DATASHEET - P1-32/I2/SVB



Main switch, 3 pole, 32 A, Emergency-Stop function, Lockable in the 0 (Off) position, surface mounting



Part no. P1-32/I2/SVB Catalog No. P1-32/I4

EL-Nummer 0001457804 (Norway)

| Delivery program | | | |
|--|----|-----|--|
| Product range | | | Main switch maintenance switch Repair switch |
| Part group reference | | | P1 |
| Stop Function | | | Emergency switching off function |
| | | | With red rotary handle and yellow locking ring |
| Information about equipment supplied | | | Auxiliary contact or neutral conductor fitted by user. |
| Number of poles | | | 3 pole |
| Auxiliary contacts | | | |
| · · | | N/0 | 0 |
| 7 | | N/C | 0 |
| Locking facility | | | Lockable in the 0 (Off) position |
| Degree of Protection | | | IP65 |
| | | | totally insulated |
| Design | | | surface mounting |
| | | | |
| Contact sequence | | | L1 L2 L3 1 |
| Switching angle | | 0 | 90 |
| Function | | | OFF ON |
| Motor rating AC-23A, 50 - 60 Hz | | | |
| 400 V | P | kW | 15 |
| Rated uninterrupted current | Iu | Α | 32 |
| Note on rated uninterrupted current !u | | | Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section. |

Technical data General

| General | | | |
|---|------------------|-------------------|--|
| Standards | | | IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3 |
| Climatic proofing | | | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature | | | |
| Enclosed | | °C | -25 - +40 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Mechanical shock resistance | - mp | g | 15 |
| Mounting position | | 9 | As required |
| Contacts | | | Astequiled |
| Mechanical variables | | | |
| Number of poles | | | 3 pole |
| Auxiliary contacts | | | |
| · | | N/0 | 0 |
| | | N/C | 0 |
| Electrical characteristics | | | |
| Rated operational voltage | U _e | V AC | 690 |
| Rated uninterrupted current | | A | 32 |
| | l _u | ^ | |
| Note on rated uninterrupted current !u | | | Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ 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 | 50 |
| Rated short-time withstand current (1 s current) | I _{cw} | A _{rms} | 640 |
| Note on rated short-time withstand current lcw | | | Current for a time of 1 second |
| Rated conditional short-circuit current | Iq | kA | 80 |
| Switching capacity | | | |
| cos φ rated making capacity as per IEC 60947-3 | | Α | 320 |
| Rated breaking capacity cos φ to IEC 60947-3 | | Α | |
| 230 V | | Α | 260 |
| 400/415 V | | Α | 300 |
| 500 V | | Α | 290 |
| 690 V | | Α | 250 |
| Safe isolation to EN 61140 | | | |
| between the contacts | | V AC | 440 |
| Current heat loss per contact at I _e | | W | 1.8 |
| Lifespan, mechanical | Operations | x 10 ⁶ | > 0.3 |
| Maximum operating frequency | Operations/h | | 1200 |
| AC | · | | |
| AC-3 | | | |
| Rating, motor load switch | Р | kW | |
| 220 V 230 V | P | kW | 7.5 |
| 400 V 415 V | P | kW | 13 |
| 500 V | P | kW | 18.5 |
| 690 V | P | kW | 15 |
| Rated operational current motor load switch | • | | - |
| 230 V | I _e | Α | 26.4 |
| 400V 415 V | | A | 26.4 |
| | I _e | | |
| 500 V | l _e | A | 23.4 |
| 690 V | I _e | Α | 14.7 |

| AC-21A | | | |
|---|-------------------|-----------------|---|
| Rated operational current switch | | | |
| 440 V | | Α | 32 |
| | l _e | ^ | JZ |
| AC-23A | D | LAA | |
| Motor rating AC-23A, 50 - 60 Hz | P | kW | |
| 230 V | P | kW | 7.5 |
| 400 V 415 V | P | kW | 15 |
| 500 V | P P | kW | 18.5 |
| 690 V | ۲ | kW | 15 |
| Rated operational current motor load switch | | ^ | 99 |
| 230 V | l _e | A | 32 |
| 400 V 415 V | l _e | Α | 32 |
| 500 V | le | Α | 30 |
| 690 V | l _e | Α | 19.8 |
| DC | | | |
| DC-1, Load-break switches L/R = 1 ms | | | |
| Rated operational current | l _e | Α | 32 |
| Voltage per contact pair in series | | V | 60 |
| DC-23A, motor load switch L/R = 15 ms | | | |
| 24 V | | | |
| Rated operational current | l _e | Α | 25 |
| Contacts | | Quantity | 1 |
| 48 V | | | |
| Rated operational current | l _e | Α | 25 |
| Contacts | | Quantity | 2 |
| 60 V | | | |
| Rated operational current | le | Α | 25 |
| Contacts | | Quantity | 2 |
| 120 V | | | |
| Rated operational current | l _e | Α | 12 |
| Contacts | | Quantity | 3 |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | H _F | < 10 ⁻⁵ , < 1 fault in 100000 operations |
| Terminal capacities Solid or stranded | | 2 | 1 v /1 E C) |
| SUIIU UI SII AIIUEU | | mm ² | 1 x (1,5 - 6) 2 x (1,5 - 6) |
| Flexible with ferrules to DIN 46228 | | mm ² | 1 x (1 - 4) 2 x (1 - 4) |
| Terminal screw | | | M4 |
| Tightening torque for terminal screw | | Nm | 1.6 |
| Technical safety parameters: | | | |
| Notes | | | B10 _d values as per EN ISO 13849-1, table C1 |
| Rating data for approved types | | | |
| Terminal capacity | | | M |
| Terminal screw | | lh in | M4 |
| Tightening torque | | lb-in | 14.128 |

Design verification as per IEC/EN 61439

| Fechnical data for design verification | | | |
|--|------------------|----|-----|
| Rated operational current for specified heat dissipation | In | Α | 32 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 1.8 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 0 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | 0 |
| Heat dissipation capacity | P_{diss} | W | 0 |
| Operating ambient temperature min. | | °C | -25 |
| Operating ambient temperature max. | | °C | 40 |

| /EN 61439 design verification | |
|--|--|
| 10.2 Strength of materials and parts | |
| 10.2.2 Corrosion resistance | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | Meets the product standard's requirements. |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat | Meets the product standard's requirements. |
| $10.2.3.3\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ abnormal\ heat\ and\ fire\ due\ to\ internal\ electric\ effects$ | Meets the product standard's requirements. |
| 10.2.4 Resistance to ultra-violet (UV) radiation | UV resistance only in connection with protective shield. |
| 10.2.5 Lifting | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions | Meets the product standard's requirements. |
| 10.3 Degree of protection of ASSEMBLIES | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.4 Clearances and creepage distances | Meets the product standard's requirements. |
| 10.5 Protection against electric shock | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.6 Incorporation of switching devices and components | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.7 Internal electrical circuits and connections | Is the panel builder's responsibility. |
| 10.8 Connections for external conductors | Is the panel builder's responsibility. |
| 10.9 Insulation properties | |
| 10.9.2 Power-frequency electric strength | Is the panel builder's responsibility. |
| 10.9.3 Impulse withstand voltage | Is the panel builder's responsibility. |
| 10.9.4 Testing of enclosures made of insulating material | Is the panel builder's responsibility. |
| 10.10 Temperature rise | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

Technical data ETIM 7.0

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])

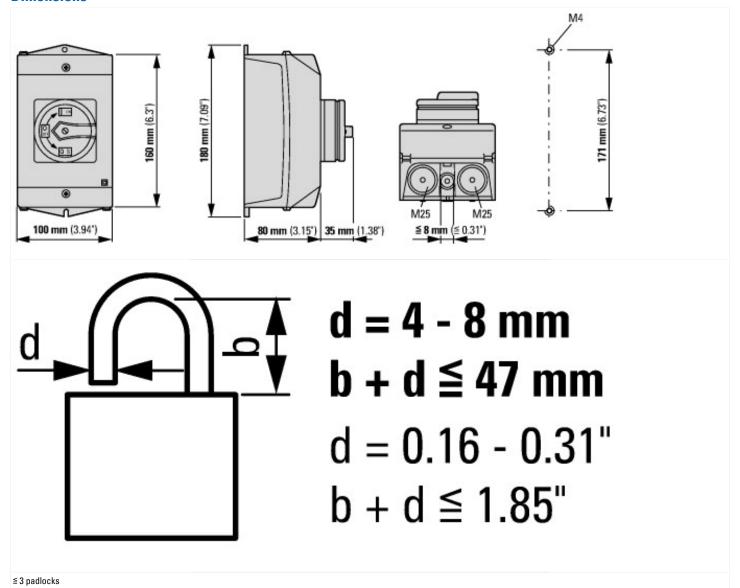
| Version as maintenance-/service switch Yes Version as safety switch Yes Version as emergency stop installation Yes Version as reversing switch No Number of switches 1 Max. rated operation voltage Ue AC V 690 Rated operation voltage V 690 - 690 Rated permanent current lu A 32 Rated permanent current at AC-23, 400 V A 32 Rated operation power at AC-3, 400 V KW 13 Rated short-time withstand current low KA 0.64 Rated short-time withstand current low KA 0.64 Rated short-driving current low KA 0.64 Switching power at 400 V KW 15 Switching power at 400 V KW 15 Switching power at 400 V KW 15 Conditioned rated short-circuit current lq KA 80 Number of poles KA 80 Number of auxiliary contacts as normally open contact C 0 Motor drive optional No | [AKF060013]) | | |
|--|---|----|----------------------------|
| Version as safety switch Version as emergency stop installation Version as reversing switch Number of switches Nax. rated operation voltage Ue AC Nax. rated operation voltage Ue AC Nated operating voltage Rated operating voltage Rated operating voltage Rated permanent current lu Rate de permanent current at AC-23, 400 V Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rw 15 Switching power at 400 V Conditioned rated short-circuit current lq Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Voltage release optional | Version as main switch | | Yes |
| Version as emergency stop installation Version as reversing switch Number of switches Max. rated operation voltage Ue AC No 690 Rated operating voltage Rated permanent current lu Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rated operation power | Version as maintenance-/service switch | | Yes |
| 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 lu A 32 Rated permanent current at AC-23, 400 V A 32 Rated operation power at AC-3, 400 V kM 13 Rated short-time withstand current lcw kA 0.64 Rated operation power at AC-23, 400 V kW 15 Switching power at 400 V kW 15 Conditioned rated short-circuit current lq kA 80 Number of poles kA 80 Number of auxiliary contacts as normally closed contact KA 90 Number of auxiliary contacts as normally open contact KA 0 Motor drive optional KA 0 Motor drive optional KA No Motor drive integrated KA No Voltage release optional No No | Version as safety switch | | Yes |
| Number of switches 1 Max. rated operation voltage Ue AC V 690 Rated operating voltage V 690 - 690 Rated permanent current lu A 32 Rated permanent current at AC-23, 400 V A 32 Rated permanent current at AC-3, 400 V kW 13 Rated short-time withstand current Icw kA 0.64 Rated operation power at AC-23, 400 V kW 15 Switching power at 400 V kW 15 Conditioned rated short-circuit current Iq kA 80 Number of poles 3 3 Number of auxiliary contacts as normally closed contact KA 80 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Motor drive optional No No Motor drive integrated No No Voltage release optional No No | Version as emergency stop installation | | Yes |
| Max. rated operation voltage Ue AC V 690 Rated operating voltage V 690 - 690 Rated permanent current Iu A 32 Rated permanent current at AC-23, 400 V A 32 Rated permanent current at AC-21, 400 V A 32 Rated short-time withstand current lcw kA 0.64 Rated operation power at AC-23, 400 V kW 15 Switching power at 400 V kW 15 Conditioned rated short-circuit current Iq kA 80 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Motor drive optional No No Motor drive integrated No No Voltage release optional No No | Version as reversing switch | | No |
| Rated operating voltage Rated permanent current lu Rated permanent current lu Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Roulitioned rated short-circuit current lq Rated operation power at 400 V Conditioned rated short-circuit current lq Rated operation power at 400 V Conditioned rated short-circuit current lq Rated operation power at 400 V Conditioned rated short-circuit current lq Rated operation power at 400 V Roulitioned rated short-circuit current lq Rated operation power at 400 V Roulitioned rated short-circuit current lq Rated operation power at 400 V Roulitioned rated short-circuit current lq Rated operation power at 400 V Roulitioned rated short-circuit current lq Rated operation power at 400 V Roulition power | Number of switches | | 1 |
| Rated permanent current lu Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Rowlitching power at AC-23, 400 V Rowlitching power at 400 V Conditioned rated short-circuit current lq RA RA RO Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Voltage release optional | Max. rated operation voltage Ue AC | V | 690 |
| Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Rated operation power at AC-23, 400 V Rated operation power at AC-20, 400 V Rated operation power at AC-21, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-2, 400 V Rated operation power at AC | Rated operating voltage | V | 690 - 690 |
| Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current Icw Rated operation power at AC-23, 400 V Rated operation power at 400 V Routing routing routing current Iq Routing routing routing current Iq Routing | Rated permanent current lu | Α | 32 |
| Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V RW Switching power at 400 V RW RO Switching power at 400 V RW Switching power at 400 V RW RO Switching power at 400 V RW RW SS Switching power at 400 V SS Switching power at 400 V RW SS Switching power at 400 V SS Switching power at 40 | Rated permanent current at AC-23, 400 V | А | 32 |
| Rated short-time withstand current lcw Rated operation power at AC-23, 400 V RW 15 Switching power at 400 V RW 15 Conditioned rated short-circuit current lq RA | Rated permanent current at AC-21, 400 V | Α | 32 |
| Rated operation power at AC-23, 400 V KW 15 Conditioned rated short-circuit current Iq KA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Nomber of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated Voltage release optional No No | Rated operation power at AC-3, 400 V | kW | 13 |
| Switching power at 400 V Conditioned rated short-circuit current Iq kA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated Voltage release optional kB 80 3 3 40 60 60 70 70 70 70 70 70 70 7 | Rated short-time withstand current lcw | kA | 0.64 |
| Conditioned rated short-circuit current Iq kA 80 Number of poles 3 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 Number of auxiliary contacts as change-over contact 0 Motor drive optional No Motor drive integrated No Voltage release optional No | Rated operation power at AC-23, 400 V | kW | 15 |
| Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No Voltage release optional No | Switching power at 400 V | kW | 15 |
| Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No Voltage release optional No | Conditioned rated short-circuit current Iq | kA | 80 |
| Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact O Motor drive optional No Motor drive integrated No Voltage release optional No | Number of poles | | 3 |
| Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional No | Number of auxiliary contacts as normally closed contact | | 0 |
| Motor drive optional No Motor drive integrated No Voltage release optional No | Number of auxiliary contacts as normally open contact | | 0 |
| Motor drive integrated No | Number of auxiliary contacts as change-over contact | | 0 |
| Voltage release optional No | Motor drive optional | | No |
| | Motor drive integrated | | No |
| Device construction Complete device in housing | Voltage release optional | | No |
| | Device construction | | Complete device in housing |

| Suitable for ground 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 | Red |
| 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) | Other |

Approvals

| Not all America del anada in order arabic namber 255651 | North America Certification | For UL/CSA certification order article number 255891 |
|---|-----------------------------|--|
|---|-----------------------------|--|

Dimensions



Assets (links)

Declaration of CE Conformity

00003102

Instruction Leaflets

IL03802001Z2018_04