

# CJ Series

## Ordering Information

<b>CJ</b>	<b>HPFP</b>	<b>20</b>	<b>V</b>	<b>1N</b>	<b>010</b>	<b>1A</b>	<b>N</b>	<b>L</b>
<p>Item</p>								
<p>Connector (terminal block - PLC)</p>								
<p>Connector pins of PLC</p>								
<p>Connector direction of PLC</p>								
<p>Branch</p>								
<p>Cable length</p>								
<p>Module type</p>								
<p>Connection type (terminal block- PLC)</p>								
<p>Module connector direction</p>								

R	Right	
L	Left	
X	Right+Left	
N	+/- Forward	
P	+/- Reverse	
Number+Character	Module detailed type signal	
005	0.5 m	
010	1.0 m	
015	1.5 m	
020	2.0 m	
P	OPEN type	
1N	Non-branch	
2S	Short 2-branch(for terminal block)	
2L	Long 2-branch(for terminal block)	
F2	Short up-down 2-branch(for PLC)	
Y2	Short right-left 2-branch(for PLC)	
V	Vertical	
H	Horizontal	
20	20-pin	
37	37-pin	
40	40-pin	
50	50-pin	
HPHP	Hirose Plug - Hirose Plug	
HPFP	Hirose Plug - Fujitsu Plug	
HPDP	Hirose Plug - D - Sub Plug	
HPDS	Hirose Plug - D - Sub Socket	
HPMP <sup>*1</sup>	Hirose Plug-3M Plug(one-touch)	
HPMQ <sup>*1</sup>	Hirose Plug-3M Plug(screw)	
HP	OPEN - Hirose Plug	
FP	OPEN - Fujitsu Plug	
DP	OPEN - D - Sub Plug	
DS	OPEN - D - Sub Socket	
MP <sup>*1</sup>	OPEN - 3M Plug(one-touch)	
CJ	Junction Cable	

※1 : Cable for SERVO

※If you combine above ordering information randomly, there may be no existing items. It is required to refer to the "Cable Selection&Connections, OPEN Type Cable Color, Cable Appearance".

## Specifications

Series	CJ SERIES	
Connector for PLC	HIF3BA-20D-2.54R, HIF3BA-40D-2.54R, HIF3BA-50D-2.54R, D-SUB 37P/S, FCN-367J040-AU/F, MDR102 SERIES(20/50pin)	
Connector for terminal block	HIF3BA-20D-2.54R, HIF3BA-40D-2.54R, HIF3BA-50D-2.54R, HIF3BB-50D-2.54R	
Applicable wire	UL 20276 TWIST 20C/40C/50C	
Conductor characteristics	7/0.127mm (AWG 28)×20P, 7/0.127mm (AWG 28)×10P, 7/0.127mm(AWG28)×25P	
Insulation diameter	0.12mm <sup>2</sup>	
Cable diameter	∅7.2mm(40C) / 8.9mm(50C)	
Rated current	Max. 1A	
Conductor resistance	Max. 0.223Ω/m	
Insulation voltage	500VAC 50/60Hz for 1 min.	
Insulation resistance	Min. 15MΩ/km	
Environment	Ambient temperature	-15 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Unit weight	Refer to page C-53	

※Environment resistance is rated at no freezing or condensation.

※Applicable cable color is black.

※Conductor resistance value is at 20°C.

※Unit weight is except packaging box weight(5g).

## ● Cable weight

Model	Weight				Model	Weight			
	0.5m	1m	1.5m	2m		0.5m	1m	1.5m	2m
CJ-HPDP37-V1N□□□□□	Approx. 90g	Approx. 127g	Approx. 164g	Approx. 201g	CJ-HPFP40-V1N□□□□□	Approx. 85g	Approx. 122g	Approx. 159g	Approx. 196g
CJ-HPDS37-V1N□□□□□	Approx. 90g	Approx. 127g	Approx. 164g	Approx. 201g	CJ-HPHP40-V1N□□□□□	Approx. 58g	Approx. 95g	Approx. 132g	Approx. 169g
CJ-HPDP37-V2S□□□□□	Approx. 84g	Approx. 121g	Approx. 158g	Approx. 195g	CJ-HPHP20-V1N□□□□□	Approx. 37g	Approx. 66g	Approx. 95g	Approx. 124g
CJ-HPDP37-V2L□□□□□	Approx. 84g	Approx. 121g	Approx. 158g	Approx. 195g	CJ-HPFP40-V2S□□□□□	Approx. 88g	Approx. 125g	Approx. 162g	Approx. 199g
CJ-HPDS37-V2S□□□□□	Approx. 84g	Approx. 121g	Approx. 158g	Approx. 195g	CJ-HPFP40-V2L□□□□□	Approx. 88g	Approx. 125g	Approx. 162g	Approx. 199g
CJ-HPDS37-V2L□□□□□	Approx. 84g	Approx. 121g	Approx. 158g	Approx. 195g	CJ-HPHP40-V2S□□□□□	Approx. 55g	Approx. 92g	Approx. 129g	Approx. 166g
CJ-HPMP20-H1N□□□□□	Approx. 46g	Approx. 74g	Approx. 102g	Approx. 131g	CJ-HPHP40-V2L□□□□□	Approx. 55g	Approx. 92g	Approx. 129g	Approx. 166g
CJ-HPMP50-H1N□□□□□	Approx. 95g	Approx. 150g	Approx. 204g	Approx. 259g	CJ-HPHP40-VY2□□□□□	Approx. 58g	Approx. 95g	Approx. 132g	Approx. 169g
CJ-HPMQ50-H1N□□□□□	Approx. 98g	Approx. 153g	Approx. 207g	Approx. 262g	CJ-HPHP40-VF2□□□□□	Approx. 58g	Approx. 95g	Approx. 132g	Approx. 169g
CJ-FP40-VP□□□	—	Approx. 112g	—	Approx. 186g	CJ-HP20-VP□□□	—	Approx. 62g	—	Approx. 120g
CJ-HP40-VP□□□	—	Approx. 62g	—	Approx. 150g	CJ-MP20-HP□□□	—	Approx. 79g	—	Approx. 137g
CJ-DP37-VP□□□	—	Approx. 117g	—	Approx. 191g	CJ-MP50-HP□□□	—	Approx. 139g	—	Approx. 248g
CJ-DS37-VP□□□	—	Approx. 117g	—	Approx. 191g	CJ-HP50-HP□□□	—	Approx. 131g	—	Approx. 240g

※Cable length 0.5m, 1.5m of OPEN type cable are option.

## ■ Connector Direction Of PLC

PLC connector type		Fujitsu plug 40-pin	D-Sub plug 37-pin	D-Sub socket 37-pin	Hirose plug 50-pin	Hirose plug 40-pin	Hirose plug 20-pin	3M socket 50-pin	3M socket 20-pin
R Right									
					—			—	—
L Left					—			—	—
X Right-Left		—	—	—	—		—	—	—

※Connector direction of terminal block supports only 'R' type.

### Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFS(Interface Terminal Block)

AFS(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

### I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QX41, QX41-S1, QX41-S2	32	Input (Output)	+	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFL-H40				
							AFR-H40				
							AFS-H20				
		QX42, QX42-S1	64	Input	+		AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFL-H40				
							AFR-H40				
							AFS-H20				
	QX71	32	Input	Com.	+, -	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
						AFL-H40					
						AFR-H40					
						AFS-H20					2
QX72	64	Input	Com.	+, -	AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4		
					AFL-H40						
					AFR-H40						
					AFS-H20					4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)
B	QX81, QX81-S2	32	Input	-	AFS-H40	1	CJ-HPDP37-V1N□-1ANR (ordering no.: DP-2-□)	1	2		
					AFL-H40						
A	QX82, QX82-S1	64	Input	-	AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4		
					AFL-H40						
						AFR-H40					
						AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)  
 ※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
 Other cable lengths are optional.  
 ※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM	COM	N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

COM	N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	PLC I/O

COM	N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

X01	X03	X05	X07	X09	X0B	X0D	X0F	X11	X13	X15	X17	X19	X1B	X1D	X1F	COM	N-C	PLC I/O		
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
X00	X02	X04	X06	X08	X0A	X0C	X0E	X10	X12	X14	X16	X18	X1A	X1C	X1E	COM	COM	N-C	PLC I/O	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
 ※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-Q Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QY41P	32	Output	-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2		4				
	QY42P	64	Output	-	AFS-H20		4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11	
	QY71	32	Output	-	AFS-H40 AFL-H40 AFR-H40		1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
	QY81P	32	Output	+	AFS-H20		2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11	
	B	QY81P	32	Output	+	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPDP37-V1N□-1ANR (ordering no.: DP-2-□)	1	2	

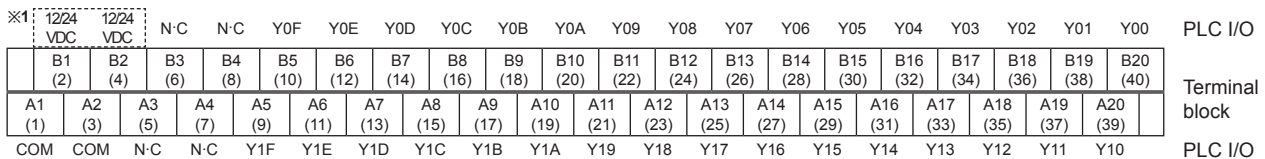
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

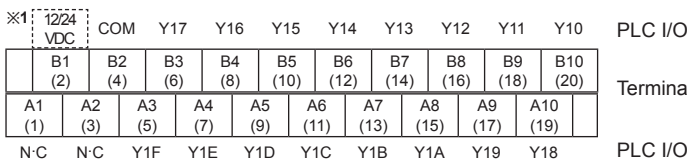
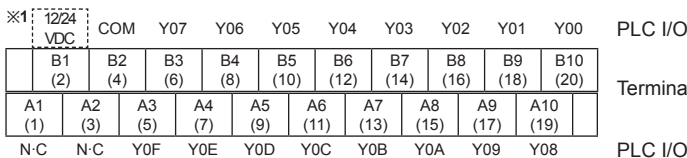
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

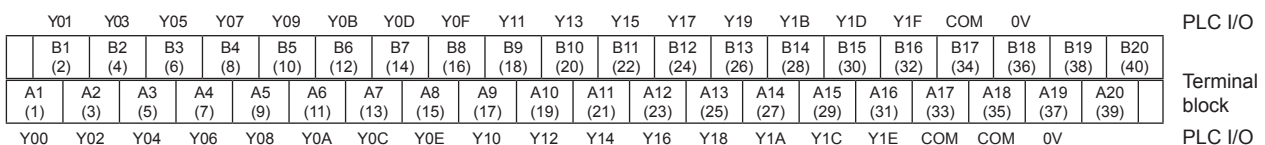
### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



### ● Connection diagram for I/O module (type A) and terminal block AFS-H20



### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



※1: QY71 modules are 5/12VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUM1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QH42P	32	Mixed (Input)	+	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFL-H40				
	AFR-H40		2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1		10,11				
	AFS-H20										
B	32	Mixed (Output)	-	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4			
				AFL-H40							
						AFR-H40	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11	
						AFS-H20					

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM1	COM1	N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

COM1	N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	PLC I/O

COM1	N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

1224 VDC	1224 VDC	N-C	N-C	Y0F	Y0E	Y0D	Y0C	Y0B	Y0A	Y09	Y08	Y07	Y06	Y05	Y04	Y03	Y02	Y01	Y00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
COM2	COM2	N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18	Y17	Y16	Y15	Y14	Y13	Y12	Y11	Y10	PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

1224 VDC	COM2	Y07	Y06	Y05	Y04	Y03	Y02	Y01	Y00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	Y0F	Y0E	Y0D	Y0C	Y0B	Y0A	Y09	Y08	PLC I/O

1224 VDC	COM2	Y17	Y16	Y15	Y14	Y13	Y12	Y11	Y10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-Q Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QX41Y41P	32	Mixed (Input)	+	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFL-H40				
	AFR-H40										
	AFS-H20		2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1		10,11				
B	32	Mixed (Output)	-	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4			
				AFL-H40							
AFR-H40											
						AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM1	COM1	N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10	

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

COM1	N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	

COM1	N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

12/24 VDC	12/24 VDC	N-C	N-C	Y2F	Y2E	Y2D	Y2C	Y2B	Y2A	Y29	Y28	Y27	Y26	Y25	Y24	Y23	Y22	Y21	Y20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
COM2	COM2	N-C	N-C	Y3F	Y3E	Y3D	Y3C	Y3B	Y3A	Y39	Y38	Y37	Y36	Y35	Y34	Y33	Y32	Y31	Y30	

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

12/24 VDC	COM2	Y27	Y26	Y25	Y24	Y23	Y22	Y21	Y20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	Y2F	Y2E	Y2D	Y2C	Y2B	Y2A	Y29	Y28	

12/24 VDC	COM2	Y37	Y36	Y35	Y34	Y33	Y32	Y31	Y30	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	Y3F	Y3E	Y3D	Y3C	Y3B	Y3A	Y39	Y38	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

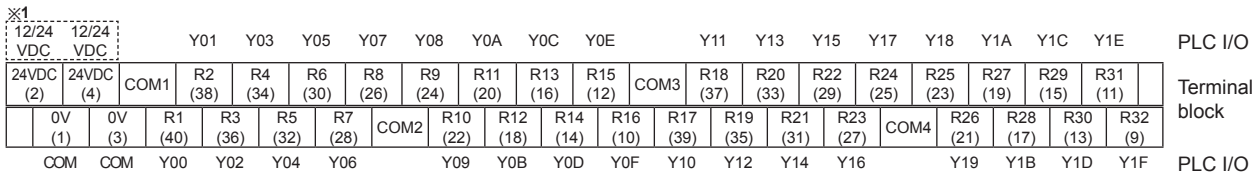
## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Relay terminal block

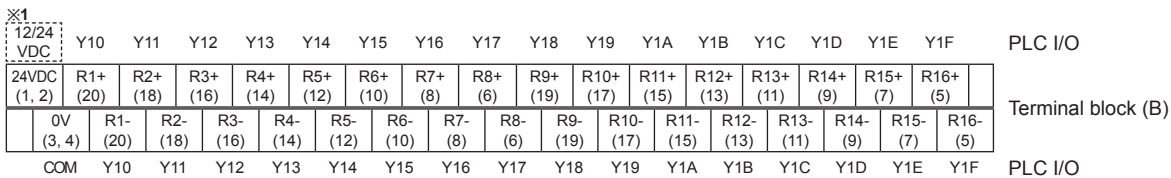
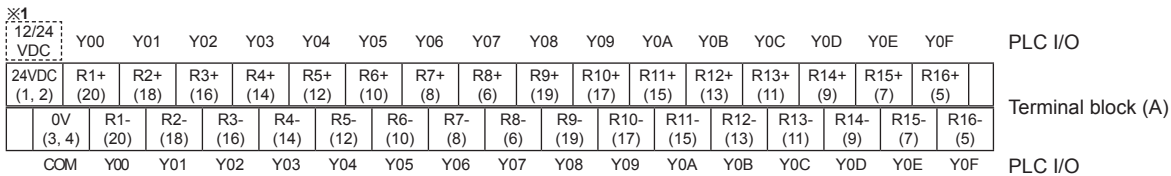
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QY41P, QY71	32	Output	-	Relay terminal block	ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		QY42P	64	Output	-		ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
		ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2		10,11				
	B	QY81P	32	Output	+		ABS-H32◆-PN	1	CJ-HPDP37-V1N□-1CPR (ordering no.: DP-6-□)	1	2
							ABS-H16◆-PN	2	CJ-HPDP37-V2★□-1CPR (ordering no.: DP-8★-□)	1	6,7
	A	QH42P	32	Mixed (Output)	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

- ※ ★ of model name indicates cable branch length. (L: long type, S: short type)
- ※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.
- ※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]
- ※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

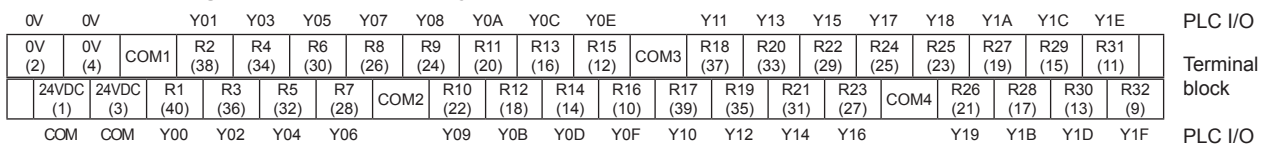
#### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN



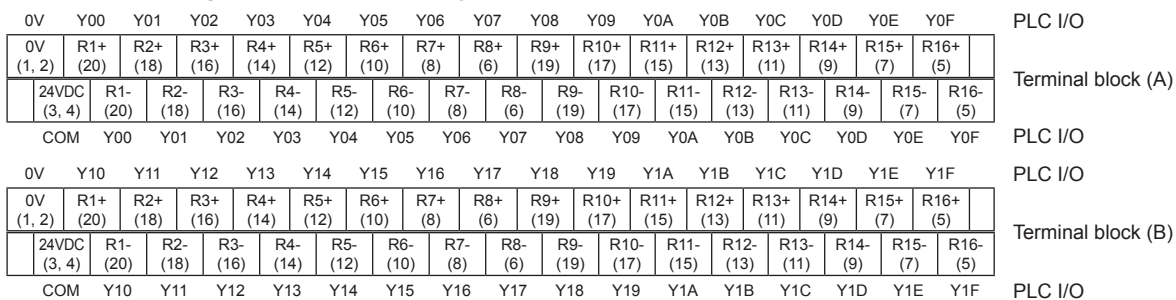
#### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN



#### ● Connection diagram for I/O module (type B) and terminal block ABS-H32◆-PN



#### ● Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN



- ※ 1: QY71 modules are 5/12VDC.
- ※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.
- ※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QX41Y41P	32	Mixed (Output)	-	Relay terminal block	ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ⇒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN

12/24 VDC	12/24 VDC		Y21	Y23	Y25	Y27	Y28	Y2A	Y2C	Y2E		Y31	Y33	Y35	Y37	Y38	Y3A	Y3C	Y3E	PLC I/O
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	Y20	Y22	Y24	Y26		Y29	Y2B	Y2D	Y2F	Y30	Y32	Y34	Y36		Y39	Y3B	Y3D	Y3F	

### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

12/24 VDC	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y2A	Y2B	Y2C	Y2D	Y2E	Y2F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (A)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y2A	Y2B	Y2C	Y2D	Y2E	Y2F	
12/24 VDC	Y30	Y31	Y32	Y33	Y34	Y35	Y36	Y37	Y38	Y39	Y3A	Y3B	Y3C	Y3D	Y3E	Y3F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	Y30	Y31	Y32	Y33	Y34	Y35	Y36	Y37	Y38	Y39	Y3A	Y3B	Y3C	Y3D	Y3E	Y3F	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJA/FR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITSUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QX41, QX41-S1, QX41-S2	32	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		QX42, QX42-S1	64	Input	+		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11

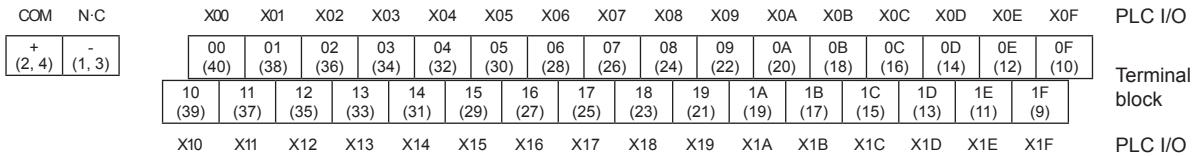
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ⇨ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

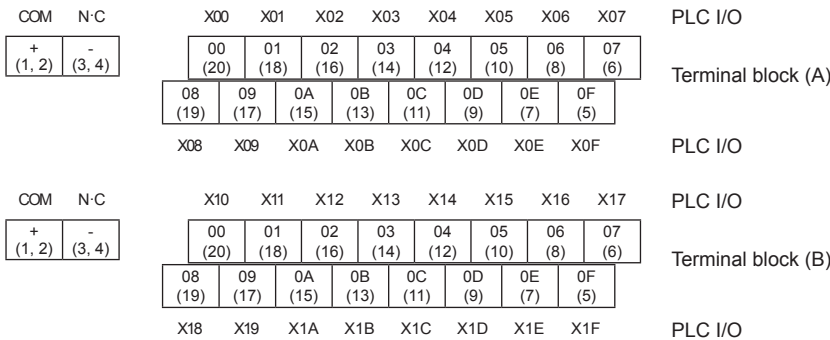
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-Q Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1	
	Type	Model				Type	Model	Qty.	Model	Qty.		
MELSEC-Q	A	QX71	32	Input	Com.	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
								AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	AFE4-H40-32LF			1				CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	1	4		
	AFE4-H20-16LF			2				CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	1	10,11		
	B	QX72	64	Input	Com.	-		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
								AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	AFE4-H40-32LF			2				CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4		
	AFE4-H20-16LF			4				CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	2	10,11		
	B	QX81, QX81-S2	32	Input	-	AFE4-H40-32LF		1	CJ-HPDP37-V1N□-1CPR (ordering no.: DP-6-□)	1	2	
						AFE4-H20-16LF		2	CJ-HPDP37-V2★□-1CPR (ordering no.: DP-8★-□)	1	6,7	
		QX82, QX82-S1	64	Input		AFE4-H40-32LF		2	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4	
						AFE4-H20-16LF		4	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	2	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF

COM	N-C	X00	X01	X02	X03	X04	X05	X06	X07	X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	PLC I/O
+	-	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	Terminal block
(2, 4)	(1, 3)	(40)	(38)	(36)	(34)	(32)	(30)	(28)	(26)	(24)	(22)	(20)	(18)	(16)	(14)	(12)	(10)	
		10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O
		(39)	(37)	(35)	(33)	(31)	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(11)	(9)	
		X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF

COM	N-C	X00	X01	X02	X03	X04	X05	X06	X07	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (A)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	
		X10	X11	X12	X13	X14	X15	X16	X17	Terminal block (B)
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF

N-C	COM	X00	X01	X02	X03	X04	X05	X06	X07	X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	PLC I/O
+	-	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	Terminal block
(2, 4)	(2, 4)	(40)	(38)	(36)	(34)	(32)	(30)	(28)	(26)	(24)	(22)	(20)	(18)	(16)	(14)	(12)	(10)	
		10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O
		(39)	(37)	(35)	(33)	(31)	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(11)	(9)	
		X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF

N-C	COM	X00	X01	X02	X03	X04	X05	X06	X07	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (A)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	
		X10	X11	X12	X13	X14	X15	X16	X17	Terminal block (B)
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches
○22/25
○30
□30
Round Push Button Switches
Square Push Button Switches
Selector Switches
Key Selector Switches
Double Push Button Switches
Mushroom-head Push Button Switches
Emergency Switches
Pilot Lights
Accessories
Buzzers
Modular Terminal Blocks
TUM(Spring Type)
TUW1(Dual Spring Type)
TM(Manual Type)
I/O Terminal Blocks
AFS(Interface Terminal Block)
AFL/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay
I/O Cables
MITUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance
Remote I/O Terminal Blocks
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)
Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-Q Series)-Sensor connector type terminal block

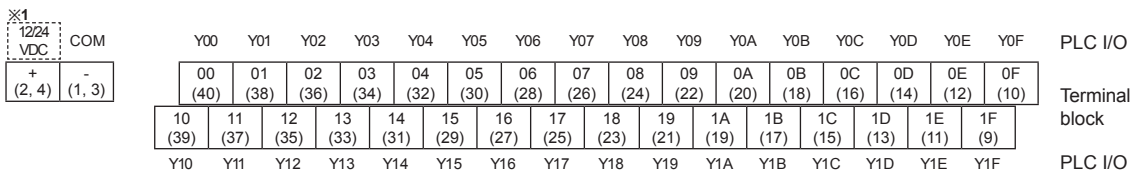
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QY41P	32	Output	-	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		QY42P	64	Output	-		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
		QY71	32	Output	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B	QY81P	32	Output	+		AFE4-H40-32LF	1	CJ-HPDP37-V1N□-1CNR (ordering no.: DP-4-□)	1	2

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

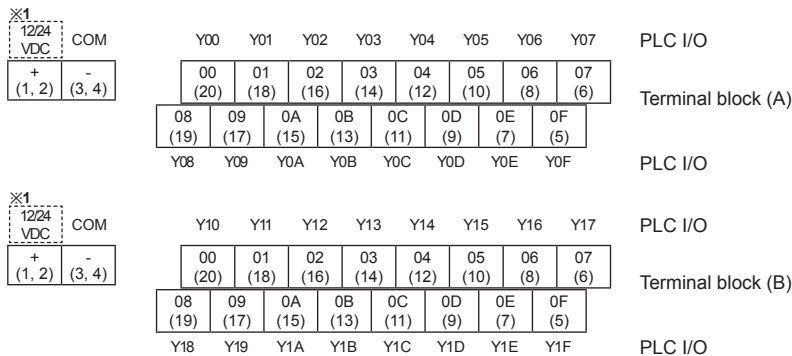
※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

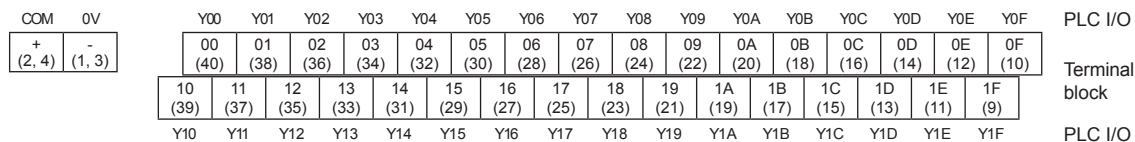
### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



※1: QY71 modules are 5/12VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-Q Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QH42P	32	Mixed (Input)	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B		32	Mixed (Output)	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF

COM	N-C	X00	X01	X02	X03	X04	X05	X06	X07	X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	PLC I/O
+	-	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	Terminal block
(2, 4)	(1, 3)	(40)	(38)	(36)	(34)	(32)	(30)	(28)	(26)	(24)	(22)	(20)	(18)	(16)	(14)	(12)	(10)	
		10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O
		(39)	(37)	(35)	(33)	(31)	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(11)	(9)	
		X10	X11	X12	X13	X14	X15	X16	X17	X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF

COM	N-C	X00	X01	X02	X03	X04	X05	X06	X07	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (A)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X08	X09	X0A	X0B	X0C	X0D	X0E	X0F	

COM	N-C	X10	X11	X12	X13	X14	X15	X16	X17	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (B)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		X18	X19	X1A	X1B	X1C	X1D	X1E	X1F	

#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF

12/24 VDC	COM	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	PLC I/O
+	-	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	Terminal block
(2, 4)	(1, 3)	(40)	(38)	(36)	(34)	(32)	(30)	(28)	(26)	(24)	(22)	(20)	(18)	(16)	(14)	(12)	(10)	
		10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O
		(39)	(37)	(35)	(33)	(31)	(29)	(27)	(25)	(23)	(21)	(19)	(17)	(15)	(13)	(11)	(9)	
		Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	

#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF

12/24 VDC	COM	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (A)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	

12/24 VDC	COM	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	PLC I/O
+	-	00	01	02	03	04	05	06	07	Terminal block (B)
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	PLC I/O
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	
		Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFJ/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-Q Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-Q	A	QX41Y41P	32	Mixed (Input)	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B		32	Mixed (Output)	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

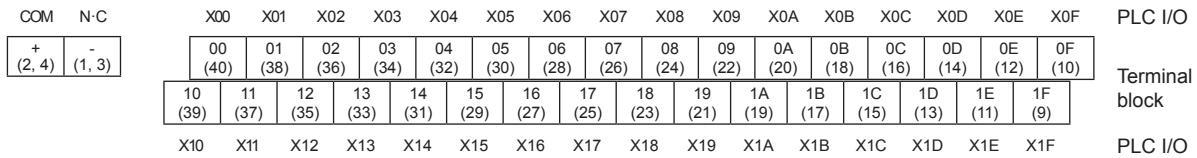
※★ of model name indicates cable branch length. (L: long type, S: short type)

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

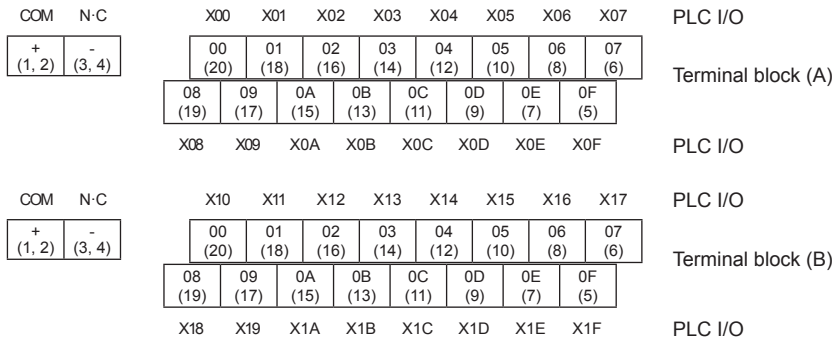
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

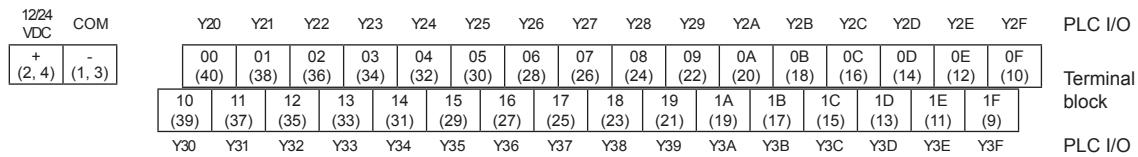
### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



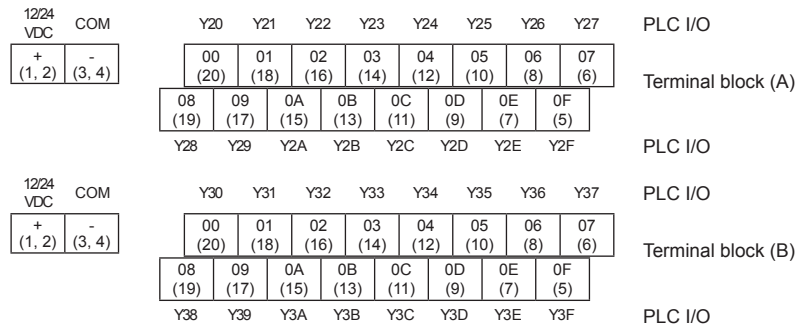
### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1		
	Type	Model			Type	Model	Qty.	Model	Qty.					
MELSEC - AnS	A	A1SX41, A1SX41-S1, A1SX41-S2	32	Input	+	Interface terminal block	AFS-H40	AFL-H40	AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
							AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11			
							AFS-H40	AFL-H40	AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4	
	A	A1SX42, A1SX42-S1, A1SX42-S2	64	Input	+		AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11			
							AFS-H40	AFL-H40	AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
	A	A1SX71	32	Input	Com.		+, -	AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11		
								AFS-H40	AFL-H40	AFR-H40	1	CJ-HPDP37-V1N□-1ANL (ordering no.: DP-1-□)	1	2
	B	A1SX81, A1SX81-S2	32	Input	Com.		+, -	AFS-H40	AFL-H40	AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
								AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11		
	A	A1SX82-S1	64	Input	Com.		+, -							

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM	COM	N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10	

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

COM	N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	
COM	N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

X01	X03	X05	X07	X09	X0B	X0D	X0F	X11	X13	X15	X17	X19	X1B	X1D	X1F	COM	N-C	PLC I/O		
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
X00	X02	X04	X06	X08	X0A	X0C	X0E	X10	X12	X14	X16	X18	X1A	X1C	X1E	COM	COM	N-C		

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches
Ø22/25
Ø30
□30
Round Push Button Switches
Square Push Button Switches
Selector Switches
Key Selector Switches
Double Push Button Switches
Mushroom-head Push Button Switches
Emergency Switches
Pilot Lights
Accessories
Buzzers
Modular Terminal Blocks
TUM(Spring Type)
TUW1(Dual Spring Type)
TM(Manual Type)
I/O Terminal Blocks
AFS(Interface Terminal Block)
AFL/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay
I/O Cables
MITSUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance
Remote I/O Terminal Blocks
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)
Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-AnS Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - AnS	A	A1SY41, A1SY41P	32	Output	-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		A1SY42, A1SY42P	64	Output	-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
		AFS-H20					4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11	
	A1SY71	32	Output	-	AFS-H40 AFL-H40 AFR-H40		1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
	A1SY81, A1SY81EP	32	Output	+	AFS-H20		2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11	
	B	A1SY81, A1SY81EP	32	Output	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPDP37-V1N□-1ANL (ordering no.: DP-1-□)	1	2
							A1SY82	64	Output	+	AFS-H40 AFL-H40 AFR-H40
A	A1SY82	64	Output	+	AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11		

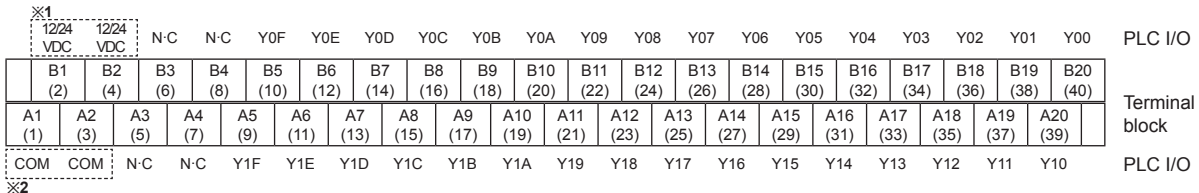
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

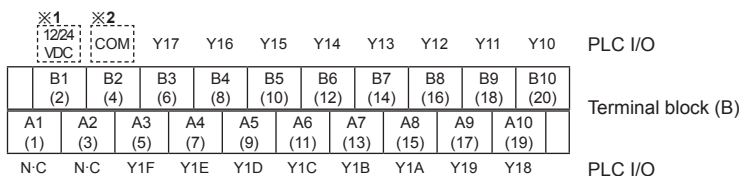
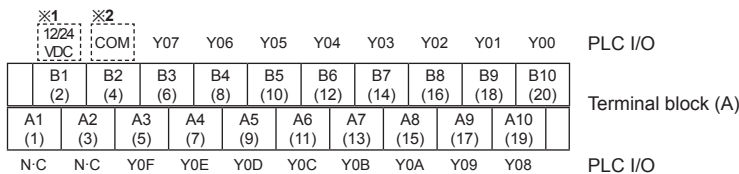
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



### ● Connection diagram for I/O module (type A) and terminal block AFS-H20



### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



※1: A1SY71 modules are 5/12VDC. A1SY82 modules are COM.

※2: A1SY82 modules are 0V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-AnS Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1	
	Type	Model				Type	Model	Qty.	Model	Qty.		
MELSEC - AnS	A	A1SH42, A1SH42-S1, A1SH42P, A1SH42P-S1	32	Mixed (Input)	+	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
							AFL-H40					
	AFR-H40			2			CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11			
	AFS-H20											
B	Mixed (Output)	-	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4					
			AFL-H40									
								AFR-H40	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

※1  $\frac{1224}{VDC}$   $\frac{1224}{VDC}$  N-C N-C X0F X0E X0D X0C X0B X0A X09 X08 X07 X06 X05 X04 X03 X02 X01 X00 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10

Terminal block

PLC I/O

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

※1  $\frac{1224}{VDC}$  N-C X07 X06 X05 X04 X03 X02 X01 X00 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08

Terminal block (A)

PLC I/O

※1  $\frac{1224}{VDC}$  N-C X17 X16 X15 X14 X13 X12 X11 X10 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18

Terminal block (B)

PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

$\frac{1224}{VDC}$   $\frac{1224}{VDC}$  N-C N-C Y0F Y0E Y0D Y0C Y0B Y0A Y09 Y08 Y07 Y06 Y05 Y04 Y03 Y02 Y01 Y00 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)
COM	COM	N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18	Y17	Y16	Y15	Y14	Y13	Y12	Y11	Y10

Terminal block

PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

$\frac{1224}{VDC}$  COM Y07 Y06 Y05 Y04 Y03 Y02 Y01 Y00 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)
N-C	N-C	Y0F	Y0E	Y0D	Y0C	Y0B	Y0A	Y09	Y08

Terminal block (A)

PLC I/O

$\frac{1224}{VDC}$  COM Y17 Y16 Y15 Y14 Y13 Y12 Y11 Y10 PLC I/O

B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)
N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18

Terminal block (B)

PLC I/O

※1: A1SH42-S1, A1SH42P-S1 modules are 24VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
- Round Push Button Switches
- Square Push Button Switches
- Selector Switches
- Key Selector Switches
- Double Push Button Switches
- Mushroom-head Push Button Switches
- Emergency Switches
- Pilot Lights
- Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJII
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -AnS	A	A1SY41, A1SY41P	32	Output	-	Relay terminal block	ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		A1SY42, A1SY42P	64	Output	-		ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
		A1SY71	32	Output	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		A1SH42, A1SH42-S1, A1SH42P, A1SH42P-S1	32	Mixed (Output)	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

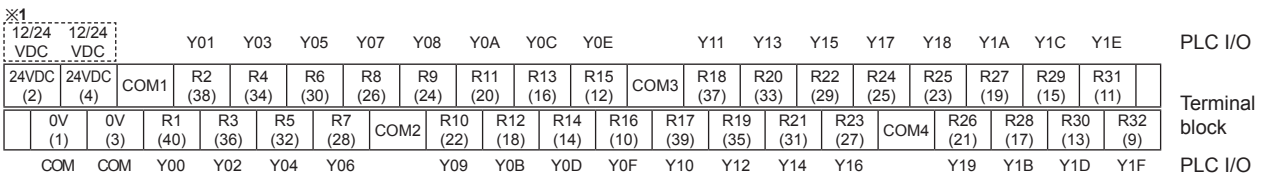
※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

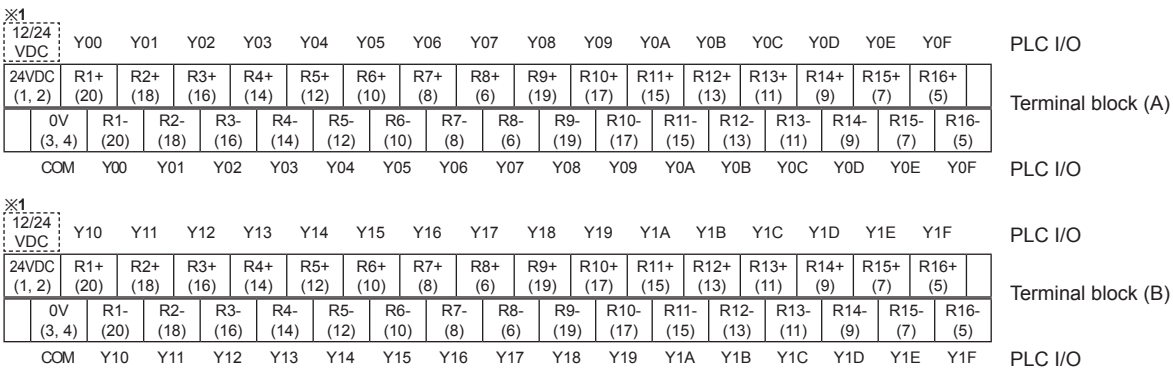
※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN



### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN



※1: A1SY71 modules are 5/12VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - AnS	A	A1SY81, A1SY81EP	32	Output	+	Relay terminal block	ABS-H32◆-PN	1	CJ-HPDP37-V1N□-1CPL (ordering no.: DP-5-□)	1	2
							ABS-H16◆-PN	2	CJ-HPDP37-V2★□-1CPL (ordering no.: DP-7★-□)	1	6,7
		A1SY82	64	Output	+		ABS-H32◆-PN	2	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4
							ABS-H16◆-PN	4	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	2	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-PN

0V	0V	Y01		Y03	Y05	Y07	Y08	Y0A	Y0C	Y0E	Y11	Y13	Y15	Y17	Y18	Y1A	Y1C	Y1E	PLC I/O	
0V (2)	0V (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
24VDC (1)	24VDC (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	Y00	Y02	Y04	Y06		Y09	Y0B	Y0D	Y0F	Y10	Y12	Y14	Y16		Y19	Y1B	Y1D	Y1F	

### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-PN

0V	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	
0V	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)  
TUW1(Dual Spring Type)  
TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJA/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITSUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

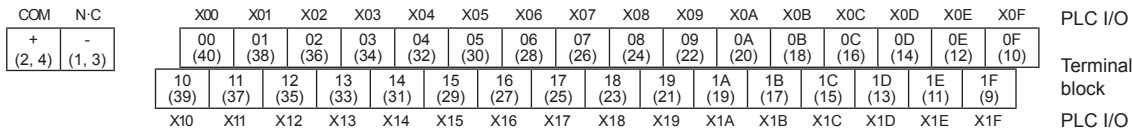
## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Sensor connector type terminal block

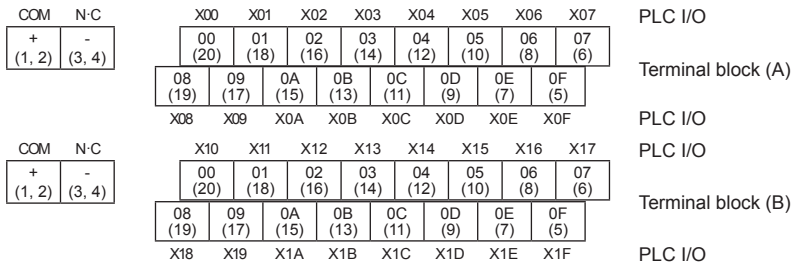
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -AnS	A	A1SX41, A1SX41-S1, A1SX41-S2	32	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2		4				
		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2		10,11				
	A	A1SX71	32	Input	Com.		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B	A1SX71	32	Input	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	1	10,11
	A	A1SX81, A1SX81-S2	32	Input	Com.		AFE4-H40-32LF	1	CJ-HPDP37-V1N□-1CNL (ordering no.: DP-3-□)	1	2
							AFE4-H40-32LF	1	CJ-HPDP37-V1N□-1CPL (ordering no.: DP-5-□)	1	2
	B	A1SX81, A1SX81-S2	32	Input	-		AFE4-H20-16LF	2	CJ-HPDP37-V2★□-1CPL (ordering no.: DP-7★-□)	1	6,7
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	A	A1SX82-S1	64	Input	Com.		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4
	B	A1SX82-S1	64	Input	-		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	2	10,11
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4

※ ★ of model name indicates cable branch length. (L: long type, S: short type)  
 ※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
 Other cable lengths are optional.  
 ※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

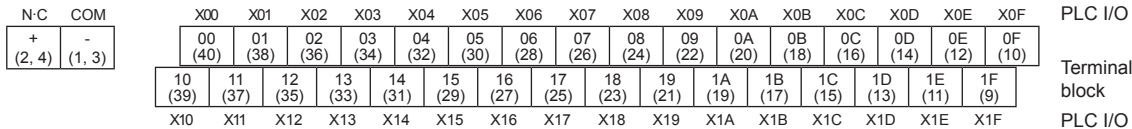
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



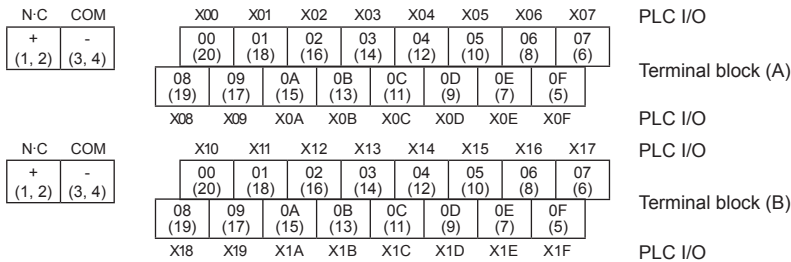
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
 ※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block	Applicable cable		Appearance ※1		
	Type	Model					Type	Model		Qty.	Model
MELSEC - AnS	A	A1SY41, A1SY41P, A1SY71	32	Output	-	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2		4				
		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2		10,11				
	B	A1SY81, A1SY81EP	32	Output	+		AFE4-H40-32LF	1	CJ-HPDP37-V1N□-1CNL (ordering no.: DP-3-□)	1	2
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4

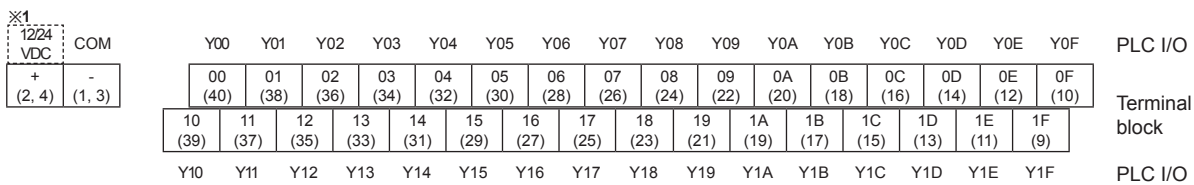
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

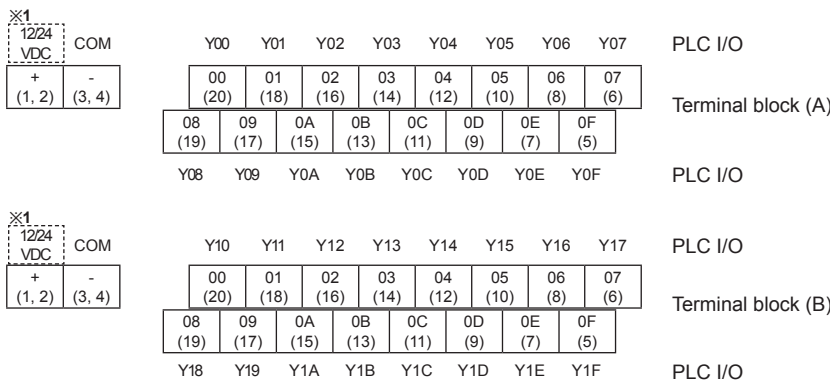
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

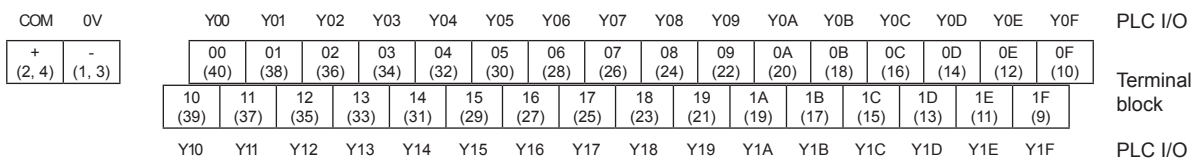
### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



※1: A1SY71 modules are 5/12VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFU/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-AnS Series)-Sensor connector type terminal block

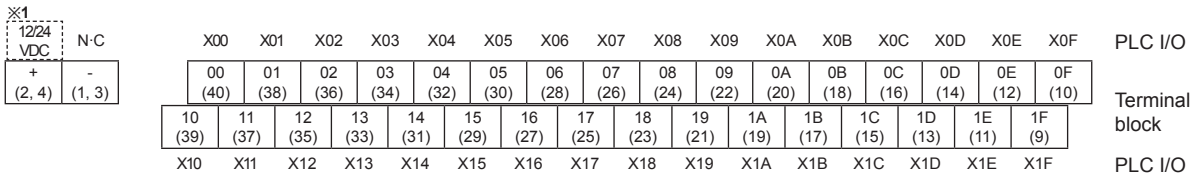
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -AnS	A	A1SH42, A1SH42-S1, A1SH42P, A1SH42P-S1	32	Mixed (Input)	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B		32	Mixed (Output)	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

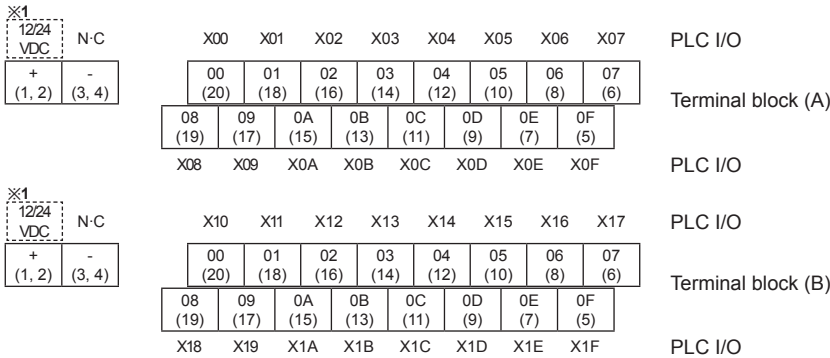
※ □ of model name indicates cable length. (standard specifications ≠ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

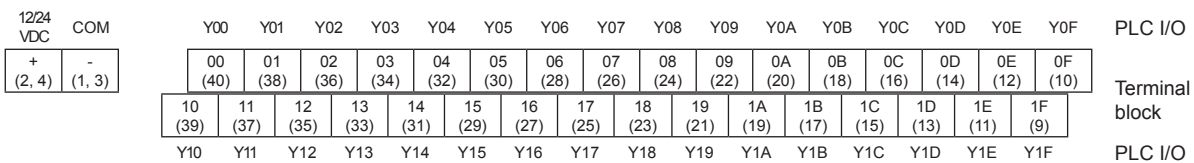
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



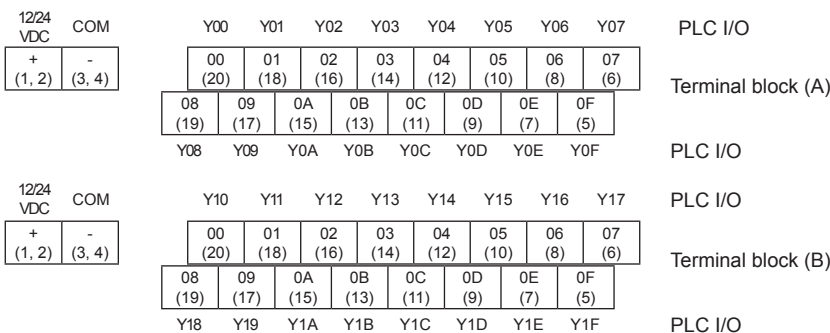
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※1: A1SH42-S1, A1SH42P-S1 modules are 24VDC.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -A	A	AX42, AX42-S1	64	Input	+	Interface terminal block	AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFL-H40				
	AFR-H40										
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	B	AX82	64	Input	-		AFS-H40	2	CJ-HPDP37-V1N□-1ANL (ordering no.: DP-1-□)	2	2
						AFL-H40					
							AFR-H40				

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

12/24 VDC		12/24 VDC		N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)			Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)			
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10			PLC I/O

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

12/24 VDC		12/24 VDC		N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08				PLC I/O

12/24 VDC		12/24 VDC		N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18				PLC I/O

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

X01	X03	X05	X07	X09	X0B	X0D	X0F	X11	X13	X15	X17	X19	X1B	X1D	X1F	0V	N-C	PLC I/O		
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
X00	X02	X04	X06	X08	X0A	X0C	X0E	X10	X12	X14	X16	X18	X1A	X1C	X1E	0V	0V	N-C		PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
 ※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITSUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - A	A	AY42, AY42-S1, AY42-S3	64	Output	-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
		AY42-S4, AY72	64	Output	-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	B	AY82EP	64	Output	+	AFS-H40 AFL-H40 AFR-H40	2	CJ-HPDP37-V1N□-1ANL (ordering no.: DP-1-□)	2	2	

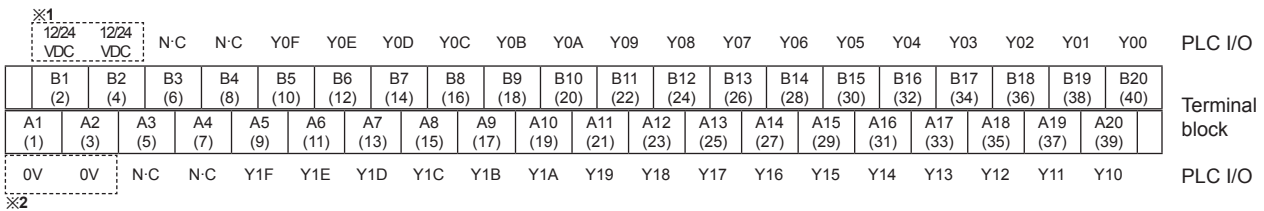
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

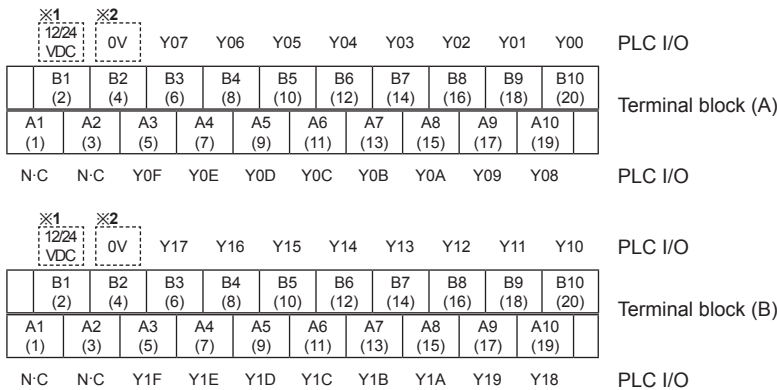
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

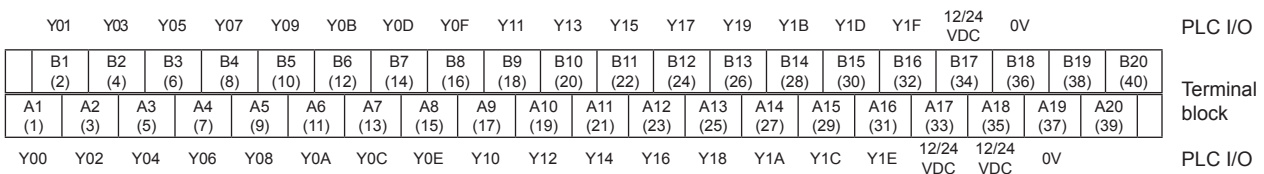
### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



### ● Connection diagram for I/O module (type A) and terminal block AFS-H20



### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



※1: AY42-S4 modules are N.C. AY72 modules are 5/12VDC.

※2: AY42-S4 modules are COM.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-A Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-A	A	AH42	32	Mixed (Input)	+	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFL-H40				
	AFR-H40										
	AFS-H20		2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1		10,11				
B	32	Mixed (Output)	-	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4			
				AFL-H40							
						AFR-H40					
						AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

12/24 VDC		12/24 VDC		N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)			Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)			PLC I/O
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10			

#### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

12/24 VDC		12/24 VDC		N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08				PLC I/O

12/24 VDC		12/24 VDC		N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18				PLC I/O

#### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

12/24 VDC		12/24 VDC		N-C	N-C	Y2F	Y2E	Y2D	Y2C	Y2B	Y2A	Y29	Y28	Y27	Y26	Y25	Y24	Y23	Y22	Y21	Y20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)			Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)			
0V	0V	N-C	N-C	Y3F	Y3E	Y3D	Y3C	Y3B	Y3A	Y39	Y38	Y37	Y36	Y35	Y34	Y33	Y32	Y31	Y30			PLC I/O

#### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

12/24 VDC		12/24 VDC		0V	Y27	Y26	Y25	Y24	Y23	Y22	Y21	Y20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	Y2F	Y2E	Y2D	Y2C	Y2B	Y2A	Y29	Y28				PLC I/O

12/24 VDC		12/24 VDC		0V	Y37	Y36	Y35	Y34	Y33	Y32	Y31	Y30	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)				Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)				
N-C	N-C	Y3F	Y3E	Y3D	Y3C	Y3B	Y3A	Y39	Y38				PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
- Round Push Button Switches
- Square Push Button Switches
- Selector Switches
- Key Selector Switches
- Double Push Button Switches
- Mushroom-head Push Button Switches
- Emergency Switches
- Pilot Lights
- Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJII
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -A	A	AY42, AY42-S1, AY42-S3, AY42-S4, AY72	64	Output	-	Relay terminal block	ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

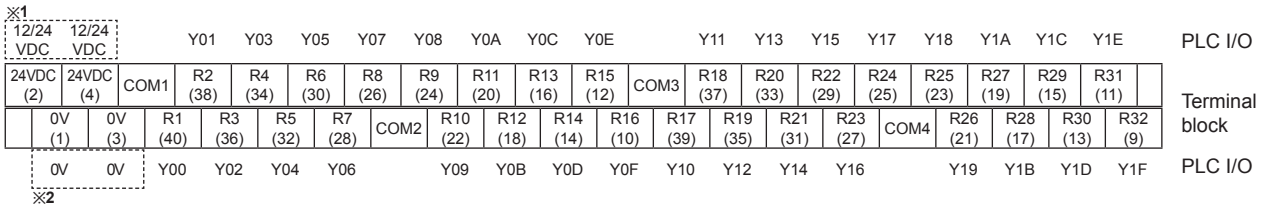
※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

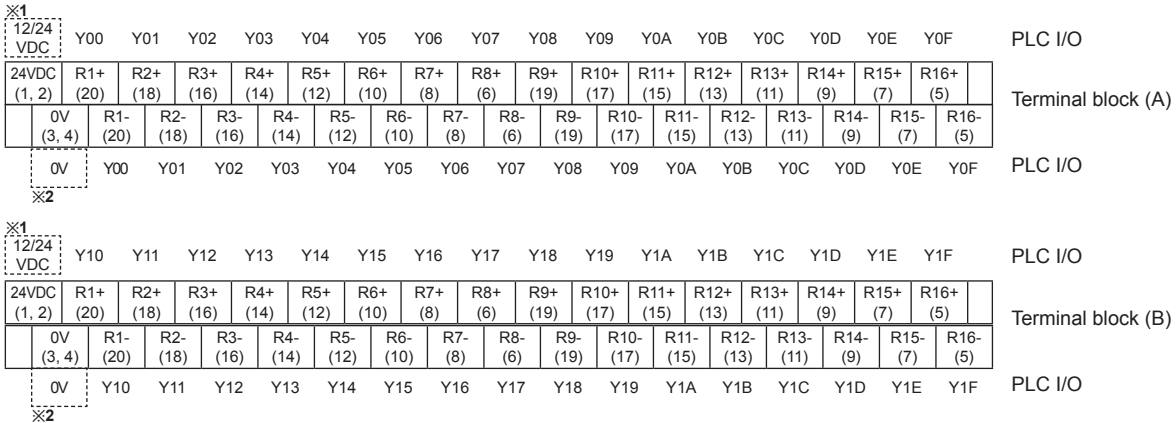
※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN



### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN



※1: AY42-S4 modules are N.C. AY72 modules are 5/12VDC.

※2: AY42-S4 modules are COM.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-A Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-A	A	AY82EP	64	Output	+	Relay terminal block	ABS-H32◆-PN	2	CJ-HPDP37-V1N□-1CPL (ordering no.: DP-5-□)	2	2
							ABS-H16◆-PN	4	CJ-HPDP37-V2★□-1CPL (ordering no.: DP-7★-□)	2	6,7
	B	AH42	32	Mixed (Output)	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-PN

0V	0V	Y01	Y03	Y05	Y07	Y08	Y0A	Y0C	Y0E	Y11	Y13	Y15	Y17	Y18	Y1A	Y1C	Y1E	PLC I/O		
0V (2)	0V (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
24VDC (1)	24VDC (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
12/24 VDC	12/24 VDC	Y00	Y02	Y04	Y06	Y09	Y0B	Y0D	Y0F	Y10	Y12	Y14	Y16	Y19	Y1B	Y1D	Y1F			

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-PN

0V	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
12/24 VDC	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	Terminal block (B)
0V	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
12/24 VDC	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	PLC I/O

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H32◆-NN

12/24 VDC	12/24 VDC	Y21	Y23	Y25	Y27	Y28	Y2A	Y2C	Y2E	Y31	Y33	Y35	Y37	Y38	Y3A	Y3C	Y3E	PLC I/O		
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
0V	0V	Y20	Y22	Y24	Y26	Y29	Y2B	Y2D	Y2F	Y30	Y32	Y34	Y36	Y39	Y3B	Y3D	Y3F			

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H16◆-NN

12/24 VDC	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y2A	Y2B	Y2C	Y2D	Y2E	Y2F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
0V	Y20	Y21	Y22	Y23	Y24	Y25	Y26	Y27	Y28	Y29	Y2A	Y2B	Y2C	Y2D	Y2E	Y2F	PLC I/O
12/24 VDC	Y30	Y31	Y32	Y33	Y34	Y35	Y36	Y37	Y38	Y39	Y3A	Y3B	Y3C	Y3D	Y3E	Y3F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
0V	Y30	Y31	Y32	Y33	Y34	Y35	Y36	Y37	Y38	Y39	Y3A	Y3B	Y3C	Y3D	Y3E	Y3F	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJII

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC -A	A	AX42, AX42-S1	64	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	B	AX82	64	Input	-		AFE4-H40-32LF	2	CJ-HPDP37-V1N□-1CPL (ordering no.: DP-5-□)	2	2
							AFE4-H20-16LF	4	CJ-HPDP37-V2★□-1CPL (ordering no.: DP-7★-□)	2	6,7

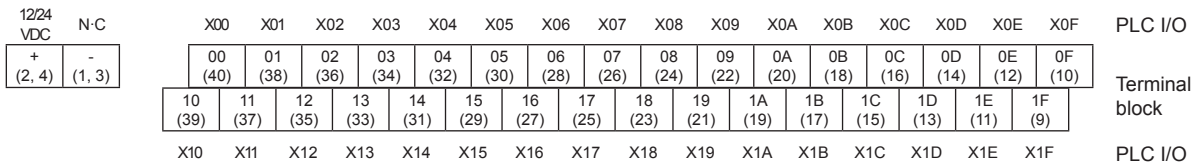
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

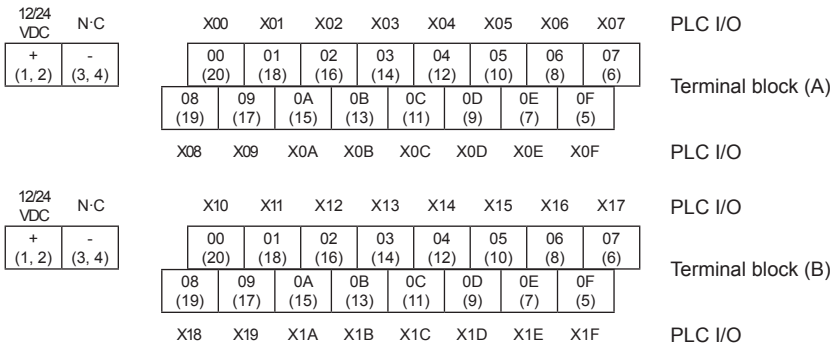
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

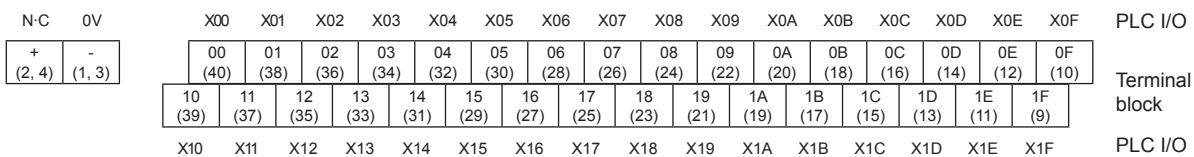
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



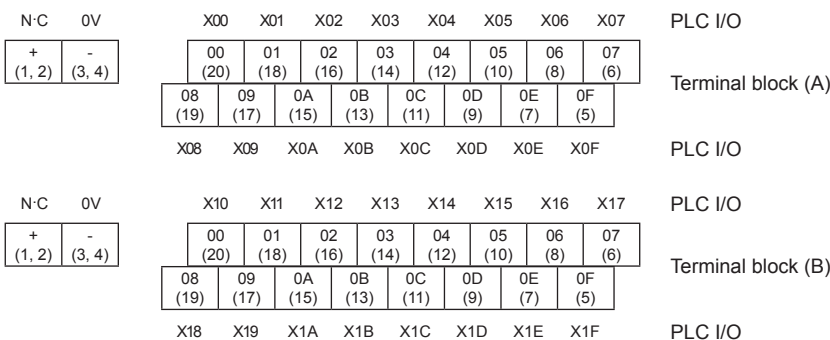
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Sensor connector type terminal block

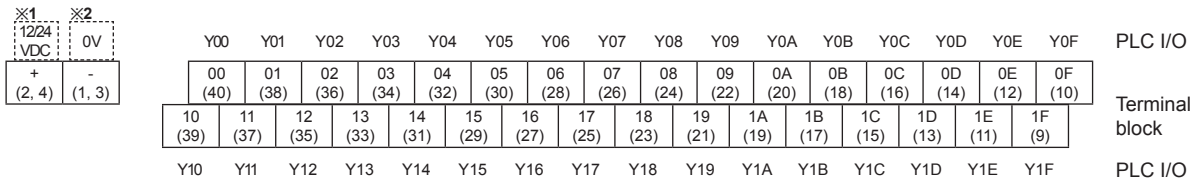
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - A	A	AY42, AY42-S1	64	Output	-	Sensor connector type terminal block	AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
		AY42-S3, AY42-S4	64	Output	-		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	B	AY82EP	64	Output	+		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11

※★ of model name indicates cable branch length. (L: long type, S: short type)

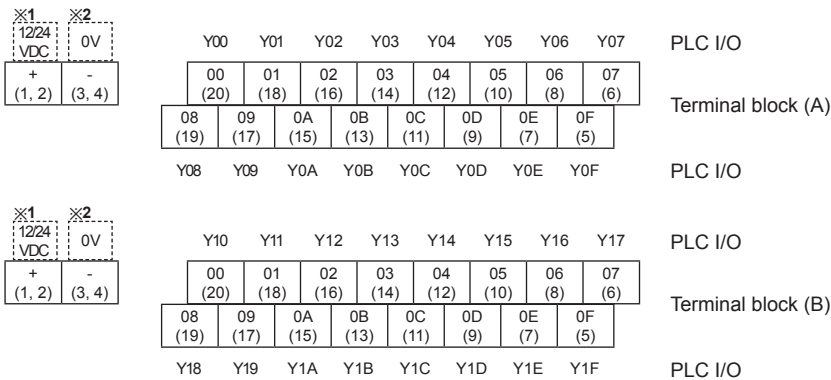
※□ of model name indicates cable length. (standard specifications ≙ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A, B) and terminal block AFE4-H40-32LF



### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



※1: AY42-S4 modules are N.C. AY72 modules are 5/12VDC.

※2: AY42-S4 modules are COM.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJ/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-A Series)-Sensor connector type terminal block

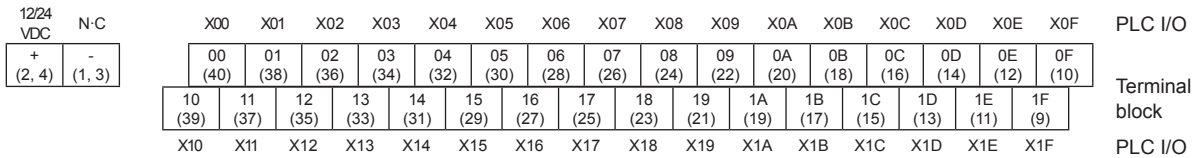
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC-A	A	AH42	32	Mixed (Input)	+	Sensor connector type	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B		32	Mixed (Output)	-		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

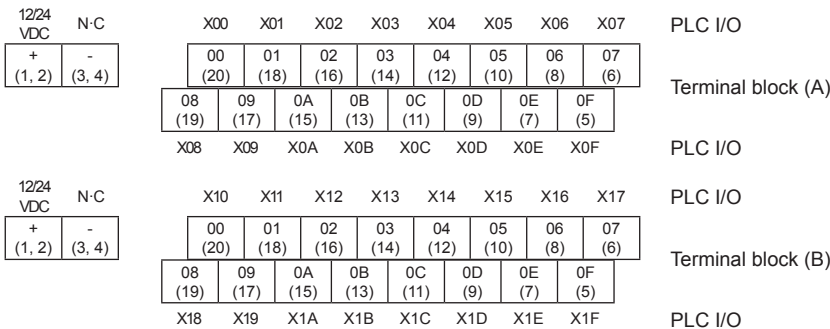
※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

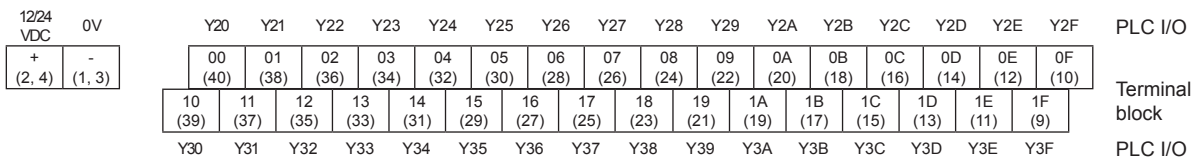
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



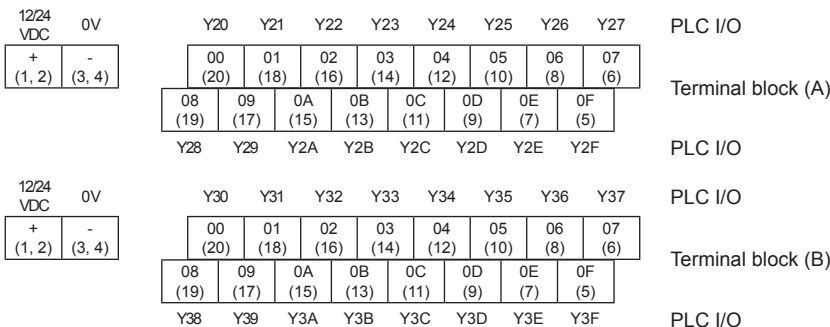
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	16MT, 16MT-D/UL	8	Mixed (Input)	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
			8	Mixed (Output)							AFS-H20
	C	16MT, 16MT-D/UL	8	Mixed (Input)		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14	
			8	Mixed (Output)							
	A	16MT-DSS	8	Mixed (Input)		AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
			8	Mixed (Output)							AFS-H20
	C	16MT-DSS	8	Mixed (Input)		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14	
			8	Mixed (Output)							

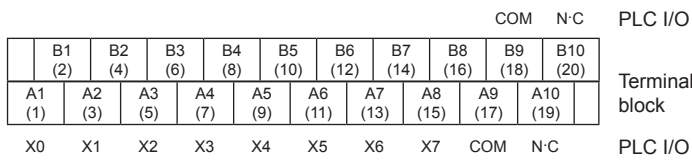
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

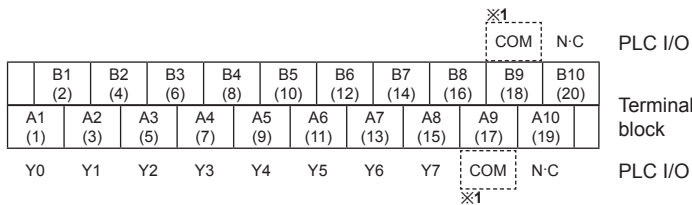
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

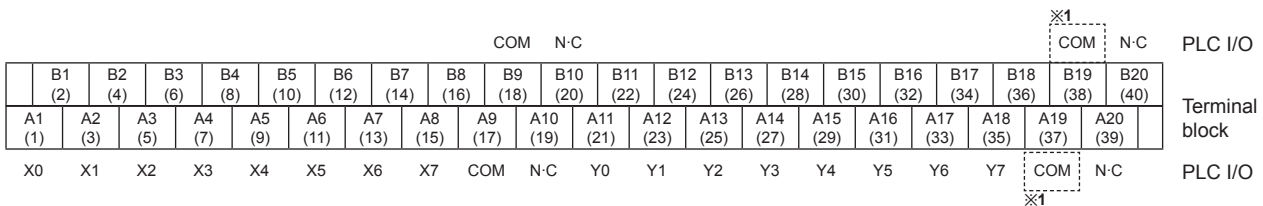
### ● Connection diagram for I/O module (type A) and terminal block AFS-H20



### ● Connection diagram for I/O module (type B) and terminal block AFS-H20



### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40



※ 1: 16MT-DSS modules are +V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	32MT, 32MT-D/UL	16	Mixed(Input)	-	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
	B	32MT, 32MT-D/UL	16	Mixed(Output)	-	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
	C	32MT, 32MT-D/UL	16	Mixed(Input)	-	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14	
			16	Mixed(Output)	-						
	A	32MT-DSS	16	Mixed(Input)	Com, +, -	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
			16	Mixed(Output)	+						
	C	32MT-DSS	16	Mixed(Input)	Com, +, -	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14	
			16	Mixed(Output)	+						
	A	64MT, 64MT-D/UL	32	Mixed(Input)	-	AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1	
			32	Mixed(Output)	-						
	C	64MT, 64MT-D/UL	32	Mixed(Input)	-	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14	
			32	Mixed(Output)	-						
	A	64MT-DSS	32	Mixed(Input)	Com, +, -	AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1	
			32	Mixed(Output)	+						
	C	64MT-DSS	32	Mixed(Input)	Com, +, -	AFS-H40 AFL-H40 AFR-H40	2	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	2	14	
			32	Mixed(Output)	+						
	A	96MT, 96MT-D/UL	48	Mixed(Input)	-	AFS-H20	3	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	3	1	
			48	Mixed(Output)	-						
	C	96MT, 96MT-D/UL	48	Mixed(Input)	-	AFS-H40 AFL-H40 AFR-H40	3	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	3	14	
			48	Mixed(Output)	-						
	A	96MT-DSS	48	Mixed(Input)	Com, +, -	AFS-H20	3	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	3	1	
			48	Mixed(Output)	+						
	C	96MT-DSS	48	Mixed(Input)	Com, +, -	AFS-H40 AFL-H40 AFR-H40	3	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	3	14	
			48	Mixed(Output)	+						

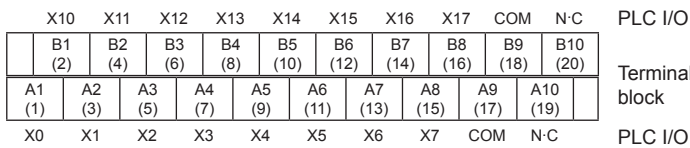
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

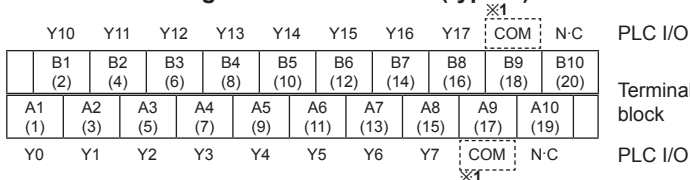
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

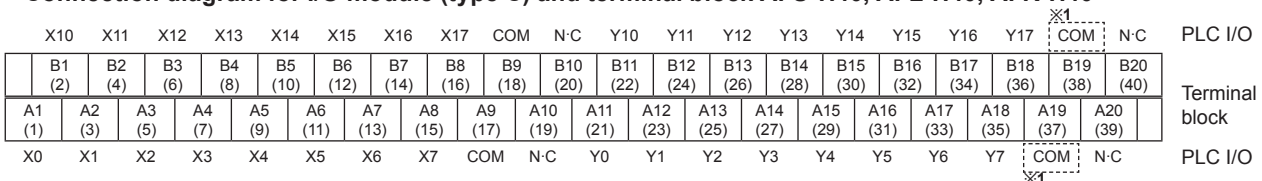
#### ● Connection diagram for I/O module (type A) and terminal block AFS-H20



#### ● Connection diagram for I/O module (type B) and terminal block AFS-H20



#### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40



※ 1: 32MT-DSS, 64MT-DSS, 96MT-DSS modules are +V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Interface terminal block

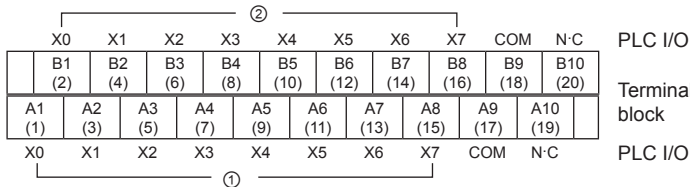
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	16EX, 16EX-D/UL	16	Input	-	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
		16EX-DS	16	Input	Com.		AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
	B	16EYT, 16EYT-D/UL	16	Output	-		AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
		16EYT-DSS	16	Output	+		AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
	C	32EX, 32EX-D/UL	32	Input	-		AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
		32EX-DS	32	Input	Com.		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14
	D	32EYT, 32EYT-D/UL	32	Output	-		AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
		32EYT-DSS	32	Output	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

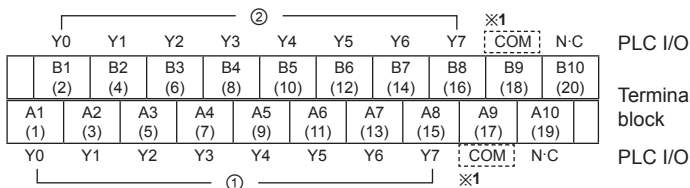
※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

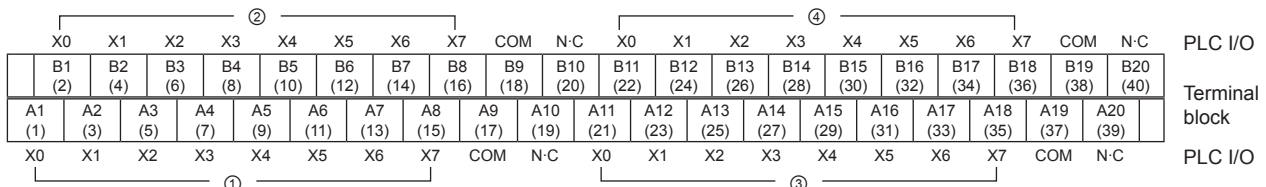
#### ● Connection diagram for I/O module (type A, C) and terminal block AFS-H20



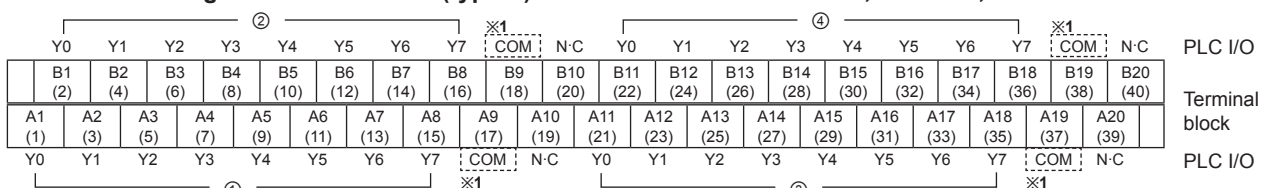
#### ● Connection diagram for I/O module (type B, D) and terminal block AFS-H20



#### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40



#### ● Connection diagram for I/O module (type D) and terminal block AFS-H40, AFL-H40, AFR-H40



※ 1: 16EYT-DSS, 32EYT-DSS modules are +V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches



## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	16MT, 16MT-D/UL	8	Mixed(Output)	-	Relay terminal block	ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B	16MT-DSS	8	Mixed(Output)	+		ABS-H16◆-PN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	C	32MT, 32MT-D/UL	16	Mixed(Output)	-		ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	D	32MT-DSS	16	Mixed(Output)	+		ABS-H16◆-PN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	C	64MT, 64MT-D/UL	32	Mixed(Output)	-		ABS-H16◆-NN	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	D	64MT-DSS	32	Mixed(Output)	+		ABS-H16◆-PN	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	C	96MT, 96MT-D/UL	48	Mixed(Output)	-		ABS-H16◆-NN	3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1
	D	96MT-DSS	48	Mixed(Output)	+		ABS-H16◆-PN	3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1
	E	16EYT, 16EYT-D/UL	16	Output	-		ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	PLC I/O															
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block							
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O							
COM	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7																

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	PLC I/O															
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block							
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O							
+V	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7																

#### ● Connection diagram for I/O module (type C) and terminal block ABS-H16◆-NN

N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	PLC I/O							
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block							
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O							
COM	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17								

#### ● Connection diagram for I/O module (type D) and terminal block ABS-H16◆-PN

N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	PLC I/O							
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block							
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O							
+V	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17								

#### ● Connection diagram for I/O module (type E) and terminal block ABS-H16◆-NN

N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	PLC I/O							
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block							
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O							
COM	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7								

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	16MT, 16MT-D/UL	8	Mixed (Input)	-	Sensor connector type terminal block	AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B		8	Mixed (Output)			AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	C	16MT-DSS	8	Mixed (Input)	Com.		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
	A						AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	D						AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF

N-C	COM	X0	X1	X2	X3	X4	X5	X6	X7	PLC I/O
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	Terminal block
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	

### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF

N-C	COM	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	PLC I/O
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	Terminal block
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	

### ● Connection diagram for I/O module (type C) and terminal block AFE4-H20-16LF

COM	N-C	X0	X1	X2	X3	X4	X5	X6	X7	PLC I/O
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	Terminal block
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	

### ● Connection diagram for I/O module (type D) and terminal block AFE4-H20-16LF

+V	N-C	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	PLC I/O
+	-	00	01	02	03	04	05	06	07	
(1, 2)	(3, 4)	(20)	(18)	(16)	(14)	(12)	(10)	(8)	(6)	
		08	09	0A	0B	0C	0D	0E	0F	Terminal block
		(19)	(17)	(15)	(13)	(11)	(9)	(7)	(5)	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJ/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJII

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ○ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Sensor connector type terminal block

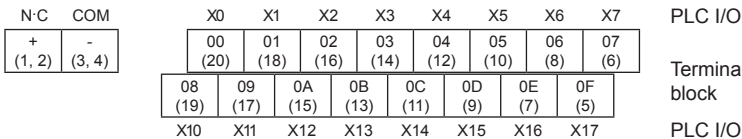
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	32MT, 32MT-D/UL	16	Mixed (Input)	-	Sensor connector type terminal block	AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B			Mixed (Output)			AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	C	32MT-DSS	16	Mixed (Input)	Com.		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
	A						AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	D	32MT-DSS	16	Mixed (Output)	+		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
	A			AFE4-H20-16LF			2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1	
	B	64MT, 64MT-D/UL	32	Mixed (Input)	-		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	C			Mixed (Output)			AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	A	64MT-DSS	32	Mixed (Input)	Com.		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	2	1
	D						AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	B	64MT-DSS	32	Mixed (Output)	+		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	2	1
	A			AFE4-H20-16LF			2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1	
	A	96MT, 96MT-D/UL	48	Mixed (Input)	-		AFE4-H20-16LF	3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1
	B			Mixed (Output)			AFE4-H20-16LF	3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1
	C	96MT-DSS	48	Mixed (Input)	Com.		AFE4-H20-16LF	3	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	3	1
	A						AFE4-H20-16LF	3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1
D	96MT-DSS	48	Mixed (Output)	+	AFE4-H20-16LF	3	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	3	1		
A			AFE4-H20-16LF		3	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	3	1			

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

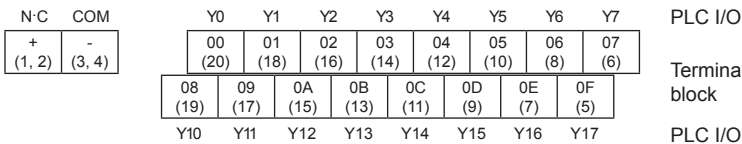
※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

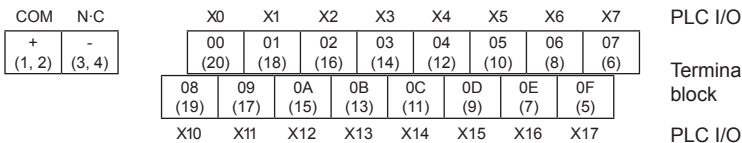
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



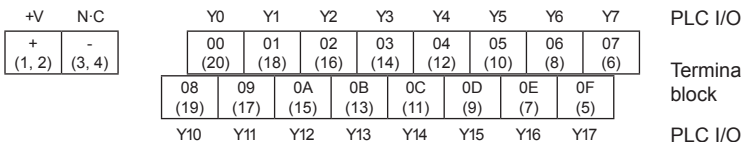
#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type C) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type D) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ MITSUBISHI (MELSEC-FX<sub>2NC</sub> Series)-Sensor connector type terminal block

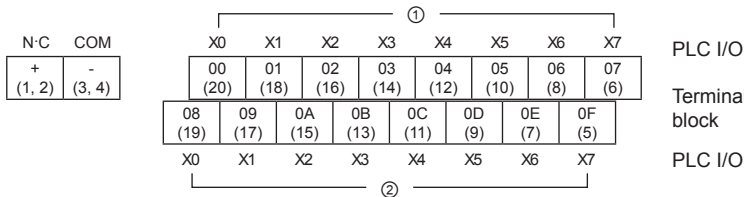
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
MELSEC - FX <sub>2NC</sub>	A	16EX, 16EX-D/UL	16	Input	-	Sensor connector type terminal block	AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B	16EX-DS	16	Input	Com.		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
	A						AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	C	16EYT, 16EYT-D/UL	16	Output	-		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	D	16EYT-DSS	16	Output	+		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
	A	32EX, 32EX-D/UL	32	Input	-		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	B	32EX-DS	32	Input	Com.		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	2	1
	A						AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	C	32EYT, 32EYT-D/UL	32	Output	-		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	D	32EYT-DSS	32	Output	+		AFE4-H20-16LF	2	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	2	1

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

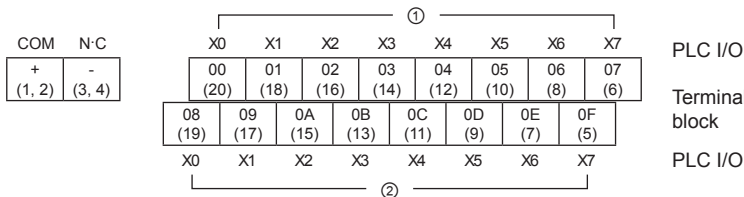
※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

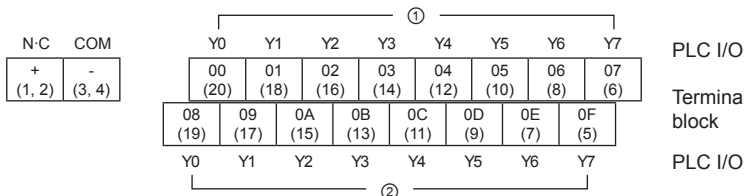
#### ● Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



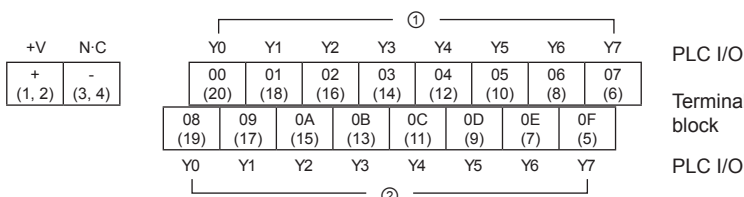
#### ● Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type C) and terminal block AFE4-H20-16LF



#### ● Connection diagram for I/O module (type D) and terminal block AFE4-H20-16LF



※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFS/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

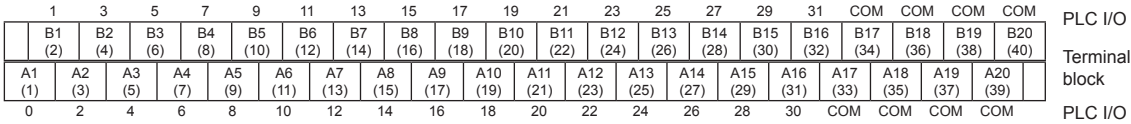
### ◎LSIS (GLOFA-GM Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
GLOFA-GM	A	G3I-D28A	64	Input	Com.	+	Interface terminal block	AFS-H40, AFL-H40, AFR-H40	2	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	2	4
		G3Q-TR8A	64	Output	-	AFS-H40, AFL-H40, AFR-H40		2	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	2	4	
	B	G3Q-TR8B	64	Output	+	AFS-H40, AFL-H40, AFR-H40		2	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	2	4	
		C	G4I-D24A	32	Input	Com.		+	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1
	G4I-D24B		32	Input	+	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3	
	A	G4I-D28A	32	Input (right)	Com.	+		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
			32	Input (left)				AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANR (ordering no.: FP-5-□)	1	4
	D	G4Q-TR4A	32	Output	-	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3	
	E	G4Q-TR4B	32	Output	+	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3	
			B	G4Q-TR8A	32	Output (right)		-	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1
	32	Output (left)			-	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPFP40-V1N□-2ANR (ordering no.: FP-5-□)	1	4	
	C	G6I-D24A	32	Input	Com.	+		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3
			G6I-D24B	32	Input	+		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3
	D	G6Q-TR4A	32	Output	-	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3	
	E	G6Q-TR4B	32	Output	+	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3	

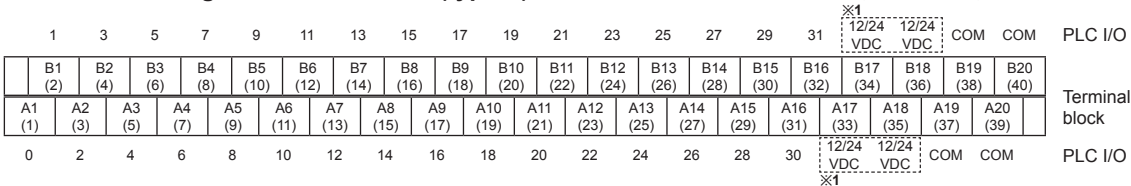
※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

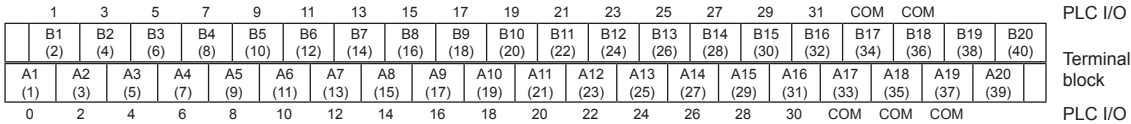
#### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



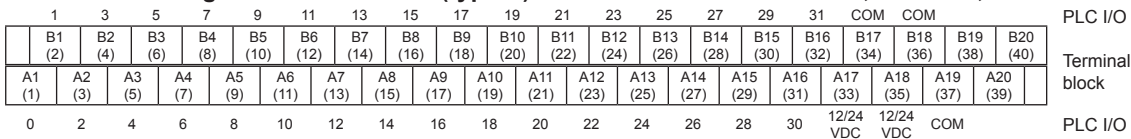
#### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



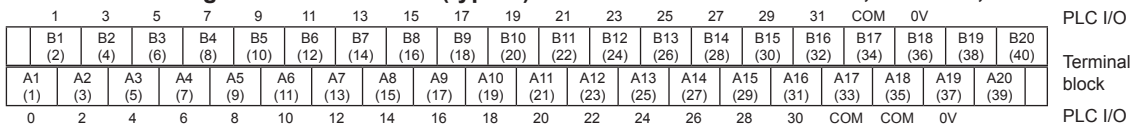
#### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40



#### ●Connection diagram for I/O module (type D) and terminal block AFS-H40, AFL-H40, AFR-H40



#### ●Connection diagram for I/O module (type E) and terminal block AFS-H40, AFL-H40, AFR-H40



※1: G3Q-TR8B modules are 0V. ※The number in ( ) indicates the connector pin number of terminal blocks.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections

### ○ LSIS (GLOFA-GM Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
GLOFA-GM	A	G3Q-TR8A	64	Output	-	Relay terminal block	ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1CNL (ordering no.: FP-8-□)	2	4
							ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1CNL (ordering no.: FP-13★-□)	2	10,11
	B	G3Q-TR8B	64	Output	+		ABS-H32◆-PN	2	CJ-HPFP40-V1N□-1CNL (ordering no.: FP-8-□)	2	4
							ABS-H16◆-PN	4	CJ-HPFP40-V2★□-1CNL (ordering no.: FP-13★-□)	2	10,11
	A	G4Q-TR4A	32	Output	-		ABS-H32◆-NN	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
							ABS-H16◆-NN	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9
	B	G4Q-TR4B	32	Output	+		ABS-H32◆-PN	1	CJ-HPDS37-V1N□-1CPR (ordering no.: DS-4-□)	1	3
							ABS-H16◆-PN	2	CJ-HPDS37-V2★□-1CPR (ordering no.: DS-6★-□)	1	8,9
	A	G4Q-TR8A	32	Output (right)	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1CNL (ordering no.: FP-9-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1CNL (ordering no.: FP-13★-□)	1	10,11
			32	Output (left)	-		ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1CNR (ordering no.: FP-9-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1CNR (ordering no.: FP-14★-□)	1	10,11
B	G6Q-TR4A	32	Output	-	ABS-H32◆-NN	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3		
					ABS-H16◆-NN	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9		
B	G6Q-TR4B	32	Output	+	ABS-H32◆-PN	1	CJ-HPDS37-V1N□-1CPR (ordering no.: DS-4-□)	1	3		
					ABS-H16◆-PN	2	CJ-HPDS37-V2★□-1CPR (ordering no.: DS-6★-□)	1	8,9		

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN

12/24 VDC	12/24 VDC	1	3	5	7	8	10	12	14	17	19	21	23	24	26	28	30	PLC I/O		
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	0	2	4	6		9	11	13	15	16	18	20	22		25	27	29	31	

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

12/24 VDC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (A)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

#### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-PN

12/24 VDC	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H32◆-PN

0V	0V	1	3	5	7	8	10	12	14	17	19	21	23	24	26	28	30	PLC I/O		
24VDC (1)	24VDC (3)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	0	2	4	6		9	11	13	15	16	18	20	22		25	27	29	31	

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

0V	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (A)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

#### ● Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

0V	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (5)	R10+ (4)	R11+ (3)	R12+ (2)	R13+ (1)	R14+ (0)	R15+ (0)	R16+ (0)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (5)	R10- (4)	R11- (3)	R12- (2)	R13- (1)	R14- (0)	R15- (0)	R16- (0)	PLC I/O
COM	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

※ The number in ( ) indicates the connector pin number of terminal blocks.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

Control Switches
○22/25
○30
□30
Round Push Button Switches
Square Push Button Switches
Key Selector Switches
Double Push Button Switches
Mushroom-head Push Button Switches
Emergency Switches
Pilot Lights
Accessories
Buzzers
Modular Terminal Blocks
TUM(Spring Type)
TUM1(Dual Spring Type)
TW(Manual Type)
I/O Terminal Blocks
AFS(Interface Terminal Block)
AFLA/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay
I/O Cables
MITUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJII
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance
Remote I/O Terminal Blocks
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)
Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎LSIS (GLOFA-GM Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
GLOFA-GM	A	G3I-D28A	64	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	2	CJ-HPFP40-V1N□-3BNL (ordering no.: FP-6-□)	2	4
	B	G3Q-TR8A	64	Output	-		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1CNL (ordering no.: FP-8-□)	2	4
	C	G3Q-TR8B	64	Output	+		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1CNL (ordering no.: FP-13★-□)	2	10,11
	A	G4I-D24A, G4I-D24B	32	Input	+		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1CPL (ordering no.: FP-10-□)	2	4
							AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1BNR (ordering no.: DS-2-□)	1	3
	A	G4I-D28A	32	Input (right)	+		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-3BNL (ordering no.: FP-6-□)	1	4
				Input (left)	+		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-3BNR (ordering no.: FP-7-□)	1	4
	B	G4Q-TR4A	32	Output	-		AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
							AFE4-H20-16LF	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9
							AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
							AFE4-H20-16LF	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9
	B	G4Q-TR4B	32	Output	+		AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1CNL (ordering no.: FP-8-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1CNL (ordering no.: FP-13★-□)	1	10,11
							AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1CNR (ordering no.: FP-9-□)	1	4
							AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1CNR (ordering no.: FP-14★-□)	1	10,11
	A	G6I-D24A, G6I-D24B	32	Input	+		AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1BNR (ordering no.: DS-2-□)	1	3
							AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
	B	G6Q-TR4A	32	Output	-		AFE4-H20-16LF	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9
							AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
	B	G6Q-TR4B	32	Output	+		AFE4-H40-32LF	1	CJ-HPDS37-V1N□-1CNR (ordering no.: DS-3-□)	1	3
							AFE4-H20-16LF	2	CJ-HPDS37-V2★□-1CNR (ordering no.: DS-5★-□)	1	8,9

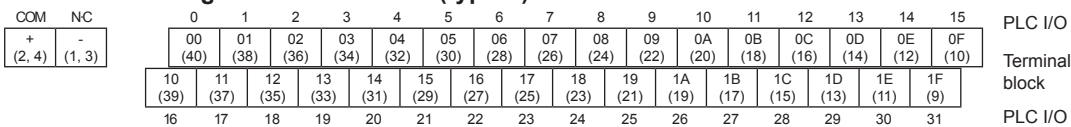
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

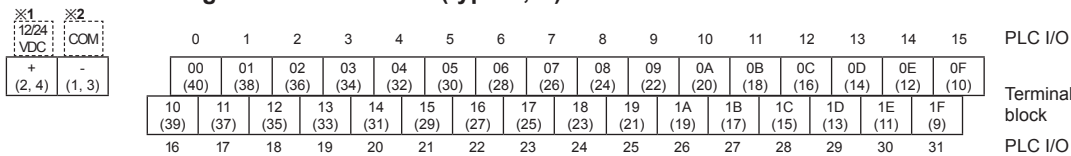
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

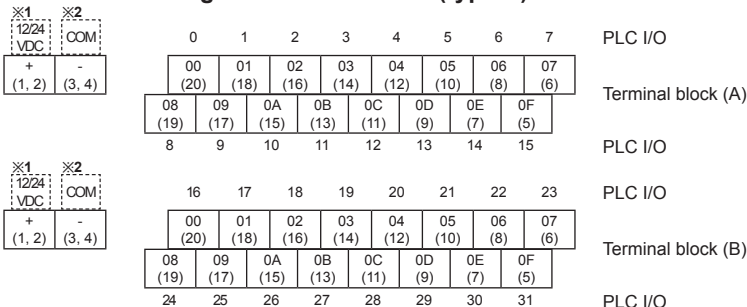
#### ●Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



#### ●Connection diagram for I/O module (type B, C) and terminal block AFE4-H40-32LF



#### ●Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※1: G3Q-TR8B, G4Q-TR4B, G6Q-TR4B modules are COM. ※2: G3Q-TR8B, G4Q-TR4B, G6Q-TR4B modules are 0V.

※The number in ( ) indicates the connector pin number of terminal blocks.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections

### ○ LSIS (XGB Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGB	A	XBM-DN16S	8	Mixed(Input)	Com.	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
			8	Mixed(Output)	-		AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1
	C	XBM-DN16S	8	Mixed(Input)	Com.		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANX (ordering no.: HP-16-□)	1	15
			8	Mixed(Output)	-						
	D	XBM-DN32S	16	Mixed(Input)	Com.		AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
			16	Mixed(Output)	-		AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1
	F	XBM-DN32S	16	Mixed(Input)	Com.		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANX (ordering no.: HP-16-□)	1	15
			16	Mixed(Output)	-						

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

COM	COM	7	6	5	4	3	2	1	0	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

12/24 VDC	12/24 VDC	27	26	25	24	23	22	21	20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
COM	COM	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	

### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

1	3	5	7	COM	N-C	N-C	N-C	N-C	N-C	21	23	25	27	12/24 VDC	N-C	N-C	N-C	N-C	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
0	2	4	6	COM	N-C	N-C	N-C	N-C	N-C	20	22	24	26	12/24 VDC	N-C	N-C	N-C	N-C	COM	

### ● Connection diagram for I/O module (type D) and terminal block AFS-H20

COM	COM	7	6	5	4	3	2	1	0	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
COM	COM	F	E	D	C	B	A	9	8	

### ● Connection diagram for I/O module (type E) and terminal block AFS-H20

12/24 VDC	12/24 VDC	27	26	25	24	23	22	21	20	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
COM	COM	2F	2E	2D	2C	2B	2A	29	28	

### ● Connection diagram for I/O module (type F) and terminal block AFS-H40, AFL-H40, AFR-H40

1	3	5	7	COM	9	B	D	F	COM	21	23	25	27	12/24 VDC	29	2B	2D	2F	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
0	2	4	6	COM	8	A	C	E	COM	20	22	24	26	12/24 VDC	28	2A	2C	2E	COM	

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJII

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections

### ◎LSIS (XGB Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
XGB	A	XBE-DC32A	32	Input	Com.	+, -	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	1	5
		XBE-DC64A	64	Input				AFS-H40 AFL-H40 AFR-H40	2	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	2	5
	B	XBE-TN32A	32	Output	-	AFS-H40 AFL-H40 AFR-H40		1	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	1	5	
		XBE-TN64A	64	Output	-	AFS-H40 AFL-H40 AFR-H40		2	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	2	5	
	C	XBE-TP32A	32	Output	+	AFS-H40 AFL-H40 AFR-H40		1	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	1	5	
		XBE-TP64A	64	Output	+	AFS-H40 AFL-H40 AFR-H40		2	CJ-HPHP40-V1N□-6ANL (ordering no.: HP-4-□)	2	5	

※ □ of model name indicates cable length. (standard specifications ≡ **005**: 0.5m, **010**: 1.0m, **015**: 1.5m, **020**: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ **Cable Appearance** on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

01	03	05	07	09	0B	0D	0F	N-C	COM	11	13	15	17	19	1B	1D	1F	N-C	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	02	04	06	08	0A	0C	0E	N-C	COM	10	12	14	16	18	1A	1C	1E	N-C	COM	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

01	03	05	07	09	0B	0D	0F	N-C	COM	11	13	15	17	19	1B	1D	1F	N-C	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	02	04	06	08	0A	0C	0E	N-C	COM	10	12	14	16	18	1A	1C	1E	N-C	COM	PLC I/O

### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

01	03	05	07	09	0B	0D	0F	N-C	COM	11	13	15	17	19	1B	1D	1F	N-C	0V	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	02	04	06	08	0A	0C	0E	N-C	COM	10	12	14	16	18	1A	1C	1E	N-C	0V	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎LSIS (XGB Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGB	A	XBM-DN16S	8	Mixed (Output)	-	Relay terminal block	ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1CNL (ordering no.: HP-12-□)	1	1
	B	XBM-DN32S	16	Mixed (Output)	-		ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1CNL (ordering no.: HP-12-□)	1	1
	C	XBE-TN32A	32	Output	-		ABS-H32◆-NN	1	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	1	5
							ABS-H16◆-NN	2	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	1	12,13
		XBE-TN64A	64	Output	-		ABS-H32◆-NN	2	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	2	5
							ABS-H16◆-NN	4	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	2	12,13

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ●Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

12/24 VDC	20	21	22	23	24	25	26	27	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)		Terminal block
	0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	
	COM	20	21	22	23	24	25	26	27	N-C	N-C	N-C	N-C	N-C	N-C	N-C	N-C	PLC I/O

#### ●Connection diagram for I/O module (type B) and terminal block ABS-H16◆-NN

12/24 VDC	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	PLC I/O	
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)		Terminal block
	0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	
	COM	20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	PLC I/O

#### ●Connection diagram for I/O module (type C) and terminal block ABS-H32◆-NN

12/24 VDC	12/24 VDC	01	03	05	07	08	0A	0C	0E	11	13	15	17	18	1A	1C	1E	PLC I/O			
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)		
	0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	
	COM	COM	00	02	04	06		09	0B	0D	0F	10	12	14	16		19	1B	1D	1F	PLC I/O

#### ●Connection diagram for I/O module (type C) and terminal block ABS-H16◆-NN

12/24 VDC	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	PLC I/O	
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)		Terminal block (A)
	0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	
	COM	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	PLC I/O
12/24 VDC	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O	
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)		Terminal block (B)
	0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	
	COM	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches
Ø22/25
Ø30
□30
Round Push Button Switches
Square Push Button Switches
Selector Switches
Key Selector Switches
Double Push Button Switches
Mushroom-head Push Button Switches
Emergency Switches
Pilot Lights
Accessories
Buzzers
Modular Terminal Blocks
TUM(Spring Type)
TUW1(Dual Spring Type)
TM(Manual Type)
I/O Terminal Blocks
AFS(Interface Terminal Block)
AFJ/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay
I/O Cables
MITUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance
Remote I/O Terminal Blocks
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)
Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎LSIS (XGB Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGB	A	XBE-TP32A	32	Output	+	Relay terminal block	ABS-H32◆-PN	1	CJ-HPHP40-V1N□-1APL (ordering no.: HP-2-□)	1	5
							ABS-H16◆-PN	2	CJ-HPHP40-V2★□-1APL (ordering no.: HP-6★-□)	1	12,13
		XBE-TP64A	64	Output	+		ABS-H32◆-PN	2	CJ-HPHP40-V1N□-1APL (ordering no.: HP-2-□)	2	5
							ABS-H16◆-PN	4	CJ-HPHP40-V2★□-1APL (ordering no.: HP-6★-□)	2	12,13

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block ABS-H32◆-PN

0V	0V	01		03	05		07	08	0A	0C	0E	11		13	15		17	18	1A	1C	1E	PLC I/O
0V (2)	0V (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)			Terminal block
24VDC (1)	24VDC (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)			PLC I/O
COM	COM	00	02	04	06		09	0B	0D	0F	10	12	14	16		19	1B	1D	1F			

### ●Connection diagram for I/O module (type A) and terminal block ABS-H16◆-PN

0V	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	Terminal block (B)
COM	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	PLC I/O

0V	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	Terminal block (B)
COM	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	PLC I/O

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

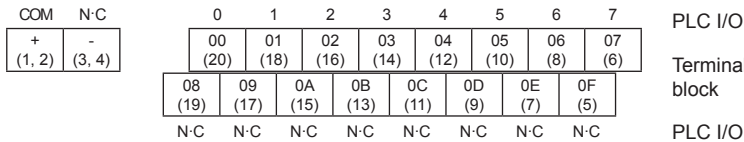
### ◎LSIS (XGB Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGB	A	XBM-DN16S	8	Mixed (Input)	+	Sensor connector type terminal block	AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1CNR (ordering no.: HP-13-□)	1	1
	B		8	Mixed (Output)	-		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1CNL (ordering no.: HP-12-□)	1	1
	C	XBM-DN32S	16	Mixed (Input)	+		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1BNR (ordering no.: HP-10-□)	1	1
	D		16	Mixed (Output)	-		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1CNL (ordering no.: HP-12-□)	1	1

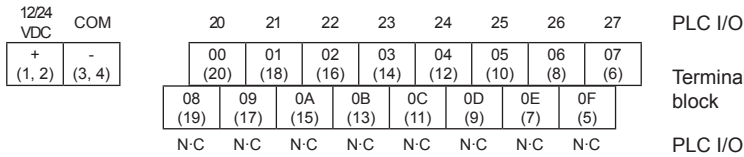
※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

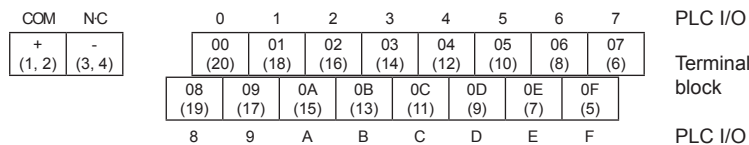
### ●Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



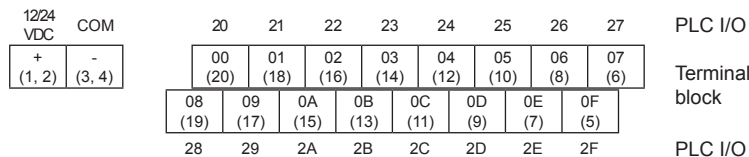
### ●Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



### ●Connection diagram for I/O module (type C) and terminal block AFE4-H20-16LF



### ●Connection diagram for I/O module (type D) and terminal block AFE4-H20-16LF



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎LSIS (XGB Series)-Sensor connector type terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1	
	Type	Model				Type	Model	Qty.	Model	Qty.		
XGB	A	XBE-DC32A	32	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPHP40-V1N□-1BNL (ordering no.: HP-3-□)	1	5	
		XBE-DC64A	64	Input	+		AFE4-H40-32LF	2	CJ-HPHP40-V1N□-1BNL (ordering no.: HP-3-□)	2	5	
		B	XBE-TN32A	32	Output		-	AFE4-H40-32LF	1	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	1	5
			XBE-TN64A	32	Output		-	AFE4-H20-16LF	2	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	1	12,13
								AFE4-H40-32LF	2	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	2	5
				64	Output		-	AFE4-H20-16LF	4	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	2	12,13
	AFE4-H40-32LF							1	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	1	5	
	XBE-TP32A		32	Output	+		AFE4-H20-16LF	2	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	1	12,13	
	XBE-TP64A	64	Output	+	AFE4-H40-32LF		2	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	2	5		
					AFE4-H20-16LF		4	CJ-HPHP40-V2★□-1ANL (ordering no.: HP-5★-□)	2	12,13		

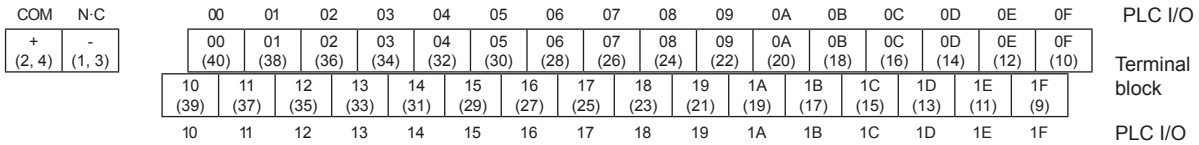
※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

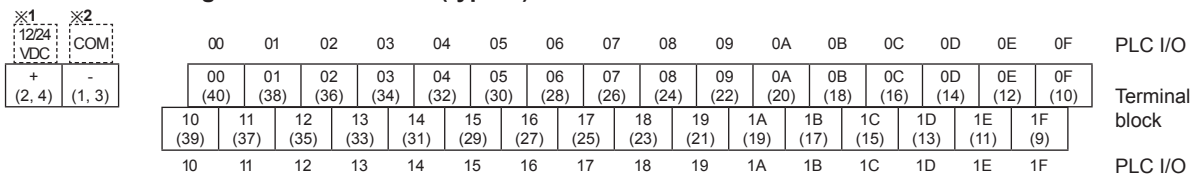
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

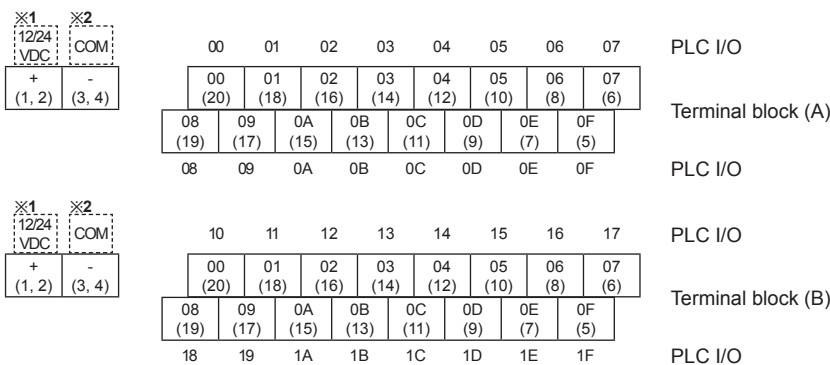
### ●Connection diagram for I/O module (type A) and terminal block AFE4-H40-32LF



### ●Connection diagram for I/O module (type B) and terminal block AFE4-H40-32LF



### ●Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



※1: XBE-TP32A, XBE-TP64A modules are COM.

※2: XBE-TP32A, XBE-TP64A modules are 0V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎LSIS (XGT Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
XGT	A	XGI-D24A	32	Input	Com.	+, -	Interface terminal block	AFS-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
								AFL-H40				
								AFR-H40				
								AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
								AFS-H40				
								AFL-H40				
		AFR-H40										
		AFS-H20	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4						
		AFS-H40										
		AFL-H40										
		AFR-H40										
		AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11						
AFS-H40												
AFL-H40												
AFR-H40												
AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	4								
AFS-H40												
AFL-H40												
AFR-H40												
AFS-H20	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4								
AFS-H40												
AFL-H40												
AFR-H40												
AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11								
AFS-H40												
AFL-H40												
AFR-H40												

- ※ ★ of model name indicates cable branch length. (L: long type, S: short type)
- ※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.
- ※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM	COM	N-C	N-C	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
COM	COM	N-C	N-C	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	

### ●Connection diagram for I/O module (type A) and terminal block AFS-H20

COM	COM	7	6	5	4	3	2	1	0	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	15	14	13	12	11	10	9	8	
COM	COM	23	22	21	20	19	18	17	16	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C	N-C	31	30	29	28	27	26	25	24	

- ※1: XGI-D28A, XGI-D28B modules are N.C.
- ※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.
- ※ The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
    - Autonics
    - RS Automation
    - YOKOGAWA
    - FUJI
    - KDT
    - OMRON
    - TELEMECANIQUE
    - For SERVO
    - Open Type Cables
    - Cable Appearance
  - Remote I/O Terminal Blocks
    - ARD(DeviceNet Digital Standard Terminal Type)
    - ARD(DeviceNet Digital Sensor Connector Type)
    - ARD(DeviceNet Analog Standard Terminal Type)
    - ARM(Modbus Digital Sensor Connector Type)
  - Others
    - Sensor Connectors
    - Sockets
    - Sensor Distribution Boxes
    - Valve Plugs
    - Thumbwheel Switches

# CJ Series

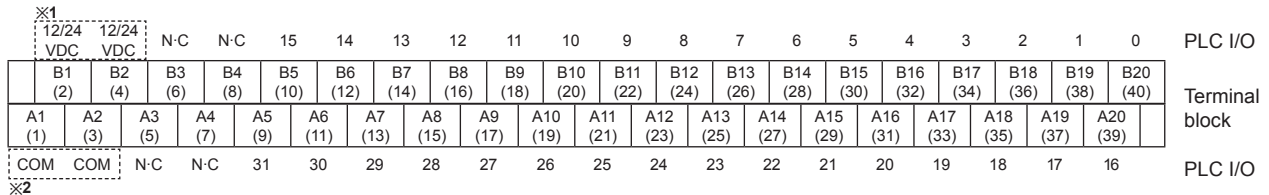
## ■ Cable Selection & Connections

### ◎LSIS (XGT Series)-Interface terminal block

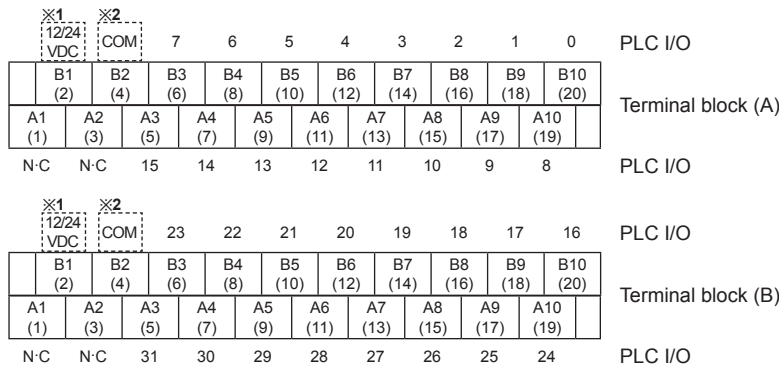
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGT	A	XGQ-TR4A	32	Output	-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		XGQ-TR4B	32	Output	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							AFS-H20	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
		XGQ-TR8A	64	Output	-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
		XGQ-TR8B	64	Output	+		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11

- ※ ★ of model name indicates cable branch length. (L: long type, S: short type)
- ※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.
- ※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



### ●Connection diagram for I/O module (type A) and terminal block AFS-H20



- ※1: XGQ-TR4B, XGQ-TR8B modules are COM.
- ※2: XGQ-TR4B, XGQ-TR8B modules are 0V.
- ※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.
- ※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎LSIS (XGT Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGT	A	XGQ-TR4A	32	Output	-	Relay terminal block	ABS-H32◆-NN	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
							ABS-H16◆-NN	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
	B	XGQ-TR4B	32	Output	+		ABS-H32◆-PN	1	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	1	4
							ABS-H16◆-PN	2	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	1	10,11
	A	XGQ-TR8A	64	Output	-		ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	B	XGQ-TR8B	64	Output	+		ABS-H32◆-PN	2	CJ-HPFP40-V1N□-1APR (ordering no.: FP-2-□)	2	4
							ABS-H16◆-PN	4	CJ-HPFP40-V2★□-1APR (ordering no.: FP-12★-□)	2	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications = 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ●Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN

12/24 VDC	12/24 VDC		1	3	5	7	8	10	12	14		17	19	21	23	24	26	28	30	PLC I/O
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	0	2	4	6		9	11	13	15	16	18	20	22		25	27	29	31	

#### ●Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

12/24 VDC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
0V (3, 4)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O	
COM	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

#### ●Connection diagram for I/O module (type B) and terminal block ABS-H32◆-PN

12/24 VDC	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

#### ●Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

0V	0V		1	3	5	7	8	10	12	14		17	19	21	23	24	26	28	30	PLC I/O
0V (2)	0V (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
24VDC (1, 2)	24VDC (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (39)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	PLC I/O
COM	COM	0	2	4	6		9	11	13	15	16	18	20	22		25	27	29	31	

#### ●Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

0V	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
0V	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches
Ø22/25
Ø30
□30
Round Push Button Switches
Square Push Button Switches
Selector Switches
Key Selector Switches
Double Push Button Switches
Mushroom-head Push Button Switches
Emergency Switches
Pilot Lights
Accessories
Buzzers
Modular Terminal Blocks
TUM(Spring Type)
TUW1(Dual Spring Type)
TM(Manual Type)
I/O Terminal Blocks
AFS(Interface Terminal Block)
AFL/AFR(Interface Terminal Block)
ACS(Common Terminal Block)
AFE(Sensor Connector Terminal Block)
ABS(Relay Terminal Block)
ABL(Relay Terminal Block)
Power Relay
I/O Cables
MITUBISHI
LSIS
Autonics
RS Automation
YOKOGAWA
FUJI
KDT
OMRON
TELEMECANIQUE
For SERVO
Open Type Cables
Cable Appearance
Remote I/O Terminal Blocks
ARD(DeviceNet Digital Standard Terminal Type)
ARD(DeviceNet Digital Sensor Connector Type)
ARD(DeviceNet Analog Standard Terminal Type)
ARM(Modbus Digital Sensor Connector Type)
Others
Sensor Connectors
Sockets
Sensor Distribution Boxes
Valve Plugs
Thumbwheel Switches



## ■ Cable Selection & Connections

### ◎LSIS (XGT Series)-Sensor connector type terminal block

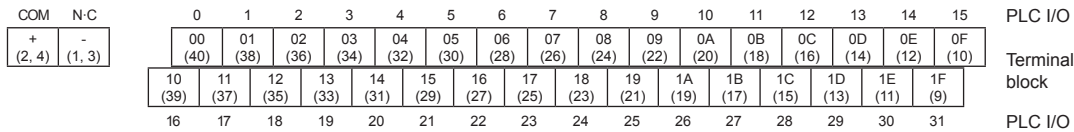
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
XGT	A	XGI-D24A, XGI-D24B	32	Input	+	Sensor connector type terminal block	AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1BNR (ordering no.: FP-3-□)	1	4
							AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	B	XGI-D28A, XGI-D28B	64	Input	+		AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
							AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	C	XGQ-TR4A	32	Output	-		AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
							AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		XGQ-TR4B	32	Output	+		AFE4-H20-16LF	2	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	1	10,11
							AFE4-H40-32LF	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		XGQ-TR8A	64	Output	-		AFE4-H40-32LF	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							AFE4-H20-16LF	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11
	XGQ-TR8B	64	Output	+	AFE4-H40-32LF		2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4	
					AFE4-H20-16LF		4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

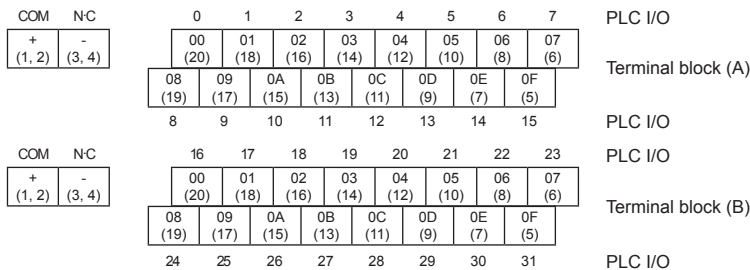
※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

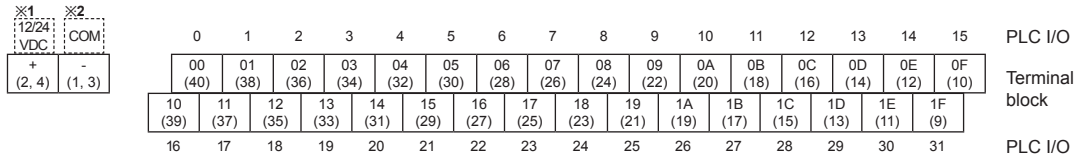
### ●Connection diagram for I/O module (type A, B) and terminal block AFE4-H40-32LF



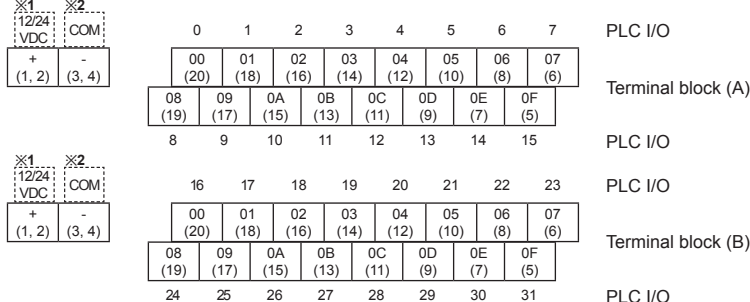
### ●Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



### ●Connection diagram for I/O module (type C) and terminal block AFE4-H40-32LF



### ●Connection diagram for I/O module (type C) and terminal block AFE4-H20-16LF



※1: XGQ-TR4B, XGQ-TR8B modules are COM. ※2: XGQ-TR4B, XGQ-TR8B modules are 0V.

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎Autonics (LP-S044/S070)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
LP-S044	A	LP-S044-S1D0-C5R-A	16	Mixed (Input)	+	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
		LP-S044-S1D1-C5R-A	16	Mixed (Output)	-						
	C	LP-S044-S1D0-C5R-A, LP-S044-S1D1-C5R-A	16	Mixed (Input)	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VY2□-2ANR (ordering no.: HP-14-□)	1	14
			16	Mixed (Output)	-						
LP-S070	A	LP-S070-T9D6-C5R, LP-S070-T9D7-C5R	16	Mixed (Input)	+	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
			16	Mixed (Output)	-						
	C	LP-S070-T9D6-C5R, LP-S070-T9D7-C5R	16	Mixed (Input)	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-VF2□-2ANR (ordering no.: HP-18-□)	1	16
			16	Mixed (Output)	-						

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H20

X8	X9	XA	XB	XC	XD	XE	XF	COM2	COM4	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
X0	X1	X2	X3	X4	X5	X6	X7	COM1	COM3	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H20

Y8	Y9	YA	YB	YC	YD	YE	YF	+	-	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	
Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	+	-	PLC I/O

### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

X8	X9	XA	XB	XC	XD	XE	XF	COM2	COM4	Y8	Y9	YA	YB	YC	YD	YE	YF	+	-	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
X0	X1	X2	X3	X4	X5	X6	X7	COM1	COM3	Y0	Y1	Y2	Y3	Y4	Y5	Y6	Y7	+	-	PLC I/O

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎Autonics (LP-S044/S070)-Sensor connector type terminal block, Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
LP-S044	A	LP-S044-S1D0-C5R-A, LP-S044-S1D1-C5R-A	16	Mixed (Input)	+	Sensor connector type terminal block	AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1BNR (ordering no.: HP-10-□)	1	1
	B		16	Mixed (Output)	-		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
LP-S070	A	LP-S070-T9D6-C5R, LP-S070-T9D7-C5R	16	Mixed (Input)	+		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1BNR (ordering no.: HP-10-□)	1	1
	B		16	Mixed (Output)	-		AFE4-H20-16LF	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
LP-S044	C	LP-S044-S1D0-C5R-A, LP-S044-S1D1-C5R-A	16	Mixed (Output)	-	Relay terminal block	ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1
LP-S070			16	Mixed (Output)	-		ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1APR (ordering no.: HP-9-□)	1	1

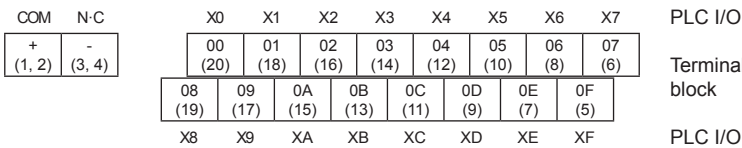
※□ of model name indicates cable length. (standard specifications ⇒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

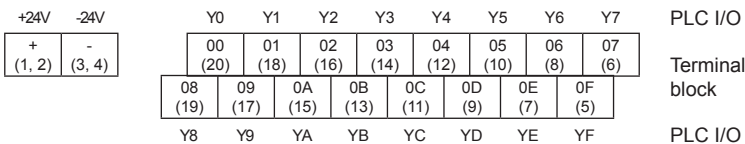
※◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

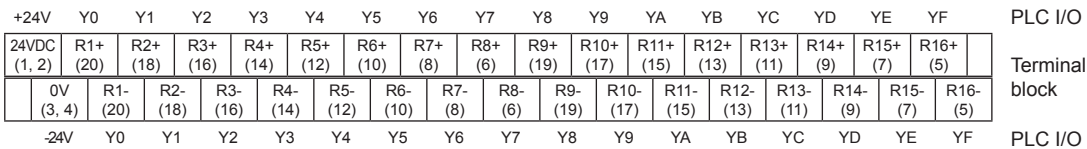
### ●Connection diagram for I/O module (type A) and terminal block AFE4-H20-16LF



### ●Connection diagram for I/O module (type B) and terminal block AFE4-H20-16LF



### ●Connection diagram for I/O module (type C) and terminal block ABS-H16◆-NN



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○ Autonics (PMC)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
PMC	A	PMC-1HS (PI/F), PMC-2HS (PI/F)	20	I/O	-	Interface terminal block	AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B	PMC-2HSP (PI/F), PMC-2HSN (PI/F)	20	I/O	-		AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

HOME	X/SCAN Y+	REGSL0/ RUN+/ SCAN X+	REGSL2/ SPD0	REGSL4/ SCAN	MODE 0	X DRIVE/ END	X ERROR	GEX	VEX	PLC signal
Input	Input	Input	Input	Input	Input	Output	Output	0V	+24V	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
Input	Input	Input	Input	Input	Input	Input	Output	Output	0V	PLC I/O
RESET	STROBE	Y/SCAN Y-	REGSL1/ RUN-/ SCAN X-	REGSL3/ SPD1	REGSL5/ STOP	MODE 1	Y DRIVE/ END	Y ERROR	GEX	PLC signal

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

HOME	X/JOG Y+	STEPSL0/ RUN+/ JOG X+	STEPSL2/ SPD0	STEPSL4/ JOG	MODE 0	X DRIVE/ END	X ERROR	GEX	VEX	PLC signal
Input	Input	Input	Input	Input	Input	Output	Output	0V	+24V	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
Input	Input	Input	Input	Input	Input	Input	Output	Output	0V	PLC I/O
RESET	STROBE	Y/JOG Y-	STEPSL1/ RUN-/ JOG X-	STEPSL3/ SPD1	STEPSL5/ STOP	MODE 1	Y DRIVE/ END	Y ERROR	GEX	PLC signal

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

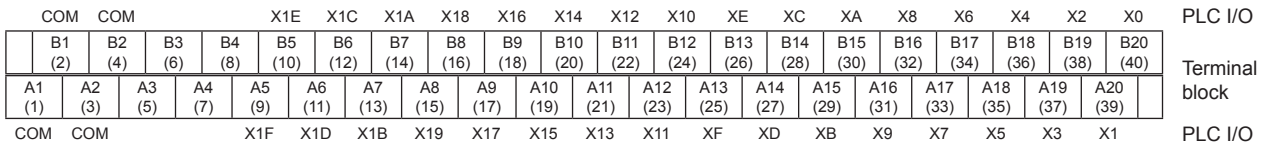
### ◎RS Automation (NX700/NX70 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1	
	Type	Model			Type	Model	Qty.	Model	Qty.				
NX700	A	NX-X32D	32	Input	Com.	+,-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	1	5	
	B	NX-Y32T	32	Output	-	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	1	5	
		NX-Y64T	64	Output	-	-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPHP40-V1N□-1ANL (ordering no.: HP-1-□)	2	5	
NX70	C	NX70-X32D, NX70-X32D1	16	Input (right)	Com.	+,-		AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1	
			16	Input (left)		AFS-H20		1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1		
	D	NX70-Y32T	16	Output (right)	-	-		AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1	
			16	Output (left)				AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
		NX70-Y32P	16	Output (right)				+	AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1
			16	Output (left)					AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1
	C	NX70-XY32	16	Mixed(Input)	Com.	+,-	AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1		
	D		16	Mixed(Output)	-	AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1			

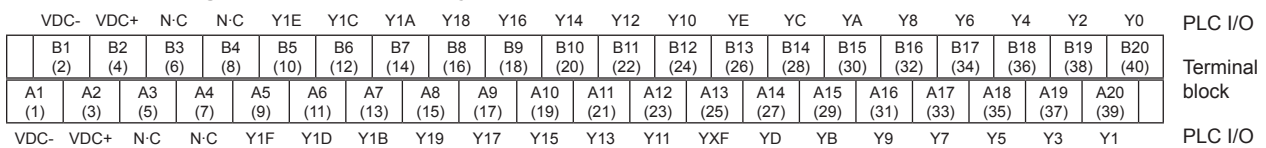
※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

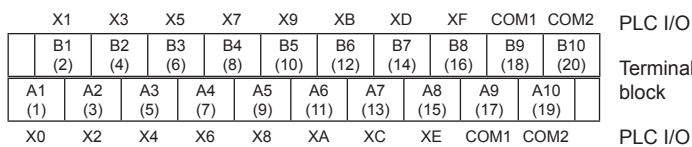
### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



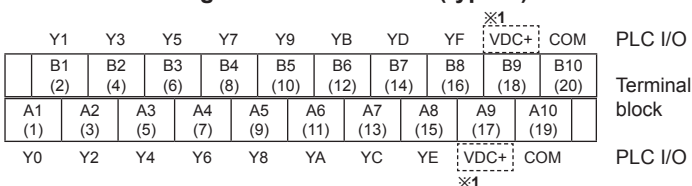
### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



### ●Connection diagram for I/O module (type C) and terminal block AFS-H20



### ●Connection diagram for I/O module (type D) and terminal block AFS-H20



※1: NX70-Y32P modules are VDC-.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎RS Automation (N700/N70 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
N700	A	CPL73024	32	Input	Comm.	+, -	Interface terminal block	AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
		CPL73027	32	Input (right)	Comm.	+, -		AFS-H20	2	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	2	1
			32	Input (left)				AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
	B	CPL73484	32	Output	-	-		AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
		CPL73487	32	Output (right)	-			AFS-H20	2	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	2	1
			32	Output (left)				AFS-H20	2	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	2	1
N70	C	CPL93024, CPL93034	16	Input (right)	Comm.	+, -	AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1	
			16	Input (left)			AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
	D	CPL93484	16	Output (right)	-	+	AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1	
			16	Output (left)			AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	
		CPL93584	16	Output (right)	+		AFS-H20	1	CJ-HPHP20-V1N□-1ANL (ordering no.: HP-7-□)	1	1	
			16	Output (left)			AFS-H20	1	CJ-HPHP20-V1N□-2ANR (ordering no.: HP-11-□)	1	1	

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ●Connection diagram for I/O module (type A) and terminal block AFS-H20

X1	X3	X5	X7	X9	XB	XD	XF	COM1	COM2	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
X0	X2	X4	X6	X8	XA	XC	XE	COM1	COM2	PLC I/O

#### ●Connection diagram for I/O module (type B) and terminal block AFS-H20

Y1	Y3	Y5	Y7	Y9	YB	YD	YF	VDC+	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
Y0	Y2	Y4	Y6	Y8	YA	YC	YE	VDC+	COM	PLC I/O

#### ●Connection diagram for I/O module (type C) and terminal block AFS-H20

X1	X3	X5	X7	X9	XB	XD	XF	COM1	COM2	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
X0	X2	X4	X6	X8	XA	XC	XE	COM1	COM2	PLC I/O

#### ●Connection diagram for I/O module (type D) and terminal block AFS-H20

Y1	Y3	Y5	Y7	Y9	YB	YD	YF	VDC+ ※1	COM	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
Y0	Y2	Y4	Y6	Y8	YA	YC	YE	VDC+ ※1	COM	PLC I/O

※1: CPL93584 modules are VDC-.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJ/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ○YOKOGAWA (FA-M3 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
FA-M3	A	F3XD32-3F, F3XD32-4F, F3XD32-5F	32	Input	Com.	+,-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		F3XD32-3N, F3XD32-4N, F3XD32-5N	32	Input	Com.	+,-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	B	F3YD32-1A, F3YD32-1T	32	Output	-	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		F3YD32-1B	32	Output	+	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	A	F3XD64-3F, F3XD64-4F	64	Input	Com.	+,-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
		F3XD64-3N, F3XD64-4N	64	Input	Com.	+,-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	B	F3YD64-1A, F3YD64-1F	64	Output	-	-		AFS-H40 AFL-H40 AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	A	F3WD64-3F, F3WD64-4F	32	Input	Com.	+,-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	C		32	Output	-	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	A	F3WD64-3N, F3WD64-4N	32	Input	Com.	+,-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	C		32	Output	-	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4

※★ of model name indicates cable branch length. (L: long type, S: short type)

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

17	18	19	20	21	22	23	24	COM3	25	26	27	28	29	30	31	32	COM4	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	Terminal block
1	2	3	4	5	6	7	8	COM1	9	10	11	12	13	14	15	16	COM2	N-C	N-C	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

17	18	19	20	21	22	23	24	COM3	25	26	27	28	29	30	31	32	COM4	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	Terminal block
1	2	3	4	5	6	7	8	COM1	9	10	11	12	13	14	15	16	COM2	N-C	N-C	PLC I/O

### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

49	50	51	52	53	54	55	56	COM7	57	58	59	60	61	62	63	64	COM8	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	Terminal block
33	34	35	36	37	38	39	40	COM5	41	42	43	44	45	46	47	48	COM6	N-C	N-C	PLC I/O

※1: F3YD32-1B modules are 0V. F3YD32-1T modules are 5VDC. F3YD64-1A, F3YD64-1F modules are 24VDC.

※2: F3WD64-4F, F3WD64-4N modules are 12VDC.

※The number in ( ) indicates the connector pin number of terminal blocks.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections

### ○ FUJI (MICREX-F Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
MICREX -F13	A	FTU127C	32	Input	Com.	+ , -	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	FTU227C	32	Output	-			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	C	FTU126A FTU125A	32	Input (left)	+			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
	D		32	Input (right)		AFS-H40 AFL-H40 AFR-H40		1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4	
MICREX -F70	A	NC1X3202-W	32	Input	Com.	+ , -		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
		NC1X3204, NC1X3206	32	Input	-			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	NC1Y32T05P1	32	Output	-			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	C	NC1X6404	32	Input (left)	+			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
D			32	Input (right)		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4		

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	C1	C1	N-C	N-C	

### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	M1	M1	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	P	P	N-C	N-C	

### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	C1	C1	N-C	N-C	

### ● Connection diagram for I/O module (type D) and terminal block AFS-H40, AFL-H40, AFR-H40

30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	N-C	N-C	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	C2	C2	N-C	N-C	

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches



## ■ Cable Selection & Connections

### ◎FUJI (MICREX-F Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1	
	Type	Model			Type	Model	Qty.	Model	Qty.				
MICREX -F13	A	FTU222A	32	Output (left)	+	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4		
												AFS-H40 AFL-H40 AFR-H40	1
	C	FTU612A	32	Input			Com.	+, -	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)		
												D	32
MICREX -F70	A	NC1Y64T05P1-1	32	Output (left)	+	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4			
											B	32	Output (right)

※□ of model name indicates cable length. (standard specifications ≡ **005**: 0.5m, **010**: 1.0m, **015**: 1.5m, **020**: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ **Cable Appearance** on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	M1	M1	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	P1	P1	N-C	N-C	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

30	31	32	33	34	35	36	37	38	39	3A	3B	3C	3D	3E	3F	N-C	N-C	M2	M2	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
20	21	22	23	24	25	26	27	28	29	2A	2B	2C	2D	2E	2F	P2	P2	N-C	N-C	PLC I/O

### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	N-C	N-C	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	C1	C1	N-C	N-C	PLC I/O

### ●Connection diagram for I/O module (type D) and terminal block AFS-H40, AFL-H40, AFR-H40

10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	N-C	N-C	M1	M1	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	P1	P1	N-C	N-C	PLC I/O

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎KDT (CIMON\_CM1 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
CM1	A	XD32C	32	Input	Com.	+ , -	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3
	B	YT32A	32	Output		+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3
	C	YT32B	32	Output		-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPDS37-V1N□-1ANR (ordering no.: DS-1-□)	1	3

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

X01 X03 X05 X07 X08 X0A X0C X0E COM X11 X13 X15 X17 X18 X1A X1C X1E COM																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
X00 X02 X04 X06 COM X09 X0B X0D X0F X10 X12 X14 X16 COM X19 X1B X1D X1F N-C																				PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

Y01 Y03 Y05 Y07 Y09 Y0B Y0D Y0F Y11 Y13 Y15 Y17 Y19 Y1B Y1D Y1F COM 0V																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
Y00 Y02 Y04 Y06 Y08 Y0A Y0C Y0E Y10 Y12 Y14 Y16 Y18 Y1A Y1C Y1E N-C COM 0V																				PLC I/O

### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

Y01 Y03 Y05 Y07 Y09 Y0B Y0D Y0F Y11 Y13 Y15 Y17 Y19 Y1B Y1D Y1F +24V COM																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	
Y00 Y02 Y04 Y06 Y08 Y0A Y0C Y0E Y10 Y12 Y14 Y16 Y18 Y1A Y1C Y1E N-C +24V COM																				PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎KDT (CIMON\_CM1 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
CM1	A	XD64C	64	Input	Com.	+, -	Interface terminal block	AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
								AFL-H40				
	AFR-H40											
	AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11							
B	YT64A	64	Output	+		AFS-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4		
						AFL-H40						
							AFR-H40					
							AFS-H20	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11	

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

COM	COM	N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	Terminal block
N-C	N-C	N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O

### ●Connection diagram for I/O module (type A) and terminal block AFS-H20

COM	N-C	X07	X06	X05	X04	X03	X02	X01	X00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	Terminal block (A)
N-C	N-C	X0F	X0E	X0D	X0C	X0B	X0A	X09	X08	PLC I/O
COM	N-C	X17	X16	X15	X14	X13	X12	X11	X10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	Terminal block (B)
N-C	N-C	X1F	X1E	X1D	X1C	X1B	X1A	X19	X18	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

COM	COM	N-C	N-C	Y0F	Y0E	Y0D	Y0C	Y0B	Y0A	Y09	Y08	Y07	Y06	Y05	Y04	Y03	Y02	Y01	Y00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	Terminal block
0V	0V	N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18	Y17	Y16	Y15	Y14	Y13	Y12	Y11	Y10	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block AFS-H20

COM	0V	Y07	Y06	Y05	Y04	Y03	Y02	Y01	Y00	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (A)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	Terminal block (A)
N-C	N-C	Y0F	Y0E	Y0D	Y0C	Y0B	Y0A	Y09	Y08	PLC I/O
COM	0V	Y17	Y16	Y15	Y14	Y13	Y12	Y11	Y10	PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block (B)
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	Terminal block (B)
N-C	N-C	Y1F	Y1E	Y1D	Y1C	Y1B	Y1A	Y19	Y18	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ○KDT (CIMON\_CM1 Series)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
CM1	A	YT64A	64	Output	+	Relay terminal block	ABS-H32◆-NN	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
							ABS-H16◆-NN	4	CJ-HPFP40-V2★□-1ANR (ordering no.: FP-11★-□)	2	10,11

※ ★ of model name indicates cable branch length. (L: long type, S: short type)

※ □ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
Other cable lengths are optional.

※ ◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※ 1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block ABS-H32◆-NN

COM	COM	Y01	Y03	Y05	Y07	Y08	Y0A	Y0C	Y0E	Y11	Y13	Y15	Y17	Y18	Y1A	Y1C	Y1E	PLC I/O		
24VDC (2)	24VDC (4)	COM1	R2 (38)	R4 (34)	R6 (30)	R8 (26)	R9 (24)	R11 (20)	R13 (16)	R15 (12)	COM3	R18 (37)	R20 (33)	R22 (29)	R24 (25)	R25 (23)	R27 (19)	R29 (15)	R31 (11)	Terminal block
0V (1)	0V (3)	R1 (40)	R3 (36)	R5 (32)	R7 (28)	COM2	R10 (22)	R12 (18)	R14 (14)	R16 (10)	R17 (9)	R19 (35)	R21 (31)	R23 (27)	COM4	R26 (21)	R28 (17)	R30 (13)	R32 (9)	Terminal block
0V	0V	Y00	Y02	Y04	Y06		Y09	Y0B	Y0D	Y0F	Y10	Y12	Y14	Y16		Y19	Y1B	Y1D	Y1F	PLC I/O

### ● Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

COM	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (A)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	Terminal block (A)
0V	Y00	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y0A	Y0B	Y0C	Y0D	Y0E	Y0F	PLC I/O
COM	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block (B)
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	Terminal block (B)
0V	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y1A	Y1B	Y1C	Y1D	Y1E	Y1F	PLC I/O

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※ The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJ/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

## ■ Cable Selection & Connections

### ◎ OMRON (C200/C500/CQM1 Series)-Interface terminal block

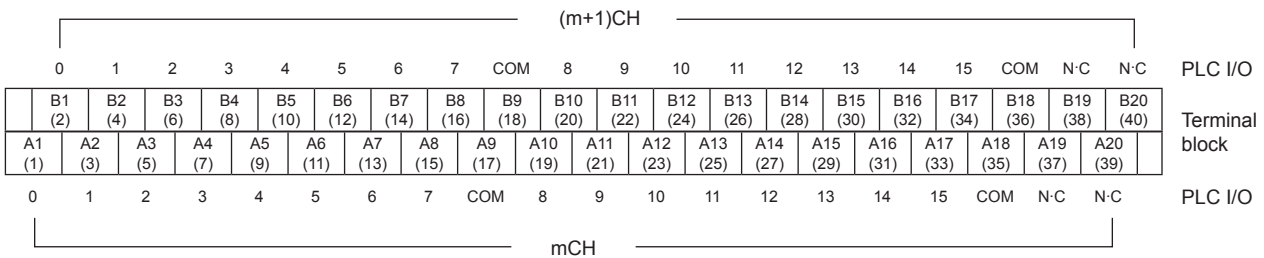
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
C200	A	C200H-ID216	32	Input	+	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	C200H-OD218	32	Output	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	A	C200H-ID111, C200H-ID217	32	Input (left)	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Input (right)			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	C200H-OD219	32	Output (left)	-		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Output (right)			AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
C500	A	C500-ID114, C500-ID119	32	Input (left)	Com.	+	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Input (right)							
	B	C500-OD213	32	Output (left)	-	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
			32	Output (right)							-
CQM1	A	CQM1-ID213, CQM1-ID112	32	Input	Com.	+	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	
	B	CQM1-OD213	32	Output	-	AFS-H40 AFL-H40 AFR-H40					1

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

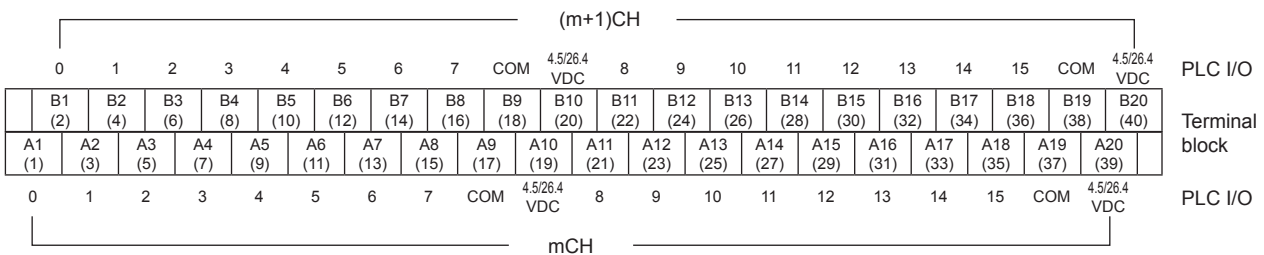
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎ OMRON (CJ1/CS1 Series)-Interface terminal block

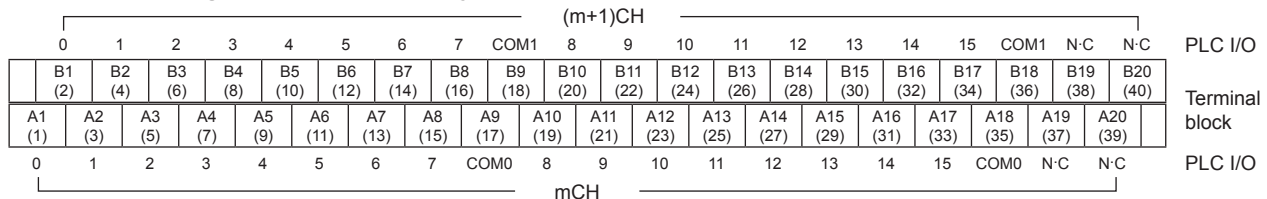
PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
CJ1	A	CJ1W-ID231	32	Input	Com.	Interface terminal block	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
		CJ1W-ID261	32	Input (left)	Com.		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Input (right)			AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	CJ1W-OD231	32	Output	-		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
		CJ1W-OD261	32	Output (left)	-		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Output (right)			AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
CS1	A	CS1W-ID231	32	Input	Com.	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
		CS1W-ID261	32	Input (left)	Com.	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
			32	Input (right)		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4	
	B	CS1W-OD231	32	Output	-	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
	C	CS1W-OD232	32	Output	+	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
		CS1W-OD261	32	Output (left)	-	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
	32		Output (right)	AFS-H40, AFL-H40, AFR-H40		1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4		
	C	CS1W-OD262	32	Output (left)	+	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4	
			32	Output (right)		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4	

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

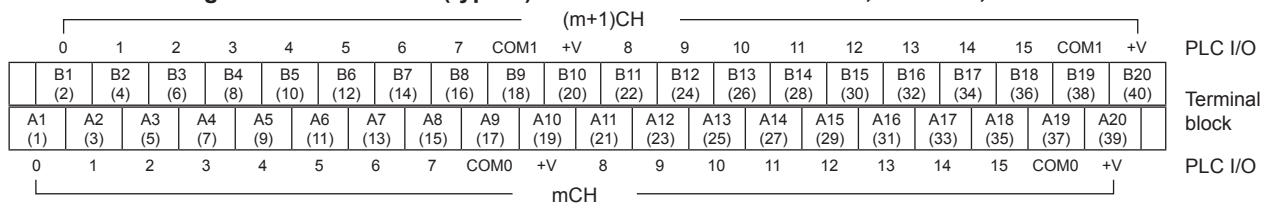
Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

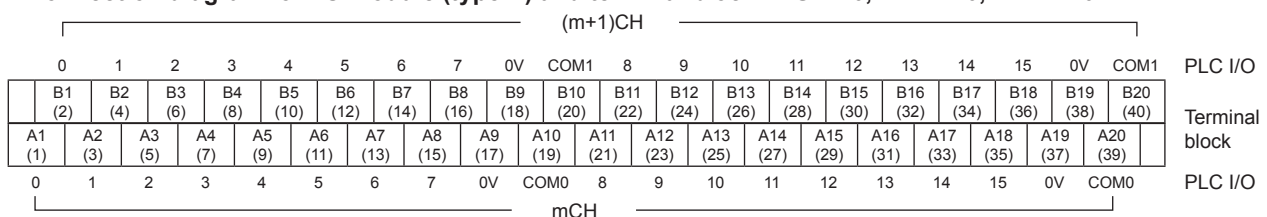
#### ● Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40



#### ● Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40



#### ● Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
 ※The number in ( ) indicates the connector pin number of terminal blocks.

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections

### ◎OMRON (CS1 Series)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM		Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model			Type	Model	Qty.	Model	Qty.			
CS1	A	CS1W-MD261	32	Output (left)	-	-	Interface terminal block	AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Input (right)	Com.	+, -		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4
	B	CS1W-MD262	32	Output (left)	+	+		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
			32	Input (right)	Com.	+, -		AFS-H40 AFL-H40 AFR-H40	1	CJ-HPFP40-V1N□-2ANL (ordering no.: FP-4-□)	1	4

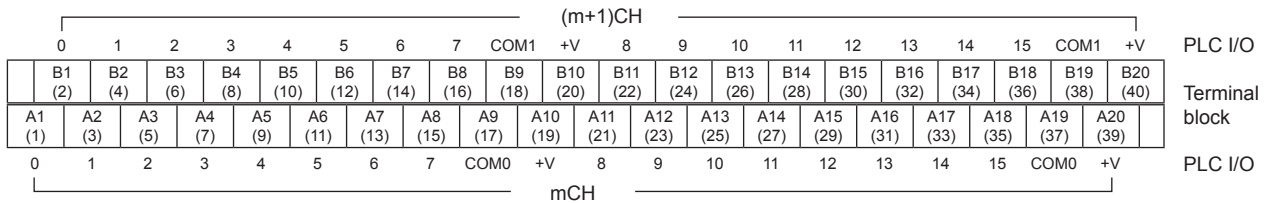
※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

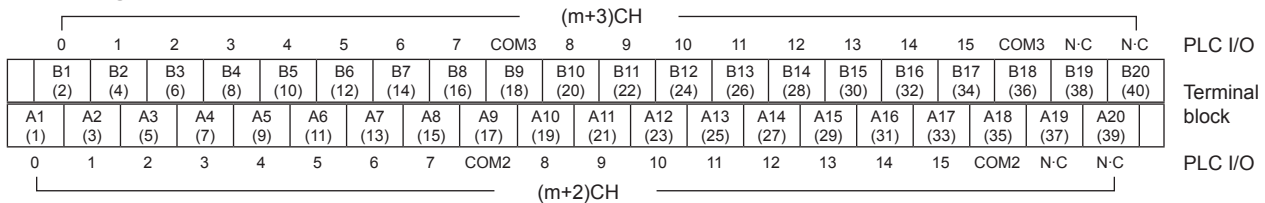
※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

#### <Output (left)>

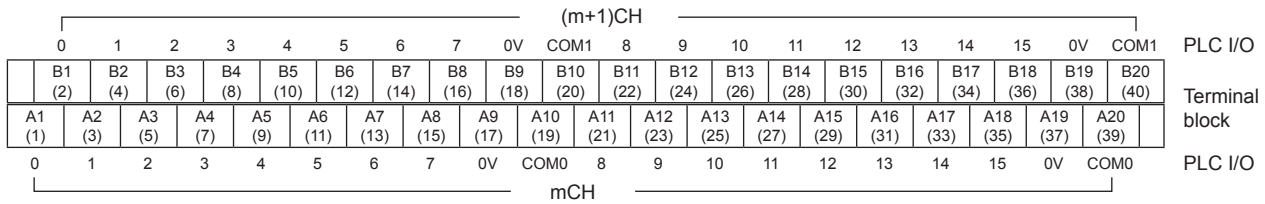


#### <Input (right)>

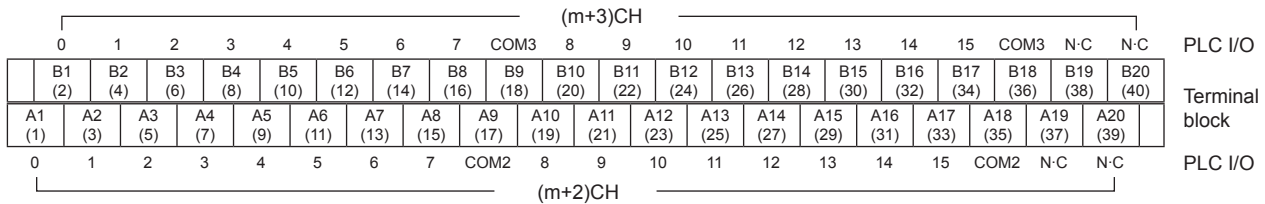


### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

#### <Output (left)>



#### <Input (right)>



※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections

### ◎TELEMECANIQUE (M340/TWIDO)-Interface terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
M340	A	BMX DDI 3202K	32	Input	-	Interface terminal block	AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		BMX DDI 6402K	64	Input	-		AFS-H40, AFL-H40, AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	B	BMX DDO 3202K	32	Output	+		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
		BMX DDO 6402K	64	Output	+		AFS-H40, AFL-H40, AFR-H40	2	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	2	4
	C	BMX DDM 3202K	32	I/O	-/+		AFS-H40, AFL-H40, AFR-H40	1	CJ-HPFP40-V1N□-1ANR (ordering no.: FP-1-□)	1	4
TWIDO	D	TWD DDI 16DK	16	Input	Com. +, -	AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1	
		TWD DDI 32DK	32	Input	Com. +, -	AFS-H20	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1	
	E	TWD DDO 16UK	16	Output	-	AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1	
	F	TWD DDO 16TK	16	Output	+	AFS-H20	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1	
	E	TWD DDO 32UK	32	Output	-	AFS-H20	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1	
	F	TWD DDO 32TK	32	Output	+	AFS-H20	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1	

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)  
 Other cable lengths are optional.

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

#### ●Connection diagram for I/O module (type A) and terminal block AFS-H40, AFL-H40, AFR-H40

SPS2+ SPS2+ I30 I28 I26 I24 I22 I20 I18 I16 SPS1+ SPS1+ I14 I12 I10 I8 I6 I4 I2 I0																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
SPS1- SPS1- I31 I29 I27 I25 I23 I21 I19 I17 SPS1- SPS1- I15 I13 I11 I9 I7 I5 I3 I1																				

#### ●Connection diagram for I/O module (type B) and terminal block AFS-H40, AFL-H40, AFR-H40

PPS2+ PPS2+ Q30 Q28 Q26 Q24 Q22 Q20 Q18 Q16 PPS1+ PPS1+ Q14 Q12 Q10 Q8 Q6 Q4 Q2 Q0																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
PPS2- PPS2- Q31 Q29 Q27 Q25 Q23 Q21 Q19 Q17 PPS1- PPS1- Q15 Q13 Q11 Q9 Q7 Q5 Q3 Q1																				

#### ●Connection diagram for I/O module (type C) and terminal block AFS-H40, AFL-H40, AFR-H40

PPS+ PPS+ Q30 Q28 Q26 Q24 Q22 Q20 Q18 Q16 SPS+ SPS+ I14 I12 I10 I8 I6 I4 I2 I0																				PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	B11 (22)	B12 (24)	B13 (26)	B14 (28)	B15 (30)	B16 (32)	B17 (34)	B18 (36)	B19 (38)	B20 (40)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	A11 (21)	A12 (23)	A13 (25)	A14 (27)	A15 (29)	A16 (31)	A17 (33)	A18 (35)	A19 (37)	A20 (39)	PLC I/O
PPS- PPS- Q31 Q29 Q27 Q25 Q23 Q21 Q19 Q17 SPS- SPS- I15 I13 I11 I9 I7 I5 I3 I1																				

#### ●Connection diagram for I/O module (type D) and terminal block AFS-H20

N-C COM I7 I6 I5 I4 I3 I2 I1 I0										PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
N-C COM I15 I14 I13 I12 I11 I10 I9 I8										

#### ●Connection diagram for I/O module (type E) and terminal block AFS-H20

+V COM(-) Q7 Q6 Q5 Q4 Q3 Q2 Q1 Q0										PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
+V COM(-) Q15 Q14 Q13 Q12 Q11 Q10 Q9 Q8										

#### ●Connection diagram for I/O module (type F) and terminal block AFS-H20

-V COM(+) Q7 Q6 Q5 Q4 Q3 Q2 Q1 Q0										PLC I/O
B1 (2)	B2 (4)	B3 (6)	B4 (8)	B5 (10)	B6 (12)	B7 (14)	B8 (16)	B9 (18)	B10 (20)	Terminal block
A1 (1)	A2 (3)	A3 (5)	A4 (7)	A5 (9)	A6 (11)	A7 (13)	A8 (15)	A9 (17)	A10 (19)	PLC I/O
-V COM(+) Q15 Q14 Q13 Q12 Q11 Q10 Q9 Q8										

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.  
 ※The number in ( ) indicates the connector pin number of terminal blocks.

- Control Switches
- 22/25
- 30
- 30
- Round Push Button Switches
- Square Push Button Switches
- Selector Switches
- Key Selector Switches
- Double Push Button Switches
- Mushroom-head Push Button Switches
- Emergency Switches
- Pilot Lights
- Accessories
- Buzzers
- Modular Terminal Blocks
- TUM(Spring Type)
- TW1(Dual Spring Type)
- TM(Manual Type)
- I/O Terminal Blocks
- AFS(Interface Terminal Block)
- AFL/AFR(Interface Terminal Block)
- ACS(Common Terminal Block)
- AFE(Sensor Connector Terminal Block)
- ABS(Relay Terminal Block)
- ABL(Relay Terminal Block)
- Power Relay
- I/O Cables
- MITUBISHI
- LSIS
- Autonics
- RS Automation
- YOKOGAWA
- FUJI
- KDT
- OMRON
- TELEMECANIQUE
- For SERVO
- Open Type Cables
- Cable Appearance
- Remote I/O Terminal Blocks
- ARD(DeviceNet Digital Standard Terminal Type)
- ARD(DeviceNet Digital Sensor Connector Type)
- ARD(DeviceNet Analog Standard Terminal Type)
- ARM(Modbus Digital Sensor Connector Type)
- Others
- Sensor Connectors
- Sockets
- Sensor Distribution Boxes
- Valve Plugs
- Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections

### ◎TELEMECANIQUE (TWIDO)-Relay terminal block

PLC item	I/O module		I/O points	I/O	COM	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model				Type	Model	Qty.	Model	Qty.	
TWIDO	A	TWD DDO 16UK	16	Output	-	Relay terminal block	ABS-H16◆-NN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	B	TWD DDO 16TK	16	Output	+		ABS-H16◆-PN	1	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	1	1
	A	TWD DDO 32UK	32	Output	-		ABS-H16◆-NN	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1
	B	TWD DDO 32TK	32	Output	+		ABS-H16◆-PN	2	CJ-HPHP20-V1N□-1ANR (ordering no.: HP-8-□)	2	1

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

Other cable lengths are optional.

※◆ of model name indicates relay type. 2 types of relays are available. [TN:TAKAMISAWA (Fujitsu) NYP, PA: MATSUSHITA (Panasonic) PA]

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ●Connection diagram for I/O module (type A) and terminal block ABS-H16◆-NN

+V	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	PLC I/O
24VDC (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block
0V (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM(-)	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	PLC I/O

### ●Connection diagram for I/O module (type B) and terminal block ABS-H16◆-PN

-V	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	PLC I/O
0V (1, 2)	R1+ (20)	R2+ (18)	R3+ (16)	R4+ (14)	R5+ (12)	R6+ (10)	R7+ (8)	R8+ (6)	R9+ (19)	R10+ (17)	R11+ (15)	R12+ (13)	R13+ (11)	R14+ (9)	R15+ (7)	R16+ (5)	Terminal block
24VDC (3, 4)	R1- (20)	R2- (18)	R3- (16)	R4- (14)	R5- (12)	R6- (10)	R7- (8)	R8- (6)	R9- (19)	R10- (17)	R11- (15)	R12- (13)	R13- (11)	R14- (9)	R15- (7)	R16- (5)	PLC I/O
COM(+)	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	PLC I/O

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

※The number in ( ) indicates the connector pin number of terminal blocks.

## ■ Cable Selection & Connections (For SERVO)

### ○ MITSUBISHI-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
MITSUBISHI MR-J4	A	MR-J4-□A	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR (ordering no.: MP-3-□)	1	18
MITSUBISHI MR-J3	A	MR-J3-□A	CN1		AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR (ordering no.: MP-3-□)	1	18
	B	MR-J3-D01	CN10		AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR (ordering no.: MP-3-□)	1	18

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode					
		Position	Position/Speed	Speed	Speed/Torque	Torque	Torque/Position
1	A1	P15R	P15R	P15R	P15R	P15R	P15R
2	B1		-/NC	VC	VC/VLA	VLA	VLA/-
3	A2	LG	LG	LG	LG	LG	LG
4	B2	LA	LA	LA	LA	LA	LA
5	A3	LAR	LAR	LAR	LAR	LAR	LAR
6	B3	LB	LB	LB	LB	LB	LB
7	A4	LBR	LBR	LBR	LBR	LBR	LBR
8	B4	LZ	LZ	LZ	LZ	LZ	LZ
9	A5	LZR	LZR	LZR	LZR	LZR	LZR
10	B5	PP	PP/-				-/PP
11	A6	PG	PG/-				-/PG
12	B6	OPC	OPC/-				-/OPC
13	A7						
14	B7						
15	A8	SON	SON	SON	SON	SON	SON
16	B8		-/SP2	SP2	SP2/SP2	SP2	SP2/-
17	A9	PC	PC/ST1	ST1	ST1/RS2	RS2	RS2/PC
18	B9	TL	TL/ST2	ST2	ST2/RS1	RS1	RS1/TL
19	A10	RES	RES	RES	RES	RES	RES
20	B10	DICOM	DICOM	DICOM	DICOM	DICOM	DICOM
21	A11	DICOM	DICOM	DICOM	DICOM	DICOM	DICOM
22	B11	INP	INP/SA	SA	SA/-		-/INP
23	A12	ZSP	ZSP	ZSP	ZSP	ZSP	ZSP
24	B12	INP	INP/SA	SA	SA/-		-/INP
25	A13	TLC	TLC	TLC	TLC/VLC	VLC	VLC/TLC
26	B13						
27	A14	TLA	TLA	TLA	TLA/TC	TC	TC/TLA
28	B14	LG	LG	LG	LG	LG	LG
29	A15						
30	B15	LG	LG	LG	LG	LG	LG
31	A16						
32	B16						
33	A17	OP	OP	OP	OP	OP	OP
34	B17	LG	LG	LG	LG	LG	LG
35	A18	NP	NP/-				-/NP
36	B18	NG	NG/-				-/NG
37	A19						
38	B19						
39	A20						
40	B20						
41	A21	CR	CR/SP1	SP1	SP1/SP1	SP1	SP1/CR
42	B21	EM2	EM2	EM2	EM2	EM2	EM2
43	A22	LSP	LSP	LSP	LSP/-		-/LSP
44	B22	LSN	LSN	LSN	LSN/-		-/LSN
45	A23	LOP	LOP	LOP	LOP	LOP	LOP
46	B23	DOCOM	DOCOM	DOCOM	DOCOM	DOCOM	DOCOM
47	A24	DOCOM	DOCOM	DOCOM	DOCOM	DOCOM	DOCOM
48	B24	ALM	ALM	ALM	ALM	ALM	ALM
49	A25	RD	RD	RD	RD	RD	RD
50	B25						

※1: MR-J3-□A modules are EMG.

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

### ● Connection diagram for I/O module (type B) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal	
		Point table	BCD input
1	A1	DI0	POS00
2	B1	DI1	POS01
3	A2	DI2	POS02
4	B2	DI3	POS03
5	A3	DI4	POS10
6	B3	DI5	POS11
7	A4	DI6	POS12
8	B4	DI7	POS13
9	A5		POS20
10	B5		POS21
11	A6		POS22
12	B6		POS23
13	A7	DICOMD	
14	B7	DICOMD	
15	A8		POSP
16	B8		POSN
17	A9		STRB
18	B9		SP0
19	A10		SP1
20	B10		SP2
21	A11	SON	
22	B11	ACD0	
23	A12	ACD1	
24	B12	ACD2	
25	A13	ACD3	
26	B13	RES	
27	A14	TL	
28	B14	TL1	
29	A15	TP	
30	B15	TP1	
31	A16	OVR	
32	B16	MD0	
33	A17	TSTP	
34	B17	PC	
35	A18	ST1	
36	B18	ST2	
37	A19	DOCOMD	
38	B19	MCD00	
39	A20	MCD01	
40	B20	MCD02	
41	A21	MCD03	
42	B21	MCD10	
43	A22	MCD11	
44	B22	MCD12	PRQ1
45	A23	MCD13	PRQ2
46	B23	PUS	
47	A24	MEND	
48	B24	CPO	
49	A25	INP	
50	B25	SD	

(※1)

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ○ MITSUBISHI-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
mitsubishi MR-J4	<b>A</b>	MR-J4-□B	CN3	Interface terminal block	AFS-H20	1	CJ-HPMP20-H1N□-1ANR (ordering no.: MP-1-□)	1	17
mitsubishi MR-J3	<b>B</b>	MR-J3-□B	CN3		AFS-H20	1	CJ-HPMP20-H1N□-1ANR (ordering no.: MP-1-□)	1	17
	<b>C</b>	MR-J3-D01	CN20		AFS-H20	1	CJ-HPMP20-H1N□-1ANR (ordering no.: MP-1-□)	1	17

※□ of model name indicates cable length. (standard specifications ≡ **005**: 0.5m, **010**: 1.0m, **015**: 1.5m, **020**: 2.0m)

※1: Please refer to the item number of ■ **Cable Appearance** on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

Module connector pin no.	Applied terminal no.	Signal
1	A1	LG
2	B1	DI1
3	A2	DOCOM
4	B2	MO1
5	A3	DICOM
6	B3	LA
7	A4	LB
8	B4	LZ
9	A5	INP
10	B5	DICOM
11	A6	LG
12	B6	DI2
13	A7	MBR
14	B7	MO2
15	A8	ALM
16	B8	LAR
17	A9	LBR
18	B9	LZR
19	A10	DI3
20	B10	EM2

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

Module connector pin no.	Applied terminal no.	Signal
1	A1	LG
2	B1	DI2
3	A2	DOCOM
4	B2	MO1
5	A3	DICOM
6	B3	LA
7	A4	LB
8	B4	LZ
9	A5	INP
10	B5	DICOM
11	A6	LG
12	B6	DI3
13	A7	MBR
14	B7	MO2
15	A8	ALM
16	B8	LAR
17	A9	LBR
18	B9	LZR
19	A10	DI1
20	B10	EM1

### ● Connection diagram for I/O module (type C) and terminal block AFS-H20

Module connector pin no.	Applied terminal no.	Signal
1	A1	LG
2	B1	VC
3	A2	
4	B2	MO1
5	A3	
6	B3	
7	A4	
8	B4	
9	A5	LG
10	B5	
11	A6	LG
12	B6	TLA
13	A7	P15R
14	B7	MO2
15	A8	N12R
16	B8	
17	A9	
18	B9	
19	A10	
20	B10	

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ○ MITSUBISHI-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
MITSUBISHI MR-2S	A	MR-J2S-□A	CN1A	Interface terminal block AFS-H20	1	CJ-HPMP20-H1N□-3ANR※2 (ordering no.: MP-2-□)	1	17	
			CN1B		1		CJ-HPMP20-H1N□-3ANR (ordering no.: MP-2-□)	1	17

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: The positioning unit (FX-10GM), CN1A are not available.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

Connector	Module connector pin no.	Applied terminal no.	Signal by control mode					
			Position	Position/Speed	Speed	Speed/Torque	Torque	Torque/Position
CN1A	1	B1	LG	LG	LG	LG	LG	LG
	2	A1	NP	NP/-				-/NP
	3	B2	PP	PP/-				-/PR
	4	A2	P15R	P15R/P15R	P15R	P15R	P15R	P15R
	5	B3	LZ	LZ	LZ	LZ	LZ	LZ
	6	A3	LA	LA	LA	LA	LA	LA
	7	B4	LB	LB	LB	LB	LB	LB
	8	A4	CR	CR/SP1	SP1	SP1/SP1	SP1	SP1/CR
	9	B5	COM	COM	COM	COM	COM	COM
	10	A5	SG	SG	SG	SG	SG	SG
	11	B6	OPC	OPC/-				-/OPC
	12	A6	NG	NG/-				-/NG
	13	B7	PG	PG/-				-/PG
	14	A7	OP	OP	OP	OP	OP	OP
	15	B8	LZR	LZR	LZR	LZR	LZR	LZR
	16	A8	LAR	LAR	LAR	LAR	LAR	LAR
	17	B9	LBR	LBR	LBR	LBR	LBR	LBR
	18	A9	INP	INP/SA	SA	SA/-		-/INP
	19	B10	RD	RD	RD	RD	RD	RD
	20	A10	SG	SG	SG	SG	SG	SG
CN1B	1	B1	LG	LG	LG	LG	LG	LG
	2	A1	-/VC	VC	VC/VLA	VLA	VLA/-	
	3	B2	VDD	VDD	VDD	VDD	VDD	VDD
	4	A2	DO1	DO1	DO1	DO1	DO1	DO1
	5	B3	SON	SON	SON	SON	SON	SON
	6	A3	TLC	TLC	TLC	TLC/VLC	VLC	VLC/TLC
	7	B4		LOP	SP2	LOP	SP2	LOP
	8	A4	PC	PC/ST1	ST1	ST1/RS2	RS2	RS2/PC
	9	B5	TL	TL/ST2	ST2	ST2/RS1	RS1	RS1/TL
	10	A5	SG	SG	SG	SG	SG	SG
	11	B6	P15R	P15R	P15R	P15R	P15R	P15R
	12	A6	TLA	TLA/TLA	TLA	TLA/TC	TC	TC/TLA
	13	B7	COM	COM	COM	COM	COM	COM
	14	A7	RES	RES	RES	RES	RES	RES
	15	B8	EMG	EMG	EMG	EMG	EMG	EMG
	16	A8	LSP	LSP	LSP	LSP/-		-/LSP
	17	B9	LSN	LSN	LSN	LSN/-		-/LSN
	18	A9	ALM	ALM	ALM	ALM	ALM	ALM
	19	B10	ZSP	ZSP	ZSP	ZSP	ZSP	ZSP
	20	A10	SG	SG	SG	SG	SG	SG

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFJ/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ◎ MITSUBISHI-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
MITSUBISHI MR-2S	A	MR-J2S-□CP	CN1A, CN1B	Interface terminal block	AFS-H20	2	CJ-HPMP20-H1N□-1ANR (ordering no.: MP-1-□)	2	17
	B	MR-J2S-□CL	CN1A, CN1B		AFS-H20	2	CJ-HPMP20-H1N□-3ANR (ordering no.: MP-2-□)	2	17

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H20

#### <CN1A>

Module connector pin no.	Applied terminal no.	Signal
1	A1	LG
2	B1	NP
3	A2	PP
4	B2	P15R
5	A3	
6	B3	
7	A4	
8	B4	DOG
9	A5	COM
10	B5	SG
11	A6	OPC
12	B6	
13	A7	
14	B7	
15	A8	
16	B8	
17	A9	
18	B9	ZP
19	A10	
20	B10	SG

#### <CN1B>

Module connector pin no.	Applied terminal no.	Signal
1	A1	LG
2	B1	VC
3	A2	VDD
4	B2	CPO
5	A3	D10
6	B3	MEND
7	A4	MD0
8	B4	ST1
9	A5	ST2
10	B5	SG
11	A6	P15R
12	B6	TLA
13	A7	COM
14	B7	DI1
15	A8	SON
16	B8	LSP
17	A9	LSN
18	B9	ALM
19	A10	RD
20	B10	SG

### ● Connection diagram for I/O module (type B) and terminal block AFS-H20

#### <CN1A>

Module connector pin no.	Applied terminal no.	Signal
1	B1	LG
2	A1	NP
3	B2	PP
4	A2	P15R
5	B3	
6	A3	
7	B4	
8	A4	DOG
9	B5	COM
10	A5	SG
11	B6	OPC
12	A6	
13	B7	
14	A7	
15	B8	
16	A8	
17	B9	
18	A9	ZP
19	B10	SON
20	A10	SG

#### <CN1B>

Module connector pin no.	Applied terminal no.	Signal
1	B1	LG
2	A1	VC
3	B2	VDD
4	A2	OUT1
5	B3	DI0
6	A3	PED
7	B4	ST1
8	A4	PI1
9	B5	PI2
10	A5	SG
11	B6	P15R
12	A6	TLA
13	B7	COM
14	A7	DI1
15	B8	RST
16	A8	LSP
17	B9	LSN
18	A9	ALM
19	B10	RD
20	A10	SG

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ◎ YASKAWA-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
YASKAWA Σ - V	A	SGDV	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19
YASKAWA Σ - III	B	SGDS	CN1		AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal
1	A1	SG
2	B1	GND
3	A2	PL1
4	B2	SEN
5	A3	V-REF
6	B3	SG
7	A4	PULS
8	B4	PULS
9	A5	T-REF
10	B5	GND
11	A6	SIGN
12	B6	SIGN
13	A7	PL2
14	B7	CLR
15	A8	CLR
16	B8	-
17	A9	-
18	B9	PL3
19	A10	PCO
20	B10	PCO
21	A11	BAT (+)
22	B11	BAT (-)
23	A12	-
24	B12	-
25	A13	V-CMP+
26	B13	V-CMP-
27	A14	TGON+
28	B14	TGON-
29	A15	S-RDY+
30	B15	S-RDY-
31	A16	ALM+
32	B16	ALM-
33	A17	PAO
34	B17	PAO
35	A18	PBO
36	B18	PBO
37	A19	ALO1
38	B19	ALO2
39	A20	ALO3
40	B20	S-ON
41	A21	P-CON
42	B21	P-OT
43	A22	N-OT
44	B22	ALM-RST
45	A23	P-CL
46	B23	N-CL
47	A24	+24V IN
48	B24	-
49	A25	-
50	B25	-

### ● Connection diagram for I/O module (type B) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal
1	A1	+24V IN
2	B1	CCW-OT
3	A2	CW-OT
4	B2	HOME
5	A3	EXSTOP+
6	B3	EXSTOP-
7	A4	USER0
8	B4	USER1
9	A5	USER+
10	B5	USER-
11	A6	BRK+
12	B6	BRK-
13	A7	ALM+
14	B7	ALM-
15	A8	MS-G
16	B8	MS-R
17	A9	MS-COM
18	B9	NS-G
19	A10	GND
20	B10	NS-COM
21	A11	ENC_A+
22	B11	ENC_A-
23	A12	ENC_B+
24	B12	ENC_B-
25	A13	ENC_C+
26	B13	ENC_C-
27	A14	
28	B14	
29	A15	
30	B15	
31	A16	
32	B16	
33	A17	
34	B17	
35	A18	
36	B18	
37	A19	
38	B19	
39	A20	
40	B20	
41	A21	
42	B21	
43	A22	
44	B22	
45	A23	
46	B23	
47	A24	
48	B24	
49	A25	
50	B25	

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ◎ PANASONIC-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
PANASONIC MINAS	A	A	CN I/F	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode			
		Position	Speed	Torque	Full close
1	A1				
2	B1				
3	A2	PULS1			ULS1
4	B2	PULS2			PULS2
5	A3	SIGN1			SIGN1
6	B3	SIGN2			SIGN2
7	A4	COM+	COM+	COM+	COM+
8	B4	CWL	CWL	CWL	CWL/SMOOTH
9	A5	CCWL	CCWL	CCWL	CCWL/DIV2
10	B5	BRK-OFF-	BRK-OFF-	BRK-OFF-	BRK-OFF-
11	A6	BRK-OFF+	BRK-OFF+	BRK-OFF+	BRK-OFF+
12	B6	ZSP	ZSP	ZSP	ZSP
13	A7	GND	GND	GND	GND
14	B7		SPR/TRQR	SPR/TRQR	SPR/TRQR
15	A8	GND			GND
16	B8		CCWTL/TRQR	CCWTL/TRQR	CCWTL/TRQR
17	A9	GND	GND	GND	GND
18	B9		CWTL	CWTL	CWTL
19	A10	CZ	CZ	CZ	CZ
20	B10				
21	A11	OA+	OA+	OA+	OA+
22	B11	OA-	OA-	OA-	OA-
23	A12	OZ+	OZ+	OZ+	OZ+
24	B12	OZ-	OZ-	OZ-	V
25	A13	GND	GND	GND	GND
26	B13	ZEROSPD	ZEROSPD	ZEROSPD	ZEROSPD
27	A14	GAIN	GAIN	GAIN	GAIN
28	B14	DIV			DIV
29	A15	SRV-ON	SRV-ON	SRV-ON	SRV-ON
30	B15	CL	CL	CL	CL/INTSPD2
31	A16	A-CLR	A-CLR	A-CLR	A-CLR
32	B16	C-MODE	C-MODE	C-MODE	C-MODE
33	A17	INH	INH	INH	INH/INTSPD1/ SC-ERR
34	B17	S-RDY-	S-RDY-	S-RDY-	S-RDY-
35	A18	S-RDY+	S-RDY+	S-RDY+	S-RDY+
36	B18	ALM-	ALM-	ALM-	ALM-
37	A19	ALM+	ALM+	ALM+	ALM+
38	B19	COIN-	COIN-	COIN-	COIN-
39	A20	COIN+	COIN+	COIN+	COIN+
40	B20	TLC	TLC	TLC	TLC
41	A21	COM-	COM-	COM-	COM-
42	B21	IM	IM	IM	IM
43	A22	SP	SP	SP	SP
44	B22	BATT+			BATT+
45	A23	BATT-			BATT-
46	B23				TX+
47	A24				TX-
48	B24	OB+	OB+	OB+	OB+
49	A25	OB-	OB-	OB-	OB-
50	B25	FG	FG	FG	FG

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ○ PANASONIC-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
PANASONIC MINAS	A	A3	CN X5	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode			
		Position	Speed	Torque	Full close
1	A1				
2	B1				
3	A2	PULS1			PULS1
4	B2	PULS2			PULS2
5	A3	SIGN1			SIGN1
6	B3	SIGN2			SIGN2
7	A4	COM+	COM+	COM+	COM+
8	B4	CWL	CWL	CWL	CWL/SMOOTH
9	A5	CCWL	CCWL	CCWL	CCWL/DIV2
10	B5	BRK-.OFF-	BRK-OFF-	BRK-OFF-	BRK-OFF-
11	A6	BRK-OFF+	BRK-OFF+	BRK-OFF+	BRK-OFF+
12	B6	ZSP	ZSP	ZSP	
13	A7	GND	GND	GND	GND
14	B7	SPR/TRQR	SPR/TRQR	SPR/TRQR	SPR/TRQR
15	A8	GND	GND	GND	GND
16	B8	CCWTL/TRQR	CCWTL/TRQR	CCWTL/TRQR	CCWTL/TRQR
17	A9	GND	GND	GND	GND
18	B9	CWTL	CWTL	CWTL	CWTL
19	A10	CZ	CZ	CZ	CZ
20	B10				
21	A11	OA+	OA+	OA+	OA+
22	B11	OA-	OA-	OA-	OA-
23	A12	OZ+	OZ+	OZ+	OZ+
24	B12	OZ-	OZ-	OZ-	OZ-
25	A13	GND	GND	GND	GND
26	B13	ZEROSPD	ZEROSPD	ZEROSPD	ZEROSPD
27	A14	GAIN	GAIN	GAIN	GAIN
28	B14	DIV			DIV
29	A15	SRV-ON	SRV-ON	SRV-ON	SRV-ON
30	B15	CL	CL	CL	CL/INTSPD2
31	A16	A-CLR	A-CLR	A-CLR	A-CLR
32	B16	C-MODE	C-MODE	C-MODE	C-MODE
33	A17	INH	INH	INH	INH/INTSPD1/ SC-ERR
34	B17	S-RDY-	S-RDY-	S-RDY-	S-RDY-
35	A18	S-RDY+	S-RDY+	S-RDY+	S-RDY+
36	B18	ALM-	ALM-	ALM-	ALM-
37	A19	ALM+	ALM+	ALM+	ALM+
38	B19	COIN-	COIN-	COIN-	COIN-
39	A20	COIN+	COIN+	COIN+	COIN+
40	B20	TLC	TLC	TLC	TLC
41	A21	COM-	COM-	COM-	COM-
42	B21	IM	IM	IM	IM
43	A22	SP	SP	SP	SP
44	B22	BATT+	BATT+	BATT+	BATT+
45	A23	BATT-	BATT-	BATT-	BATT-
46	B23				TX+
47	A24				TX-
48	B24	OB+	OB+	OB+	OB+
49	A25	OB-	OB-	OB-	OB-
50	B25	FG	FG	FG	FG

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

- Control Switches
  - 22/25
  - 30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches



# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ◎ PANASONIC-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
PANASONIC MINAS	A	A4	CN X5	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19
	B	A4P							

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode			
		Position	Speed	Torque	Full close
1	A1	OPC1			OPC1
2	B1	OPC2			OPC2
3	A2	PULS1			PULS1
4	B2	PULS2			PULS2
5	A3	SIGN1			SIGN1
6	B3	SIGN2			SIGN2
7	A4	COM+	COM+	COM+	COM+
8	B4	CWL	CWL	CWL	CWL
9	A5	CCWL	CCWL	CCWL	CCWL
10	B5	BRKOFF-	BRKOFF-	BRKOFF-	BRKOFF-
11	A6	BRKOFF+	BRKOFF+	BRKOFF+	BRKOFF+
12	B6	ZSP	ZSP	ZSP	ZSP
13	A7	GND			GND
14	B7	SPR/TRQR	SPR/TRQR	SPR/TRQR	SPR/TRQR
15	A8	GND	GND	GND	GND
16	B8	CCWTL/TRQR	CCWTL/TRQR	CCWTL/TRQR	CCWTL/TRQR
17	A9	GND	GND	GND	GND
18	B9	CWTL	CWTL	CWTL	CWTL
19	A10	CZ	CZ	CZ	CZ
20	B10				
21	A11	OA+	OA+	OA+	OA+
22	B11	OA-	OA-	OA-	OA-
23	A12	OZ+	OZ+	OZ+	OZ+
24	B12	OZ-	OZ-	OZ-	OZ-
25	A13	GND	GND	GND	GND
26	B13	VS-SEL	ZEROSPD	ZEROSPD	VS-SEL
27	A14	GAIN	GAIN	GAIN	
28	B14	DIV	INTSPD3	DIV	DIV
29	A15	SRV-ON	SRV-ON	SRV-ON	SRV-ON
30	B15	CL	INTSPD2	CL	CL
31	A16	A-CLR	A-CLR	A-CLR	A-CLR
32	B16	C-MODE	C-MODE	C-MODE	C-MODE
33	A17	INH	INTSPD1	INH	INH
34	B17	S-RDY-	S-RDY-	S-RDY-	S-RDY-
35	A18	S-RDY+	S-RDY+	S-RDY+	S-RDY+
36	B18	ALM-	ALM-	ALM-	ALM-
37	A19	ALM+	ALM+	ALM+	ALM+
38	B19	COIN-	AT-SPEED-	AT-SPEED-	EX-COIN-
39	A20	COIN+	AT-SPEED+	AT-SPEED+	EX-COIN+
40	B20	TLC	TLC	TLC	TLC
41	A21	COM-	COM-	COM-	COM-
42	B21	IM	IM	IM	IM
43	A22	SP	SP	SP	SP
44	B22	PULSH1			PULSH1
45	A23	PULSH2			PULSH2
46	B23	SIGNH1			SIGNH1
47	A24	SIGNH2			SIGNH2
48	B24	OB+	OB+	OB+	OB+
49	A25	OB-	OB-	OB-	OB-
50	B25	FG	FG	FG	FG

### ● Connection diagram for I/O module (type B) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal
1	A1	COM+
2	B1	EMG-STP
3	A2	P1IN
4	B2	P2IN
5	A3	P4IN
6	B3	P8IN
7	A4	P16IN
8	B4	P32IN
9	A5	OZ+
10	B5	OZ-
11	A6	OA+
12	B6	OA-
13	A7	OB+
14	B7	OB-
15	A8	ALM
16	B8	CZ
17	A9	COM-
18	B9	FG
19	A10	CCWL
20	B10	CWL
21	A11	ZLS
22	B11	EX.IN1
23	A12	SRV.ON
24	B12	STB
25	A13	EX-IN2
26	B13	GND
27	A14	COIN/ DCLON
28	B14	BUSY
29	A15	P1OUT
30	B15	P2OUT
31	A16	P4OUT
32	B16	P8OUT
33	A17	P16OUT
34	B17	P32OUT
35	A18	
36	B18	BRK-OFF
37	A19	
38	B19	
39	A20	
40	B20	
41	A21	
42	B21	
43	A22	
44	B22	
45	A23	
46	B23	
47	A24	
48	B24	
49	A25	
50	B25	

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ○ PANASONIC-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
PANASONIC MINAS	A	A5	CN X4	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode			
		Position	Speed	Torque	Full close
1	A1	OPC1			OPC1
2	B1	OPC2			OPC2
3	A2	PULS1			PULS1
4	B2	PULS2			PULS2
5	A3	SIGN1			SIGN1
6	B3	SIGN2			SIGN2
7	A4	COM+	COM+	COM+	COM+
8	B4	NOT	NOT	NOT	NOT
9	A5	POT	POT	POT	POT
10	B5	BRKOFF-	BRKOFF-	BRKOFF-	BRKOFF-
11	A6	BRKOFF+	BRKOFF+	BRKOFF+	BRKOFF+
12	B6	ZSP	ZSP	ZSP	ZSP
13	A7	GND			GND
14	B7	SPR/TRQR/SPL	SPR/TRQR/SPL	SPR/TRQR/SPL	SPR/TRQR/SPL
15	A8	GND	GND	GND	GND
16	B8	P-ATL/TRQR	P-ATL/TRQR	P-ATL/TRQR	P-ATL/TRQR
17	A9	GND	GND	GND	GND
18	B9	N-ATL	N-ATL	N-ATL	N-ATL
19	A10	CZ	CZ	CZ	CZ
20	B10				
21	A11	OA+	OA+	OA+	OA+
22	B11	OA-	OA-	OA-	OA-
23	A12	OZ+	OZ+	OZ+	OZ+
24	B12	OZ-	OZ-	OZ-	OZ-
25	A13	GND	GND	GND	GND
26	B13	VS-SEL1	ZEROSPD	ZEROSPD	VS-SEL1
27	A14	GAIN	GAIN	GAIN	GAIN
28	B14	DIV1	INTSPD3	DIV1	DIV1
29	A15	SRV-ON	SRV-ON	SRV-ON	SRV-ON
30	B15	CL	INTSPD2	CL	CL
31	A16	A-CLR	A-CLR	A-CLR	A-CLR
32	B16	C-MODE	C-MODE	C-MODE	C-MODE
33	A17	INH	INTSPD1	INH	INH
34	B17	S-RDY-	S-RDY-	S-RDY-	S-RDY-
35	A18	S-RDY+	S-RDY+	S-RDY+	S-RDY+
36	B18	ALM-	ALM-	ALM-	ALM-
37	A19	ALM+	ALM+	ALM+	ALM+
38	B19	INP-	AT.SPEED-	AT.SPEED-	INP-
39	A20	INP+	AT.SPEED+	AT.SPEED+	INP+
40	B20	TLC	TLC	TLC	TLC
41	A21	COM-	COM-	COM-	COM-
42	B21	IM	IM	IM	IM
43	A22	SP	SP	SP	SP
44	B22	PULSH1			PULSH1
45	A23	PULSH2			PULSH2
46	B23	SIGN1			SIGN1
47	A24	SIGN2			SIGN2
48	B24	OB+	OB+	OB+	OB+
49	A25	OB-	OB-	OB-	OB-
50	B25	FG	FG	FG	FG

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ◎LS Mecapion-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
LS Mecapion APD	A	APD-VS	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≒ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode					
		Position	Speed/Position	Speed	Speed/Torque	Torque	Position/Torque
1	A1	TRQLIM	TRQLIM	TRQLIM	TRQLIM/COM	TRQCOM	TRQLIM/COM
2	B1						
3	A2	OPCZO	OPCZO	OPCZO	OPCZO	OPCZO	OPCZO
4	B2	ZO	ZO	ZO	ZO	ZO	ZO
5	A3	/ZO	/ZO	/ZO	/ZO	/ZO	/ZO
6	B3						
7	A4						
8	B4	GND	GND	GND	GND	GND	GND
9	A5	PF+	PF+				PF+
10	B5	PF-	PF-				PF-
11	A6	PR+	PR+				PR+
12	B6	PR-	PR-				PR-
13	A7	PCON	PCON	PCON	PCON		PCON
14	B7	GAIN2	GAIN2	GAIN2	GAIN2		GAIN2
15	A8	PCLEAR	PCLEAR				PCLEAR
16	B8	TLIMIT	TLIMIT	TLIMIT	TLIMIT		TLIMIT
17	A9	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST
18	B9	EMG	EMG	EMG	EMG	EMG	EMG
19	A10	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM
20	B10	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM
21	A11		MODE	SDP3	MODE		MODE
22	B11	EGEAR2	SPD2/ERG2	SDP2	SDP2	SDP2	EGR2/SPD2
23	A12	EGEAR1	SPD1/ERG1	SDP1	SDP1	SDP1	EGR1/SPD1
24	B12	GND24	GND24	GND24	GND24	GND24	GND24
25	A13	GND24	GND24	GND24	GND24	GND24	GND24
26	B13						
27	A14		SPDCOM	SPDCOM	SPDCOM/LIM	SPDLIM	SPDLIM
28	B14	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1
29	A15	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2
30	B15	BO	BO	BO	BO	BO	BO
31	A16	/BO	/BO	/BO	/BO	/BO	/BO
32	B16	AO	AO	AO	AO	AO	AO
33	A17	/AO	/AO	/AO	/AO	/AO	/AO
34	B17						
35	A18						
36	B18	GND	GND	GND	GND	GND	GND
37	A19	GND	GND	GND	GND		GND
38	B19	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+
39	A20	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-
40	B20	RDY+	RDY+	RDY+	RDY+	RDY+	RDY+
41	A21	RDY-	RDY-	RDY-	RDY-	RDY-	RDY-
42	B21	TLOUT	TLOUT	TLOUT	TLOUT	TCONT	TLOUT
43	A22	ZSPD	ZSPD	ZSPD	ZSPD	ZSPD	ZSPD
44	B22	BRAKE	BRAKE	BRAKE	BRAKE	BRAKE	BRAKE
45	A23	INPOS	INSPD/POS	INSPD	INSPD	INSPD	INPOS
46	B23		DIR	DIR	DIR		
47	A24	SVON	SVON	SVON	SVON	SVON	SVON
48	B24		STOP	STOP	STOP	STOP	STOP
49	A25	PULCOM	PULCOM				PULCOM
50	B25	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ○ LS Mecapion-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
LS Mecapion APD	A	APD-VP	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ※ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode				
		Linear coordinates position drive (Drive mode : 1 to 5, 8, 9)	Linear coordinates position drive (Drive mode: 6)	Rotary coordinates position drive	Feeder and sensor-input position drive	Program operation drive
1	A1	GND	GND	GND	GND	GND
2	B1	ZO	ZO	ZO	ZO	ZO
3	A2	/ZO	/ZO	/ZO	/ZO	/ZO
4	B2	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1
5	A3	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2
6	B3	PF+	PF+	PF+		
7	A4	PF-	PF-	PF-		
8	B4	PR+	PR+	PR+		
9	A5	PR-	PR-	PR-		
10	B5	SPD1/DATA2-2	PSEL0	SPD1	SPD1/DATA2-2	
11	A6	P-JOG	P-JOG	P-JOG	P-JOG	P-JOG
12	B6	N-JOG	N-JOG	N-JOG	N-JOG	N-JOG
13	A7	START	START	START	START	AUTO_RUN
14	B7	STOP	STOP	STOP	STOP	STOP
15	A8	ORGIN	ORGIN	ORGIN	SEN1	ORG/HOME
16	B8	DOGIN	DOGIN	DOGIN	SEN2	DOGIN
17	A9	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST
18	B9	EMG	EMG	EMG	EMG	EMG
19	A10	CWLIM	CWLIM	CWLIM	MOVESEL	CWLIM
20	B10	CCWLIM	CCWLIM	CCWLIM	AUTO	CCWLIM
21	A11	MPGEN/DATA2-1	MPGEN	MPGEN	SPD0/DATA2-1	SENSOR
22	B11	SPD2/DATA2-4	PSEL1	SPD2	X/DATA2-4	SPD1
23	A12	SPD3/DATA2-8	SPD1	SPD3	X/DATA2-8	SPD2
24	B12	GND24	GND24	GND24	GND24	GND24
25	A13	GND24	GND24	GND24	GND24	GND24
26	B13					
27	A14	SPDCOM	SPDCOM	SPDCOM	SPDCOM	
28	B14	A-COM	A-COM	A-COM	A-COM	
29	A15	BO	BO	BO	BO	BO
30	B15	/BO	/BO	/BO	/BO	/BO
31	A16	AO	AO	AO	AO	AO
32	B16	/AO	/AO	/AO	/AO	/AO
33	A17	BRAKE	BRAKE	BRAKE/OP4	BRAKE	BRK
34	B17	ORG-OUT	ORG-OUT	ORG-OUT	PITCH	ORG
35	A18	ALARM+	ALARM+	ALARM+	ALARM+	RDY/ALM+
36	B18	ALARM-	ALARM-	ALARM-	ALARM-	RDY/ALM-
37	A19	RDY+	RDY+	RDY+	RDY+	STEP_END+
38	B19	RDY-	RDY-	RDY-	RDY-	STEP_END-
39	A20	INPOS	INPOS	INPOS	INPOS	PROG_END
40	B20	OP1/SEL1	SEL1	OP0	SEL1	RUN
41	A21	OP2/SEL2	SEL2	OP1	SEL2	OUT0
42	B21	OP3/SEL3	SEL3	OP2	SEL3	OUT1
43	A22	OP4/SEL4	SEL4	OP3	SEL4	OUT2
44	B22	PSEL0/DATA1-1	DATA1-1	PSEL0	PSEL0/DATA1-1	STEP_RUN
45	A23	PSEL1/DATA1-2	DATA1-2	PSEL1	PSEL1/DATA1-2	HOLD
46	B23	PSEL2/DATA1-4	DATA1-4	PSEL2	PSEL2/DATA1-4	PROG_0
47	A24	PSEL3/DATA1-8	DATA1-8	PSEL3	PSEL3/DATA1-8	PROG_1
48	B24	PSEL4/READEN	READEN	PSEL4	READEN	PROG_2
49	A25	SVON	SVON	SVON	SVON	SVON
50	B25	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN

※ The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ Cable Selection & Connections (For SERVO)

### ○LS Mecapion-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
LS Mecapion APD	A	APD-VN	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ●Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode					
		Position	Speed/Position	Speed	Speed/Torque	Torque	Position/Torque
1	A1	PF+	PF+				PF+
2	B1	PF-	PF-				PF-
3	A2	PR+	PR+				PR+
4	B2	PR-	PR-				PR-
5	A3	+15V	+15V	+15V	+15V	+15V	+15V
6	B3	-15V	-15V	-15V	-15V	-15V	-15V
7	A4	GND	GND	GND	GND	GND	GND
8	B4	TRQLIM	TRQLIM	TRQLIM	TRQLIM/TRQCOM	TRQCOM	TRQLIM/TRQCOM
9	A5		SPDCOM	SPDCOM	SPDCOM/SPDLIM	SPDLIM	SPDLIM
10	B5						
11	A6	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+
12	B6	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-
13	A7	INSPD+	INSPD+/NPOS+	INSPD+	INSPD+	INSPD+	INSPD+
14	B7	INPOS-	INSPD-/NPOS-	INSPD-	INSPD-	INSPD-	INSPD-
15	A8	RDY/BRK/TLO+	RDY/BRK/TLO+	RDY/BRK/TLO+	RDY/BRK/TLO+	RDY/BRK/TLO+	RDY/BRK/TLO+
16	B8	RDY/BRK/TLO-	RDY/BRK/TLO-	RDY/BRK/TLO-	RDY/BRK/TLO-	RDY/BRK/TLO-	RDY/BRK/TLO-
17	A9	EGEAR2	SPD2/EGEAR2	SPD2	SPD2	SPD2	EGEAR2/SPD2
18	B9	EGEAR1	SPD1/EGEAR1	SPD1	SPD1	SPD1	EGEAR1/SPD1
19	A10	ZO	ZO	ZO	ZO	ZO	ZO
20	B10	/ZO	/ZO	/ZO	/ZO	/ZO	/ZO
21	A11	AO	AO	AO	AO	AO	AO
22	B11	/AO	/AO	/AO	/AO	/AO	/AO
23	A12	BO	BO	BO	BO	BO	BO
24	B12	/BO	BO	/BO	/BO	/BO	/BO
25	A13	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1
26	B13	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2
27	A14	GND	GND	GND	GND	GND	GND
28	B14	TRQLIM	MODE	TRQLIM	MODE		MODE
29	A15	PULCOM	PULCOM				PULCOM
30	B15	SVON	SVON	SVON	SVON	SVON	SVON
31	A16	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM
32	B16	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM
33	A17	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST
34	B17		DIR	DIR	DIR	DIR	
35	A18	PCLR	STOP/PCLR	STOP	STOP/TCLR	TCLR	PCLR/TCLR
36	B18	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN
37	A19						
38	B19						
39	A20						
40	B20						
41	A21						
42	B21						
43	A22						
44	B22						
45	A23						
46	B23						
47	A24						
48	B24						
49	A25						
50	B25						

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

## ■ Cable Selection & Connections (For SERVO)

### ○ LS Mecapion-Interface terminal block

PLC item	I/O module		I/O	Applicable terminal block			Applicable cable		Appearance ※1
	Type	Model		Type	Model	Qty.	Model	Qty.	
LS Mecapion APD	A	APD-L7	CN1	Interface terminal block	AFS-H50 AFL-H50 AFR-H50	1	CJ-HPMP50-H1N□-1ANR※2 (ordering no.: MP-3-□), CJ-HPMQ50-H1N□-1ANR※2 (ordering no.: MQ-1-□)	1	18/19

※□ of model name indicates cable length. (standard specifications ≡ 005: 0.5m, 010: 1.0m, 015: 1.5m, 020: 2.0m)

※1: Please refer to the item number of ■ Cable Appearance on pages C-130 to C-137.

※2: Select the proper cable after checking one-touch of socket and screw method for SERVO.

### ● Connection diagram for I/O module (type A) and terminal block AFS-H50, AFL-H50, AFR-H50

Module connector pin no.	Applied terminal no.	Signal by control mode					
		Position	Speed/Position	Speed	Speed/Torque	Torque	Position/Torque
1	A1	TRQCOM	TRQCOM	TRQCOM	TRQCOM	TRQCOM	TRQCOM
2	B1						
3	A2						
4	B2	ZO	ZO	ZO	ZO	ZO	ZO
5	A3	/ZO	/ZO	/ZO	/ZO	/ZO	/ZO
6	B3						
7	A4						
8	B4	GND	GND	GND	GND	GND	GND
9	A5	PF+	PF+				PF+
10	B5	PF-	PF-				PF-
11	A6	PR+	PR+				PR+
12	B6	PR-	PR-				PR-
13	A7						
14	B7	ALO2	ALO2	ALO2	ALO2	ALO2	ALO2
15	A8	ALO1	ALO1	ALO1	ALO1	ALO1	ALO1
16	B8	ALO0	ALO0	ALO0	ALO0	ALO0	ALO0
17	A9	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST	ALMRST
18	B9	EMG	EMG	EMG	EMG	EMG	EMG
19	A10	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM	CWLIM
20	B10	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM	CCWLIM
21	A11	SPD3	SPD3	SPD3	SPD3	SPD3	SPD3
22	B11	SPD2	SPD2	SPD2	SPD2	SPD2	SPD2
23	A12	SPD1	SPD1	SPD1	SPD1	SPD1	SPD1
24	B12	GND24	GND24	GND24	GND24	GND24	GND24
25	A13	GND24	GND24	GND24	GND24	GND24	GND24
26	B13						
27	A14		SPDCOM	SPDCOM	SPDCOM	SPDCOM	SPDCOM
28	B14	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1	MONIT1
29	A15	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2	MONIT2
30	B15	BO	BO	BO	BO	BO	BO
31	A16	/BO	/BO	/BO	/BO	/BO	/BO
32	B16	AO	AO	AO	AO	AO	AO
33	A17	/AO	/AO	/AO	/AO	/AO	/AO
34	B17	+12VA	+12VA	+12VA	+12VA	+12VA	+12VA
35	A18	-12VA	-12VA	-12VA	-12VA	-12VA	-12VA
36	B18	SG	SG	SG	SG	SG	SG
37	A19	GND	GND	GND	GND	GND	GND
38	B19	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+	ALARM+
39	A20	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-	ALARM-
40	B20	READY+	READY+	READY+	READY+	READY+	READY+
41	A21	READY-	READY-	READY-	READY-	READY-	READY-
42	B21						
43	A22	ZSPD	ZSPD	ZSPD	ZSPD	ZSPD	ZSPD
44	B22	BRAKE	BRAKE	BRAKE	BRAKE	BRAKE	BRAKE
45	A23	INPOS	INPOS	INPOS	INPOS	INPOS	INPOS
46	B23	DIR	DIR	DIR	DIR	DIR	DIR
47	A24	SVON	SVON	SVON	SVON	SVON	SVON
48	B24	STOP	STOP	STOP	STOP	STOP	STOP
49	A25	PULCOM	PULCOM				PULCOM
50	B25	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN	+24V IN

※The connection diagrams are only for reference. Please check the power ratings and connection diagrams provided by the PLC manufacturer before wiring.

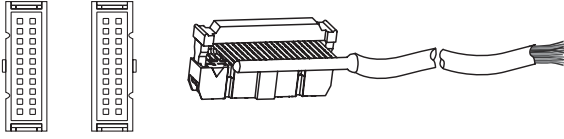
- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFL/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
    - Open Type Cables
    - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches

# CJ Series

## ■ OPEN Type Cable Color

### 1) Hirose, 3M 20-pin connector insulator color

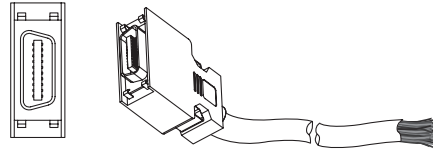
#### ● CJ-HP20-VP□-R, CJ-HP20-VP□-L



<L direction> <R direction>

Connector pin	Insulator color	Point color	No. of points
1	Yellow	Black	1 EA
2	Yellow	Red	1 EA
3	Yellow	Black	2 EA
4	Yellow	Red	2 EA
5	Yellow	Black	3 EA
6	Yellow	Red	3 EA
7	Yellow	Black	4 EA
8	Yellow	Red	4 EA
9	Yellow	Black	5 EA
10	Yellow	Red	5 EA

#### ● CJ-MP20-HP-R

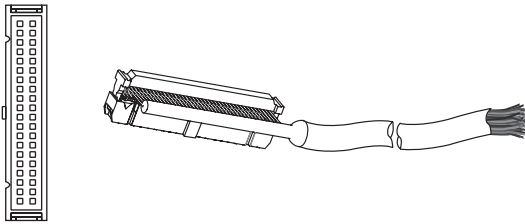


< R direction >

Connector pin	Insulator color	Point color	No. of points
11	White	Black	1 EA
12	White	Red	1 EA
13	White	Black	2 EA
14	White	Red	2 EA
15	White	Black	3 EA
16	White	Red	3 EA
17	White	Black	4 EA
18	White	Red	4 EA
19	White	Black	5 EA
20	White	Red	5 EA

### 2) Hirose, Fujitsu 40-pin connector insulator color

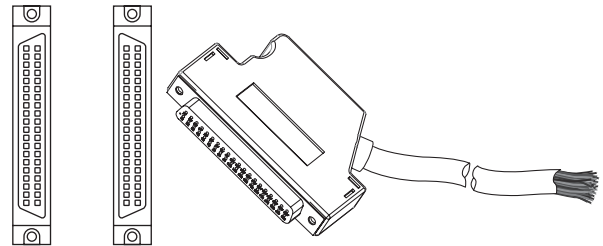
#### ● CJ-HP40-VP□-L



< L direction>

Connector pin	Insulator color	Point color	No. of points
1	Orange	Black	1 EA
2	Orange	Red	1 EA
3	Orange	Black	2 EA
4	Orange	Red	2 EA
5	Orange	Black	3 EA
6	Orange	Red	3 EA
7	Orange	Black	4 EA
8	Orange	Red	4 EA
9	Yellow	Black	1 EA
10	Yellow	Red	1 EA
11	Yellow	Black	2 EA
12	Yellow	Red	2 EA
13	Yellow	Black	3 EA
14	Yellow	Red	3 EA
15	Yellow	Black	4 EA
16	Yellow	Red	4 EA
17	White	Black	1 EA
18	White	Red	1 EA
19	White	Black	2 EA
20	White	Red	2 EA

#### ● CJ-FP40-VP□-R, CJ-FP40-VP□-L



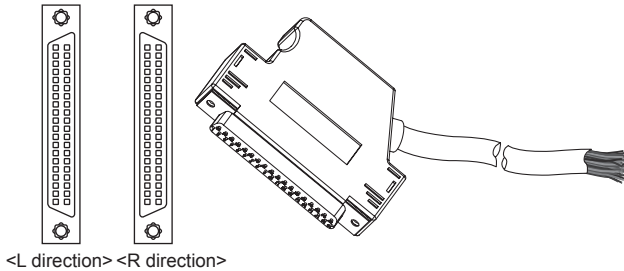
<L direction> <R direction>

Connector pin	Insulator color	Point color	No. of points
21	White	Black	3 EA
22	White	Red	3 EA
23	White	Black	4 EA
24	White	Red	4 EA
25	Gray	Black	1 EA
26	Gray	Red	1 EA
27	Gray	Black	2 EA
28	Gray	Red	2 EA
29	Gray	Black	3 EA
30	Gray	Red	3 EA
31	Gray	Black	4 EA
32	Gray	Red	4 EA
33	Pink	Black	1 EA
34	Pink	Red	1 EA
35	Pink	Black	2 EA
36	Pink	Red	2 EA
37	Pink	Black	3 EA
38	Pink	Red	3 EA
39	Pink	Black	4 EA
40	Pink	Red	4 EA

## ■ OPEN Type Cable Color

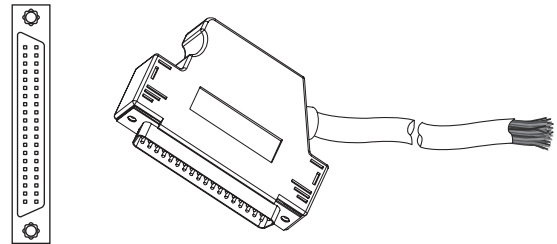
### 3)D-Sub 37-pin connector insulator color

#### ●CJ-DP37-VP□-R, CJ-DP37-VP□-L



<L direction> <R direction>

#### ●CJ-DS37-VP□-R



< R direction >

Connector pin	Insulator color	Point color	No. of points
1	Orange	Black	1 EA
2	Yellow	Black	1 EA
3	White	Black	1 EA
4	Gray	Black	1 EA
5	Pink	Black	1 EA
6	Orange	Black	2 EA
7	Yellow	Black	2 EA
8	White	Black	2 EA
9	Gray	Black	2 EA
10	Pink	Black	2 EA
11	Orange	Black	3 EA
12	Yellow	Black	3 EA
13	White	Black	3 EA
14	Gray	Black	3 EA
15	Pink	Black	3 EA
16	Orange	Black	4 EA
17	Yellow	Black	4 EA
18	White	Black	4 EA
19	Gray	Black	4 EA
20	Orange	Red	1 EA

Connector pin	Insulator color	Point color	No. of points
21	Yellow	Red	1 EA
22	White	Red	1 EA
23	Gray	Red	1 EA
24	Pink	Red	1 EA
25	Orange	Red	2 EA
26	Yellow	Red	2 EA
27	White	Red	2 EA
28	Gray	Red	2 EA
29	Pink	Red	2 EA
30	Orange	Red	3 EA
31	Yellow	Red	3 EA
32	White	Red	3 EA
33	Gray	Red	3 EA
34	Pink	Red	3 EA
35	Orange	Red	4 EA
36	Yellow	Red	4 EA
37	White	Red	4 EA

#### Control Switches

Ø22/25

Ø30

□30

#### Round Push Button Switches

#### Square Push Button Switches

#### Selector Switches

#### Key Selector Switches

#### Double Push Button Switches

#### Mushroom-head Push Button Switches

#### Emergency Switches

#### Pilot Lights

#### Accessories

#### Buzzers

#### Modular Terminal Blocks

TUM(Spring Type)

TUW1(Dual Spring Type)

TM(Manual Type)

#### I/O Terminal Blocks

AFS(Interface Terminal Block)

AFJ/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

#### I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

#### Open Type Cables

#### Cable Appearance

#### Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

#### Others

#### Sensor Connectors

#### Sockets

#### Sensor Distribution Boxes

#### Valve Plugs

#### Thumbwheel Switches

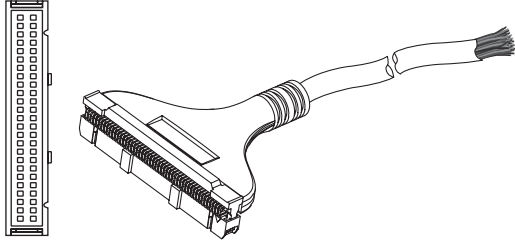


# CJ Series

## OPEN Type Cable Color

### 4) Hirose, 3M 50-pin connector insulator color

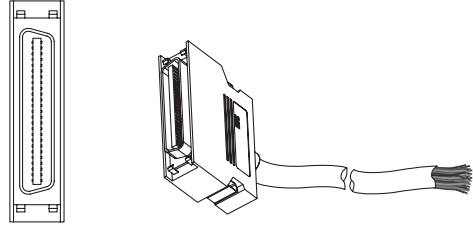
#### ●CJ-HP50-HP□-R



< R direction >

Connector pin	Insulator color	Point color	No. of points
1	Orange	Black	1 EA
2	Orange	Red	1 EA
3	Orange	Black	2 EA
4	Orange	Red	2 EA
5	Orange	Black	3 EA
6	Orange	Red	3 EA
7	Orange	Black	4 EA
8	Orange	Red	4 EA
9	Orange	Black	5 EA
10	Orange	Red	5 EA
11	Yellow	Black	1 EA
12	Yellow	Red	1 EA
13	Yellow	Black	2 EA
14	Yellow	Red	2 EA
15	Yellow	Black	3 EA
16	Yellow	Red	3 EA
17	Yellow	Black	4 EA
18	Yellow	Red	4 EA
19	Yellow	Black	5 EA
20	Yellow	Red	5 EA
21	White	Black	1 EA
22	White	Red	1 EA
23	White	Black	2 EA
24	White	Red	2 EA
25	White	Black	3 EA

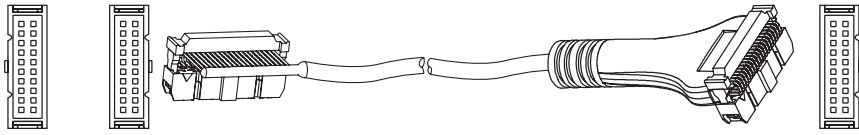
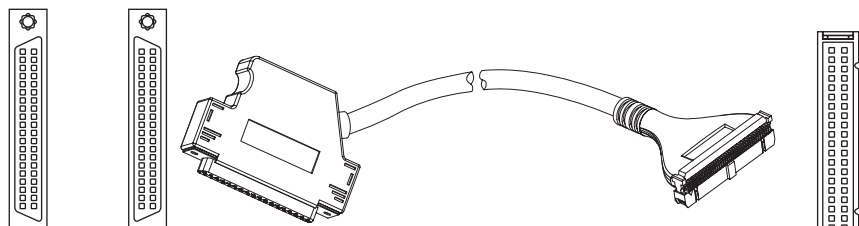
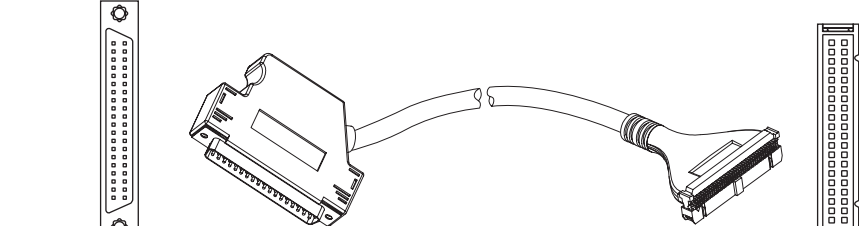
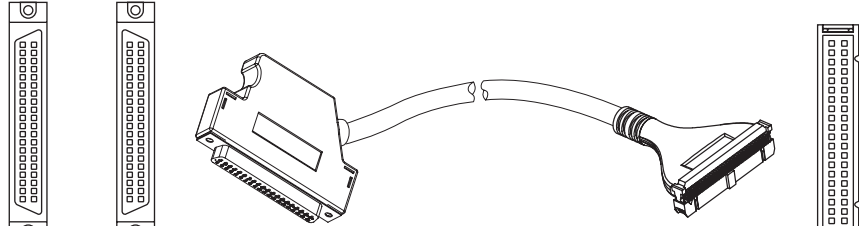
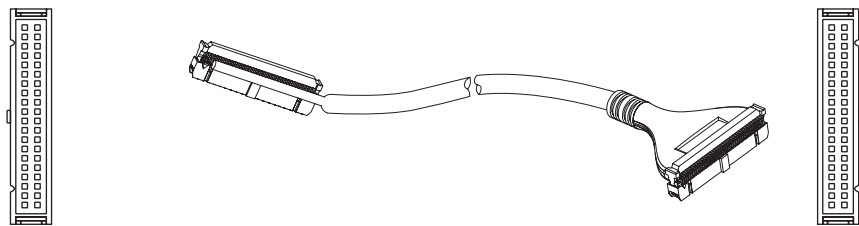
#### ●CJ-MP50-HP□-R



< R direction >

Connector pin	Insulator color	Point color	No. of points
26	White	Red	3 EA
27	White	Black	4 EA
28	White	Red	4 EA
29	White	Black	5 EA
30	White	Red	5 EA
31	Gray	Black	1 EA
32	Gray	Red	1 EA
33	Gray	Black	2 EA
34	Gray	Red	2 EA
35	Gray	Black	3 EA
36	Gray	Red	3 EA
37	Gray	Black	4 EA
38	Gray	Red	4 EA
39	Gray	Black	5 EA
40	Gray	Red	5 EA
41	Pink	Black	1 EA
42	Pink	Red	1 EA
43	Pink	Black	2 EA
44	Pink	Red	2 EA
45	Pink	Black	3 EA
46	Pink	Red	3 EA
47	Pink	Black	4 EA
48	Pink	Red	4 EA
49	Pink	Black	5 EA
50	Pink	Red	5 EA

## ■ Cable Appearance

Model	Appearance
<p>(1) CJ-HPHP20-V1N□□□□R CJ-HPHP20-V1N□□□□L</p>	 <p>&lt; L direction &gt; &lt; R direction &gt;</p>
<p>(2) CJ-HPDP37-V1N□□□□R CJ-HPDP37-V1N□□□□L</p>	 <p>&lt; L direction &gt; &lt; R direction &gt;</p>
<p>(3) CJ-HPDS37-V1N□□□□R</p>	 <p>&lt; R direction &gt;</p>
<p>(4) CJ-HPFP40-V1N□□□□R CJ-HPFP40-V1N□□□□L</p>	 <p>&lt; L direction &gt; &lt; R direction &gt;</p>
<p>(5) CJ-HPHP40-V1N□□□□L</p>	 <p>&lt; L direction &gt;</p>

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)  
TUW1(Dual Spring Type)  
TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

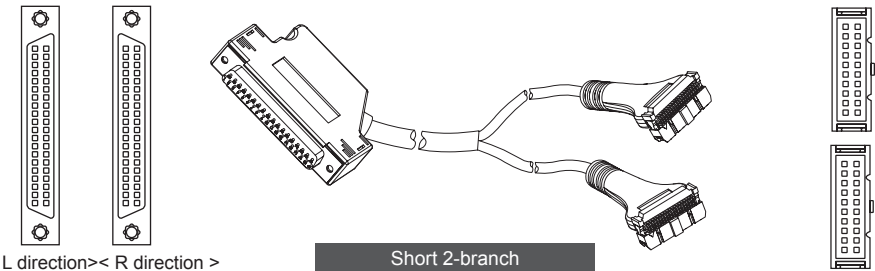
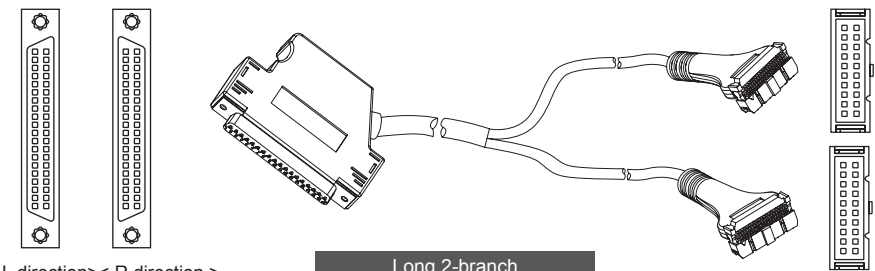
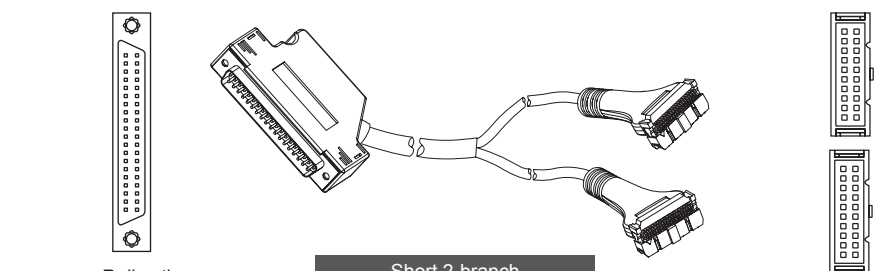
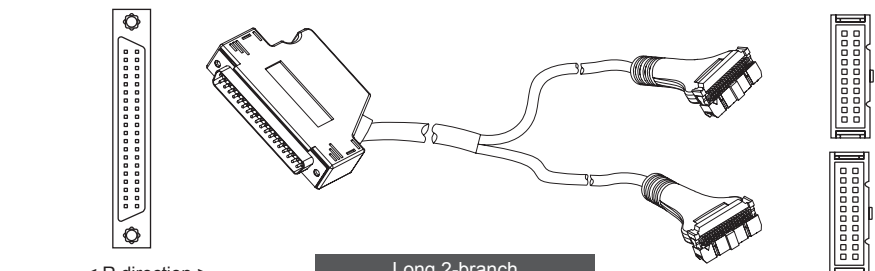
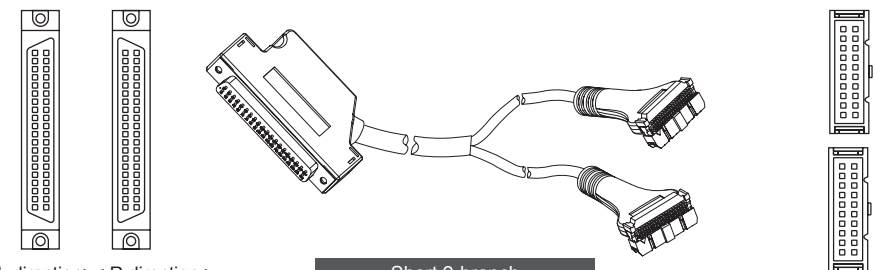
Sensor Distribution Boxes

Valve Plugs

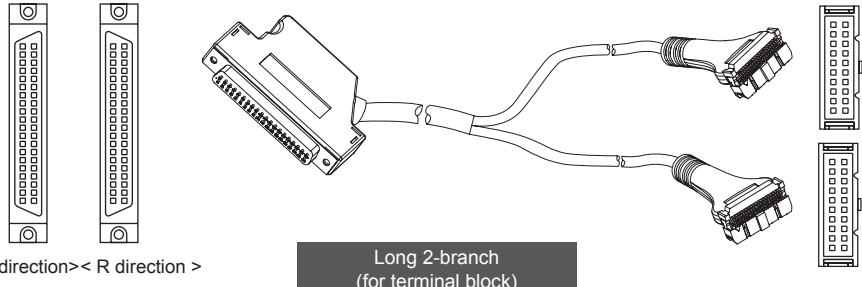
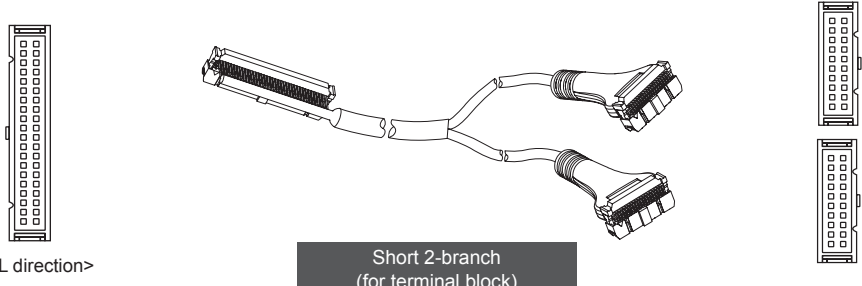
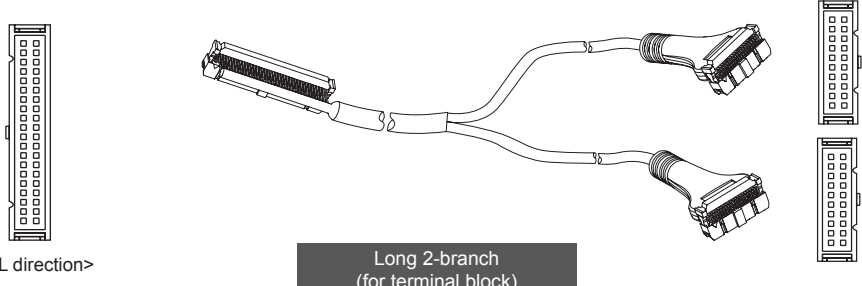
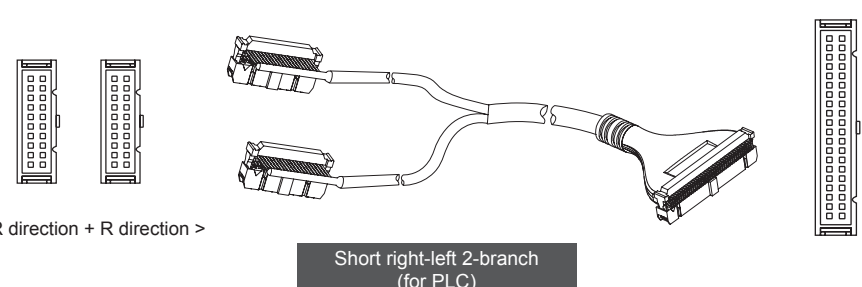
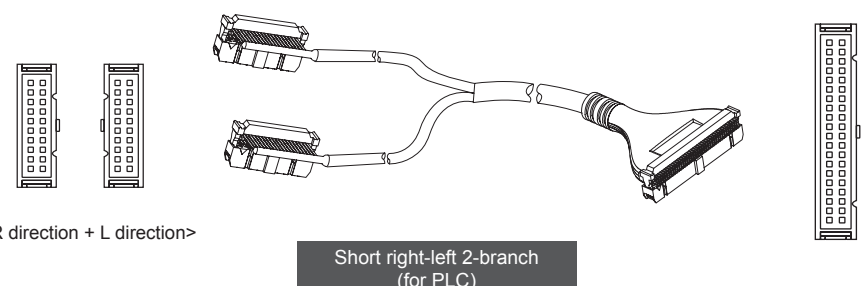
Thumbwheel Switches

# CJ Series

## ■ Cable Appearance

Model	Appearance
<p>(6)</p> <p>CJ-HPDP37-V2S□□□□R</p> <p>CJ-HPDP37-V2S□□□□L</p>	 <p>&lt; L direction &gt;&lt; R direction &gt;</p> <p>Short 2-branch (for terminal block)</p>
<p>(7)</p> <p>CJ-HPDP37-V2L□□□□R</p> <p>CJ-HPDP37-V2L□□□□L</p>	 <p>&lt; L direction &gt;&lt; R direction &gt;</p> <p>Long 2-branch (for terminal block)</p>
<p>(8)</p> <p>CJ-HPDS37-V2S□□□□R</p>	 <p>&lt; R direction &gt;</p> <p>Short 2-branch (for terminal block)</p>
<p>(9)</p> <p>CJ-HPDS37-V2L□□□□R</p>	 <p>&lt; R direction &gt;</p> <p>Long 2-branch (for terminal block)</p>
<p>(10)</p> <p>CJ-HPFP40-V2S□□□□R</p> <p>CJ-HPFP40-V2S□□□□L</p>	 <p>&lt; L direction &gt;&lt; R direction &gt;</p> <p>Short 2-branch (for terminal block)</p>

## ■ Cable Appearance

Model	Appearance
<p>(11) CJ-HPFP40-V2L□□□□R CJ-HPFP40-V2L□□□□L</p>	 <p>&lt; L direction &gt; &lt; R direction &gt;</p> <p>Long 2-branch (for terminal block)</p>
<p>(12) CJ-HPHP40-V2S□□□□L</p>	 <p>&lt; L direction &gt;</p> <p>Short 2-branch (for terminal block)</p>
<p>(13) CJ-HPHP40-V2L□□□□L</p>	 <p>&lt; L direction &gt;</p> <p>Long 2-branch (for terminal block)</p>
<p>(14) CJ-HPHP40-VY2□□□□R</p>	 <p>&lt; R direction + R direction &gt;</p> <p>Short right-left 2-branch (for PLC)</p>
<p>(15) CJ-HPHP40-VY2□□□□X</p>	 <p>&lt; R direction + L direction &gt;</p> <p>Short right-left 2-branch (for PLC)</p>

Control Switches

Ø22/25

Ø30

□30

Round Push Button Switches

Square Push Button Switches

Selector Switches

Key Selector Switches

Double Push Button Switches

Mushroom-head Push Button Switches

Emergency Switches

Pilot Lights

Accessories

Buzzers

Modular Terminal Blocks

TUM(Spring Type)  
TUW1(Dual Spring Type)  
TM(Manual Type)

I/O Terminal Blocks

AFS(Interface Terminal Block)

AFL/AFR(Interface Terminal Block)

ACS(Common Terminal Block)

AFE(Sensor Connector Terminal Block)

ABS(Relay Terminal Block)

ABL(Relay Terminal Block)

Power Relay

I/O Cables

MITUBISHI

LSIS

Autonics

RS Automation

YOKOGAWA

FUJI

KDT

OMRON

TELEMECANIQUE

For SERVO

Open Type Cables

Cable Appearance

Remote I/O Terminal Blocks

ARD(DeviceNet Digital Standard Terminal Type)

ARD(DeviceNet Digital Sensor Connector Type)

ARD(DeviceNet Analog Standard Terminal Type)

ARM(Modbus Digital Sensor Connector Type)

Others

Sensor Connectors

Sockets

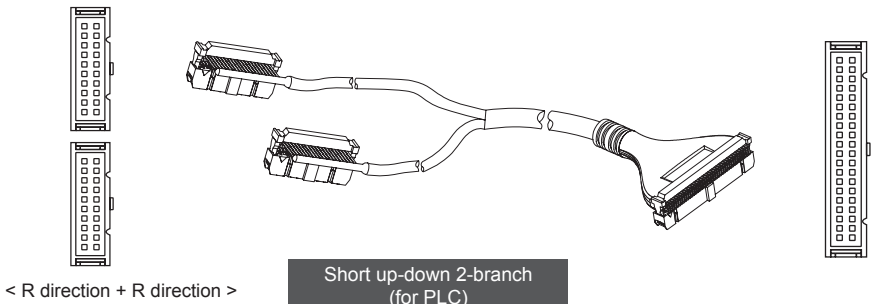
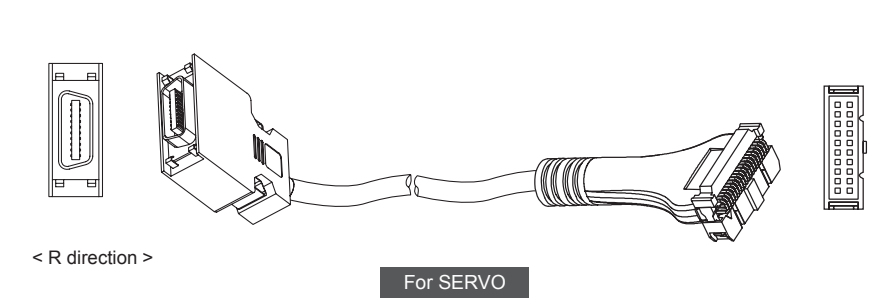
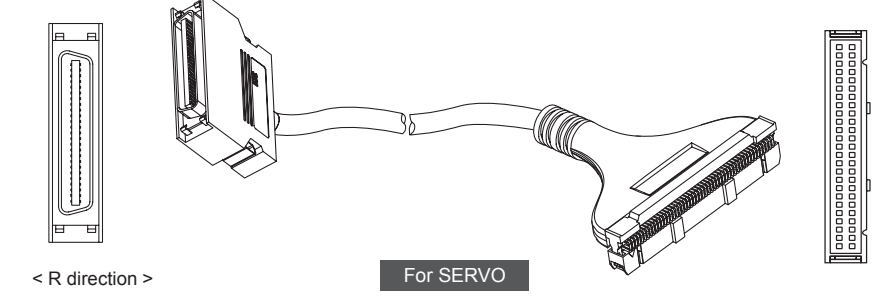
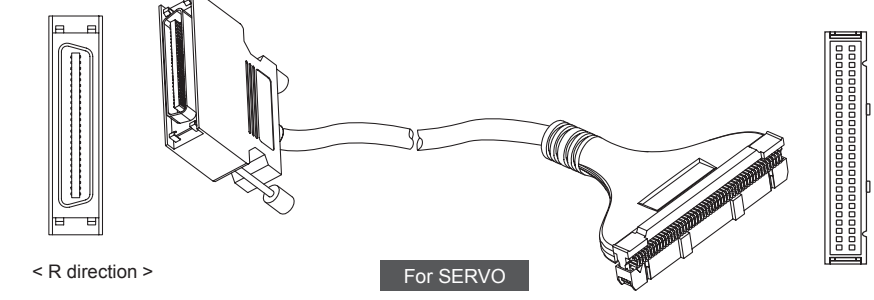
Sensor Distribution Boxes

Valve Plugs

Thumbwheel Switches

# CJ Series

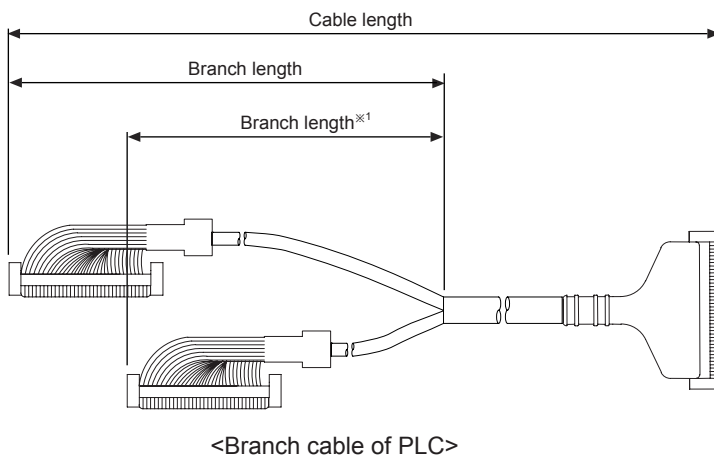
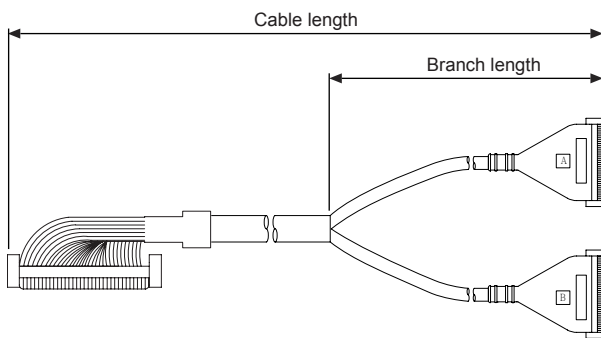
## ■ Cable Appearance

Model	Appearance
<p>(16) CJ-HPHP40-VF2□□□□R</p>	 <p>&lt; R direction + R direction &gt;</p> <p>Short up-down 2-branch (for PLC)</p>
<p>(17) CJ-HPMP20-H1N□□□□R</p>	 <p>&lt; R direction &gt;</p> <p>For SERVO</p>
<p>(18) CJ-HPMP50-H1N□□□□R</p>	 <p>&lt; R direction &gt;</p> <p>For SERVO</p>
<p>(19) CJ-HPMQ50-H1N□□□□R</p>	 <p>&lt; R direction &gt;</p> <p>For SERVO</p>

## ■ Cable Appearance

### ● Branch length of branch cable

Model	Branch type	Cable length	Branch length	
CJ-□□□□□□-2S□□□□□□	Terminal block	Short 2-branch	0.5m	0.15m
			1m	0.15m
			1.5m	0.15m
			2m	0.15m
CJ-□□□□□□-2L□□□□□□	Terminal block	Long 2-branch	0.5m	0.3m
			1m	0.8m
			1.5m	1.3m
			2m	1.8m
CJ-HPHP40-□Y2□□□□□□	PLC	Short right-left 2-branch	0.5m	0.15m
			1m	0.15m
			1.5m	0.15m
			2m	0.15m
CJ-HPHP40-□F2□□□□□□	PLC	Short up-down 2-branch	0.5m	0.15m
				0.09m <sup>※1</sup>
			1m	0.15m
				0.09m <sup>※1</sup>
			1.5m	0.15m
				0.09m <sup>※1</sup>
			2m	0.15m
				0.09m <sup>※1</sup>



※1. Only for short up-down 2-branch(PLC)

- Control Switches
  - Ø22/25
  - Ø30
  - 30
  - Round Push Button Switches
  - Square Push Button Switches
  - Selector Switches
  - Key Selector Switches
  - Double Push Button Switches
  - Mushroom-head Push Button Switches
  - Emergency Switches
  - Pilot Lights
  - Accessories
- Buzzers
- Modular Terminal Blocks
  - TUM(Spring Type)
  - TUW1(Dual Spring Type)
  - TM(Manual Type)
- I/O Terminal Blocks
  - AFS(Interface Terminal Block)
  - AFJ/AFR(Interface Terminal Block)
  - ACS(Common Terminal Block)
  - AFE(Sensor Connector Terminal Block)
  - ABS(Relay Terminal Block)
  - ABL(Relay Terminal Block)
  - Power Relay
- I/O Cables
  - MITUBISHI
  - LSIS
  - Autonics
  - RS Automation
  - YOKOGAWA
  - FUJI
  - KDT
  - OMRON
  - TELEMECANIQUE
  - For SERVO
  - Open Type Cables
  - Cable Appearance
- Remote I/O Terminal Blocks
  - ARD(DeviceNet Digital Standard Terminal Type)
  - ARD(DeviceNet Digital Sensor Connector Type)
  - ARD(DeviceNet Analog Standard Terminal Type)
  - ARM(Modbus Digital Sensor Connector Type)
- Others
  - Sensor Connectors
  - Sockets
  - Sensor Distribution Boxes
  - Valve Plugs
  - Thumbwheel Switches