

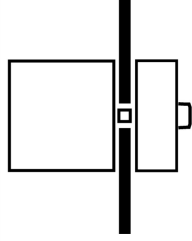
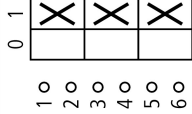
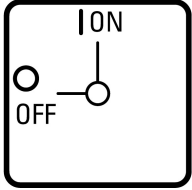


Main switch, P3, 63 A, flush mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

Part no. P3-63/EA/SVB  
 Catalog No. 031607

EL-Nummer 1456124  
 (Norway)

**Delivery program**

|  |                |     |  |
|--|----------------|-----|--|
| Product range                                      |                |     | Main switch<br>maintenance switch<br>Repair switch                                   |
| Part group reference                               |                |     | P3   |
| Stop Function                                      |                |     | Emergency switching off function   |
| Information about equipment supplied               |                |     | With red rotary handle and yellow locking ring                                       |
| Number of poles                                    |                |     | 3 pole   |
| <b>Auxiliary contacts</b>                          |                |     |  |
|  |                | N/O | 0  |
|  |                | N/C | 0  |
| Locking facility                                   |                |     | Lockable in the 0 (Off) position   |
| Degree of Protection                               |                |     | Front IP65   |
| Design   |                |     | flush mounting   |
|  |                |     |  |
| Contact sequence                                   |                |     |  |
| Function   |                |     |  |
| <b>Motor rating AC-23A, 50 - 60 Hz</b>             |                |     |  |
| 400 V  | P              | kW  | 30   |
| Rated uninterrupted current                        | I <sub>u</sub> | A   | 63   |
| Note on rated uninterrupted current I <sub>u</sub> |                |     | Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.      |

**Technical data**

|                     |  |  |  |
|---------------------|--|--|--|
| <b>General</b>      |  |  |  |
| Standards           |  |  | IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL<br>Switch-disconnector according to IEC/EN 60947-3<br>NEMA12 |
| Climatic proofing   |  |  | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30                             |
| Ambient temperature |  |  |  |

|                                       |           |      |             |
|---------------------------------------|-----------|------|-------------|
| Open                                  |           | °C   | -25 - +50   |
| 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   |
| Auxiliary contacts                                  |          |           |  |
|   |          | N/O       | 0  |
|   |          | N/C       | 0  |
| Electrical characteristics                          |          |           |  |
| Rated operational voltage                           | $U_e$    | V AC      | 690  |
| Rated uninterrupted current                         | $I_u$    | A         | 63   |
| 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   | 80   |
| Rated short-time withstand current (1 s current)    | $I_{cw}$ | $A_{rms}$ | 1260   |
| Note on rated short-time withstand current $I_{cw}$ |          |           | Current for a time of 1 second   |
| Rated conditional short-circuit current             | $I_q$    | kA        | 4  |

## Switching capacity

|  |              |          |       |
|--|--------------|----------|-------|
| cos $\varphi$ rated making capacity as per IEC 60947-3 |              | A        | 800   |
| Rated breaking capacity cos $\varphi$ to IEC 60947-3   |              | A        |       |
| 230 V  |              | A        | 640   |
| 400/415 V  |              | A        | 600   |
| 500 V  |              | A        | 590   |
| 690 V  |              | A        | 340   |
| Safe isolation to EN 61140                             |              |          |       |
| between the contacts                                   |              | V AC     | 440   |
| Current heat loss per contact at $I_e$                 |              | W        | 4.5   |
| 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       | 15    |
| 400 V 415 V  | P            | kW       | 30    |
| 500 V  | P            | kW       | 30    |
| 690 V  | P            | kW       | 30    |
| Rated operational current motor load switch            |              |          |       |
| 230 V  | $I_e$        | A        | 51    |
| 400V 415 V   | $I_e$        | A        | 55    |
| 500 V  | $I_e$        | A        | 44    |
| 690 V  | $I_e$        | A        | 22.1  |
| AC-23A   |              |          |       |
| Motor rating AC-23A, 50 - 60 Hz                        | P            | kW       |       |
| 230 V  | P            | kW       | 18.5  |
| 400 V 415 V  | P            | kW       | 30    |
| 500 V  | P            | kW       | 45    |

|   |                   |                |  |
|---|-------------------|----------------|--|
| 690 V   | P                 | kW             | 55   |
| Rated operational current motor load switch   |                   |                |  |
| 230 V   | I <sub>e</sub>    | A              | 63   |
| 400 V 415 V                                   | I <sub>e</sub>    | A              | 63   |
| 500 V   | I <sub>e</sub>    | A              | 63   |
| 690 V   | I <sub>e</sub>    | A              | 63   |
| DC  |                   |                |  |
| DC-1, Load-break switches L/R = 1 ms          |                   |                |  |
| Rated operational current                     | I <sub>e</sub>    | A              | 63   |
| Voltage per contact pair in series            |                   | V              | 60   |
| DC-23A, motor load switch L/R = 15 ms         |                   |                |  |
| 24 V  |                   |                |  |
| Rated operational current                     | I <sub>e</sub>    | A              | 50   |
| Contacts                                      |                   | Quantity       | 1  |
| 48 V  |                   |                |  |
| Rated operational current                     | I <sub>e</sub>    | A              | 50   |
| Contacts                                      |                   | Quantity       | 2  |
| 60 V  |                   |                |  |
| Rated operational current                     | I <sub>e</sub>    | A              | 50   |
| Contacts                                      |                   | Quantity       | 2  |
| 120 V   |                   |                |  |
| Rated operational current                     | I <sub>e</sub>    | A              | 25   |
| Contacts                                      |                   | Quantity       | 3  |
| Control circuit reliability at 24 V DC, 10 mA | Fault probability | H <sub>F</sub> | < 10 <sup>-5</sup> , < 1 failure in 100,000 switching operations |

### Terminal capacities

|                                      |  |                 |                                  |
|--------------------------------------|--|-----------------|----------------------------------|
| Solid or stranded                    |  | mm <sup>2</sup> | 1 x (2,5 - 35)<br>2 x (2,5 - 10) |
| Flexible with ferrules to DIN 46228  |  | mm <sup>2</sup> | 1 x (1.5 - 25)<br>2 x (1.5 - 6)  |
| Terminal screw                       |  |                 | M5                               |
| Tightening torque for terminal screw |  | Nm              | 3                                |

### Technical safety parameters:

|              |  |  |   |
|--------------|--|--|---|
| <b>Notes</b> |  |  | B10 <sub>d</sub> values as per EN ISO 13849-1, table C1 |
|--------------|--|--|---|

### Rating data for approved types

|                                  |                |      |                |
|----------------------------------|----------------|------|----------------|
| Contacts                         |                |      |                |
| Rated operational voltage        | U <sub>e</sub> | V AC | 600            |
| Rated uninterrupted current max. |                |      |                |
| Main conducting paths            |                |      |                |
| General use                      |                | A    | 60             |
| Auxiliary contacts               |                |      |                |
| General Use                      | I <sub>U</sub> | A    | 10             |
| Pilot Duty                       |                |      | A 600<br>P 600 |
| Switching capacity               |                |      |                |
| Maximum motor rating             |                |      |                |
| Single-phase                     |                |      |                |
| 120 V AC                         |                | HP   | 3              |
| 200 V AC                         |                | HP   | 7.5            |
| 240 V AC                         |                | HP   | 10             |
| Three-phase                      |                |      |                |
| 200 V AC                         |                | HP   | 15             |
| 240 V AC                         |                | HP   | 15             |
| 480 V AC                         |                | HP   | 40             |
| 600 V AC                         |                | HP   | 50             |
| Short Circuit Current Rating     |                |      |                |
| Basic Rating                     |                | kA   | 10             |

|  |       |        |
|--|-------|--------|
| max. Fuse                                | A     | 150    |
| Terminal capacity                        |       |        |
| Solid or flexible conductor with ferrule | AWG   | 14 - 2 |
| Terminal screw                           |       | M5     |
| Tightening torque                        | lb-in | 26.5   |

## Design verification as per IEC/EN 61439

|  |            |    |  |
|--|------------|----|--|
| Technical data for design verification   |            |    |  |
| Rated operational current for specified heat dissipation   | $I_n$      | A  | 63   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 4.5  |
| 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 | 50   |
| IEC/EN 61439 design verification   |            |    |  |
| 10.2 Strength of materials and parts   |            |    |  |
| 10.2.2 Corrosion resistance  |            |    |  |
| 10.2.2.1 Verification of thermal stability of enclosures   |            |    | Meets the product standard's requirements.                         |
| 10.2.2.2 Verification of resistance of insulating materials to normal heat   |            |    | Meets the product standard's requirements.                         |
| 10.2.2.3 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  |            |    |  |
| 10.4 Clearances and creepage distances   |            |    |  |
| 10.5 Protection against electric shock   |            |    |  |
| 10.6 Incorporation of switching devices and components   |            |    |  |
| 10.7 Internal electrical circuits and connections  |            |    |  |
| 10.8 Connections for external conductors   |            |    |  |
| 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   |            |    |  |
| 10.11 Short-circuit rating   |            |    |  |
| 10.12 Electromagnetic compatibility  |            |    |  |
| 10.13 Mechanical function  |            |    |  |

## Technical data ETIM 7.0

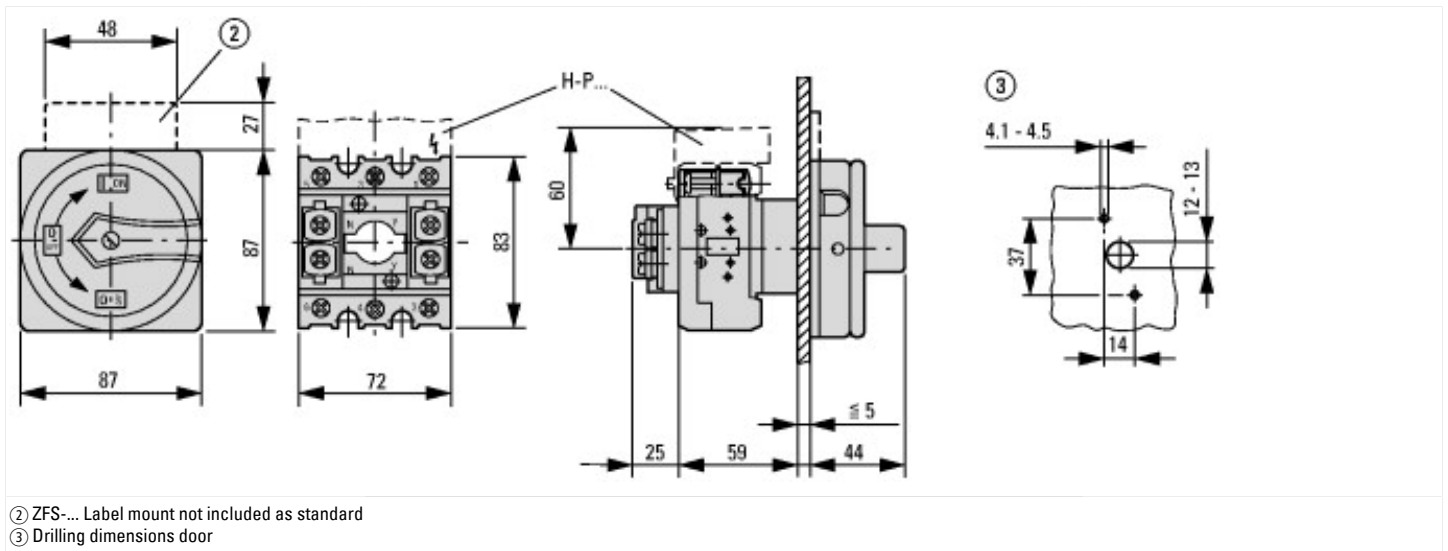
|   |  |   |           |
|---|--|---|-----------|
| Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)   |  |   |           |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss10.0.1-27-37-14-03 [AKF060013]) |  |   |           |
| Version as main switch  |  |   | Yes       |
| Version as maintenance-/service switch  |  |   | Yes       |
| Version as safety switch  |  |   | No        |
| Version as emergency stop installation  |  |   | Yes       |
| Version as reversing switch   |  |   | No        |
| Number of switches  |  |   | 1         |
| Max. rated operation voltage $U_e$ AC   |  | V | 690       |
| Rated operating voltage   |  | V | 690 - 690 |

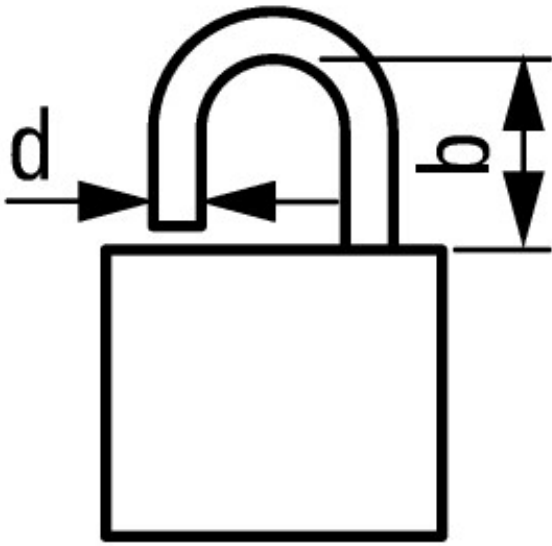
|   |    |  |
|---|----|--|
| Rated permanent current I <sub>u</sub>                  | A  | 63                                       |
| Rated permanent current at AC-23, 400 V                 | A  | 63                                       |
| Rated permanent current at AC-21, 400 V                 | A  | 63                                       |
| Rated operation power at AC-3, 400 V                    | kW | 30                                       |
| Rated short-time withstand current I <sub>cw</sub>      | kA | 1.26                                     |
| Rated operation power at AC-23, 400 V                   | kW | 30                                       |
| Switching power at 400 V                                | kW | 30                                       |
| Conditioned rated short-circuit current I <sub>q</sub>  | kA | 4  |
| 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  |
| Motor drive optional                                    |    | No                                       |
| Motor drive integrated                                  |    | No                                       |
| Voltage release optional                                |    | No                                       |
| Device construction                                     |    | Built-in device fixed built-in technique |
| Suitable for ground mounting                            |    | No                                       |
| Suitable for front mounting 4-hole                      |    | Yes                                      |
| 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)                             |    | 12                                       |

## Approvals

|                             |  |  |
|-----------------------------|--|--|
| Product Standards           |  | UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking |
| UL File No.                 |  | E36332   |
| UL Category Control No.     |  | NLRV   |
| CSA File No.                |  | 12528  |
| CSA Class No.               |  | 3211-05  |
| North America Certification |  | UL listed, CSA certified   |
| Suitable for                |  | Branch circuits, suitable as motor disconnect  |
| Degree of Protection        |  | IEC: IP65; UL/CSA Type 1, 12   |

## Dimensions





$$d = 4 - 8 \text{ mm}$$

$$b + d \leq 47 \text{ mm}$$

$$d = 0.16 - 0.31''$$

$$b + d \leq 1.85''$$

≤ 3 padlocks

### Additional product information (links)

|  |   |
|--|---|
| Technical overview cam switch, switch-disconnector | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2</a>                                     |
| System overview cam switch T                       | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4</a>                                     |
| System overview switch-disconnector P              | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6</a>                                     |
| Key to part numbers Cam switch                     | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>                                     |
| Key to part numbers Switch-disconnector            | <a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>                                     |
| Switches for ATEX                                  | <a href="http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html">http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html</a> |