

DOL starter on feeder system adapter, 3-pole, 7.5 kW/400 V/AC-3, 50 kA, DC operated  $\,$ 



Part no. MSC-DM-16-M15(24VDC)/MSFA

Catalog No. 191113

Eaton Catalog No. XTSC016B015BMTDNL-FS

Delivery program			
Basic function			DOL starters (complete devices)
Basic device			MSC
Motor ratings			
Motor rating			
AC-3			
380 V 400 V 415 V	P	kW	7.5
Rated operational current	I <sub>e</sub>	Α	15.2
Rated short-circuit current 380 - 415 V	Iq	kA	50
Setting range			
Setting range of overload releases	I <sub>r</sub>	Α	10 - 16
Non-delayed	I <sub>rm</sub>	Α	248
Coordination			Type of coordination "1"
Contact sequence  Actuating voltage			M 3 24 V DC DC voltage
Motor-protective circuit-breakers PKZM0-16			
Contactor DILM15-10()			
DOL starter wiring set Mechanical connection element and electrical electric contact mode	ule PKZM0-XDM15ME		

**Technical data** 

**General** Standards

10/26/2017

UL 508 (on request) CSA C 22.2 No. 14 (on request)

### **Main conducting paths**

Rated impulse withstand voltage	$U_{\text{imp}}$	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>	Α	16

#### **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
Power consumption	

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DC operated	Sealing	W	2.6
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# Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature max.	°(	С	-25
Operating ambient temperature max.	°(	С	55

### **Technical data ETIM 6.0**

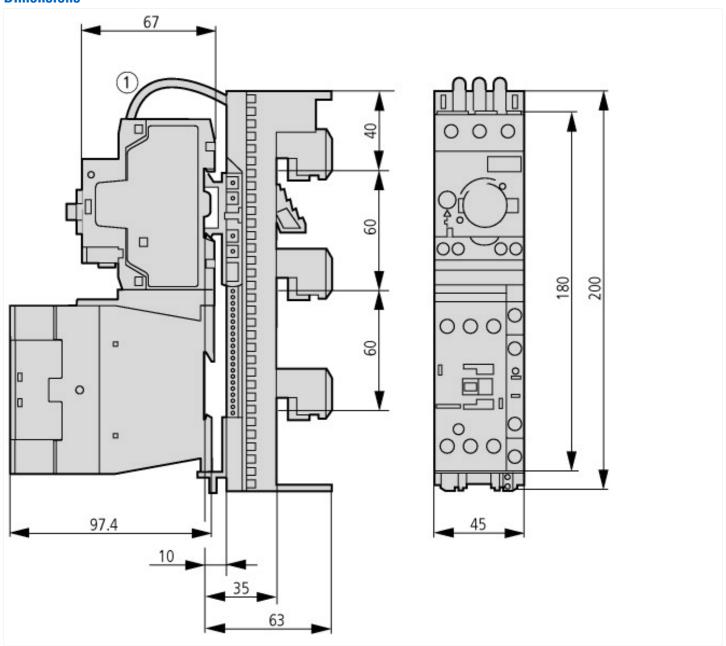
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Low-voltage industrial components (EG000017) / Motor starter/Motor starter combination (EC0	

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

Kind of motor starter         Direct starter         Wes           With short-circuit release         V         9         0	[AJZ718010])		
Rated control supply voltage Us at AC 50HZ         V         0 - 0           Rated control supply voltage Us at AC 50HZ         V         0 - 0           Rated control supply voltage Us at AC 50HZ         V         2 - 24           Voltage type for actuating         RM         A           Rated operation power at AC 3, 20V 3-phase         RW         4           Rated operation power, 57 W 60 Hz, 3-phase         W         0           Rated operation current at AC 3, 400 V         A         15           Rated operation current at AC 3, 400 V         A         15           Rated operation current at AC 3, 400 V         A         15           Rated operation current at AC 3, 400 V         A         15           Voetoad release current setting         A         15           Rated operation current type 1, 480 Y/277 V         A         0           Rated conditional short-circuit current, type 2, 230 V         A         0           Rated conditional short-circuit current, type 2, 230 V         A         0           Rated conditional short-circuit current, type 2, 230 V         A         0           Rated conditional short-circuit current, type 2, 230 V         A         0           Rated conditional short-circuit current, type 2, 250 V         A         0	Kind of motor starter		Direct starter
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         WW         4           Rated operation power at AC-3, 400 V         WW         7.5           Rated power, 575 V.80 Hz.3-phase         WW         0           Rated operation current te AC-3, 400 V         WW         15           Rated operation current at AC-3, 400 V         A         15           Rated operation current at AC-3, 400 V         A         15           Overload release current setting         A         15           Rated operation current, type 1, 480 Y/277 V         A         0           Rated conditional short-circuit current, type 2, 400 V         A         0           Rated conditional short-circuit current, type 1, 800 Y347 V         A         0           Rated conditional short-circuit current, type 2, 400 V         A         0           Number of auxiliary contacts as normally observed contact         Y         0           Number of auxiliary contacts as normally closed contact         Y         0           Release class         Y         0         0           Release class         <	With short-circuit release		Yes
Rated control supply voltage Us at DC         V         24-24           Voltage type for actuating         DC           Rated operation power at AC3-239 V,3-phase         RW         4           Rated operation power at AC3-340 V         WW         5           Rated power, 575 V,60 Hz, 3-phase         WW         0           Rated operation current Ie         WW         15-2           Rated operation current at AC3-400 V         AW         15-2           Voerload release current setting         AW         10-16           Rated conditional short-circuit current, type 1,480 Y/277 V         AW         0           Rated conditional short-circuit current, type 2,230 V         AW         0           Rated conditional short-circuit current, type 2,240 V         AW         0           Number of auxiliary contacts as normally open contact         AW         0           Number of auxiliary contacts as normally open contact         BW         0           Number of auxiliary contacts as normally open contact         BW         0           Release class	Rated control supply voltage Us at AC 50HZ	V	0 - 0
Voltage type for actuating         C           Rated operation power at AC-3, 200 V, 3-phase         WW         4           Rated operation power at AC-3, 400 V         WW         7.5           Rated operation power at AC-3, 400 V         WW         0           Rated operation current tell         A         15.2           Rated operation current at AC-3, 400 V         A         15.2           Rated operation current at AC-3, 400 V         A         15.0           Verload release current setting         A         0         0           Rated conditional short-circuit current, type 1, 480 Y/277 V         A         0         0           Rated conditional short-circuit current, type 2, 200 V         A         0         0           Rated conditional short-circuit current, type 2, 240 V         A         0           Number of auxiliary contacts as normally open contact         Y         0         0           Number of auxiliary contacts as normally closed contact         Y         0         0           Number of auxiliary contacts as normally closed contact         Y         0         0           Number of auxiliary contacts as normally closed contact         Y         0         0           Neelease class         Y         1         0         0	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated operation power at AC-3, 200 V, 3-phase         kW         7.5           Rated power, 650 V, 60 Hz, 3-phase         kW         0           Rated power, 575 V, 60 Hz, 3-phase         kW         0           Rated operation current la Rate do operation current at AC-3, 400 V         A         15           Rated operation current at AC-3, 400 V         A         15           Overload release current setting         A         10 - 16           Rated conditional short-circuit current, type 1, 480 Y/277 V         A         0           Rated conditional short-circuit current, type 2, 230 V         A         0           Rated conditional short-circuit current, type 2, 240 V         A         0           Number of auxiliary contacts as normally open contact         B         1           Number of auxiliary contacts as normally closed contact         B         6           Ambient temperature, upper operating limit         C         6           Temperature compensated overload protection         F         6         CLASS 10           Release class         CLASS 10         CLASS 10         CLASS 10           Type of electrical connection of main circuit         F         6         CLASS 10           Type of electrical connection of main circuit         F         120         No	Rated control supply voltage Us at DC	V	24 - 24
Rated operation power at AC-3, 400 V         kW         7.5           Rated power, 460 V, 60 Hz, 3-phase         kW         0           Rated operation current le         kW         15.2           Rated operation current at AC-3, 400 V         A         15.0           Verload release current setting         A         10.16           Rated conditional short-circuit current, type 1, 480 Y277 V         A         0           Rated conditional short-circuit current, type 1, 480 Y277 V         A         0           Rated conditional short-circuit current, type 2, 400 V         A         0           Rated conditional short-circuit current, type 2, 400 V         A         0           Number of auxiliary contacts as normally closed contact         A         0           Number of auxiliary contacts as normally closed contact         Ye         10           Ambient temperature, upper operating limit         C         Ye           Temperature compensated overload protection         Ye         10           Release class         Ye         10           Release class         Ye         10           Release class         Ye         10           Supporting protection (French for a carried for faction)         Ye         10           Supporting protection (FP)	Voltage type for actuating		DC
Rated power, 480 V, 60 Hz, 3-phase         kW         0           Rated power, 575 V, 60 Hz, 3-phase         kW         0           Rated operation current 1e         A         15.2           Rated operation current at AC-3,400 V         A         15.6           Overload release current setting         A         10-16           Rated conditional short-circuit current, type 1,480 Y/277 V         A         0           Rated conditional short-circuit current, type 1,480 Y/277 V         A         0           Rated conditional short-circuit current, type 2,400 V         A         0           Rated conditional short-circuit current, type 2,400 V         A         0           Number of auxiliary contacts as normally open contact         B         0           Number of auxiliary contacts as normally open contact         C         0           Ambient temperature, upper operating limit         °C         6           Temperature compensated overload protection         CLASS 10           Type of electrical connection of main circuit         CLASS 10           Type of electrical connection for auxiliary- and control current circuit         F         Yes           Degree of protection (IP)         V         No           Supporting protocol for CPO/Pls         No         No           Sup	Rated operation power at AC-3, 230 V, 3-phase	kW	4
Rated power, 975 V, 60 Hz, 3-phase         kW         0           Rated operation current le         A         15.2           Rated operation current at AC-3,400 V         A         15.6           Overload release current setting         A         10.16           Rated conditional short-circuit current, type 1,480 V/277 V         A         0           Rated conditional short-circuit current, type 1,480 V/277 V         A         0           Rated conditional short-circuit current, type 2,230 V         A         0           Rated conditional short-circuit current, type 2,230 V         A         0           Number of suxiliary contacts as normally open contact         B         0           Number of suxiliary contacts as normally open contact         B         0           Ambient temperature, upper operating limit         B         Yes           Temperature compensated overload protection         B         CLASS 10           Release class         CLASS 10         Screw connection           Type of electrical connection for auxiliary- and control current circuit         B         Yes           Ball mounting possible         Yes         Yes           Supporting protocol for PROFIBUS         No         No           Supporting protocol for PROFIBUS         No         No	Rated operation power at AC-3, 400 V	kW	7.5
Rated operation current le Rated operation current at AC-3, 400 V  Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V  Rated conditional short-circuit current, type 1, 800 Y/347 V  Rated conditional short-circuit current, type 2, 230 V  Rated conditional short-circuit current, type 2, 400 V  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally closed contact  Release class  CLASS 10  CLASS 10  CLASS 10  Crew connection  Type of electrical connection of main circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for PROFIBUS  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for CAN  Supporting protocol for ASI  Supporting protocol for MODBUS	Rated power, 460 V, 60 Hz, 3-phase	kW	0
Rated operation current at AC-3, 400 V Overload release current setting Rated conditional short-circuit current, type 1, 480 Y/277 V Rated conditional short-circuit current, type 1, 600 Y/347 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rated conditional short-circuit current type 2, 400 V Rated	Rated power, 575 V, 60 Hz, 3-phase	kW	0
Overload release current setting         A         10 - 16           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         0           Rated conditional short-circuit current, type 2, 400 V         A         0           Number of auxiliary contacts as normally closed contact         C         60           Ambient temperature, upper operating limit         C         60           Temperature compensated overload protection         Yes         CLASS 10           Release class         CLASS 10         Screw connection           Type of electrical connection of main circuit         Yes         Screw connection           Rail mounting possible         Yes         Screw connection           Supporting protocol for TCP/IP         No         No           Supporting protocol for PROFIBUS         No         No           Supporting protocol for CAN         No         No           Supporting protocol for INTERBUS         No         No           Supporting protocol for ASI         No         No           Supporting protocol for MDBUS         No         No	Rated operation current le	Α	15.2
Rated conditional short-circuit current, type 1,480 Y/277 V A A 0 Rated conditional short-circuit current, type 1,600 Y/347 V A A 0 Rated conditional short-circuit current, type 2,230 V A A 0 Rated conditional short-circuit current, type 2,400 V A A 0 Rated conditional short-circuit current, type 2,400 V A A 0 Number of auxiliary contacts as normally open contact	Rated operation current at AC-3, 400 V	А	15
Rated conditional short-circuit current, type 1,600 Y/347 V	Overload release current setting	Α	10 - 16
Rated conditional short-circuit current, type 2, 230 V Rated conditional short-circuit current, type 2, 400 V Rumber of auxiliary contacts as normally open contact Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally closed contact Ambient temperature, upper operating limit Temperature compensated overload protection Release class Release class Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible Degree of protection (IP) Supporting protocol for TCP/IP Supporting protocol for TCP/IP Supporting protocol for PROFIBUS Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for INTERBUS Supporting protocol for MODBUS Supporting protocol for MODBUS Supporting protocol for MODBUS	Rated conditional short-circuit current, type 1, 480 Y/277 V	А	0
Rated conditional short-circuit current, type 2, 400 V  Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as normally closed contact  Ambient temperature, upper operating limit  Temperature compensated overload protection  Release class  Type of electrical connection of main circuit  Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for NSI  Supporting protocol for ASI  Supporting protocol for MODBUS	Rated conditional short-circuit current, type 1, 600 Y/347 V	Α	0
Number of auxiliary contacts as normally open contact  Number of auxiliary contacts as normally closed contact  Ambient temperature, upper operating limit  Temperature compensated overload protection Release class  Type of electrical connection of main circuit  Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for MODBUS  Supporting protocol for MODBUS	Rated conditional short-circuit current, type 2, 230 V	Α	0
Number of auxiliary contacts as normally closed contact  Ambient temperature, upper operating limit  Ambient temperature, upper operating limit  Temperature compensated overload protection  Release class  Type of electrical connection of main circuit  Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for MODBUS  Mo  No  No  No  No  No  No  No  No  No	Rated conditional short-circuit current, type 2, 400 V	Α	0
Ambient temperature, upper operating limit  Temperature compensated overload protection Release class  Type of electrical connection of main circuit  Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for INTERBUS  Supporting protocol for MOBBUS	Number of auxiliary contacts as normally open contact		1
Temperature compensated overload protection Release class CLASS 10 Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible Degree of protection (IP) Supporting protocol for TCP/IP Supporting protocol for PROFIBUS Supporting protocol for CAN Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for ASI Supporting protocol for MODBUS Supporting	Number of auxiliary contacts as normally closed contact		0
Release class Type of electrical connection of main circuit Type of electrical connection for auxiliary- and control current circuit Rail mounting possible Degree of protection (IP) Supporting protocol for TCP/IP Supporting protocol for PROFIBUS Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for ASI Supporting protocol for MODBUS Supporting protocol for MODBUS Supporting protocol for MODBUS Supporting protocol for MODBUS  CLASS 10 CLAS 10 CLASS 10 CLAS 10 CL	Ambient temperature, , upper operating limit	°C	60
Type of electrical connection of main circuit  Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for ASI  Supporting protocol for MODBUS  No  Supporting protocol for MODBUS  No  Supporting protocol for MODBUS  No  No  No  No  No  No  No  No  No  N	Temperature compensated overload protection		Yes
Type of electrical connection for auxiliary- and control current circuit  Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for ASI  Supporting protocol for MODBUS  Supporting protocol for MODBUS  Supporting protocol for MODBUS  Supporting protocol for MODBUS  No	Release class		CLASS 10
Rail mounting possible  Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for ASI  Supporting protocol for MODBUS  Supporting protocol for MODBUS  No  Supporting protocol for MODBUS	Type of electrical connection of main circuit		Screw connection
Degree of protection (IP)  Supporting protocol for TCP/IP  Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for ASI  Supporting protocol for MODBUS  No  Supporting protocol for MODBUS  No  No  No  No  No  No  No  No  No  N	Type of electrical connection for auxiliary- and control current circuit		Screw connection
Supporting protocol for TCP/IP Supporting protocol for PROFIBUS Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for ASI Supporting protocol for MODBUS Supporting protocol for MODBUS  No Supporting protocol for MODBUS  No Supporting protocol for MODBUS	Rail mounting possible		Yes
Supporting protocol for PROFIBUS  Supporting protocol for CAN  Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for MODBUS  No  No  No  No  No  No  No  No  No  N	Degree of protection (IP)		IP20
Supporting protocol for CAN Supporting protocol for INTERBUS Supporting protocol for ASI Supporting protocol for MODBUS  No Supporting protocol for MODBUS  No	Supporting protocol for TCP/IP		No
Supporting protocol for INTERBUS  Supporting protocol for ASI  Supporting protocol for MODBUS  No	Supporting protocol for PROFIBUS		No
Supporting protocol for ASI Supporting protocol for MODBUS No	Supporting protocol for CAN		No
Supporting protocol for MODBUS  No	Supporting protocol for INTERBUS		No
	Supporting protocol for ASI		No
Supporting protocol for Data-Highway 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**



# **Additional product information (links)**

IL034030ZU Electrical connector	
IL034030ZU Electrical connector	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL034030ZU2015_04.pdf
IL015082ZU Adapter	
IL015082ZU Adapter	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL015082ZU2017_05.pdf

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

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