DATASHEET - DILMP32-10(RDC24)

Contactor, 4 pole, DC operation, AC-1: 32 A, 1 N/O, RDC 24: 24 - 27 V DC, Screw terminals

Powering Business Worldwide™

Part no.	**DILMP32-10(RDC24)**
	109811
EL Number (Norway)	**4130411**

Product name	Eaton Moeller® series DILMP contactor
Part no.	DILMP32-10(RDC24)
EAN	4015081093830
Product Length/Depth	97 millimetre
Product height	85 millimetre
Product width	58 millimetre
Product weight	0.6 kilogram
Certifications	VDE 0660 CSA Class No.: 2411-03, 3211-04 CE UL UL File No.: E29096 UL 60947-4-1 UL Category Control No.: NLDX CSA File No.: 012528 IEC/EN 60947-4-1 CSA IEC/EN 60947 CSA-C22.2 No. 60947-4-1-14
Product Tradename	DILMP
Product Type	Contactor
Product Sub Type	None
Catalog Notes	Also tested according to AC-3e.
Fitted with:	Suppressor circuit in actuating electronics
Application	Contactors for 4 pole electric consumers
Degree of protection	IP00
Lifespan, mechanical	10,000,000 Operations (AC operated) 10,000,000 Operations (DC operated)
Operating frequency	5000 mechanical Operations/h (AC operated) 5000 mechanical Operations/h (DC 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
Residual current	1 mA (with actuation of A1 - A2 by the electronics with "0" signal)
Resistance per pole	2.7 mΩ
Utilization category	AC-3: Normal AC induction motors: starting, switch off during running AC-1: Non-inductive or slightly inductive loads, resistance furnaces
Voltage type	DC
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
Altitude	Max. 2000 m
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, constant, to IEC 60068-2-3 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacity (flexible with ferrule)	1 x (0.75 - 1.5) mm^2 2 x (0.75 - 1.5) mm^2
Terminal capacity (flexible)	1 x (0.75 - 2.5) mm^2 2 x (0.75 - 2.5) mm^2
Terminal capacity (solid)	1 x (0.75 - 16) mm^2, Main cables 2 x (0.75 - 10) mm^2, Main cables 1 x (0.75 - 4) mm^2, Control circuit cables 2 x (0.75 - 2.5) mm^2, Control circuit cables 1 x (0.75 - 2.5) mm^2
Terminal capacity (solid/stranded AWG)	18 - 6, Main cables 18 - 14, Control circuit cables
Terminal capacity (stranded)	1 x 16 mm^2, Main cables
Stripping length (main cable)	10 mm
Stripping length (control circuit cable)	10 mm
Screw size	M5, Terminal screw, Main cables M3.5, Terminal screw, Control circuit cables
Screwdriver size	0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
Tightening torque	3 Nm, Screw terminals, Main cables 1.2 Nm, Screw terminals, Control circuit cables
Rated breaking capacity at 220/230 V	180 A
Rated breaking capacity at 380/400 V	180 A
Rated breaking capacity at 500 V	180 A
Rated breaking capacity at 660/690 V	120 A
Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V	32 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	18 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	18 A
Rated operational current (Ie) at AC-3, 440 V	18 A
Rated operational current (Ie) at AC-3, 500 V	18 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	12 A
Rated operational current (Ie) at DC-1, 60 V	32 A
Rated operational current (Ie) at DC-1, 110 V	32 A
Rated operational current (Ie) at DC-1, 220 V	32 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-1, 220/230 V, 50 Hz	12 kW
Rated operational power at AC-1, 240 V, 50 Hz	13 kW
Rated operational power at AC-1, 380/400 V, 50 Hz	20 kW
Rated operational power at AC-1, 415 V, 50 Hz	22 kW
Rated operational power at AC-1, 440 V, 50 Hz	23 kW
Rated operational power at AC-1, 500 V, 50 Hz	26 kW
Rated operational power at AC-1, 690 V, 50 Hz	35 kW
Rated operational power at AC-3, 240 V, 50 Hz	5.5 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	10 kW
Rated operational power at AC-3, 440 V, 50 Hz	10.5 kW
Rated operational power at AC-3, 500 V, 50 Hz	12 kW
Rated operational power at AC-3, 690 V, 50 Hz	11 kW
Rated operational voltage (Ue) at AC - max	690 V
Short-circuit current rating (basic rating)	125 A, max. CB, SCCR (UL/CSA) 125 A, max. Fuse, SCCR (UL/CSA) 5 kA, SCCR (UL/CSA)

Short-circuit current rating (high fault at 480 V)	10/100 kA, Fuse, SCCR (UL/CSA) 10/65 kA, CB, SCCR (UL/CSA) 125/70 A, Class J, max. Fuse, SCCR (UL/CSA) 50/32 A, max. CB, SCCR (UL/CSA)
Short-circuit current rating (high fault at 600 V)	125/100 A, Class J, max. Fuse, SCCR (UL/CSA) 50/32 A, max. CB, SCCR (UL/CSA) 10/100 kA, Fuse, SCCR (UL/CSA) 10/22 kA, 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 ith (1-pole, enclosed)	76 A
Conventional thermal current ith (3-pole, enclosed)	27 A
Conventional thermal current ith at 55°C (3-pole, open)	29 A
Conventional thermal current ith at 60°C (3-pole, open)	28 A
Conventional thermal current ith of main contacts (1-pole, open)	84 A
Switching capacity (main contacts, general use)	40 A, Maximum motor rating (UL/CSA)
Switching capacity (auxiliary contacts, general use)	10 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)
Arcing time	10 ms
Drop-out voltage	0.2 - 0.6 x UC, DC operated
Duty factor	100 %
Pick-up voltage	0.7 - 1.2 V DC x Uc 0.85 - 1.1 V AC/DC x Us
Power consumption (pick-up) at DC	12 W
Power consumption (sealing) at DC	0.9 W
Rated control supply voltage (Us) at AC, 50 Hz - min	0 V
Rated control supply voltage (Us) at AC, 50 Hz - max	0 V
Rated control supply voltage (Us) at AC, 60 Hz - min	0 V
Rated control supply voltage (Us) at AC, 60 Hz - max	0 V
Rated control supply voltage (Us) at DC - min	24 V
Rated control supply voltage (Us) at DC - max	27 V
Switching time (DC operated, make contacts, closing delay) - max	47 ms
Switching time (DC operated, make contacts, opening delay) - max	30 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	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
Connection	Screw terminals
Connection to SmartWire-DT	In conjunction with DIL-SWD SmartWire DT contactor module Yes
Number of contacts (normally open contacts)	1
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	1
Safe isolation	440 V AC, Between the contacts, According to EN 61140 440 V AC, Between coil and contacts, According to EN 61140
Special purpose rating of ballast electrical discharge lamps	40 A (480V 60Hz 3phase, 277V 60Hz 1phase)

			40 A (600V 60Hz 3phase, 347V 60Hz 1phase)
Special purpose rating of definite purpose rating			25 A, FLA 480 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA) 150 A, LRA 480 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA)
Special purpose rating of elevator control			5 HP, 240 V 60 Hz 3-ph, (UL/CSA) 10 HP, 480 V 60 Hz 3-ph, (UL/CSA) 3 HP, 200 V 60 Hz 3-ph, (UL/CSA) 17 A, 600 V 60 Hz 3-ph, (UL/CSA) 14 A, 480 V 60 Hz 3-ph, (UL/CSA) 15.2 A, 240 V 60 Hz 3-ph, (UL/CSA) 11 A, 200 V 60 Hz 3-ph, (UL/CSA) 15 HP, 600 V 60 Hz 3-ph, (UL/CSA)
Special purpose rating of refrigeration control (CSA only)			40 A, FLA 480 V 60 Hz 3phase; (CSA) 30 A, FLA 600 V 60 Hz 3phase; (CSA) 240 A, LRA 480 V 60 Hz 3phase; (CSA) 180 A, LRA 600 V 60 Hz 3phase; (CSA)
Special purpose rating of resistance air heating			40 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (UL/CSA) 40 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (UL/CSA)
Special purpose rating of tungsten incandescent lamps			40 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (UL/CSA) 40 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (UL/CSA)
Equipment heat dissipation, current-dependent Pvid			6.6 W
Heat dissipation capacity Pdiss			0 W
Heat dissipation per pole, current-dependent Pvid			2.2 W
Rated operational current for specified heat dissipation (In)			32 A
Static heat dissipation, non-current-dependent Pvs			0.9 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	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	24 - 27
Voltage type for actuating		DC
Rated operation current Ie at AC-1, 400 V	A	32
Rated operation current Ie at AC-3, 400 V	A	18
Rated operation power at AC-3, 400 V	kW	7.5
Rated operation current Ie at AC-4, 400 V	A	15

Rated operation power at AC-4, 400 V		kW	7
Rated operation power NEMA		kW	11
Modular version			No
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as normally closed contact			0
Type of electrical connection of main circuit			Screw connection
Number of normally closed contacts as main contact			0
Number of normally open contacts as main contact			4