

**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
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### 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)
Overtoltage 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
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### 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
<b>Electro magnetic compatibility</b>	
Emitted interference	According to EN 60947-1
Interference immunity	According to EN 60947-1
<b>Terminal capacities</b>	
Terminal capacity (flexible with ferrule)	2 x (0.5 - 1.5) mm <sup>2</sup> , Main cables 1 x (0.5 - 1.5) mm <sup>2</sup> , Control circuit cables 2 x (1 - 4) mm <sup>2</sup> 1 x (1 - 6) mm <sup>2</sup>
Terminal capacity (flexible)	1 x (1 - 10) mm <sup>2</sup> 1 x (0.5 - 2.5) mm <sup>2</sup> 2 x (1-6) mm <sup>2</sup> 2 x (0.5 - 2.5) mm <sup>2</sup>
Terminal capacity (solid)	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> 2 x (0.5 - 2.5) mm <sup>2</sup> , 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
<b>Electrical rating</b>	
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
<b>Short-circuit rating</b>	
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
<b>Conventional thermal current <math>I_{th}</math></b>	
Conventional thermal current $I_{th}$ (1-pole, enclosed)	90 A
Conventional thermal current $I_{th}$ (3-pole, enclosed)	36 A
Conventional thermal current $I_{th}$ at 55°C (3-pole, open)	42 A
Conventional thermal current $I_{th}$ of main contacts (1-pole, open)	100 A
<b>Magnet system</b>	
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	230 V
Rated control supply voltage ( $U_s$ ) at AC, 50 Hz - max	230 V
Rated control supply voltage ( $U_s$ ) at AC, 60 Hz - min	240 V
Rated control supply voltage ( $U_s$ ) at AC, 60 Hz - max	240 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
<b>Motor rating</b>	
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
<b>Communication</b>	
Connection	Push in terminals
Connection to SmartWire-DT	No
<b>Contacts</b>	
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
<b>Safety</b>	
Safe isolation	400 V AC, Between coil and contacts, According to EN 61140 400 V AC, Between the contacts, According to EN 61140
<b>Design verification</b>	
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 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