

**Contactor, 3 pole, 380 V 400 V 8.3 kW, 1 N/O, 1 NC, 110 V 50 Hz, 120 V 60 Hz, AC operation, Push in terminals**



**Part no. DILM17-11(110V50HZ,120V60HZ)-PI  
199280**

Product name	Eaton Moeller® series DILM contactor
Part no.	DILM17-11(110V50HZ,120V60HZ)-PI
EAN	4015081973644
Product Length/Depth	115 millimetre
Product height	85 millimetre
Product width	45 millimetre
Product weight	0.441 kilogram
Certifications	VDE 0660 IEC/EN 60947 UL Listed UL File No.: E29096 UL Category Control No.: NLDX CE marking CSA File No.: 012528 CSA certified CSA Class No.: 2411-03, 3211-04
Product Tradename	DILM
Product Type	Contactor
Product Sub Type	None
Catalog Notes	Also tested according to AC-3e.
Fitted with:	Mirror contact
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-4: Normal AC induction motors: starting, plugging, reversing, inching AC-1: Non-inductive or slightly inductive loads, resistance furnaces AC-3: Normal AC induction motors: starting, switch off during running
Voltage type	AC
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
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
Emitted interference		According to EN 60947-1
Interference immunity		According to EN 60947-1
Terminal capacity (flexible with ferrule)		2 x (1 - 4) mm <sup>2</sup> 1 x (0.5 - 1.5) mm <sup>2</sup> , Control circuit cables 1 x (1 - 6) mm <sup>2</sup> 2 x (0.5 - 1.5) mm <sup>2</sup> , Main cables
Terminal capacity (flexible)		1 x (0.5 - 2.5) mm <sup>2</sup> 2 x (0.5 - 2.5) mm <sup>2</sup> 2 x (1-6) mm <sup>2</sup> 1 x (1 - 10) mm <sup>2</sup>
Terminal capacity (solid)		2 x (0.5 - 2.5) mm <sup>2</sup> , Control circuit cables 1 x (0.5 - 0.25) mm <sup>2</sup> 1 x (1 - 6) mm <sup>2</sup> 2 x (1 - 6) mm <sup>2</sup>
Terminal capacity (solid/stranded AWG)		20 - 14 18 - 8, Main cables
Screwdriver size		3 x 0.5 mm, Terminal screw 3.0 x 0.5 mm, Terminal screw
Rated breaking capacity at 220/230 V		170 A
Rated breaking capacity at 380/400 V		170 A
Rated breaking capacity at 500 V		170 A
Rated breaking capacity at 660/690 V		120 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		17 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V		17 A
Rated operational current (Ie) at AC-3, 440 V		17 A
Rated operational current (Ie) at AC-3, 500 V		17 A
Rated operational current (Ie) at AC-3, 660 V, 690 V		12 A
Rated operational current (Ie) at AC-4, 220 V, 230 V, 240 V		10 A
Rated operational current (Ie) at AC-4, 440 V		10 A
Rated operational current (Ie) at AC-4, 500 V		10 A
Rated operational current (Ie) at AC-4, 660 V, 690 V		8 A
Rated operational current (Ie) at DC-1, 60 V		35 A
Rated operational current (Ie) at DC-1, 110 V		35 A
Rated operational current (Ie) at DC-1, 220 V		35 A
Rated insulation voltage (Ui)		690 V
Rated making capacity up to 690 V (cos phi to IEC/EN 60947)		238 A
Rated operational power at AC-3, 240 V, 50 Hz		5 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		7.5 kW
Rated operational power at AC-3, 415 V, 50 Hz		8.7 kW
Rated operational power at AC-4, 220/230 V, 50 Hz		2.5 kW
Rated operational power at AC-4, 240 V, 50 Hz		3 kW
Rated operational power at AC-4, 415 V, 50 Hz		5 kW
Rated operational power at AC-4, 440 V, 50 Hz		5.5 kW
Rated operational power at AC-4, 500 V, 50 Hz		6 kW
Rated operational power at AC-4, 660/690 V, 50 Hz		6.5 kW
Rated operational voltage (Ue) at AC - max		690 V
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		63 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 $I_{th}$ (1-pole, enclosed)		80 A
Conventional thermal current $I_{th}$ (3-pole, enclosed)		32 A
Conventional thermal current $I_{th}$ at 55°C (3-pole, open)		37 A
Conventional thermal current $I_{th}$ of main contacts (1-pole, open)		88 A
Arcing time		10 ms
Duty factor		100 %
Pick-up voltage		0.8 - 1.1 V AC x $U_c$
Power consumption, pick-up, 50 Hz		52 VA, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 50 Hz
Power consumption, pick-up, 60 Hz		67 VA, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 60 Hz
Power consumption, sealing, 50 Hz		2.1 W, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 50 Hz 7.1 VA, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 50 Hz
Power consumption, sealing, 60 Hz		2.1 W, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 60 Hz 8.7 VA, Dual-frequency coil in a cold state and 1.0 x $U_s$ , at 60 Hz
Rated control supply voltage ( $U_s$ ) at AC, 50 Hz - min		110 V
Rated control supply voltage ( $U_s$ ) at AC, 50 Hz - max		110 V
Rated control supply voltage ( $U_s$ ) at AC, 60 Hz - min		120 V
Rated control supply voltage ( $U_s$ ) at AC, 60 Hz - max		120 V
Rated control supply voltage ( $U_s$ ) at DC - min		0 V
Rated control supply voltage ( $U_s$ ) 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
Assigned motor power at 115/120 V, 60 Hz, 1-phase		2 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase		5 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase		3 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase		5 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase		10 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase		15 HP
Connection		Push in terminals
Connection to SmartWire-DT		No
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
Safe isolation		400 V AC, Between the contacts, According to EN 61140 400 V AC, Between coil and contacts, According to EN 61140
Heat dissipation capacity $P_{diss}$		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 $U_s$ at AC 50HZ	V	110 - 110
Rated control supply voltage $U_s$ at AC 60HZ	V	120 - 120
Rated control supply voltage $U_s$ at DC	V	0 - 0
Voltage type for actuating		AC
Rated operation current $I_e$ at AC-1, 400 V	A	45
Rated operation current $I_e$ at AC-3, 400 V	A	17
Rated operation power at AC-3, 400 V	kW	7.5
Rated operation current $I_e$ at AC-4, 400 V	A	10
Rated operation power at AC-4, 400 V	kW	4.5
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