DOL starter, 0.3-1.2A, protection electronic, advanced, SmartWire-DT



Part no. Article no. Catalog No.

MSC-DEA-1,2-M17-SP(24VDC) 167822 XTFCE1P2BCCATD





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| Delivery program | | | |
|------------------------------------|-----------------|----|--|
| Basic function | | | Type E DOL starters (complete devices) |
| Basic device | | | MSC |
| Connection to SmartWire-DT | | | with PKE-SWD-32 for connecting the motor-starter combination |
| Components for | | | North America |
| Maximum motor rating | | | |
| AC HP = PS | | | |
| 460 V 480 V | | HP | 0.5 |
| 575 V 600 V | | HP | 0.5 |
| Short Circuit Current Rating | | | |
| 240 V | | kA | 14 |
| 480 Y 277 V | | kA | 14 |
| 600 Y 347 V | | kA | 14 |
| Setting range | | | |
| Setting range of overload releases | I _r | A | 0.3 - 1.2 |
| Short-circuit releases | | | |
| Non-delayed | I _{rm} | A | 186 |
| Contact sequence | | | |
| Actuating voltage | | | 24 V DC |
| | | | |

| | | DC Voltage |
|---|------|------------|
| Motor-protective circuit-breakers PKE12/XTU-1,2 | | |
| Contactor DILM17-10() | | |
| DOL starter wiring set Mechanical connection element and electrical electric contact module PKZM0-XD | 0M32 | |
| Extension terminal BK25/3-PKZ0-E | | |
| Notes | | |

The DOL starter type E (complete devices) consists of a PKE motor-protective circuit-breaker with AK-PKZ0, a DILM contactor and an extension terminal BK25/3-PKZ0-E.

Motor-protective circuit-breaker and contactor mounted on top hat rail adapter plate.

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

The MSC-DEA... DOL starters are prepared for communication via SmartWire-DT. In order to be used this way, they first need to be expanded with the PKE-SWD-32 communications module.

| Technical data General | | | |
|---|------------------|------|--|
| Standards | | | IEC/EN 60947-4-1, VDE 0660 |
| Main conducting paths | | | |
| Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Overvoltage category/pollution degree | | | 111/3 |
| Rated operational voltage | U _e | V | 208 - 600 |
| Rated operational current | | | |
| Open, 3-pole: 50 – 60 Hz | | | |
| 380 V 400 V | l _e | Α | 1.2 |
| Additional technical data | | | |
| Motor protective circuit breaker PKZM0, PKE | | | PKE motor-protective circuit-breaker, see motor-protective circuit-breaker product group DILM contactors, see contactors product group |
| Power consumption | | | |
| DC operated | Sealing | W | 0.5 |

Design verification as per IEC/EN 61439

| Design verification as per IEC/EN 01439 | | | |
|--|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | I _n | А | 1.2 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0.4 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 1.2 |
| Static heat dissipation, non-current-dependent | P _{vs} | W | 0.86 |
| 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)

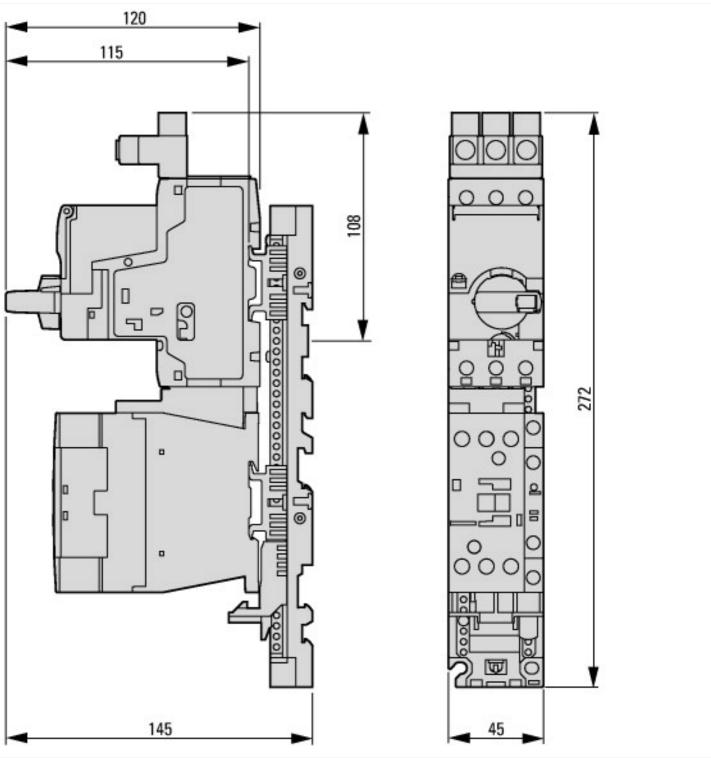
| | - | | |
|---|-----------------|------------|---|
| Electric engineering, automation, process control engineering / Low-voltage swit [AJZ718010]) | ch technology / | .oad breal | kout, motor breakout / Motor starter combination (ecl@ss8.1-27-37-09-05 |
| Kind of motor starter | | | Direct starter |
| With short-circuit release | | | Yes |
| Rated control supply voltage Us at AC 50HZ | | V | 0 - 0 |
| Rated control supply voltage Us at AC 60HZ | | V | 0 - 0 |
| Rated control supply voltage Us at DC | | V | 24 - 24 |
| Voltage type for actuating | | | DC |
| Rated operation power at AC-3, 230 V, 3-phase | | kW | 0.18 |
| Rated operation power at AC-3, 400 V | | kW | 7.5 |
| Rated power, 460 V, 60 Hz, 3-phase | | kW | 0.37 |
| Rated power, 575 V, 60 Hz, 3-phase | | kW | 0.37 |
| Rated operation current le | | А | 16.7 |
| Rated operation current at AC-3, 400 V | | А | 1.2 |
| Overload release current setting | | А | 0.3 - 1.2 |
| Rated conditional short-circuit current, type 1, 480 Y/277 V | | А | 0 |
| Rated conditional short-circuit current, type 1, 600 Y/347 V | | А | 0 |
| Rated conditional short-circuit current, type 2, 230 V | | А | 0 |
| Rated conditional short-circuit current, type 2, 400 V | | А | 0 |
| Number of auxiliary contacts as normally open contact | | | 0 |
| Number of auxiliary contacts as normally closed contact | | | 1 |
| Ambient temperature, , upper operating limit | | °C | 60 |
| Temperature compensated overload protection | | | Yes |
| Release class | | | Adjustable |
| 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 | Yes |

Approvals

| - pp | |
|--------------------------------------|---|
| 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. | 165628 |
| CSA Class No. | 3211-08 |
| North America Certification | UL listed, CSA certified |
| Specially designed for North America | Yes |

Dimensions



IL03402052Z Motorstarter combination: type E starter/type F starter with PKE

IL03402052Z Motorstarter combination: type E ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402052Z2014_02.pdf starter/type F starter with PKE