


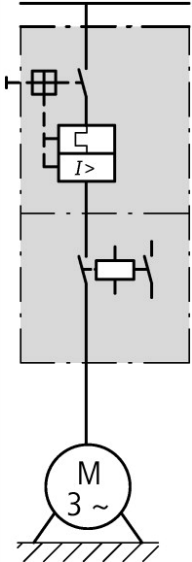




## DOL starter, 3p, 0.06kW/400V/AC3, 100kA, +busbar adapter

**Part no.** MSC-D-0,25-M7(230V50HZ)/BBA  
**Article no.** 102737  
**Catalog No.** XTSCP25B007BFNL-A

### Delivery program

|  |          |    |   |
|--|----------|----|---|
| Basic function   |          |    | DOL starters (complete devices)   |
| Basic device   |          |    | MSC   |
|  |          |    |                                       |
| Notes  |          |    | Also suitable for motors with efficiency class IE3.<br>IE3-ready devices are identified by the logo on their packaging. |
| <b>Motor ratings</b>   |          |    |   |
| Motor rating   |          |    |   |
| AC-3   |          |    |   |
| 380 V 400 V 415 V  | P        | kW | 0.06  |
| Rated operational current  | $I_e$    | A  | 0.21  |
| Rated short-circuit current 380 - 415 V  | $I_q$    | kA | 100   |
| <b>Setting range</b>   |          |    |   |
| Setting range of overload releases   | $I_r$    | A  | 0.16 - 0.25   |
|   |          |    |   |
| Non-delayed  | $I_{rm}$ | A  | 3.9   |
|   |          |    |   |
| 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</b> PKZM0-0,25  |          |    |   |
| Contactor DILM7-10(...)  |          |    |   |
| <b>DOL starter wiring set</b><br>Mechanical connection element and electrical electric contact module PKZM0-XDM12  |          |    |   |
| <b>Notes</b>   |          |    |   |
| The direct-on-line starter (complete unit) consists of a PKZM0 motor-protective circuit-breaker and a DILM contactor. These combinations are mounted on the busbars. |          |    |   |

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

**Further information**  
 Technical data PKZM0  
 Accessories PKZ  
 Technical data DILM  
 DILM accessories

**Page**  
 → PKZM0  
 → 072896  
 → DILM  
 → 281199

## 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.

## Technical data

### General

|           |  |  |   |
|-----------|--|--|---|
| Standards |  |  | UL 508 (on request)<br>CSA C 22.2 No. 14 (on request) |
|-----------|--|--|---|

### 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    | 0.25      |

### 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 $1.0 \times U_c$ |         |   |  |
| Dual-voltage coil 50 Hz  | Sealing | W | 1.2  |

## Design verification as per IEC/EN 61439

|  |            |    |  |
|--|------------|----|--|
| Technical data for design verification   |            |    |  |
| Rated operational current for specified heat dissipation   | $I_n$      | A  | 0.25   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 1.9  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 5.7  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 1.4  |
| Heat dissipation capacity  | $P_{diss}$ | W  | 0  |
| Operating ambient temperature min.   |            | °C | -25  |
| Operating ambient temperature max.   |            | °C | 55   |
| 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 6.0

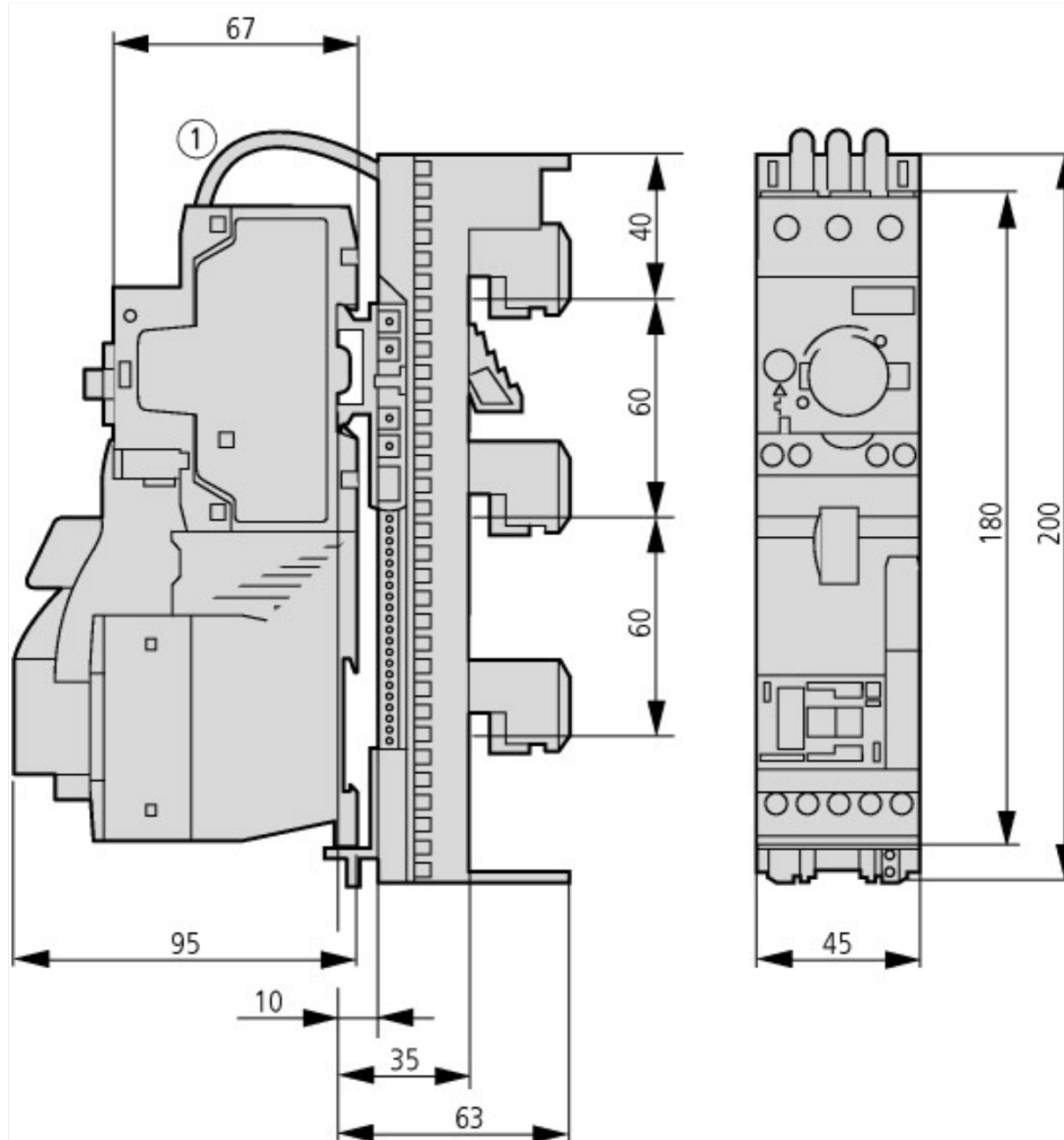
Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC001037)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Load breakout, motor breakout / Motor starter combination (ec!@ss8.1-27-37-09-05 [AJZ718010])

|  |  |    |                  |
|--|--|----|------------------|
| Kind of motor starter  |  |    | Direct starter   |
| With short-circuit release   |  |    | Yes              |
| Rated control supply voltage Us at AC 50HZ                               |  | V  | 230 - 230        |
| Rated control supply voltage Us at AC 60HZ                               |  | V  | 0 - 0            |
| Rated control supply voltage Us at DC                                    |  | V  | 0 - 0            |
| Voltage type for actuating   |  |    | AC               |
| Rated operation power at AC-3, 230 V, 3-phase                            |  | kW | 0.04             |
| Rated operation power at AC-3, 400 V                                     |  | kW | 0.06             |
| Rated power, 460 V, 60 Hz, 3-phase                                       |  | kW | 0                |
| Rated power, 575 V, 60 Hz, 3-phase                                       |  | kW | 0                |
| Rated operation current Ie   |  | A  | 0.21             |
| Rated operation current at AC-3, 400 V                                   |  | A  | 0.25             |
| Overload release current setting   |  | A  | 0.16 - 0.25      |
| 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  | 50000            |
| Rated conditional short-circuit current, type 2, 400 V                   |  | A  | 50000            |
| Number of auxiliary contacts as normally open contact                    |  |    | 1                |
| Number of auxiliary contacts as normally closed contact                  |  |    | 0                |
| Ambient temperature, , upper operating limit                             |  | °C | 60               |
| Temperature compensated overload protection                              |  |    | Yes              |
| Release class  |  |    | CLASS 10         |
| Type of electrical connection of main circuit                            |  |    | Screw connection |
| Type of electrical connection for auxiliary- and control current circuit |  |    | Screw connection |
| Rail mounting possible   |  |    | Yes              |
| Degree of protection (IP)  |  |    | IP20             |
| 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 |

## Dimensions



① l = 73 mm

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

## Additional product information (links)

### IL03402015Z (AWA1210-2324) Busbar adapter

IL03402015Z (AWA1210-2324) Busbar adapter [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03402015Z2010\\_10.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402015Z2010_10.pdf)

Motor starters and "Special Purpose Ratings" for the North American market [http://www.moeller.net/binary/ver\\_techpapers/ver953en.pdf](http://www.moeller.net/binary/ver_techpapers/ver953en.pdf)

Busbar Component Adapters for modern Industrial control panels [http://www.moeller.net/binary/ver\\_techpapers/ver960en.pdf](http://www.moeller.net/binary/ver_techpapers/ver960en.pdf)