

**Contactor, 3 pole, 380 V 400 V 11 kW, 1 N/O, 1 NC, 230 V 50 Hz, 240 V 60 Hz,
AC operation, Push in terminals**

**Part no. DILM25-11(230V50HZ,240V60HZ)-PI
199284**

General specifications		
Product name		Eaton Moeller® series DILM contactor
Part no.		DILM25-11(230V50HZ,240V60HZ)-PI
EAN		4015081973682
Product Length/Depth		115 millimetre
Product height		85 millimetre
Product width		45 millimetre
Product weight		0.441 kilogram
Certifications		IEC/EN 60947 VDE 0660 UL File No.: E29096 CSA certified CSA Class No.: 2411-03, 3211-04 CSA File No.: 012528 UL Category Control No.: NLDX UL Listed CE marking
Product Tradename		DILM
Product Type		Contactor
Product Sub Type		None
Catalog Notes		Also tested according to AC-3e.
Features & Functions		
Fitted with:		Mirror contact
General information		
Application		Contactors for Motors
Degree of protection		IP20
Frame size		FS2
Lifespan, mechanical		10,000,000 Operations (AC operated)
Operating frequency		5000 mechanical Operations/h (AC operated)
Overvoltage category		III
Pollution degree		3
Product category		Contactors
Protection		Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Rated impulse withstand voltage (Uimp)		8000 V AC
Suitable for		Also motors with efficiency class IE3
Utilization category		AC-3: Normal AC induction motors: starting, switch off during running AC-1: Non-inductive or slightly inductive loads, resistance furnaces AC-4: Normal AC induction motors: starting, plugging, reversing, inching
Voltage type		AC
Ambient conditions, mechanical		
Shock resistance		10 g, N/O main contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 7 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 5 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 6.5 g, N/O main contact, Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms 8 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms 2 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		60 °C

Ambient operating temperature (enclosed) - min		25 °C
Ambient operating temperature (enclosed) - max		40 °C
Ambient storage temperature - min		40 °C
Ambient storage temperature - max		80 °C
Climatic proofing		Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Electro magnetic compatibility		
Emitted interference		According to EN 60947-1
Interference immunity		According to EN 60947-1
Terminal capacities		
Terminal capacity (flexible with ferrule)		2 x (0.5 - 1.5) mm ² , Main cables 1 x (0.5 - 1.5) mm ² , Control circuit cables 2 x (1 - 4) mm ² 1 x (1 - 6) mm ²
Terminal capacity (flexible)		1 x (1 - 10) mm ² 1 x (0.5 - 2.5) mm ² 2 x (1-6) mm ² 2 x (0.5 - 2.5) mm ²
Terminal capacity (solid)		1 x (0.5 - 0.25) mm ² 1 x (1 - 6) mm ² 2 x (1 - 6) mm ² 2 x (0.5 - 2.5) mm ² , Control circuit cables
Terminal capacity (solid/stranded AWG)		18 - 8, Main cables 20 - 14
Screwdriver size		3 x 0.5 mm, Terminal screw 3.0 x 0.5 mm, Terminal screw
Electrical rating		
Rated breaking capacity at 220/230 V		250 A
Rated breaking capacity at 380/400 V		250 A
Rated breaking capacity at 500 V		250 A
Rated breaking capacity at 660/690 V		150 A
Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V		45 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V		25 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V		25 A
Rated operational current (Ie) at AC-3, 440 V		25 A
Rated operational current (Ie) at AC-3, 500 V		25 A
Rated operational current (Ie) at AC-3, 660 V, 690 V		15 A
Rated operational current (Ie) at AC-4, 220 V, 230 V, 240 V		13 A
Rated operational current (Ie) at AC-4, 440 V		13 A
Rated operational current (Ie) at AC-4, 500 V		13 A
Rated operational current (Ie) at AC-4, 660 V, 690 V		10 A
Rated operational current (Ie) at DC-1, 60 V		40 A
Rated operational current (Ie) at DC-1, 110 V		40 A
Rated operational current (Ie) at DC-1, 220 V		40 A
Rated insulation voltage (Ui)		690 V
Rated making capacity up to 690 V (cos phi to IEC/EN 60947)		350 A
Rated operational power at AC-3, 240 V, 50 Hz		8.5 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		11 kW
Rated operational power at AC-3, 415 V, 50 Hz		14.5 kW
Rated operational power at AC-4, 220/230 V, 50 Hz		3.5 kW
Rated operational power at AC-4, 240 V, 50 Hz		4 kW
Rated operational power at AC-4, 415 V, 50 Hz		6.5 kW
Rated operational power at AC-4, 440 V, 50 Hz		7 kW
Rated operational power at AC-4, 500 V, 50 Hz		8 kW
Rated operational power at AC-4, 660/690 V, 50 Hz		8.5 kW
Rated operational voltage (Ue) at AC - max		690 V
Short-circuit rating		
Short-circuit current rating (high fault at 480 V)		65 kA, CB, SCCR (UL/CSA) 32 A, max. CB, SCCR (UL/CSA)
Short-circuit protection rating (type 1 coordination) at 400 V		100 A gG/gL

Short-circuit protection rating (type 1 coordination) at 690 V		50 A gG/gL
Short-circuit protection rating (type 2 coordination) at 400 V		35 A gG/gL
Short-circuit protection rating (type 2 coordination) at 690 V		35 A gG/gL
Conventional thermal current Ith		
Conventional thermal current Ith (1-pole, enclosed)		90 A
Conventional thermal current Ith (3-pole, enclosed)		36 A
Conventional thermal current Ith at 55°C (3-pole, open)		42 A
Conventional thermal current Ith of main contacts (1-pole, open)		100 A
Magnet system		
Arcing time		10 ms
Duty factor		100 %
Pick-up voltage		0.8 - 1.1 V AC x Uc
Power consumption, pick-up, 50 Hz		52 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz
Power consumption, pick-up, 60 Hz		67 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz
Power consumption, sealing, 50 Hz		2.1 W, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz 7.1 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz
Power consumption, sealing, 60 Hz		2.1 W, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz 8.7 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz
Rated control supply voltage (Us) at AC, 50 Hz - min		230 V
Rated control supply voltage (Us) at AC, 50 Hz - max		230 V
Rated control supply voltage (Us) at AC, 60 Hz - min		240 V
Rated control supply voltage (Us) at AC, 60 Hz - max		240 V
Rated control supply voltage (Us) at DC - min		0 V
Rated control supply voltage (Us) at DC - max		0 V
Switching time (AC operated, make contacts, closing delay) - min		16 ms
Switching time (AC operated, make contacts, closing delay) - max		22 ms
Switching time (AC operated, make contacts, opening delay) - min		8 ms
Switching time (AC operated, make contacts, opening delay) - max		14 ms
Motor rating		
Assigned motor power at 115/120 V, 60 Hz, 1-phase		2 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase		7.5 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase		5 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase		10 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase		15 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase		20 HP
Communication		
Connection		Push in terminals
Connection to SmartWire-DT		No
Contacts		
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		1
Number of auxiliary contacts (normally closed contacts)		1
Number of auxiliary contacts (normally open contacts)		1
Safety		
Safe isolation		400 V AC, Between coil and contacts, According to EN 61140 400 V AC, Between the contacts, According to EN 61140
Design verification		
Heat dissipation capacity Pdis		0 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 8.0

Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015])			
Rated control supply voltage Us at AC 50HZ	V	230 - 230	
Rated control supply voltage Us at AC 60HZ	V	240 - 240	
Rated control supply voltage Us at DC	V	0 - 0	
Voltage type for actuating		AC	
Rated operation current Ie at AC-1, 400 V	A	45	
Rated operation current Ie at AC-3, 400 V	A	25	
Rated operation power at AC-3, 400 V	kW	11	
Rated operation current Ie at AC-4, 400 V	A	13	
Rated operation power at AC-4, 400 V	kW	6	
Rated operation power NEMA	kW	0	
Modular version		No	
Number of auxiliary contacts as normally open contact		1	
Number of auxiliary contacts as normally closed contact		1	
Type of electrical connection of main circuit		Spring clamp connection	
Number of normally closed contacts as main contact		0	
Number of normally open contacts as main contact		3	