DILA CONTACTOR RELAY
276351

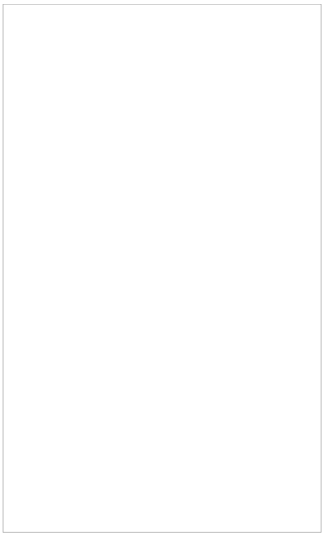


Photo is representative

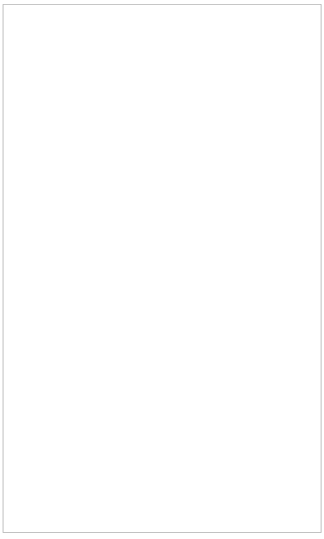


Photo is representative

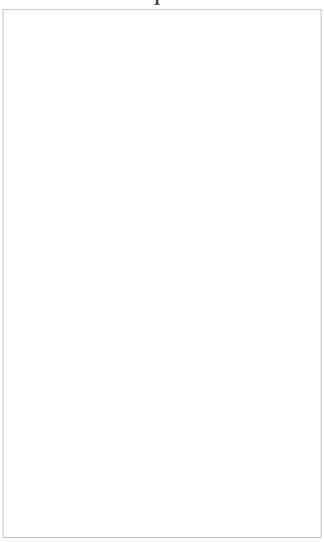
276351

Eaton Moeller® series DILA Contactor relay, 24 V
terminals, AC operation

How to buy

Photo is representative

Photo is representative



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Designed to work together

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

276426

Eaton Moeller® series DILA Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38

276427

Eaton Moeller® series DILA Auxiliary contact module, 4 pole, Ith= 16 A, 3 N/O, 1 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38

276421

Eaton Moeller® series DILA Auxiliary contact module, 2 pole, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38

101672

Eaton Moeller® series DILM Di suppressor, for DILA, M7-15

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General specifications >

Product specifications >

GENERAL SPECIFICATIONS

PRODUCT NAME	Eaton Moeller® series DILA Control Relay
CATALOG NUMBER	276351
MODEL CODE	DILA-31(24V50HZ)
EAN	4015082763510
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	68 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.24 kg
COMPLIANCES	CE Marked
CERTIFICATIONS	UL 508 EN 60947-4-1 IEC 60947-4-1 CSA Std. C22.2 No. 14-05 VDE CSA Class No.: 3211-03 CSA-C22.2 No. 14-05 IEC/EN 60947 UL File No.: E29184 CE CSA CSA File No.: 012528 IEC/EN 60947-4-1 UL EN 60947-5-1 UL Category Control No.: NKCR

VDE 0660

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	15.5 A
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 2.5) mm², Screw terminals 1 x (0.75 - 2.5) mm², Screw terminals
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specificatio must be observed.
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	24 V
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	16 A
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
MOUNTING METHOD	Screw
OPERATING VOLTAGE AT DC - MAX	220 VDC
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
FITTED WITH:	Positive operation contacts
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	24 V
OPERATING VOLTAGE AT DC - MIN	24 VDC
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
FEATURES	Positive operating contacts to EN 60947-5-1 append auxiliary contact module
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	Contactor relays
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	4 A
OPERATING FREQUENCY	9000 Operations/h
VOLTAGE TYPE	AC

PRODUCT CATEGORY	DILA relays
POWER CONSUMPTION, PICK-UP, 50 HZ	24 VA, AC, Single-frequency coil 50 Hz and Dual-f Hz
HEAT DISSIPATION CAPACITY PDISS	0 W
CONNECTION TYPE (AUXILIARY CIRCUIT)	Screw connection
SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING	10 A gG/gL, 500 V, Max. Fuse, Contacts
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MIN	9 ms
OPERATING VOLTAGE AT AC, 60 HZ - MAX	500 V
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 14, Screw terminals
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP20
OVERVOLTAGE CATEGORY	III
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	18 ms
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
VOLTAGE TYPE OF OPERATING VOLTAGE	AC/DC
POLLUTION DEGREE	3
POWER CONSUMPTION, PICK-UP, 60 HZ	24 VA, AC, Single-frequency coil 50 Hz and Dual-f Hz
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	21 ms
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
CONNECTION	Screw terminals
OPERATING VOLTAGE AT AC, 60 HZ - MIN	17 V
TIGHTENING TORQUE	1.2 Nm, Screw terminals
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.
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	3
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN	15 ms
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	3

SHOCK RESISTANCE	7 g, N/O auxiliary contact, Basic unit with auxiliary Mechanical, according to IEC/EN 60068-2-27, Half- ms 5 g, N/C auxiliary contact, Basic unit with auxiliary Mechanical, according to IEC/EN 60068-2-27, Half- ms
POWER CONSUMPTION, SEALING, 60 HZ	1.4 W, AC, Single-frequency coil 50 Hz and Dual-f Hz
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	25 °C
OPERATING VOLTAGE AT AC, 50 HZ - MAX	500 V
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specificatio must be observed.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS, DELAYED SWITCHING)	0
STRIPPING LENGTH (MAIN CABLE)	10 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
SCREW SIZE	M3.5, Terminal screw
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS, LEADING)	0
PROTECTION	Finger and back-of-hand proof, Protection against di actuated from front (EN 50274)
POWER CONSUMPTION, SEALING, 50 HZ	1.4 W, AC, Single-frequency coil 50 Hz and Dual-f Hz 3.4 VA, AC, Single-frequency coil 50 Hz and Dual- Hz
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
CODE NUMBER	31E
CONNECTION TO SMARTWIRE-DT	No
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	1.4 W
RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V	1.5 A
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to

SAFE ISOLATION	400 V AC, Between auxiliary contacts, According t 400 V AC, Between coil and auxiliary contacts, Acc
OPERATING VOLTAGE AT AC, 50 HZ - MIN	17 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	4 A
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.
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.5 W
ACTUATING VOLTAGE	24 V 50 Hz
SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
RATED SWITCH CURRENT	16 A
RATED OPERATIONAL CURRENT (IE)	6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in se 6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in 2 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in 10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in s 4 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in s 3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in s 1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in s 4 A at 24 V, DC L/R ≤ 50 ms (with 3 contacts in s 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in 16 A
PICK-UP VOLTAGE	0.8 - 1.1 V AC x Uc (voltage tolerance - single-volt dual-voltage coil 50 Hz, 60 Hz)
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 4) mm², Screw terminals 2 x (0.75 - 2.5) mm², Screw terminals
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	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	20,000,000 Operations (AC operated)
CONTROL CIRCUIT RELIABILITY	λ < 5 x 10-7 (1 failure at 2,000,000 operations for U = 17 V, Imin = 5.4 mA)
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER	0

CONTACTS)	0
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.
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
SCREWDRIVER SIZE	0.8 x 5.5/1 x 6 mm, Terminal screw, Standard scre 2, Terminal screw, Pozidriv screwdriver
DUTY FACTOR	100 %
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)
RATED INSULATION VOLTAGE (UI)	690 V

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

System overview

Wiring diagrams

276351

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