

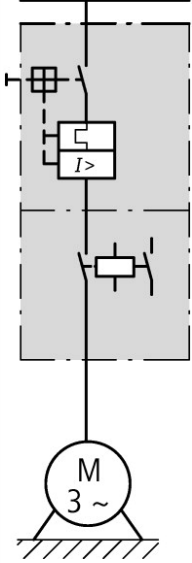




**DOL starter, 380 V 400 V 415 V: 0.25 kW, I<sub>r</sub>= 0.63 - 1 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage, Push in terminals**

**Part no. MSC-D-1-M7(230V50HZ)-PI**  
**Catalog No. 199564**  
**Alternate Catalog No. XTSCPI001B007BFNL**

**Delivery program**

|  |   |    |          |  |
|--|---|----|----------|--|
| Basic function                                   |   |    |          | DOL starters (complete devices)  |
| Basic device                                     |   |    |          | MSC  |
|  |   |    |          |    |
| Notes  |   |    |          | Also suitable for motors with efficiency class IE3.                                  |
| Connection technique                             |   |    |          | Push in terminals  |
| Connection to SmartWire-DT                       |   |    |          | no   |
| <b>Motor ratings</b>                             |   |    |          |  |
| Motor rating                                     |   |    |          |  |
| AC-3   |   |    |          |  |
| 380 V 400 V 415 V                                | P   | kW | 0.25     |  |
| Rated operational current                        |   |    |          |  |
| AC-3   |   |    |          |  |
| 380 V 400 V 415 V                                | I <sub>e</sub>  | A  | 0.8      |  |
| Rated short-circuit current 380 - 415 V          | I <sub>q</sub>  | kA | 150      |  |
| <b>Setting range</b>                             |   |    |          |  |
| Setting range of overload releases               | I <sub>r</sub>  | A  | 0.63 - 1 |  |
|  |  |    |          |  |
| Coordination                                     |   |    |          | Type of coordination "1"<br>Type of coordination "2"                                 |
| Contact sequence                                 |   |    |          |  |
| Actuating voltage                                |   |    |          | 230 V 50 Hz, 240 V 60 Hz<br>AC voltage   |
| <b>Motor-protective circuit-breakers PKZM0-1</b> |   |    |          |  |
| <b>Contactor DILM7-10(...)</b>                   |   |    |          |  |

## DOL starter wiring set

Mechanical connection element and electrical electric contact module PKZM0-XDM12-PI

### Notes

The DOL starter (complete device) consists of a PKZM0 motor protective circuit breaker and a DILM contactor.

With the adapter-less top-hat rail mounting of starters up to 15 A, only the motor protective circuit breaker on the top-hat rail requires an adapter. The contactors are provided with mechanical support via a mechanical connection element.

Control wire guide with max. 6 conductors up to 2.5°mm external diameter or 4 conductors up to 3.5°mm external diameter.

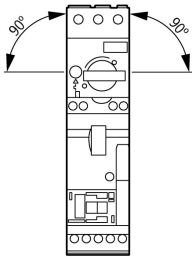
From 16 A, the motor protective circuit breaker and contactor are mounted on the top hat rail adapter plate.

The connection of the main circuit between PKZ and contactor is established with electrical contact modules.

When using the auxiliary contacts DILA-XHIT... (→ 101042) the plug-in electrical connector can be removed without the removal of the front mounting auxiliary contact.

## Technical data

### General

|                     |   |  |  |
|---------------------|---|--|--|
| Standards           |   |  | IEC/EN 60947-4-1, VDE 0660   |
| Mounting position   |   |  |  |
| Altitude            | m |  | Max. 2000  |
| Ambient temperature |   |  | -25 - +55  |

### Main conducting paths

|                                       |           |      |           |
|---------------------------------------|-----------|------|-----------|
| Rated impulse withstand voltage       | $U_{imp}$ | V AC | 6000      |
| Overvoltage category/pollution degree |           |      | III/3     |
| Rated operational voltage             | $U_e$     | V    | 230 - 415 |
| Rated operational current             |           |      |           |
| Open, 3-pole: 50 – 60 Hz              |           |      |           |
| 380 V 400 V                           | $I_e$     | A    | 1         |

### Additional technical data

|  |         |   |   |
|--|---------|---|---|
| Motor protective circuit breaker PKZM0, PKE                        |         |   | PKZM0 motor-protective circuit-breakers, see motor-protective circuit-breakers/<br>PKZM0 product group<br>DILM contactors, see contactor product group<br>DILET timing relay, ETR, see contactors, electronic timing relays product group |
| DILM contactors  |         |   |   |
| Power consumption of the coil in a cold state and $1.0 \times U_S$ |         |   |   |
| Dual-voltage coil 50 Hz  | Sealing | W | 1.4   |

## Design verification as per IEC/EN 61439

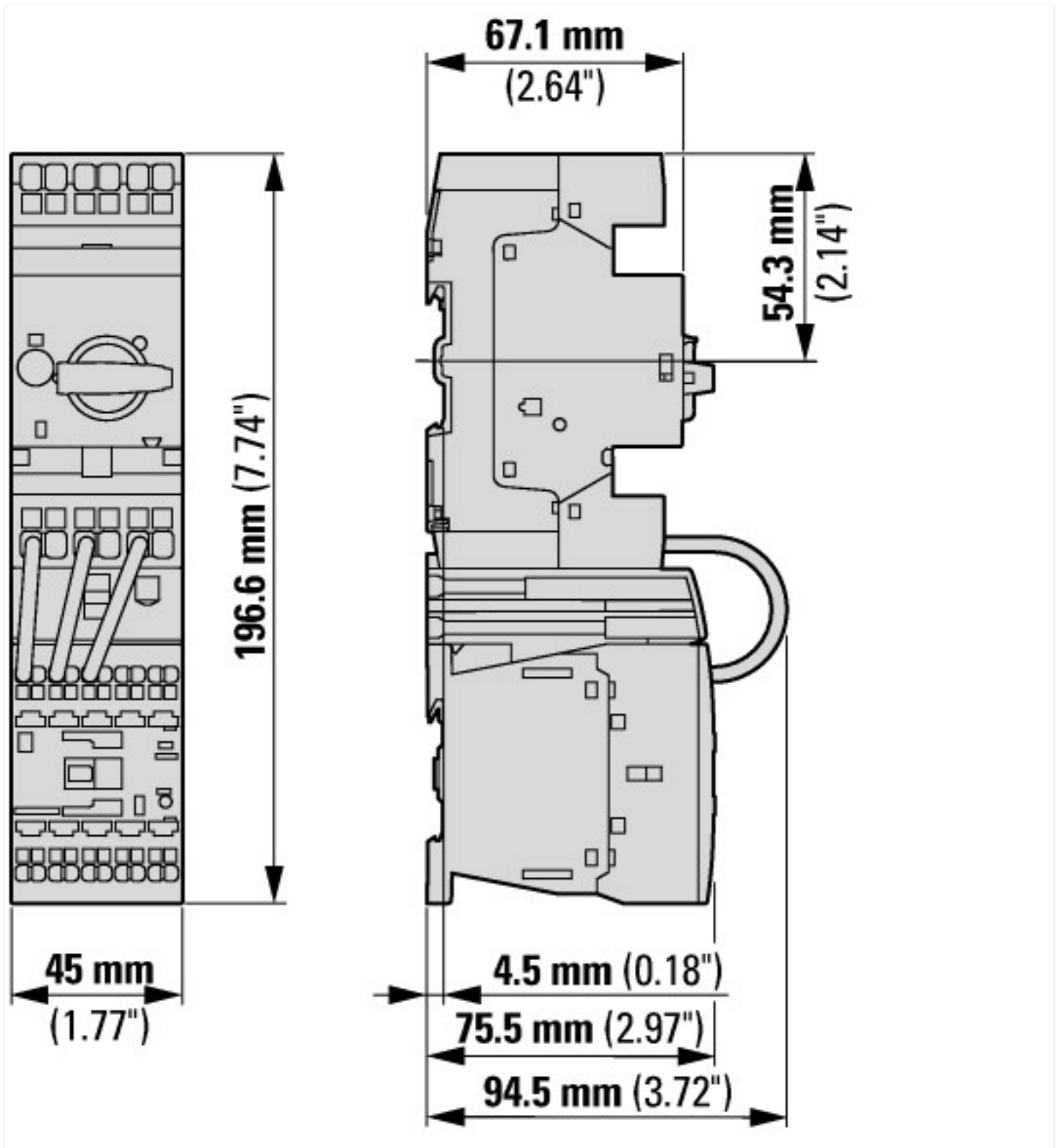
|  |  |    |     |
|--|--|----|-----|
| Technical data for design verification |  |    |     |
| Operating ambient temperature min.     |  | °C | -25 |
| Operating ambient temperature max.     |  | °C | 55  |

## Technical data ETIM 8.0

|  |  |    |                             |
|--|--|----|-----------------------------|
| Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC001037)  |  |    |                             |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecl@ss10.0.1-27-37-09-05 [AJZ718013]) |  |    |                             |
| Type of motor starter  |  |    | Direct online starter (DOL) |
| With short-circuit release   |  |    | Yes                         |
| Rated control supply voltage $U_s$ at AC 50HZ  |  | V  | 230 - 230                   |
| Rated control supply voltage $U_s$ at AC 60HZ  |  | V  | 0 - 0                       |
| Rated control supply voltage $U_s$ at DC   |  | V  | 0 - 0                       |
| Voltage type for actuating   |  |    | AC                          |
| Rated operation power at AC-3, 230 V, 3-phase  |  | kW | 0.12                        |
| Rated operation power at AC-3, 400 V   |  | kW | 0.25                        |
| Rated power, 460 V, 60 Hz, 3-phase   |  | kW | 0                           |

|  |    |                         |
|--|----|-------------------------|
| Rated power, 575 V, 60 Hz, 3-phase                                       | kW | 0                       |
| Rated operation current I <sub>e</sub>                                   | A  | 0.8                     |
| Rated operation current at AC-3, 400 V                                   | A  | 1                       |
| Overload release current setting   | A  | 0.63 - 2                |
| Rated conditional short-circuit current, type 1, 480 Y/277 V             | A  | 0                       |
| Rated conditional short-circuit current, type 1, 600 Y/347 V             | A  | 0                       |
| Rated conditional short-circuit current, type 2, 230 V                   | A  | 50                      |
| Rated conditional short-circuit current, type 2, 400 V                   | A  | 50                      |
| Number of auxiliary contacts as normally open contact                    |    | 1                       |
| Number of auxiliary contacts as normally closed contact                  |    | 0                       |
| Ambient temperature, upper operating limit                               | °C | 55                      |
| Temperature compensated overload protection                              |    | Yes                     |
| Release class  |    | CLASS 10 A              |
| Type of electrical connection of main circuit                            |    | Spring clamp connection |
| Type of electrical connection for auxiliary- and control current circuit |    | Spring clamp connection |
| Rail mounting possible   |    | Yes                     |
| With transformer   |    | No                      |
| Number of command positions  |    | 0                       |
| Suitable for emergency stop  |    | No                      |
| Coordination class according to IEC 60947-4-3                            |    | Class 2                 |
| Number of indicator lights   |    | 0                       |
| External reset possible  |    | No                      |
| With fuse  |    | No                      |
| Degree of protection (IP)  |    | IP20                    |
| Degree of protection (NEMA)  |    | Other                   |
| Supporting protocol for TCP/IP   |    | No                      |
| Supporting protocol for PROFIBUS   |    | No                      |
| Supporting protocol for CAN  |    | No                      |
| Supporting protocol for INTERBUS   |    | No                      |
| Supporting protocol for ASI  |    | No                      |
| Supporting protocol for Modbus   |    | No                      |
| Supporting protocol for Data-Highway                                     |    | No                      |
| Supporting protocol for DeviceNet  |    | No                      |
| Supporting protocol for SUCONET  |    | No                      |
| Supporting protocol for LON  |    | No                      |
| Supporting protocol for PROFINET IO                                      |    | No                      |
| Supporting protocol for PROFINET CBA                                     |    | No                      |
| Supporting protocol for SERCOS   |    | No                      |
| Supporting protocol for Foundation Fieldbus                              |    | No                      |
| Supporting protocol for EtherNet/IP                                      |    | No                      |
| Supporting protocol for AS-Interface Safety at Work                      |    | No                      |
| Supporting protocol for DeviceNet Safety                                 |    | No                      |
| Supporting protocol for INTERBUS-Safety                                  |    | No                      |
| Supporting protocol for PROFIsafe  |    | No                      |
| Supporting protocol for SafetyBUS p                                      |    | No                      |
| Supporting protocol for other bus systems                                |    | No                      |
| Width  | mm | 45                      |
| Height   | mm | 197                     |
| Depth  | mm | 95                      |

## Dimensions



## Additional product information (links)

|  |   |
|--|---|
| Motor starters and "Special Purpose Ratings" for the North American market | <a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf</a> |
| Busbar Component Adapters for modern Industrial control panels             | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>   |
| Moeller_Online Selections Aids   | <a href="http://www.moeller.net/en/support/slider/index.jsp">http://www.moeller.net/en/support/slider/index.jsp</a>   |