

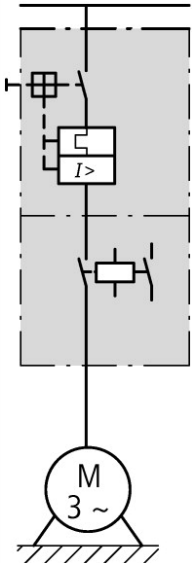




**DOL starter, 380 V 400 V 415 V: 1.1, 1.5 kW, I<sub>r</sub>= 2.5 - 4 A, 230 V 50 Hz, 240 V 60 Hz, AC voltage**

**Part no. MSC-DM-4-M7(230V50HZ)/MSFA**  
**Catalog No. 191120**  
**Alternate Catalog No. XTSC004B007BMFNL-FS**  
**EL-Nummer (Norway) 4100185**

**Delivery program**

Basic function				DOL starters (complete devices)
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
<b>Motor ratings</b>				
Motor rating				
AC-3				
380 V 400 V 415 V	P	kW		1.1 1.5
Rated operational current				
AC-3				
380 V 400 V 415 V	I <sub>e</sub>	A		2.6 3.6
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		2.5 - 4
				
Coordination				Type of coordination "1" Type of coordination "2"
Contact sequence				
Actuating voltage				230 V 50 Hz, 240 V 60 Hz AC voltage
<b>Motor-protective circuit-breakers PKZM0-4</b>				

**DOL starter wiring set**

Mechanical connection element and electrical electric contact module PKZM0-XDM15ME

**Notes**

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.

**Further information**

Technische Daten PKZM0  
 Zusatzausrüstung PKZ  
 Technische Daten DILM  
 Zusatzausrüstung DILM

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 → DILM  
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**Technical data**

**General**

Standards			UL 508 (on request) CSA C 22.2 No. 14 (on request)
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 operational voltage	$U_e$	V	230 - 415
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	$I_e$	A	4

**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			
Power consumption of the coil in a cold state and $1.0 \times U_S$			
Dual-voltage coil 50 Hz	Sealing	W	1.4

**Design verification as per IEC/EN 61439**

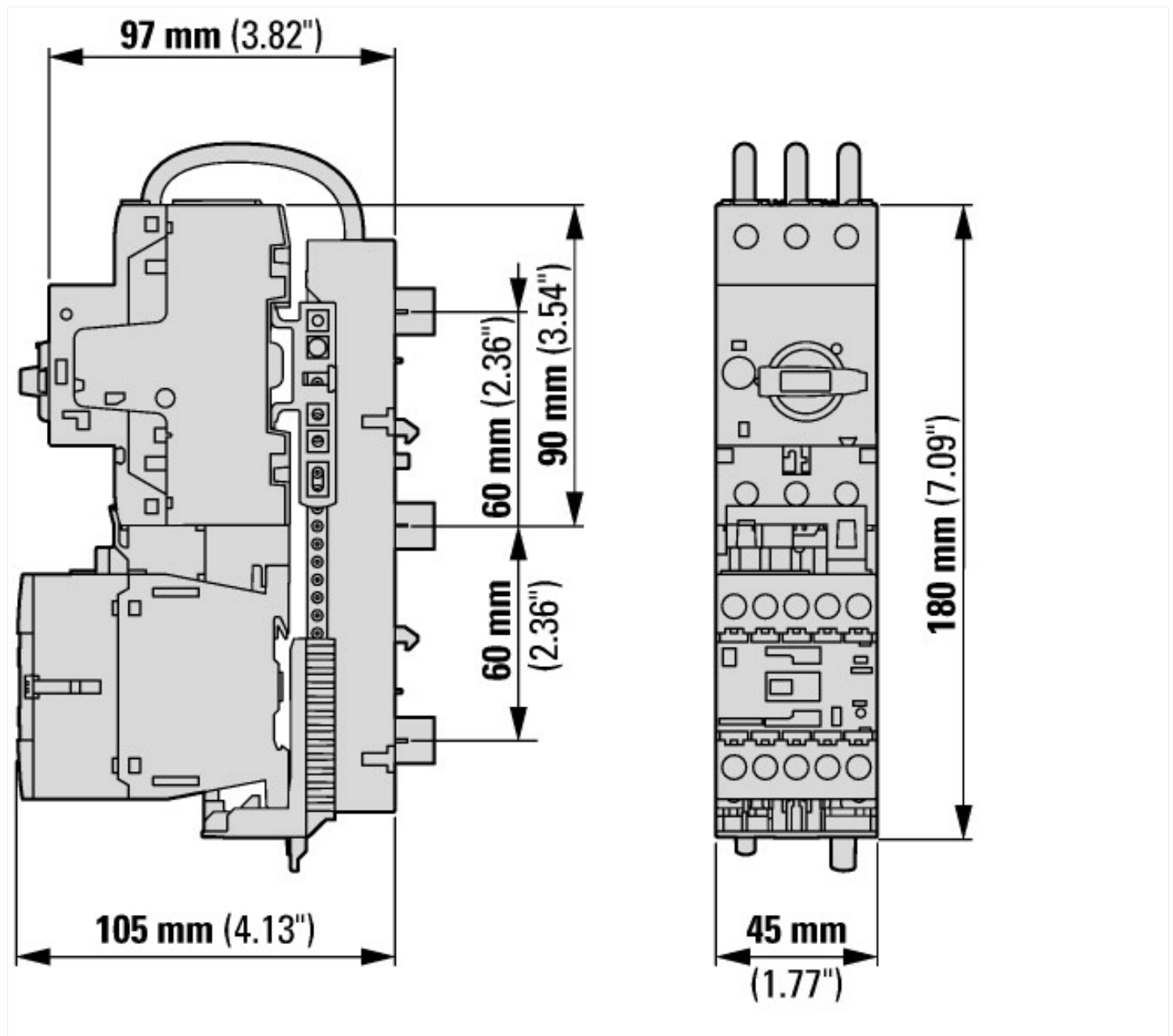
Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55

**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 $U_s$ at AC 50HZ		V	230 - 230
Rated control supply voltage $U_s$ at AC 60HZ		V	0 - 0
Rated control supply voltage $U_s$ at DC		V	0 - 0
Voltage type for actuating			AC
Rated operation power at AC-3, 230 V, 3-phase		kW	0.75
Rated operation power at AC-3, 400 V		kW	1.5
Rated power, 460 V, 60 Hz, 3-phase		kW	0
Rated power, 575 V, 60 Hz, 3-phase		kW	0
Rated operation current $I_e$		A	3.6
Rated operation current at AC-3, 400 V		A	4
Overload release current setting		A	2.5 - 4
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 PROFI-safe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		No
Width	mm	45
Height	mm	180
Depth	mm	115

## Dimensions



## Additional product information (links)

<b>IL034030ZU Electrical connector</b>	
IL034030ZU Electrical connector	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL034030ZU2018_05.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL034030ZU2018_05.pdf</a>
<b>IL015082ZU Adapter</b>	
IL015082ZU Adapter	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL015082ZU2018_05.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL015082ZU2018_05.pdf</a>
Motor starters and "Special Purpose Ratings" for the North American market	<a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf</a>
Busbar Component Adapters for modern Industrial control panels	<a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>