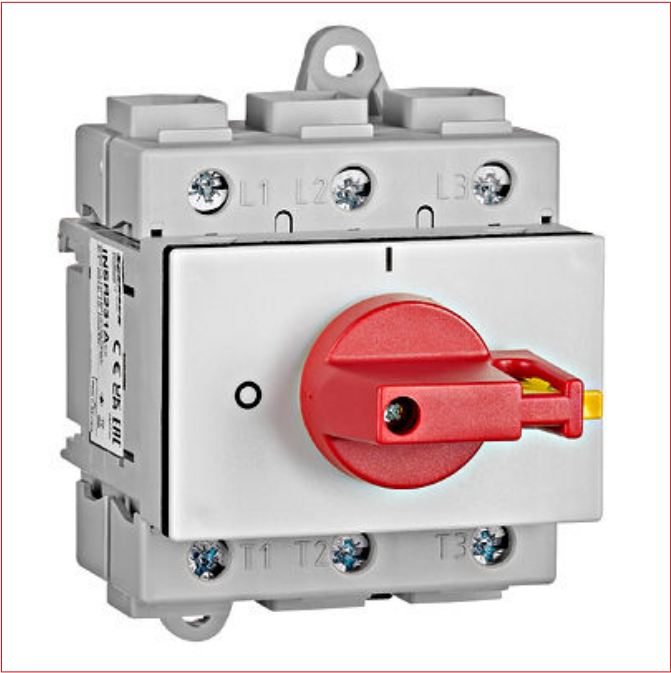


Data Sheet for Article: INSR231A--

# Emergency-Stop Main Switch 3-pole, modular, 100A

Version Emergency main switch, Rated current 100A, Poles 3, IP Rating IP40 (front), IP10 (terminals)



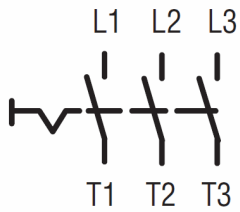
## Technical Data

|                                            |                                                                                                                |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Version                                    | Emergency main switch                                                                                          |
| Rated current (A)                          | 100                                                                                                            |
| Poles                                      | 3                                                                                                              |
| Mounting                                   | DIN-rail                                                                                                       |
| Standard                                   | IEC 60947, EN 60947, VDE 0660                                                                                  |
| Rated insulation voltage [Ui] (V)          | 690                                                                                                            |
| Rated impulse withstand voltage [Uimp] (V) | 6000                                                                                                           |
| Rated short-time withstand current Icw     | 1000                                                                                                           |
| Rated conditional short-circuit-current    | 10kA @ 440V / 6kA @ 690V                                                                                       |
| Short-circuit protection maximum fuse      | 125                                                                                                            |
| Frequency (Hz)                             | 50/60                                                                                                          |
| Operating Current                          | AC-23A - 400V - 70A<br>AC-23A - 690V - 34A<br>AC-3 - 400V - 53A<br>AC-3 - 690V - 25.5A<br>AC-21A - 690V - 100A |

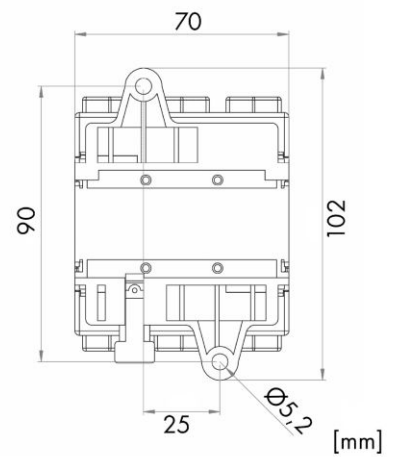
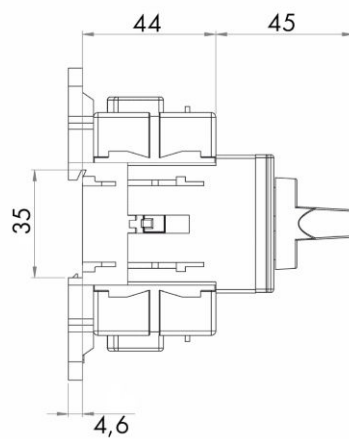
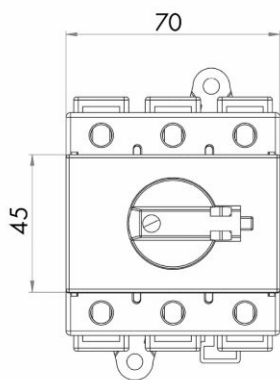
## Technical Data - continued

|                                                                         |                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching Capacity                                                      | AC-3 - 400V - 30kW<br>AC-3 - 690V - 22kW<br>AC-23A - 400V - 37kW<br>AC-23A - 690V - 30kW                                                                                                                                                                                                                                                                        |
| <b>According to UL 508 / CSA</b>                                        |                                                                                                                                                                                                                                                                                                                                                                 |
| Connection type                                                         | UL/CSA - AWG 12-1                                                                                                                                                                                                                                                                                                                                               |
| Operating voltage AC (V)                                                | 600                                                                                                                                                                                                                                                                                                                                                             |
| Thermal rated continuous current (A)                                    | 100                                                                                                                                                                                                                                                                                                                                                             |
| Active Power                                                            | 3x480VAC - 60Hp<br>3x240VAC - 30Hp<br>3x600VAC - 75Hp                                                                                                                                                                                                                                                                                                           |
| <b>Connections</b>                                                      |                                                                                                                                                                                                                                                                                                                                                                 |
| Conventional thermal current I <sub>th</sub> (A)                        | 100                                                                                                                                                                                                                                                                                                                                                             |
| Tightening torque (Nm)                                                  | 3                                                                                                                                                                                                                                                                                                                                                               |
| Connection cross-section, multi-wire (mm <sup>2</sup> )                 | 4-50                                                                                                                                                                                                                                                                                                                                                            |
| Connection cross section, single wire (mm <sup>2</sup> )                | 4-50                                                                                                                                                                                                                                                                                                                                                            |
| Connection cross-section, flexible wire with ferrule (mm <sup>2</sup> ) | 4-35                                                                                                                                                                                                                                                                                                                                                            |
| <b>Retrofit contacts</b>                                                |                                                                                                                                                                                                                                                                                                                                                                 |
| Auxiliary contacts                                                      | Maximum 2x INSHK001-- permitted. 1x INSHK001-- can be snapped on to the left side of the main contact and 1x INSHK001-- to the right side of the main contact. Maximum configuration 2x NC contact / 2x NO contact. The switching behavior is the same regardless of whether the auxiliary contact is snapped on to the left or right side of the main contact. |
| Neutral conductor contacts                                              | ATTENTION! If this 3-pole switch is converted to a 4-pole switch using neutral conductor contact INSNK013--, no additional auxiliary contact can be snapped onto the N contact. On the other side, auxiliary contact INSHK001-- can be used as normal. For further details, see Auxiliary contact and N contact overview.                                       |
| Operating temperature                                                   | -25°C to +55°C                                                                                                                                                                                                                                                                                                                                                  |
| Mechanical durability                                                   | 100000 switching cycles                                                                                                                                                                                                                                                                                                                                         |
| Power loss per pole (W)                                                 | 7,50                                                                                                                                                                                                                                                                                                                                                            |
| Protection against direct contact                                       | finger-proof and back-of-hand-proof according to VDE 0106 Part 100                                                                                                                                                                                                                                                                                              |
| IP Rating                                                               | IP40 (front), IP10 (terminals)                                                                                                                                                                                                                                                                                                                                  |
| Lockable                                                                | With 2 locks, each with a shackle lock diameter of 4-6 mm                                                                                                                                                                                                                                                                                                       |
| Net length (mm)                                                         | 89,50                                                                                                                                                                                                                                                                                                                                                           |
| Net width (mm)                                                          | 70,00                                                                                                                                                                                                                                                                                                                                                           |
| Net height (mm)                                                         | 45,00                                                                                                                                                                                                                                                                                                                                                           |
| Min. ambient temperature (°C)                                           | -25                                                                                                                                                                                                                                                                                                                                                             |
| Max. ambient temperature (°C)                                           | 55                                                                                                                                                                                                                                                                                                                                                              |

## Schaltbild INSR231A--



## Maßbild INSR231A--



## Montageanleitung INSR Hutschiennenmontage Schalter



## Montageanleitung INSHK Hilfskontakte bei Verwendung von INSNK Neutraleiterkontakte



## Article Table

| DESCRIPTION                                                                                                                                                | Order No. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Emergency-Stop Main Switch 3-pole, modular, 100A                                                                                                           | INSR231A  |
| Version Emergency main switch, Rated current 100A, Poles 3, IP Rating IP40 (front), IP10 (terminals)                                                       |           |
| <b>Optional Accessories</b>                                                                                                                                |           |
| Auxiliary Contact 1NO/1NC for INSR, INSP and INSA                                                                                                          | INSHK001  |
| Nicht für INSE zu verwenden, Version accessories, IP Rating IP20 (terminals)                                                                               |           |
| N-contact for 3-pole INSR, INSP, and INSA switches, 100-125A                                                                                               | INSNK013  |
| Snap-on N-contact for retrofitting a 3-pole switch to a 4-pole switch, Can only be used with a 100-125A INSR, INSP, or INSA switch, not for use with INSE! |           |