



□□□□□

Eaton 276523

Eaton Moeller® series DILA Contactor relay,
110 V DC, 2 N/O, 2 NC, Spring-loaded
terminals, DC operation

□□□□

PRODUCT NAME	Eaton Moeller® series DILA Control relay
CATALOG NUMBER	276523
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	68 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.286 kg
COMPLIANCES	CE Marked
CERTIFICATIONS	UL 508 EN 60947-4-1 CSA Std. C22.2 No. 14-05 IEC 60947-4-1 VDE IEC/EN 60947 CE CSA-C22.2 No. 14-05 EN 60947-5-1 IEC/EN 60947-4-1 CSA Class No.: 3211-03 CSA CSA File No.: 012528 UL File No.: E29184 VDE 0660 UL Category Control No.: NKCR UL
CATALOG NOTES	This item can only be ordered until December 31, 2023 with a maximum delivery date of May 31, 2024.

FEATURES

Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module

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.

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

Does not apply, since the entire switchgear needs to

00000

[eaton-contactors-dila-dilm7-15-dilmp20-il03407013z.pdf](#)

000

[eaton-contactors-contact-diler-relay-wiring-diagram-006.eps](#)

00

[eaton-contactors-frame-dilm-dimensions.eps](#)

[eaton-contactors-contact-dilm-dimensions.eps](#)

[eaton-contactors-dilm-3d-drawing-008.eps](#)

ASSEMBLIES	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.
FITTED WITH:	Built-in suppressor circuit Positive operation contacts Suppressor circuit
OPERATING FREQUENCY	9000 Operations/h
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W

HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.8 W
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS, DELAYED SWITCHING)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS, LEADING)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	2
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	2
POWER CONSUMPTION (PICK-UP) AT DC	2.6 W
POWER CONSUMPTION (SEALING) AT DC	2.6 W
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
CONNECTION TO SMARTWIRE-DT	No
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
CONNECTION	Spring-loaded terminals
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	12 ms
APPLICATION	Contactor relays
PRODUCT CATEGORY	DILA relays
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN

	50274)
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	16 A
VOLTAGE TYPE OF OPERATING VOLTAGE	AC/DC
RATED SWITCH CURRENT	16 A
OPERATING VOLTAGE AT AC, 50 HZ - MIN	17 V
OPERATING VOLTAGE AT AC, 50 HZ - MAX	500 V
OPERATING VOLTAGE AT AC, 60 HZ - MIN	17 V
OPERATING VOLTAGE AT AC, 60 HZ - MAX	500 V
OPERATING VOLTAGE AT DC - MIN	24 VDC
OPERATING VOLTAGE AT DC - MAX	220 VDC
SCREWDRIVER SIZE	0.6 x 3.5 mm, Spring-loaded terminals
VOLTAGE TYPE	DC
CODE NUMBER	22D
DEGREE OF PROTECTION	IP20
OVERVOLTAGE CATEGORY	III
CONTROL CIRCUIT RELIABILITY	$\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA)
CONNECTION TYPE (AUXILIARY CIRCUIT)	Spring clamp connection
DUTY FACTOR	100 %
LIFESPAN, MECHANICAL	20,000,000 Operations (DC operated)
MOUNTING METHOD	Screw
PICK-UP VOLTAGE	0.8 - 1.1 V DC x U_c 0.7 - 1.3 V DC x U_c (at 24 V: without auxiliary contact module and at ambient air temperature + 40 °C)
VOLTAGE TOLERANCE	Smoothed DC, three-phase bridge rectifiers or smoothed double-wave rectification
SAFE ISOLATION	400 V AC, Between coil and auxiliary contacts, According to EN 61140 400 V AC, Between auxiliary contacts, According to EN 61140

RATED OPERATIONAL CURRENT (IE)	5 A at 220 V, DC L/R \leq 15 ms (with 3 contacts in series) 2 A at 110 V, DC L/R \leq 50 ms (with 3 contacts in series) 10 A at 60 V, DC L/R \leq 15 ms (with 2 contacts in series) 1 A at 220 V, DC L/R \leq 15 ms (with 1 contact in series) 4 A at 24 V, DC L/R \leq 50 ms (with 3 contacts in series) 3 A at 110 V, DC L/R \leq 15 ms (with 1 contact in series) 10 A at 24 V, DC L/R \leq 15 ms (with 1 contact in series) 6 A at 110 V, DC L/R \leq 15 ms (with 3 contacts in series) 1 A at 220 V, DC L/R \leq 50 ms (with 3 contacts in series) 6 A at 60 V, DC L/R \leq 15 ms (with 1 contact in series) 4 A at 60 V, DC L/R \leq 50 ms (with 3 contacts in series) 16 A
SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	110 V
RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	4 A
RATED OPERATIONAL	4 A

CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	
RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V	1.5 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	15.5 A
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS	3 W
STRIPPING LENGTH (MAIN CABLE)	10 mm
SWITCHING TIME (DC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	31 ms
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.75 - 1.5) mm ² , Spring-loaded terminals with or without ferrule DIN 46228 2 x (0.75 - 1.5) mm ² , Spring-loaded terminals with or without ferrule DIN 46228
SHOCK RESISTANCE	7 g, N/O auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 10 ms 5 g, N/C auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 10 ms
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 14, Spring-loaded terminals
SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING	10 A gG/gL, 500 V, Max. Fuse, Contacts
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 2.5) mm ² , Spring-loaded terminals 2 x (0.75 - 2.5) mm ² , Spring-loaded terminals
ACTUATING VOLTAGE	110 V DC

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:



 Eaton House
30 Pembroke Road
Dublin 4,
Eaton.com

© 2025

Follow us on social media to get the latest product and support information.

