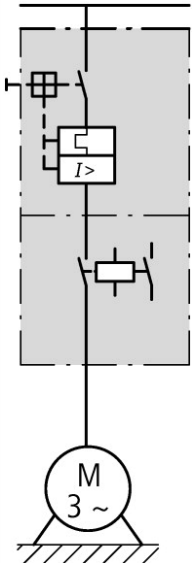




DOL starter, 3p, 0.18kW/400V/AC3, 100kA, +busbar adapter

**Part no.** MSC-D-0,63-M7(230V50HZ)/BBA  
**Catalog No.** 102739  
**Alternate Catalog No.** XTSCP63B007BFNL-A  
**EL-Nummer (Norway)** 4315410

## 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. |
| Connection to SmartWire-DT                                                                                        |                |    | no                                                                                                                      |
| <b>Motor ratings</b>                                                                                              |                |    |                                                                                                                         |
| Motor rating                                                                                                      |                |    |                                                                                                                         |
| AC-3                                                                                                              |                |    |                                                                                                                         |
| 380 V 400 V 415 V                                                                                                 | P              | kW | 0.12<br>0.18                                                                                                            |
| Rated operational current                                                                                         |                |    |                                                                                                                         |
| AC-3                                                                                                              |                |    |                                                                                                                         |
| 380 V 400 V 415 V                                                                                                 | I <sub>e</sub> | A  | 0.41<br>0.6                                                                                                             |
| Rated short-circuit current 380 - 415 V                                                                           | I <sub>q</sub> | kA | 100                                                                                                                     |
| <b>Setting range</b>                                                                                              |                |    |                                                                                                                         |
| Setting range of overload releases                                                                                | I <sub>r</sub> | A  | 0.4 - 0.63                                                                                                              |
|                                                                                                                   |                |    |                                      |
| 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</b> PKZM0-0,63                                                               |                |    |                                                                                                                         |
| Contactor DILM7-10(...)                                                                                           |                |    |                                                                                                                         |
| <b>DOL starter wiring set</b><br>Mechanical connection element and electrical electric contact module PKZM0-XDM12 |                |    |                                                                                                                         |

|                                                                                                                                                                                          |  |             |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|--|
| <b>Notes</b>                                                                                                                                                                             |  |             |  |
| 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. |  |             |  |
| <b>Notes</b>                                                                                                                                                                             |  |             |  |
| The DOL starters (complete units) consist of a PKZM0 motor protective circuit breaker and a DILM contactor. These combinations are mounted on the busbar adapters.                       |  |             |  |
| The connection of the main circuit between the motor protective circuit breaker and the contactor is established with an electrical contact module.                                      |  |             |  |
| Cannot be combined with NHI-E-...-PKZ0-C standard auxiliary contact with spring-cage terminal.                                                                                           |  |             |  |
| <b>Further information</b>                                                                                                                                                               |  | <b>Page</b> |  |
| Technical data PKZM0                                                                                                                                                                     |  | → PKZM0     |  |
| Accessories PKZ                                                                                                                                                                          |  | → 072896    |  |
| Technical data DILM                                                                                                                                                                      |  | → DILM      |  |
| Accessories DILM                                                                                                                                                                         |  | → 281199    |  |

## 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 <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    | 0.63      |

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

### Rating data for approved types

|                    |  |   |      |
|--------------------|--|---|------|
| Auxiliary contacts |  |   |      |
| Pilot Duty         |  |   |      |
| AC operated        |  |   | A600 |
| DC operated        |  |   | P300 |
| General Use        |  |   |      |
| AC                 |  | V | 600  |
| AC                 |  | A | 15   |
| DC                 |  | V | 250  |
| DC                 |  | A | 1    |

## Design verification as per IEC/EN 61439

|                                                                                                                        |                   |    |                                            |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|--------------------------------------------|
| Technical data for design verification                                                                                 |                   |    |                                            |
| Rated operational current for specified heat dissipation                                                               | I <sub>n</sub>    | A  | 0.63                                       |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 1.9                                        |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 5.7                                        |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 1.4                                        |
| Heat dissipation capacity                                                                                              | P <sub>diss</sub> | 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 7.0

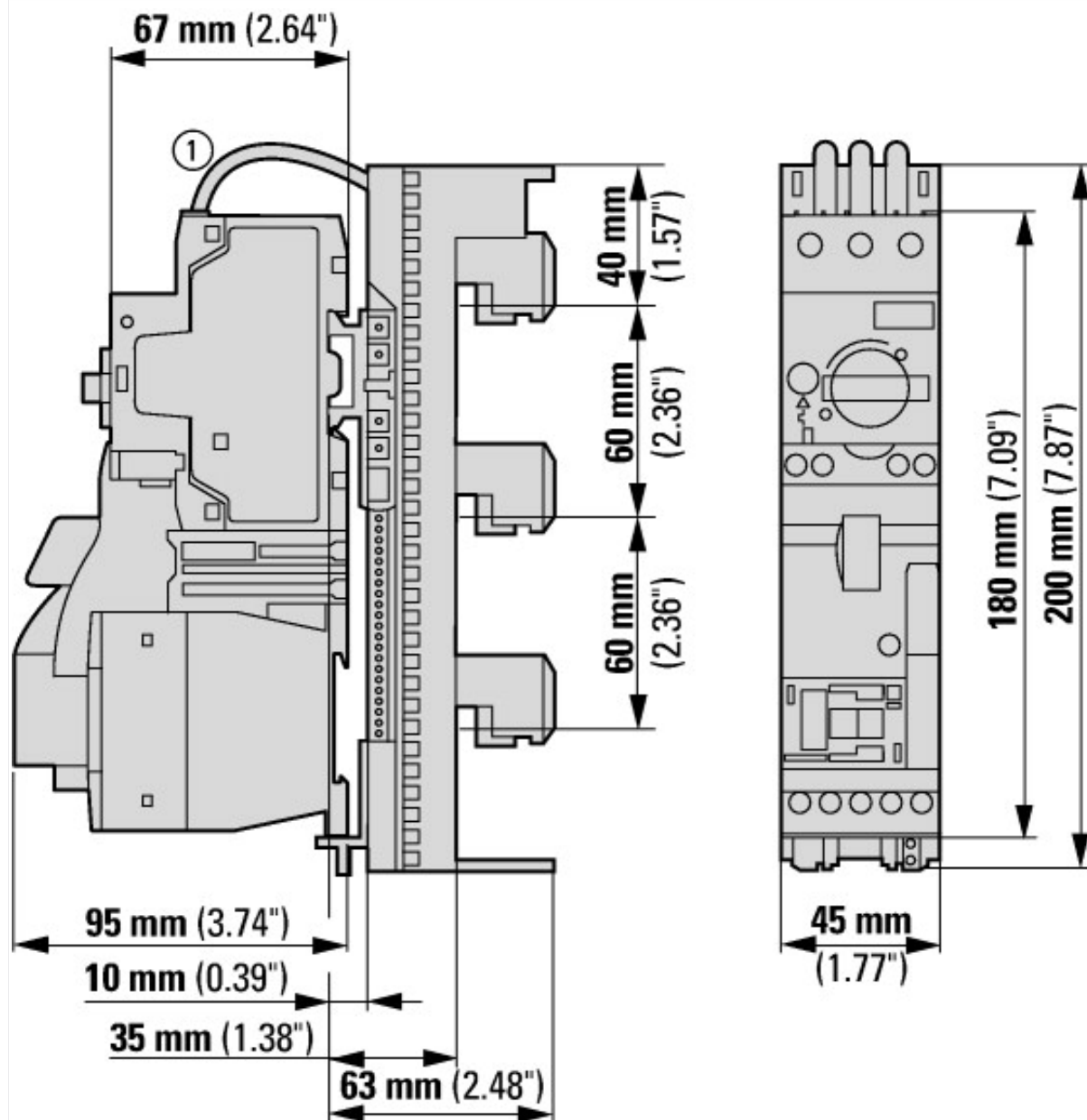
|                                                                                                                                                                                                  |  |    |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|------------------|
| 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]) |  |    |                  |
| 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 | 0.09             |
| Rated operation power at AC-3, 400 V                                                                                                                                                             |  | kW | 0.18             |
| 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  | 0.6              |
| Rated operation current at AC-3, 400 V                                                                                                                                                           |  | A  | 0.63             |
| Overload release current setting                                                                                                                                                                 |  | A  | 0.4 - 0.63       |
| 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              |
| 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 | 200   |
| Depth                                               |  | mm | 154   |

## Approvals

|                                      |  |  |                                                             |
|--------------------------------------|--|--|-------------------------------------------------------------|
| Product Standards                    |  |  | UL60947-4-1A; CSA-C22.2 No. 14-10; IEC60947-4-1; CE marking |
| UL File No.                          |  |  | E123500                                                     |
| UL Category Control No.              |  |  | NKJH                                                        |
| CSA File No.                         |  |  | 12528                                                       |
| CSA Class No.                        |  |  | 3211-04                                                     |
| North America Certification          |  |  | UL listed, CSA certified                                    |
| Specially designed for North America |  |  | No                                                          |

## Dimensions



① l = 73 mm

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

## Assets (links)

[Declaration of CE Conformity](#)

00002885

[Instruction Leaflets](#)

IL034038ZU2018\_06