


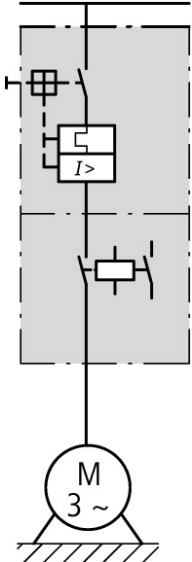




**DOL starter, 3p, 0.75kW/400V/AC3, 150kA**

**Part no.** MSC-D-2,5-M7(230V50HZ)  
**Article no.** 283142  
**Catalog No.** XTSC2P5B007BFNL

## Delivery programme

|   |          |    |  |
|---|----------|----|--|
| Basic function  |          |    | DOL starters (complete devices)  |
| Basic device  |          |    | MSC  |
| <b>Motor ratings</b>  |          |    |  |
| Motor rating  |          |    |  |
| AC-3  |          |    |  |
| 380 V 400 V 415 V   | P        | kW | 0.75   |
| Rated operational current   |          |    |  |
| AC-3  |          |    |  |
| 400 V   | $I_e$    | A  | 1.9  |
| Rated short-circuit current 380 - 415 V   | $I_q$    | kA | 150  |
| <b>Setting range</b>  |          |    |  |
| Setting range of overload releases  | $I_r$    | A  | 1.6 - 2.5  |
|                                 |          |    |  |
| Short-circuit releases  |          |    |  |
|                                |          |    |  |
| Non-delayed   | $I_{rm}$ | A  | 35   |
|                                |          |    |  |
| Coordination  |          |    | Type of coordination "1"<br>Type of coordination "2"                                 |
| Contact sequence  |          |    |  |
| Actuating voltage   |          |    | 230 V 50 Hz  |
|   |          |    | AC voltage   |
| <b>Motor-protective circuit-breakers PKZM0-2,5</b>  |          |    |  |
| Contactor DILM7-10(...)   |          |    |  |
| <b>DOL starter wiring set</b><br>Mechanical connection element and electrical electric contact module PKZM0-XDM12 |          |    |  |
| <b>Notes</b>  |          |    |  |

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.

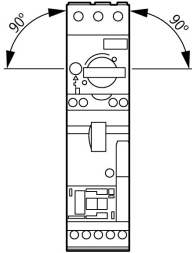
Notes

BK25/3-PKZ0-E extension terminal and if necessary B3.../-PKZ0 three-phase commoning link can be added to motor-starter combinations to make Type F starters in accordance with UL508.

Approvals

|                                      |   |
|--------------------------------------|---|
| Product Standards                    | UL508; CSA-C22.2 No. 14; IEC60847-4-1; CE marking |
| UL File No.                          | E36332  |
| UL Category Control No.              | NLRV  |
| CSA File No.                         | 165628  |
| CSA Class No.                        | 3211-04   |
| North America Certification          | UL listed, CSA certified                          |
| Specially designed for North America | No  |

General

|                   |   |  |  |
|-------------------|---|--|--|
| Standards         | IEC/EN 60947-4-1, VDE 0660  |  |  |
| Mounting position |  |  |  |

Main conducting paths

|                                       |                  |      |           |
|---------------------------------------|------------------|------|-----------|
| Rated impulse withstand voltage       | U <sub>imp</sub> | V AC | 6000      |
| Overvoltage category/pollution degree |                  |      | III/3     |
| Rated operational voltage             | U <sub>e</sub>   | V    | 230 - 415 |
| Rated operational current             |                  |      |           |
| Open, 3-pole: 50 – 60 Hz              |                  |      |           |
| 380 V 400 V                           | I <sub>e</sub>   | A    | 2.5       |

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 contactors 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 x U <sub>c</sub> |  |   |     |
| Dual-voltage coil 50 Hz  | Sealing  | W | 1.2 |

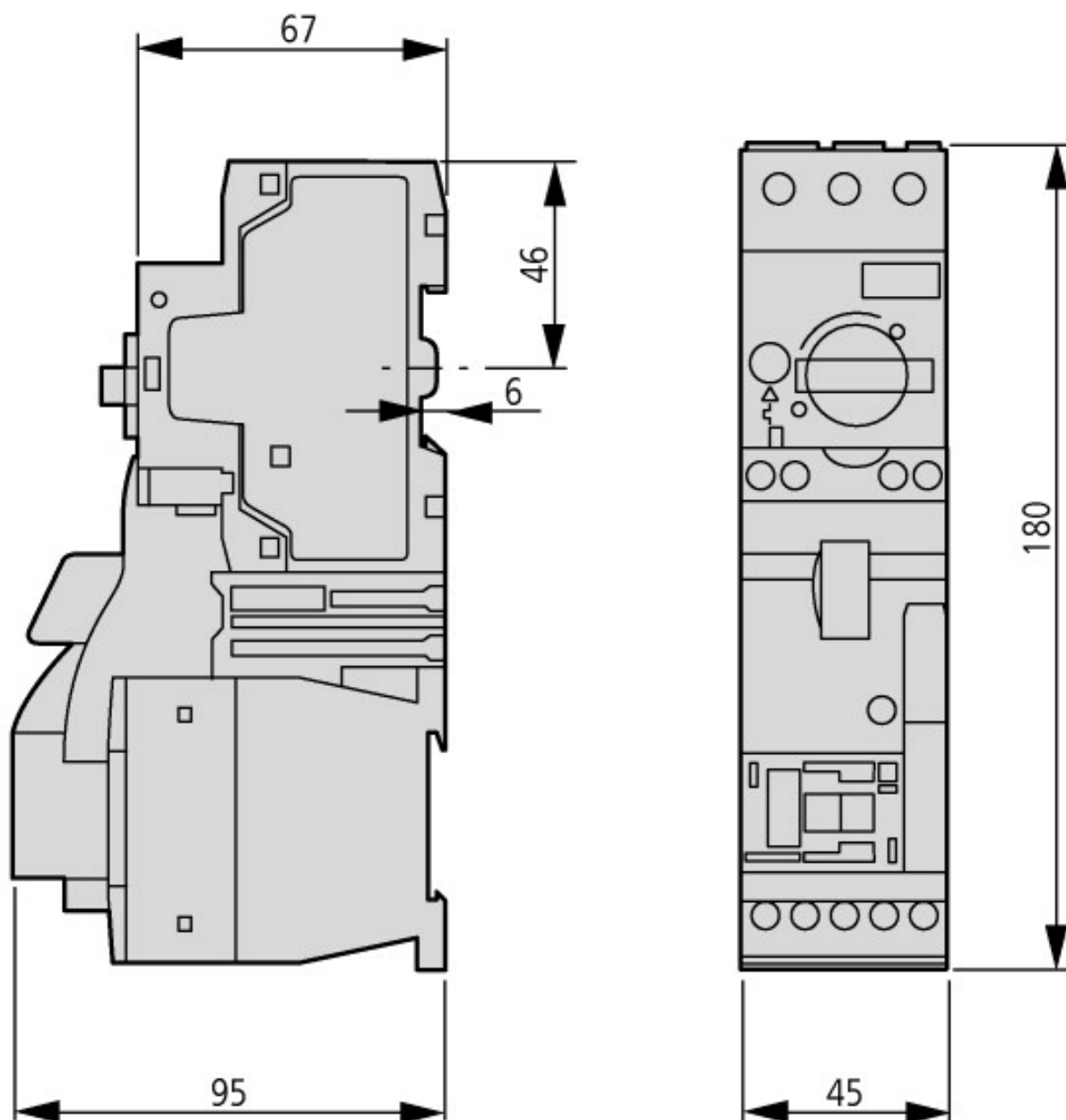
Data for design verification according to IEC/EN 61439

|  |  |  |  |
|--|--|--|--|
| IEC/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   |  |  | Meets the product standard's requirements.                         |
| 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 5.0

|   |    |                  |
|---|----|------------------|
| Low-voltage industrial components (EG000017) / Motor starter combination (EC001037)   |    |                  |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ecI@ss8-27-37-09-05 [AJZ718009]) |    |                  |
| Function  |    | Direct starter   |
| 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, 400 V  | kW | 0.75             |
| Rated operation current $I_e$   | A  | 1.9              |
| Conditioned rated short-circuit current $I_q$   | kA | 100              |
| Setting range overload protector  | A  | 1.6 - 2.5        |
| With short-circuit release  |    | Yes              |
| Type of coordination  |    | 1.2              |
| Connection type main current circuit  |    | Screw connection |
| Degree of protection (IP)   |    | IP20             |
| Suited for bus connection   |    | No               |



MSC-D-...-M7[...15]...

### Additional product information (links)

|  |   |
|--|---|
| Motor starters and "Special Purpose Ratings" for the North American market | <a href="http://www.moeller.net/binary/ver_techpapers/ver953en.pdf">http://www.moeller.net/binary/ver_techpapers/ver953en.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>               |