## Ensuring Your Protection in Potentially Dangerous Areas

 C $\epsilon_{\text {numes © © © }}^{\text {© }}$The Key to Your Safety

## Ø22/25 Emergency Stop Button Switches SF2ER Series

The SF2ER series emergency stop button switches are used to stop operation of machines during emergency situations.


D30


D40


D40-EMS

## Ordering Information



## Parts Descriptions



Contact capacity

- IEC (EN60947-5-1)

| Rated current |  |  |  |  |  |  | 10 A |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Rated voltage |  | 24 V | 110 V | 220 V | 380 V |  |  |
| AC | Resistive load (AC-12) | 10 A | 10 A | 6 A | 3 A |  |  |
|  | Inductive load (AC-15) | 10 A | 5 A | 3 A | 2 A |  |  |
| DC | Resistive load (DC-12) | 10 A | 2 A | 0.6 A | 0.2 A |  |  |
|  | Inductive load (DC-13) | 1.5 A | 0.5 A | 0.2 A | 0.1 A |  |  |

- UL / CSA (UL508, CSA C22.2 No. 14)

A300

| Rated voltage | Through <br> current | Current (A) |  |  | Volt ampere (VA) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  |  | Breaking | Making | Breaking |  |  |
| AC120 V | 10 A | 60 | 6 | 7,200 | 720 |  |
| AC240 V |  | 30 | 3 |  |  |  |


| Rated voltage | Through current | Current (A) |  | Volt ampere (VA) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Making | Breaking | Making | Breaking |
| DC125 V | 2.5 A | 0.55 | 0.55 | 69 | 69 |
| DC250 V |  | 0.27 | 0.27 |  |  |

Specifications

| Model | SF2ER- $\square \square \square \square-\square$ |
| :---: | :---: |
| Rated voltage/current | $\begin{aligned} & \text { IEC: AC-15 (220 VAC~, 3A), DC-13 (220 VDC=-- } 0.2 \text { A) } \\ & \text { UL: A300, Q300 } \end{aligned}$ |
| Contact operating power | 3.0 to $8.0 \mathrm{~N} / 1$ contact |
| Operation distance | 5.0 mm (0/-0.5) |
| Rotation angle | CW (clock wise) $52^{\circ}$ |
| Allowable operation frequency ${ }^{01)}$ | Mechanical: 20 times/minute Electrical: 20 times/minute |
| Life cycle | Mechanical: Min. 250,000 times Electrical: Min. 100,000 times |
| Applicable wire | AWG 18 (0.823 mm ${ }^{2}$ ) |
| Insulation resistance | $\geq 100 \mathrm{M} \Omega$ ( $500 \mathrm{VDC}==$ megger) |
| Dielectric strength | 2,500 VAC $\sim 50 / 60 \mathrm{~Hz}$ for 1 minute |
| Vibration | 1.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min ) in each $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ direction for 2 hours |
| Vibration (malfunction) | 1.5 mm double amplitude at frequency of 10 to 55 Hz (for 1 min ) in each $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ direction for 10 minutes |
| Shock | $1,000 \mathrm{~m} / \mathrm{s}^{2}(\approx 100 \mathrm{~g})$ in each $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ direction for 3 times |
| Shock (malfunction) | $250 \mathrm{~m} / \mathrm{s}^{2}(\approx 25 \mathrm{~g})$ in each $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ direction for 3 times |
| Ambient temperature | -20 to $65^{\circ} \mathrm{C}^{02)}$, storage : -40 to $70^{\circ} \mathrm{C}$ (at no freezing or condensation) |
| Ambient humidity | 35 to $85 \%$ RH, storage : 35 to $85 \%$ RH (at no freezing or condensation) |
| Protection structure | IP65 ${ }^{03}$ (oil resistant, IEC standards) |
| Material | Button: PC, BODY: PA6, lever in fixing unit: PA6 |
| Approval |  |
| Weight ${ }^{04}$ | $\approx 66 \mathrm{~g}$ |

1) Setting and resetting once is counted as one operation.
2) It is only for part from front of the panel. Protection structure is guaranteed only when the switch is installed on flat and smooth surface with mounting holes $\varnothing 22 \mathrm{~mm}$.
3) It is switch with three contact blocks.

## Dimensions

## D30 (short head, non-illuminated)



D40 (short head, non-illuminated)


