

## Eaton 276330

Eaton Moeller® series DILA Contactor relay,  
380 V 50 Hz, 440 V 60 Hz, 4 N/O, Screw  
terminals, AC operation

<b>PRODUCT NAME</b>	Eaton Moeller® series DILA Control relay
<b>CATALOG NUMBER</b>	276330
<b>PRODUCT LENGTH/DEPTH</b>	75 mm
<b>PRODUCT HEIGHT</b>	68 mm
<b>PRODUCT WIDTH</b>	45 mm
<b>PRODUCT WEIGHT</b>	0.237 kg
<b>CERTIFICATIONS</b>	IEC/EN 60947 CE CSA IEC/EN 60947-4-1 UL 508 VDE 0660 CSA Class No.: 3211-03 CSA File No.: 012528 UL Category Control No.: NKR CSA-C22.2 No. 14-05 EN 60947-5-1 UL UL File No.: E29184

<b>FEATURES</b>	Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.

<a href="#">eaton-contactors-dila-dilm7-15-dilmp20-il03407013z.pdf</a>
<a href="#">eaton-contactors-contact-diler-relay-wiring-diagram.eps</a>
<a href="#">eaton-contactors-module-dilm-dimensions.eps</a>
<a href="#">eaton-contactors-frame-dilm-dimensions.eps</a>
<a href="#">eaton-contactors-dilm-3d-drawing-007.eps</a>

<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>FITTED WITH:</b>	Positive operation contacts
<b>OPERATING FREQUENCY</b>	9000 Operations/h
<b>POLLUTION DEGREE</b>	3
<b>CLIMATIC PROOFING</b>	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	40 °C
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	-25 °C
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	80 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-40 °C
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	0 W

<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	0.5 W
<b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS, DELAYED SWITCHING)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	4
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS, LEADING)</b>	0
<b>NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)</b>	4
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX</b>	380 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN</b>	380 V
<b>CONNECTION TO SMARTWIRE-DT</b>	No
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	6000 V AC
<b>CONNECTION</b>	Screw terminals
<b>APPLICATION</b>	Contactor relays
<b>PRODUCT CATEGORY</b>	DILA relays
<b>PROTECTION</b>	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
<b>CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)</b>	16 A

<b>VOLTAGE TYPE OF OPERATING VOLTAGE</b>	AC/DC
<b>RATED SWITCH CURRENT</b>	16 A
<b>OPERATING VOLTAGE AT AC, 50 HZ - MIN</b>	17 V
<b>OPERATING VOLTAGE AT AC, 50 HZ - MAX</b>	500 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MIN</b>	17 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MAX</b>	500 V
<b>OPERATING VOLTAGE AT DC - MIN</b>	24 VDC
<b>OPERATING VOLTAGE AT DC - MAX</b>	220 VDC
<b>SCREWDRIVER SIZE</b>	2, Terminal screw, Pozidriv screwdriver 0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver
<b>VOLTAGE TYPE</b>	AC
<b>CODE NUMBER</b>	40D
<b>DEGREE OF PROTECTION</b>	IP20
<b>OVERVOLTAGE CATEGORY</b>	III
<b>CONTROL CIRCUIT RELIABILITY</b>	$\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA)
<b>CONNECTION TYPE (AUXILIARY CIRCUIT)</b>	Screw connection
<b>DUTY FACTOR</b>	100 %
<b>LIFESPAN, MECHANICAL</b>	20,000,000 Operations (AC operated)
<b>MOUNTING METHOD</b>	DIN-rail/screw
<b>PICK-UP VOLTAGE</b>	0.8 - 1.1 V AC x $U_c$ (voltage tolerance - single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz)
<b>POWER CONSUMPTION, PICK-UP, 50 HZ</b>	24 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
<b>SAFE ISOLATION</b>	400 V AC, Between auxiliary contacts, According to EN 61140 400 V AC, Between coil and auxiliary contacts,

	According to EN 61140
<b>POWER CONSUMPTION, PICK-UP, 60 HZ</b>	24 VA, AC, Single- frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
<b>SCREW SIZE</b>	M3.5, Terminal screw
<b>POWER CONSUMPTION, SEALING, 60 HZ</b>	1.4 W, AC, Single- frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
<b>RATED OPERATIONAL CURRENT (IE)</b>	6 A at 60 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 3 A at 110 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) 1 A at 220 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 1 A at 220 V, DC L/R $\leq$ 50 ms (with 3 contacts in series) 6 A at 110 V, DC L/R $\leq$ 15 ms (with 3 contacts in series) 4 A at 60 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) 10 A at 24 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 2 A at 110 V, DC L/R $\leq$ 50 ms (with 3 contacts in series) 5 A at 220 V, DC L/R $\leq$ 15 ms (with 3 contacts in series) 16 A
<b>POWER CONSUMPTION, SEALING, 50 HZ</b>	1.4 W, AC, Single- frequency coil 50 Hz and Dual-frequency coil 50/60 Hz 3.4 VA, AC, Single- frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
<b>SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)</b>	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
<b>SWITCHING CAPACITY (AUXILIARY CONTACTS,</b>	P300, DC operated (UL/CSA)

<b>PILOT DUTY)</b>	A600, AC operated (UL/CSA)
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX</b>	440 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN</b>	440 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>	0 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>	0 V
<b>RATED INSULATION VOLTAGE (UI)</b>	690 V
<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V</b>	4 A
<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V</b>	4 A
<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V</b>	1.5 A
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	15.5 A
<b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>	690 V
<b>STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS</b>	1.4 W
<b>STRIPPING LENGTH (MAIN CABLE)</b>	10 mm
<b>SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX</b>	21 ms
<b>SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN</b>	15 ms
<b>SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX</b>	18 ms
<b>SWITCHING TIME (AC</b>	9 ms

<b>OPERATED, MAKE CONTACTS, OPENING DELAY) - MIN</b>	
<b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>	1 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals 2 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals
<b>SHOCK RESISTANCE</b>	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
<b>TERMINAL CAPACITY (SOLID/STRANDED AWG)</b>	18 - 14, Screw terminals
<b>SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING</b>	10 A gG/gL, 500 V, Max. Fuse, Contacts
<b>TERMINAL CAPACITY (SOLID)</b>	2 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals 1 x (0.75 - 4) mm <sup>2</sup> , Screw terminals
<b>ACTUATING VOLTAGE</b>	380 V 50 Hz, 440 V 60 Hz

<b>PROJECT NAME:</b>
<b>PROJECT NUMBER:</b>
<b>PREPARED BY:</b>
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