

KGN Series Control Stations

IP40 Enclosed Steel Control Stations For ø30 mm Series Switches/Pilot Lights Various Control Stations are Available

Various control stations are available with most widely used combinations of switches/pilot lights (contact configurations, voltage, button colors, and nameplates).



Specifications

Degree of Protection	IP40 (IEC60529)
Material (Enclosure)	Carbon steel plate (t=1.0mm)
Coating Color (Melamine coating)	Yellow semi-gloss (Munsell 5Y7/1)
Rated Insulation Voltage	600V (Buzzer: 250V)
Insulation Resistance	5 MΩ minimum
Dielectric Strength (Note 1)	Between live and dead parts: 2500V AC, 1 minute
Standard Operating Conditions (Note 2)	Ambient temperature: -25 to +50°C (no freezing) Relative humidity: 45 to 85% (no condensation)
Style	Wall mount (1 to 5 holes)
Cable Lead-in (Wall Mount)	Double knockouts On top: ø22 and ø27 mm On bottom: ø16 and ø20 mm
Applicable Switches/Pilot Lights	IDEC ø30 mm series

Note 1: Buzzer: 2000V AC, 1 minute

Note 2: Buzzer: -10 to +40°C

Contact Ratings (Contact Block)

Contact Block	Rated Insulation Voltage	600V
	Rated Thermal Current	10A
	Contact Ratings by Utilization Category IEC60947-5-1	AC-15 (A600) DC-13 (P600)

Operational Voltage and Current by Utilization Category

Operational Voltage		24V	48V	50V	110V	220V	440V
Operational Current	AC (50/60Hz)	AC-12 Control of resistive loads and solid state loads	10A	—	10A	10A	6A 2A
		AC-15 Control of electromagnetic loads (>72VA)	10A	—	7A	5A	3A 1A
Operational Current	DC	DC-12 Control of resistive loads and solid state loads	10A	5A	—	2.2A	1.1A —
		DC-13 Control of electromagnets	5A	2A	—	1.1A	0.6A —

Common

Minimum applicable load (reference value) = 3V AC/DC, 5 mA (the applicable range is subject to change according to the operating conditions)

Rubber Bushing (Supplied) Color: Black

Enclosure Style	Supplied Bushing			Applicable Knockout Hole
	Part No.	Outside Dia.	Inside Dia.	
1 or 2 holes	GB-2	ø30 mm	ø16 mm	ø20 or ø22 mm
3 or 4 holes	GB-3	ø38 mm	ø20 mm	ø27 mm

Switches/Pilot Lights Mounting Holes

The holes for mounting switches/pilot lights are 30.5 mm in diameter with an anti-rotation notch. Mounting centers are 50 mm.

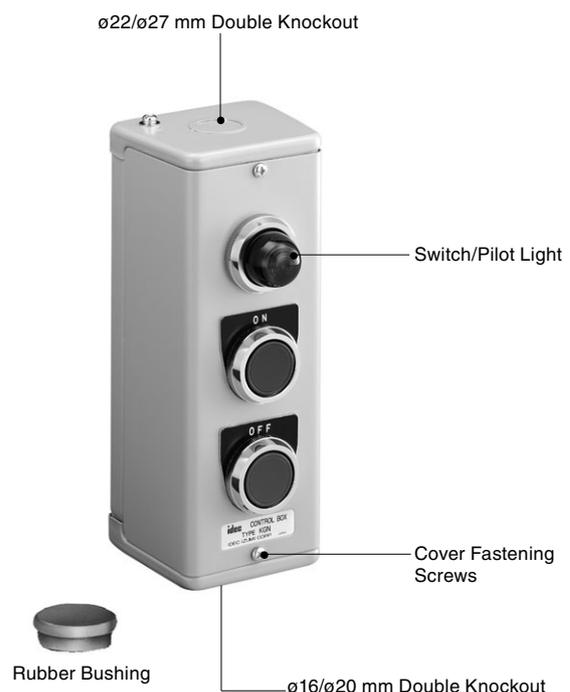
Double Knockouts

The top and bottom surfaces have double knockouts.

On top: ø22 and ø27 mm double knockouts

On bottom: ø16 and ø20 mm double knockouts

One rubber bushing is supplied to protect lead-in wires from damage on the wire surface; 1- and 2-hole enclosures are supplied with a bushing to fit ø20 and ø22 mm holes, and 3- and 5-hole enclosures with a bushing to fit a ø27 mm hole.



Control Stations with Switches/Pilot Lights

The control stations are available with a selected combination of switches/pilot lights as listed below. For the dimensions and mounting centers, see the figures on page G-26.

Switch/ Pilot Light	Part No.	Specifications
Pushbutton (PB)	ABN110 *	Flush, 1NO
	ABN101 *	Flush, 1NC
	ABN111 *	Flush, 1NO-1NC
	ABN311R	ø40 mushroom, 1NO-1NC
	ABBN1110 **	Flush, double beam latching, 1NO
	ABBN1111 **	Flush, double beam latching, 1NO-1NC
	ATN420	Toggle lever, 2NO
Pilot Light (PL) (Incandescent)	APN118 *	Dome, 110V AC (2W)
	APN128 *	Dome, 220V AC (2W)
Selector Switch (SS)	ASN311	Knob, 2-position, 1NO-1NC
	ASN111	Knob, 3-position, 1NO-1NC
	ASN3K11	Key, 2-position, 1NO-1NC
Buzzer (BZ)	AZ11N	110V AC
	AZ12N	220V AC

Note: Specify a button or lens color code in place of *:
 Pushbutton: B (black), G (green), R (red)
 Pilot Light: G (green), R (red), W (white)
 Flush pushbuttons are supplied with black, green, and red color caps.

Control Stations

Package Quantity: 1

Control Station		Mounted Switch/Pilot Light		
Style	Part No.	Symbol	Part No.	NA Nameplate Legend
Wall Mount / 1 hole	KGN1101NY		ABN110	ON
	KGN1102NY		ABN311R	OFF
	KGN1103NY		APN118R	Without nameplate
	KGN1104NY		APN128R	Without nameplate
	KGN1105NY		ASN311	HAND-AUTO
	KGN1106NY		ASN111	HAND-OFF-AUTO
	KGN1107NY		ASN3K11	OFF-ON
	KGN1108NY		AZ11N	Without nameplate
	KGN1110NY		ATN420	Without nameplate ON-OFF on bezel
	KGN1111NY		HN1E-BV411R	EMERGENCY STOP
Wall Mount / 2 holes	KGN2101NY		ABN110 ABN101	ON OFF
	KGN2102NY		ABN111 ABN111	ON OFF
	KGN2103NY		APN118R APN118G	Without nameplate
	KGN2104NY		APN128R APN128G	Without nameplate
	KGN2105NY		APN118R ABN111	Without nameplate STOP
	KGN2106NY		APN128R ABN111	Without nameplate STOP
	KGN2107NY		APN118R ASN311	Without nameplate HAND-AUTO

Control Station		Mounted Switch/Pilot Light			
Style	Part No.	Symbol	Part No.	NA Nameplate Legend	
Wall Mount / 2 holes	KGN2108NY		APN128R ASN311	Without nameplate HAND-AUTO	
	KGN2109NY		APN118R ASN3K11	Without nameplate OFF-ON	
	KGN2110NY		APN128R ASN3K11	Without nameplate OFF-ON	
	KGN2111NY		ABBN1110	ON OFF	
	KGN2112NY		ABBN1111	ON OFF	
	KGN2113NY		ABN110 ABN311R	ON OFF	
	KGN2114NY		APN118R ATN420	Without nameplate ON-OFF on bezel	
	KGN2116NY		AZ11N ABN111	Without nameplate	
	KGN2117NY		AZ12N ABN111	Without nameplate	
	KGN2118NY		AZ11N APN118R	Without nameplate	
	KGN2119NY		AZ12N APN128R	Without nameplate	
	Wall Mount / 3 holes	KGN3102NY		APN118R ABN110 ABN101	Without nameplate ON OFF
		KGN3103NY		APN128R ABN110 ABN101	Without nameplate ON OFF
		KGN3104NY		ABN111 ABN111 ASN311	ON OFF HAND-AUTO
KGN3106NY			APN128W APN128R APN128G	Without nameplate	
KGN3107NY			APN118R ABBN1110	Without nameplate ON OFF	
KGN3108NY			APN128R ABBN1110	Without nameplate ON OFF	
Wall Mount / 4 holes	KGN4101NY		APN128R APN128G ABN111 ABN111	Without nameplate Without nameplate ON OFF	
	KGN4102NY		APN128R ABN111 ABN111 ASN311	Without nameplate ON OFF HAND-AUTO	

Switches & Pilot Lights
Flush Silhouette Switches
Emergency Stop Switches
Control Stations
Display Lights
Operator Interfaces
PLCs
Softwares
Relays
Sockets
Timers
Terminal Blocks
Circuit Protectors
Power Supplies
Sensors
Ex-proof Control Boxes
Barriers
LEDs
Safety Products
Information

KGN Series Control Stations

Empty Enclosures

Package Quantity: 1

Style	Part No.	Unit Mounting Hole	Switch/Pilot Light Mounting Centers
1 hole (approx. 0.4 kg)	KGN111Y	With	
	KGN110Y	Without	
2 holes (approx. 0.5 kg)	KGN211Y	With	
	KGN210Y	Without	
3 holes (approx. 0.6 kg)	KGN311Y	With	
	KGN310Y	Without	
4 holes (approx. 0.7 kg)	KGN411Y	With	
	KGN410Y	Without	
5 holes (approx. 0.8 kg)	KGN511Y	With	
	KGN510Y	Without	
Switch/Pilot Light Mounting Hole		Effective Depth inside the Enclosure	

All dimension in mm

Accessories

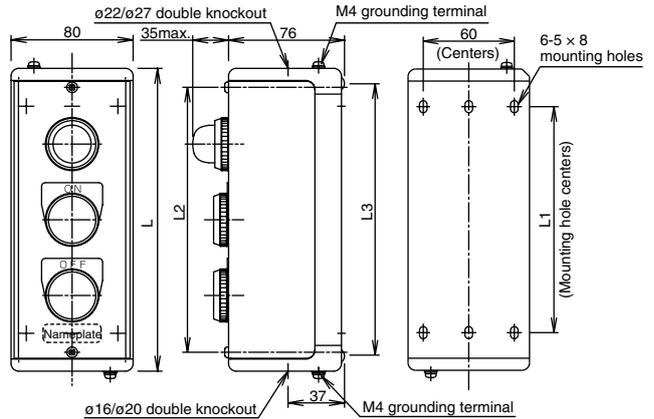
Package Quantity: 1

Name	Part No.	Applicable Enclosure	Applicable Knockout Hole
Rubber Bushing	GB-2	KGN111Y	ø20 or ø22 mm
		KGN110Y	
		KGN211Y	
		KGN210Y	
	GB-3	KGN311Y	ø27 mm
		KGN310Y	
		KGN411Y	
		KGN410Y	
		KGN511Y	
		KGN510Y	

Dimensions

All dimensions in mm.

KGN Control Station (Wall Mount)

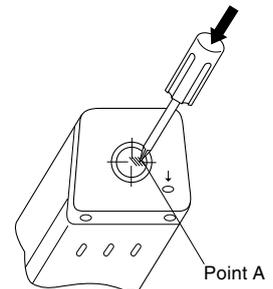


	1 hole	2 holes	3 holes	4 holes	5 holes	
	111Y	212Y	313Y	314Y	414Y	510Y
L	100	150	200	200	250	250
L1	50	100	150	150	200	250
L2	75	125	175	175	225	275
L3	80	130	180	180	230	280
Weight (Approx.)	0.4 kg	0.5 kg	0.6 kg	0.6 kg	0.7 kg	0.8 kg

Instructions

Precautions for Opening the Knockout Hole

- The metal piece for the inner hole of ø22 or ø16 mm knockout has two linked parts to the outer hole. When breaking the knockout to make an inner hole, strike the inner metal piece at the cut parts (the hatched parts shown as point A at right) using a screwdriver tip or similar tool.
- When opening a larger hole of ø27 or ø20 mm, first make a smaller hole as described above. Then break the knockout for the larger hole using pliers.



Ordering Information

When ordering control stations with switches/pilot lights:

Specify the Part No. of the control station.

When ordering enclosures without switches/pilot lights:

Specify the following items.

- Part No. of the enclosure
- Part No. and specifications of the switch/pilot light to be mounted (lens color, button color, etc.)
- Nameplate
- Other specifications

Ordering Example

Part No. of Enclosure		KGN311Y
Switch/Pilot Light and Nameplate	①	APN128R
	②	ABN210B, with NA-1
	③	ABN201R, with NA-2

Note: Any ø30 mm series switch/pilot lights are selectable. However, take the effective depth inside the enclosure into consideration.