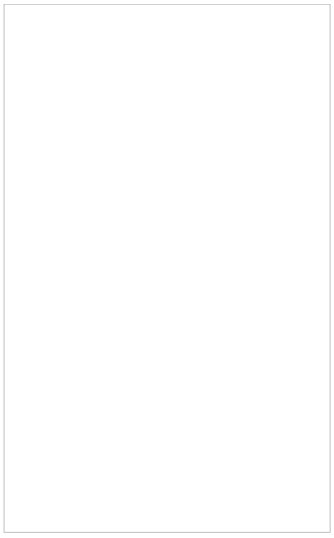
LEISTUNGSSCHÜTZE DIL
239591



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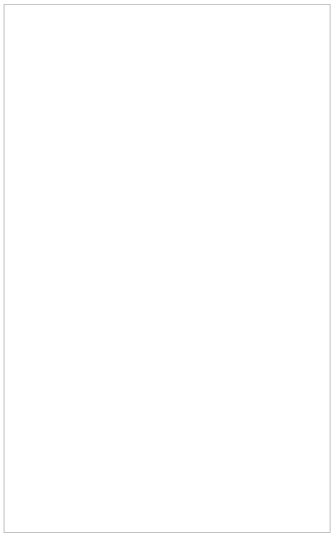

Photo is representative

239591

Eaton Moeller® series DILM Contactor, 3 pole, 380
- 27 V DC, DC operation, Screw terminals DILM150(

Anfrage zu diesem Produkt

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Designed to work together

Discover other Eaton products and accessories built to enhance this product.

277950

Eaton Moeller® series DILM Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILM40 - DILM170

277946

Eaton Moeller® series DILM Auxiliary contact module, 2 pole, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, DILM40 - DILM170

278464

Eaton Moeller® series ZB Overload relay, ZB150, Ir= 70 - 100 A, 1 N/O, 1 N/C, Direct mounting, IP00

278425

Eaton Moeller® series DILM Au
contact module, 2 pole, Ith= 10
NC, Side mounted, Screw termi
DILM40 - DILM225A, -SI

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General specifications >

Product specifications >

GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller® series DILM contactor
CATALOG NUMBER	239591
MODEL CODE	DILM150(RDC24)
EAN	4015082395919
PRODUCT LENGTH/DEPTH	160 mm
PRODUCT HEIGHT	170 mm
PRODUCT WIDTH	90 mm
PRODUCT WEIGHT	2.25 kg
CERTIFICATIONS	CE CSA CSA File No.: 012528 VDE 0660 UL File No.: E29096 IEC/EN 60947-4-1 CSA-C22.2 No. 60947-4-1-14 UL UL 60947-4-1 UL Category Control No.: NLDX IEC/EN 60947 CSA Class No.: 2411-03, 3211-04
CATALOG NOTES	Contacts according to EN 50012

PRODUCT SPECIFICATIONS

TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 2.5) mm², Control circuit cables 1 x (0.75 - 2.5) mm², Control circuit cables 1 x (10 - 95) mm², Main cables 2 x (10 - 70) mm², Main cables
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	150 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specificatio must be observed.
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	75 kW
CONVENTIONAL THERMAL CURRENT ITH (3-POLE, ENCLOSED)	144 A
RATED OPERATIONAL POWER AT AC-4, 380/400 V, 50	33 kW

HZ	
RATED OPERATIONAL CURRENT (IE) AT AC-4, 440 V	65 A
TERMINAL CAPACITY (COPPER BAND)	2 x (6 x 16 x 0.8) mm (Number of segments x widt cables
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	160 A
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	65 kA, CB, SCCR (UL/CSA) 300/300 A, Class J, max. Fuse, SCCR (UL/CSA) 250 A, max. CB, SCCR (UL/CSA) 30/100 kA, Fuse, SCCR (UL/CSA)
CONVENTIONAL THERMAL CURRENT ITH AT 55°C (3-POLE, OPEN)	170 A
RATED OPERATIONAL POWER (NEMA)	93 kW
OPERATING VOLTAGE AT DC - MAX	27 V
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
FITTED WITH:	Suppressor circuit in actuating electronics
RATED BREAKING CAPACITY AT 380/400 V	1500 A
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	600 A, max. Fuse, SCCR (UL/CSA) 600 A, max. CB, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
RATED BREAKING CAPACITY AT 660/690 V	1200 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, 220 V	90 A
SPECIAL PURPOSE RATING OF ELEVATOR CONTROL	75 HP, 480 V 60 Hz 3-ph, (UL/CSA) 100 HP, 600 V 60 Hz 3-ph, (UL/CSA) 92 A, 200 V 60 Hz 3-ph, (UL/CSA) 104 A, 240 V 60 Hz 3-ph, (UL/CSA) 96 A, 480 V 60 Hz 3-ph, (UL/CSA) 40 HP, 240 V 60 Hz 3-ph, (UL/CSA) 99 A, 600 V 60 Hz 3-ph, (UL/CSA) 30 HP, 200 V 60 Hz 3-ph, (UL/CSA)
OPERATING VOLTAGE AT DC - MIN	24 V
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-	10 HP

PHASE	10 A
RATED OPERATIONAL POWER AT AC-4, 440 V, 50 HZ	41 kW
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
POWER CONSUMPTION (SEALING) AT DC	1.9 W
NUMBER OF POLES	Three-pole
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
APPLICATION	Contactors for Motors
OPERATING FREQUENCY	3600 mechanical Operations/h (DC operated)
VOLTAGE TYPE	DC
SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 400 V	250 A gG/gL
PRODUCT CATEGORY	Contactors
RATED OPERATIONAL CURRENT (IE) AT AC-4, 220 V, 230 V, 240 V	65 A
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	96 kW
HEAT DISSIPATION CAPACITY PDISS	0 W
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	125 HP
SPECIAL PURPOSE RATING OF TUNGSTEN INCANDESCENT LAMPS	160 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (160 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (
RATED OPERATIONAL CURRENT (IE) AT AC-4, 500 V	65 A
RATED OPERATIONAL POWER AT AC-3, 240 V, 50 HZ	52 kW
OPERATING VOLTAGE AT AC, 60 HZ - MAX	690 V
TERMINAL CAPACITY (SOLID/STRANDED AWG)	Single 8…3/0, double 8…2/0, Main cables 18 - 14, Control circuit cables
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP00
OVERVOLTAGE CATEGORY	III
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
POLLUTION DEGREE	3
RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V,	190 A

400 V, 415 V	
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V AC
CONNECTION	Screw terminals
OPERATING VOLTAGE AT AC, 60 HZ - MIN	230 V
TIGHTENING TORQUE	1.2 Nm, Screw terminals, Control circuit cables 14 Nm, Screw terminals, Main cables
RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ	48 kW
FRAME SIZE	FS4
CONVENTIONAL THERMAL CURRENT ITH (1-POLE, ENCLOSED)	360 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	100 A
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	150 A
SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 400 V	250 A gG/gL
SPECIAL PURPOSE RATING OF BALLAST ELECTRICAL DISCHARGE LAMPS	160 A (480V 60Hz 3phase, 277V 60Hz 1phase) 160 A (600V 60Hz 3phase, 347V 60Hz 1phase)
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
SPECIAL PURPOSE RATING OF DEFINITE PURPOSE RATING	900 A, LRA 480 V 60 Hz 3-ph, 100,000 cycles acc (UL/CSA) 150 A, FLA 480 V 60 Hz 3-ph, 100,000 cycles acc. (UL/CSA)
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	110 kW
SHOCK RESISTANCE	7 g, N/O auxiliary contact, Mechanical, according to 27, Half-sinusoidal shock 10 ms 10 g, N/O main contact, Mechanical, according to I when tabletop-mounted, Half-sinusoidal shock 10 m 5 g, N/C auxiliary contact, Mechanical, according to when tabletop-mounted, Half-sinusoidal shock 10 m 7 g, N/O auxiliary contact, Mechanical, according to when tabletop-mounted, Half-sinusoidal shock 10 m 5 g, N/C auxiliary contact, Mechanical, according to 27, Half-sinusoidal shock 10 ms 10 g, N/O main contact, Mechanical, according to I Half-sinusoidal shock 10 ms
RATED OPERATIONAL CURRENT (IE) AT DC-1, 110 V	160 A
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-	60 HP

PHASE	
DROP-OUT VOLTAGE	0.6 - 0.15 x UC, DC operated At least smoothed two-phase bridge rectifier or three
RESISTANCE PER POLE	0.6 mΩ
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	25 °C
STRIPPING LENGTH (CONTROL CIRCUIT CABLE)	10 mm
OPERATING VOLTAGE AT AC, 50 HZ - MAX	690 V
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specificatio must be observed.
SPECIAL PURPOSE RATING OF REFRIGERATION CONTROL (CSA ONLY)	90 A, FLA 600 V 60 Hz 3phase; (CSA) 540 A, LRA 600 V 60 Hz 3phase; (CSA) 90 A, FLA 480 V 60 Hz 3phase; (CSA) 540 A, LRA 480 V 60 Hz 3phase; (CSA)
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
STRIPPING LENGTH (MAIN CABLE)	24 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
SPECIAL PURPOSE RATING OF RESISTANCE AIR HEATING	160 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (160 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	30/100 kA, Fuse, SCCR (UL/CSA) 350 A, max. CB, SCCR (UL/CSA) 30 kA, CB, SCCR (UL/CSA) 300/600 A, Class J, max. Fuse, SCCR (UL/CSA)
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	3
RATED BREAKING CAPACITY AT 220/230 V	1500 A
SCREW SIZE	M10, Terminal screw, Main cables 5 mm AF, Hexagon socket-head spanner, Terminal M3.5, Terminal screw, Control circuit cables
RATED OPERATIONAL CURRENT (IE) AT AC-4, 400 V	65 A
SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 690 V	250 A gG/gL
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	125 HP
PROTECTION	Finger and back-of-hand proof, Protection against di actuated from front (EN 50274)
RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ	95 kW
TERMINAL CAPACITY (STRANDED)	1 x (16 - 95) mm², Main cables

TERMINAL CAPACITY (STRANDED)	2 x (16 - 70) mm², Main cables
RATED BREAKING CAPACITY AT 500 V	1500 A
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	91 kW
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
CONNECTION TO SMARTWIRE-DT	No
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	1.9 W
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	27 V
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	AC-1: Non-inductive or slightly inductive loads, re AC-4: Normal AC induction motors: starting, plugg inching AC-3: Normal AC induction motors: starting, switc
RATED OPERATIONAL CURRENT (IE) AT AC-3, 440 V	150 A
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to
SAFE ISOLATION	690 V AC, Between the contacts, According to EN 690 V AC, Between coil and contacts, According to
OPERATING VOLTAGE AT AC, 50 HZ - MIN	230 V
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the inf instruction leaflet (IL) is observed.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	10.7 W
ACTUATING VOLTAGE	RDC 24: 24 - 27 V DC
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	30 ms
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	35 ms
RESIDUAL CURRENT	1 mA (with actuation of A1 - A2 by the electronics
RATED OPERATIONAL CURRENT (IE) AT AC-4, 660 V, 690 V	50 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	32.1 W
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	50 HP
PICK-UP VOLTAGE	0.7 - 1.2 V DC x Uc

PICK-UP VOLTAGE	24 - 27 V DC (RDC 24)
SUITABLE FOR	Also motors with efficiency class IE3
CONVENTIONAL THERMAL CURRENT ITH AT 40°C (3-POLE, OPEN)	190 A
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 4) mm², Control circuit cables 2 x (0.75 - 2.5) mm², Control circuit cables
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
INTERFERENCE IMMUNITY	According to EN 60947-1
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.
LIFESPAN, MECHANICAL	10,000,000 Operations (DC operated)
SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 690 V	250 A gG/gL
RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947)	2100 A
RATED OPERATIONAL POWER AT AC-4, 240 V, 50 HZ	22 kW
RATED OPERATIONAL POWER AT AC-4, 500 V, 50 HZ	47 kW
RATED OPERATIONAL CURRENT (IE) AT DC-1, 60 V	160 A
RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ	20 kW
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
POWER CONSUMPTION (PICK-UP) AT DC	149 W
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	225 A, Maximum motor rating (UL/CSA)
CONVENTIONAL THERMAL CURRENT ITH AT 50°C (3-POLE, OPEN)	180 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	150 A
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	30 HP
SCREWDRIVER SIZE	0.8 x 5.5/1 x 6 mm, Terminal screw, Control circui screwdriver

	2, Terminal screw, Control circuit cables, Pozidriv
DUTY FACTOR	100 %
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	150 A
CONVENTIONAL THERMAL CURRENT ITH OF MAIN CONTACTS (1-POLE, OPEN)	400 A
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
ARCING TIME	15 ms
RATED OPERATIONAL POWER AT AC-4, 415 V, 50 HZ	39 kW
RATED INSULATION VOLTAGE (UI)	690 V
ALTITUDE	Max. 2000 m

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

System overview

Wiring diagrams

Angebot anfragen

Kontakt

239591

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