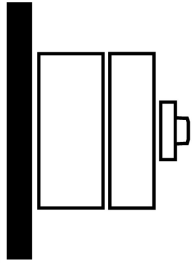
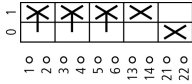
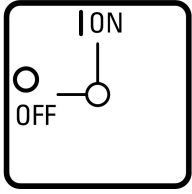




**Main switch, P1, 40 A, surface mounting, 3 pole, Emergency switching off function, red rotary handle and yellow locking ring, Lockable in the 0 (Off) position, hard knockout version, with assembly sheet screen**

**Part no. P1-40/I2H/MBS/SVB**  
**Catalog No. 199917**

**Delivery program**

|  |                |     |  |
|--|----------------|-----|--|
| Product range                                      |                |     | Main switch<br>maintenance switch  |
| Part group reference                               |                |     | P1   |
| Stop Function                                      |                |     | Emergency switching off function<br>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   |
| <b>Auxiliary contacts</b>                          |                |     |  |
|  |                | N/O | 0  |
|  |                | N/C | 0  |
| Locking facility                                   |                |     | Lockable in the 0 (Off) position   |
| Degree of Protection                               |                |     | IP65   |
| Design   |                |     | surface mounting   |
|  |                |     |  |
| Contact sequence                                   |                |     |  |
| Switching angle                                    |                | °   | 90   |
| Function   |                |     |  |
| <b>Motor rating AC-23A, 50 - 60 Hz</b>             |                |     |  |
| 400 V  | P              | kW  | 22   |
| Rated uninterrupted current                        | I <sub>u</sub> | A   | 40   |
| 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, IEC/EN 60204<br>Switch-disconnector according to IEC/EN 60947-3  |
| Climatic proofing                     |  |    | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature                   |  |    |  |
| Enclosed                              |  | °C | -20 - +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         | 40   |
| Note on rated uninterrupted current $I_u$           |          |           | Rated uninterrupted current $I_u$ is specified for max. cross-section. |
| 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 $I_{cw}$ |          |           | Current for a time of 1 second   |

## Switching capacity

|   |                   |               |   |
|---|-------------------|---------------|---|
| Safe isolation to EN 61140                    |                   |               |   |
| between the contacts                          |                   | V AC          | 440   |
| Current heat loss per contact at $I_e$        |                   | W             | 3.5   |
| Lifespan, mechanical                          | Operations        | $\times 10^6$ | > 0.3   |
| Maximum operating frequency                   | Operations/h      |               | 1200  |
| AC  |                   |               |   |
| AC-3  |                   |               |   |
| Rating, motor load switch                     | P                 | kW            |   |
| 220 V 230 V                                   | P                 | kW            | 7.5   |
| 400 V 415 V                                   | P                 | kW            | 15  |
| 690 V   | P                 | kW            | 15  |
| Rated operational current motor load switch   |                   |               |   |
| 230 V   | $I_e$             | A             | 30  |
| 400V 415 V                                    | $I_e$             | A             | 30  |
| 690 V   | $I_e$             | A             | 17  |
| AC-21A  |                   |               |   |
| Rated operational current switch              |                   |               |   |
| 400 V 415 V                                   | $I_e$             | A             | 40  |
| 500 V   | $I_e$             | A             | 40  |
| 690 V   | $I_e$             | A             | 40  |
| AC-22A  |                   |               |   |
| Rated operational current switch              |                   |               |   |
| 400 V 415 V                                   | $I_e$             | A             | 40  |
| 500 V   | $I_e$             | A             | 40  |
| 690 V   | $I_e$             | A             | 40  |
| AC-23A  |                   |               |   |
| Motor rating AC-23A, 50 - 60 Hz               | P                 | kW            |   |
| 230 V   | P                 | kW            | 11  |
| 400 V 415 V                                   | P                 | kW            | 22  |
| 690 V   | P                 | kW            | 17  |
| Rated operational current motor load switch   |                   |               |   |
| 230 V   | $I_e$             | A             | 40  |
| 400 V 415 V                                   | $I_e$             | A             | 40  |
| 690 V   | $I_e$             | A             | 20  |
| 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 <sup>2</sup> | 1 x (1,5 - 10)<br>2 x (1,5 - 10) |
| Flexible with ferrules to DIN 46228  |  | mm <sup>2</sup> | 1 x (1 - 4)<br>2 x (1 - 4)       |
| Terminal screw                       |  |                 | M4                               |
| Tightening torque for terminal screw |  | Nm              | 1.6                              |

## Rating data for approved types

|                   |  |  |    |
|-------------------|--|--|----|
| Terminal capacity |  |  |    |
| Terminal screw    |  |  | M4 |

## Design verification as per IEC/EN 61439

|  |                  |   |     |
|--|------------------|---|-----|
| Technical data for design verification                   |                  |   |     |
| Rated operational current for specified heat dissipation | I <sub>n</sub>   | A | 40  |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub> | W | 3.5 |

## Technical data ETIM 8.0

|   |  |    |                            |
|---|--|----|----------------------------|
| 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 <sub>e</sub> AC  |  | V  | 690                        |
| Rated operating voltage   |  | V  | 690 - 690                  |
| Rated permanent current I <sub>u</sub>  |  | A  | 40                         |
| Rated permanent current at AC-23, 400 V   |  | A  | 40                         |
| Rated permanent current at AC-21, 400 V   |  | A  | 40                         |
| Rated operation power at AC-3, 400 V  |  | kW | 15                         |
| Rated short-time withstand current I <sub>cw</sub>  |  | kA | 0.64                       |
| Rated operation power at AC-23, 400 V   |  | kW | 22                         |
| Switching power at 400 V  |  | kW | 22                         |
| Conditioned rated short-circuit current I <sub>q</sub>  |  | 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                          |
| Motor drive optional  |  |    | No                         |
| Motor drive integrated  |  |    | No                         |
| Voltage release optional  |  |    | No                         |
| Device construction   |  |    | Complete device in housing |
| Suitable for floor mounting   |  |    | No                         |
| 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)   |  |    |                            |

## 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> |