

DILA CONTACTOR RELAY
276414



Overview



Specifications



Resources

How to buy

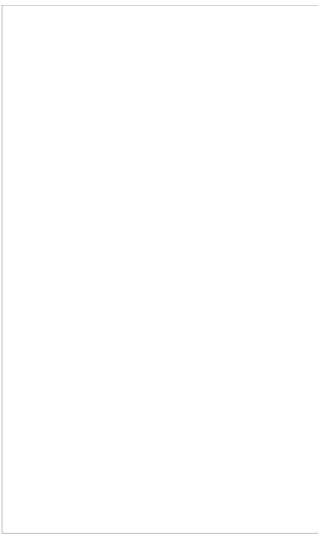


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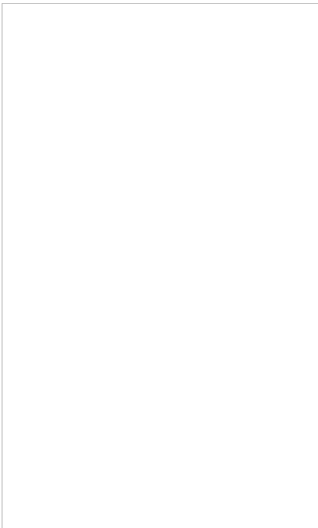


Photo is representative

276414

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

How to buy

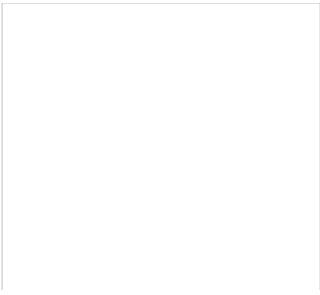


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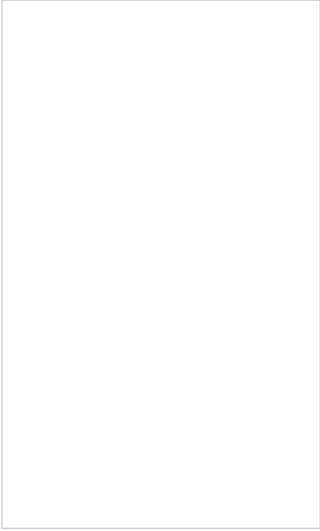


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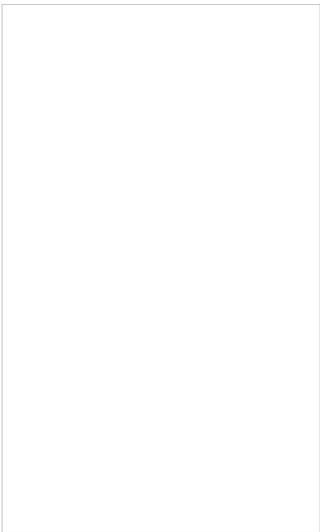


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Designed to work together

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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

General specifications

>

PRODUCT NAME Eaton Moeller® series DILA Control Relay

CATALOG NUMBER 276414

Product specifications

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MODEL CODE DILA-22(24VDC)

EAN 4015082764142

PRODUCT LENGTH/DEPTH 75 mm

PRODUCT HEIGHT 68 mm

PRODUCT WIDTH 45 mm

PRODUCT WEIGHT 0.294 kg

CERTIFICATIONS

IEC/EN 60947
IEC/EN 60947-4-1
UL Category Control No.: NKCR
CSA Class No.: 3211-03
UL 508
CE
UL
UL File No.: E29184
CSA
CSA-C22.2 No. 14-05
CSA File No.: 012528
EN 60947-5-1
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) mm ² , Screw terminals 1 x (0.75 - 2.5) mm ² , Screw terminals
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications must be observed.
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 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	DIN-rail/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:	Suppressor circuit Positive operation contacts Built-in suppressor circuit
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
OPERATING VOLTAGE AT DC - MIN	24 VDC
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
FEATURES	Positive operating contacts to EN 60947-5-1 appendix auxiliary contact module
POWER CONSUMPTION (SEALING) AT DC	2.6 W
VOLTAGE TOLERANCE	Smoothed DC, three-phase bridge rectifiers or smoothed rectification
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	Contact relays
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	4 A
OPERATING FREQUENCY	9000 Operations/h
VOLTAGE TYPE	DC

VOLTAGE TYPE	DC
PRODUCT CATEGORY	DILA relays
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
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
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
VOLTAGE TYPE OF OPERATING VOLTAGE	AC/DC
POLLUTION DEGREE	3
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
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)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	2
SHOCK RESISTANCE	5 g, N/C auxiliary contact, Basic unit with auxiliary Mechanical, according to IEC/EN 60068-2-27, Half ms 7 g, N/O auxiliary contact, Basic unit with auxiliary Mechanical, according to IEC/EN 60068-2-27, Half ms
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 specifications must be observed.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to
NUMBER OF AUXILIARY CONTACTS (NORMALLY	0

CLOSED CONTACTS, DELAYED SWITCHING)	-
STRIPPING LENGTH (MAIN CABLE)	10 mm
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 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 dirt actuated from front (EN 50274)
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
CODE NUMBER	22E
CONNECTION TO SMARTWIRE-DT	In conjunction with DIL-SWD SmartWire DT contact Yes
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	3 W
RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V	1.5 A
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	24 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 be protected.
SAFE ISOLATION	400 V AC, Between auxiliary contacts, According to IEC 60071-1 400 V AC, Between coil and auxiliary contacts, According to IEC 60071-1
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 instructions in the 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)	2
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1 W
ACTUATING VOLTAGE	24 V DC
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	12 ms

SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	15 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	31 ms
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
RATED SWITCH CURRENT	16 A
RATED OPERATIONAL CURRENT (IE)	2 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in s) 6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in s) 6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact 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 ≤ 50 ms (with 3 contacts in s) 10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in s) 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in s) 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts 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) 4 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in s) 16 A
PICK-UP VOLTAGE	0.7 - 1.3 V DC x U _c (at 24 V: without auxiliary co ambient air temperature + 40 °C) 0.8 - 1.1 V DC x U _c
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 4) mm ² , Screw terminals 2 x (0.75 - 2.5) mm ² , Screw terminals
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	2
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 (DC operated)
CONTROL CIRCUIT RELIABILITY	$\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for U _c = 17 V, I _{min} = 5.4 mA)
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER 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.
POWER CONSUMPTION (PICK-UP) AT DC	2.6 W
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 screw 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)	P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)
RATED INSULATION VOLTAGE (UI)	690 V

Catalogs

Characteristic curve

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

PEP Eco-passport

System overview

Wiring diagrams

276414



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