DATASHEET - MSC-D-1,6-M7(24VDC)



Delivery program

Basic function

DOL starter, 380 V 400 V 415 V: 0.37, 0.55 kW, Ir= 1 - 1.6 A, 24 V DC, DC

Powering Business Worldwide

Part no. MSC-D-1,6-M7(24VDC)

4365040

Catalog No. 283159 XTSC1P6B007BTDNL

Alternate Catalog

EL-Nummer

(Norway)

Basic device MSC Notes Also suitable for motors with efficiency class IE3. IE3-ready devices are identified by the logo on their packaging. Connection to SmartWire-DT no **Motor ratings** Motor rating AC-3 kW 0.37 0.55 380 V 400 V 415 V Rated operational current AC-3 380 V 400 V 415 V I_{e} Α 1.1 1.5 Rated short-circuit current 380 - 415 V I_{q} kΑ 150 **Setting range** Setting range of overload releases Α 1 - 1.6 5 Type of coordination "1" Coordination Type of coordination "2" Contact sequence

DOL starters (complete devices)

Motor-protective circuit-breakers PKZM0-1,6

Contactor DILM7-10(...)

Actuating voltage

24 V DC

DC

DOL starter wiring set

Mechanical connection element and electrical electric contact module PKZM0-XDM12

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.

Notes

The DOL starters (complete units) consist 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.

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

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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 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	l _e	Α	1.6

Additional technical data

Motor protective circuit breaker PKZM0, PKE		PKZM0 motor-protective circuit-breakers, see motor-protective circuit-breakers/ PKZM0 product group DILM contactors, see contactor product group DILET timing relay, ETR, see contactors, electronic timing relays product group
DILM contactors		
Current heat loss		
Current heat loss at I _e to AC-3/400 V	W	5.7
Power consumption		

Power consumption

ng W 2.6

Rating data for approved types

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

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1.6
Heat dissipation per pole, current-dependent	P_{vid}	W	1.9
Equipment heat dissipation, current-dependent	P _{vid}	W	5.7

provide heat dissipation data for the devices.	Static heat dissipation, non-current-dependent	P_{vs}	W	2.6
Operating ambient temperature max. 10.2 Strength of materials and parts 10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.2 Verification of resistance of insulating materials to abnormal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of ASSEMBLIES 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Insulation properties 10.9.1 Provided the devices in sulating material 10.9 Insulation properties 10.9 Prover-frequency electric strength 10.9 Insulation properties 10.9 Temperature rise 10.11 Short-circuit rating 10.11 Short-circuit rating 10.11 Short-circuit rating 10.11 Short-circuit rating	Heat dissipation capacity	P _{diss}	W	0
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	10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility. The specifications for the switchgear mobserved.	10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function The device meets the requirements, provided the information in the instruction leaflet (IL) is 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	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	0.25
Rated operation power at AC-3, 400 V	kW	0.55
Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated power, 575 V, 60 Hz, 3-phase	kW	0
Rated operation current le	А	1.5
Rated operation current at AC-3, 400 V	А	1.6
Overload release current setting	А	1 - 1.6
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	50000
Rated conditional short-circuit current, type 2, 400 V	А	50000
Number of auxiliary contacts as normally open contact		1
Number of auxiliary contacts as normally closed contact		0

Temperature compensated overload protection Release class CLASS 19 Class 19 Crew connection Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and control current circuit Type of electrical connection for auxiliary- and contr	A 15 M	00	
Release class CLASS 10 Type of electrical connection of main circuit Screw connection Type of electrical connection for auxiliary- and centrol current circuit Yes All mounting possible Yes With transformer No Number of command positions O Subtable for enseragency stop O Coordination class ascording to IEC 6097-4-3 O Number of indicator lights No External reset peasable No With frame No Degree of protection (IP) No Degree of protection (IP) No Supporting protected for TCP/IP No Supporting protected for TCP/IP No Supporting protected for PCPR No Supporting protected for NETREBUS No Supporting protected for NETREBUS No Supporting protected for MUTERBUS No Supporting protected for MOBBUS No Supporting protected for MOBBUS No Supporting protected for PDET FERT (DET No Supporting protected for SERONS No	Ambient temperature, upper operating limit	°C	60
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	Depth	mm	95

Approvals

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Product Standards	IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	12528
CSA Class No.	3211-24
North America Certification	UL listed, CSA certified
Specially designed for North America	No

Dimensions 67 mm (2.64") 180 mm (7.09") 95 mm (3.74")

Assets (links)

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

Declaration of CE Conformity

00002885

Instruction Leaflets

IL034038ZU2018_06

Additional product information (links)

IL034038ZU (AWA1210-2246) Direct-on-line starter up to 15 A		
IL034038ZU (AWA1210-2246) Direct-on-line starter up to 15 A	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL034038ZU2018_06.pdf	
Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf	
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf	
Moeller_Online Selections Aids	http://www.moeller.net/en/support/slider/index.jsp	