# DATASHEET - P3-100/SE3/SVB-SW/N

**Main switch, P3, 100 A, surface mounting, 3 pole + N, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position, in steel enclosure**

Powering Business Worldwide

**Part no.** P3-100/SE3/SVB-SW/N
**Catalog No.** 197375

## Delivery program

| | | | |
|---|---|---|---|
| Product range | | | Main switch<br>maintenance switch |
| Part group reference | | | P3 |
| Stop Function | | | STOP function |
| | | | With black rotary handle and locking ring |
| Information about equipment supplied | | | auxiliary contact fitted by user. |
| Notes | | | in steel enclosure |
| Number of poles | | | 3 pole + N |
| **Auxiliary contacts** | | | |
| | | N/O | 0 |
|  | | N/C | 0 |
| Locking facility | | | Lockable in the 0 (Off) position |
| Degree of Protection | | | IP65 |
| Design | | | surface mounting |
| Switching angle | | ° | 90 |
| **Motor rating AC-23A, 50 - 60 Hz** | | | |
| 400 V | P | kW | 55 |
| Rated uninterrupted current | $I_u$ | A | 100 |
| Note on rated uninterrupted current $I_u$ | | | Rated uninterrupted current $I_u$ is specified for max. cross-section. |

## Technical data

### General

| | | | |
|---|---|---|---|
| Standards | | | IEC/EN 60947, VDE 0660, IEC/EN 60204<br>Switch disconnector in accordance with IEC/EN 60947-3 |
| Ambient temperature | | | |
| Enclosed | | °C | -25 - +40 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated impulse withstand voltage | $U_{imp}$ | V AC | 6000 |
| Mechanical shock resistance | | g | 15 |
| Mounting position | | | As required |

### Contacts

| | | | |
|---|---|---|---|
| Mechanical variables | | | |
| Number of poles | | | 3 pole + N |
| Auxiliary contacts | | | |
| | | N/O | 0 |
| | | N/C | 0 |
| Electrical characteristics | | | |
| Rated operational voltage | $U_e$ | V AC | 690 |
| Rated uninterrupted current | $I_u$ | A | 100 |
| Note on rated uninterrupted current $I_u$ | | | Rated uninterrupted current $I_u$ is specified for max. cross-section. |
| Load rating with intermittent operation, class 12 | | | |
| AB 25 % DF | | x $I_e$ | 2 |
| AB 40 % DF | | x $I_e$ | 1.6 |

| | | | |
|---|---|---|---|
| AB 60 % DF | | x $I_e$ | 1.3 |
| Short-circuit rating | | | |
| Fuse | | A gG/gL | 100 |
| Rated short-time withstand current (1 s current) | $I_{cw}$ | $A_{rms}$ | 2000 |
| Note on rated short-time withstand current Icw | | | Current for a time of 1 second |
| Rated conditional short-circuit current | Iq | kA | 4 (Load side)<br>80 (Supply side) |

## Switching capacity

| | | | |
|---|---|---|---|
| cos φ rated making capacity as per IEC 60947-3 | | A | 950 |
| Rated breaking capacity cos φ to IEC 60947-3 | | A | |
| 230 V | | A | 760 |
| 400/415 V | | A | 740 |
| 500 V | | A | 880 |
| 690 V | | A | 520 |
| Safe isolation to EN 61140 | | | |
| between the contacts | | V AC | 440 |
| Current heat loss per contact at $I_e$ | | W | 7.5 |
| Lifespan, mechanical | Operations | x $10^6$ | > 0.1 |
| Maximum operating frequency | Operations/h | | 1200 |
| AC | | | |
| AC-3 | | | |
| Rating, motor load switch | P | kW | |
| 220 V 230 V | P | kW | 22 |
| 400 V 415 V | P | kW | 37 |
| 500 V | P | kW | 45 |
| 690 V | P | kW | 37 |
| Rated operational current motor load switch | | | |
| 230 V | $I_e$ | A | 71 |
| 400V 415 V | $I_e$ | A | 71 |
| 500 V | $I_e$ | A | 65 |
| 690 V | $I_e$ | A | 23.8 |
| AC-23A | | | |
| Motor rating AC-23A, 50 - 60 Hz | P | kW | |
| 230 V | P | kW | 30 |
| 400 V 415 V | P | kW | 55 |
| 500 V | P | kW | 55 |
| 690 V | P | kW | 55 |
| Rated operational current motor load switch | | | |
| 230 V | $I_e$ | A | 100 |
| 400 V 415 V | $I_e$ | A | 100 |
| 500 V | $I_e$ | A | 96 |
| 690 V | $I_e$ | A | 68 |
| DC | | | |
| DC-1, Load-break switches L/R = 1 ms | | | |
| Rated operational current | $I_e$ | A | 100 |
| Voltage per contact pair in series | | V | 60 |
| DC-23A, motor load switch L/R = 15 ms | | | |
| 24 V | | | |
| Rated operational current | $I_e$ | A | 50 |
| Contacts | | Quantity | 1 |
| 48 V | | | |
| Rated operational current | $I_e$ | A | 50 |
| Contacts | | Quantity | 2 |
| 60 V | | | |

| | | | |
|---|---|---|---|
| Rated operational current | $I_e$ | A | 50 |
| Contacts | | Quantity | 2 |
| 120 V | | | |
| Rated operational current | $I_e$ | A | 25 |
| Contacts | | Quantity | 3 |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | $H_F$ | $< 10^{-5}$,< 1 failure in 100,000 switching operations |

### Terminal capacities

| | | | |
|---|---|---|---|
| Solid or stranded | | $mm^2$ | 1 x (2,5 - 35)<br>2 x (2,5 - 10) |
| Flexible with ferrules to DIN 46228 | | $mm^2$ | 1 x (1.5 - 25)<br>2 x (1.5 - 6) |
| Tightening torque for terminal screw | | Nm | 3 |

### Technical safety parameters:

| | | | |
|---|---|---|---|
| **Notes** | | | $B10_d$ values as per EN ISO 13849-1, table C1 |

## Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

| | | | |
|---|---|---|---|
| Version as main switch | | | No |
| Version as maintenance-/service switch | | | Yes |
| Version as safety switch | | | No |
| Version as emergency stop installation | | | No |
| Version as reversing switch | | | No |
| Number of switches | | | 1 |
| Max. rated operation voltage Ue AC | | V | 690 |
| Rated operating voltage | | V | 690 - 690 |
| Rated permanent current Iu | | A | 100 |
| Rated permanent current at AC-23, 400 V | | A | 100 |
| Rated permanent current at AC-21, 400 V | | A | 100 |
| Rated operation power at AC-3, 400 V | | kW | 37 |
| Rated short-time withstand current Icw | | kA | 2 |
| Rated operation power at AC-23, 400 V | | kW | 55 |
| Switching power at 400 V | | kW | 55 |
| Conditioned rated short-circuit current Iq | | kA | 80 |
| Number of poles | | | 4 |
| Number of auxiliary contacts as normally closed contact | | | 0 |
| Number of auxiliary contacts as normally open contact | | | 0 |
| Number of auxiliary contacts as change-over contact | | | 0 |
| Motor drive optional | | | No |
| Motor drive integrated | | | No |
| Voltage release optional | | | No |
| Device construction | | | Complete device in housing |
| Suitable for floor mounting | | | Yes |
| Suitable for front mounting 4-hole | | | No |
| Suitable for front mounting centre | | | No |
| Suitable for distribution board installation | | | No |
| Suitable for intermediate mounting | | | No |
| Colour control element | | | Black |
| Type of control element | | | Door coupling rotary drive |
| Interlockable | | | Yes |
| Type of electrical connection of main circuit | | | Screw connection |
| Degree of protection (IP), front side | | | IP65 |
| Degree of protection (NEMA) | | | 12 |


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