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Eaton 199638

Eaton Moeller® series DILA Contactor relay,
230 V 50/60 Hz, 3 N/O, 1 NC, Push in
terminals, AC operation

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PRODUCT NAME	Eaton Moeller® series DILA Control relay
CATALOG NUMBER	199638
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	68 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.227 kg
CERTIFICATIONS	IEC/EN 60947 VDE 0660 EN 60947-5-1

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FEATURES	Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module
FITTED WITH:	Positive operation contacts
OPERATING FREQUENCY	9000 Operations/h
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
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
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS, DELAYED SWITCHING)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	3
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS, LEADING)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	3
RATED CONTROL SUPPLY	230 V

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DECLARATIONS OF CONFORMITY	eaton-control-relay-declaration-of-conformity-uk251205en.pdf
MCAD MODEL	eaton-iec-contactors-mcad-3d-models-dil-m7-15-pi.stp dil_m7_15_pi.dwg
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VOLTAGE (US) AT AC, 50 HZ - MAX	
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	230 V
CONNECTION TO SMARTWIRE-DT	No
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
CONNECTION	Push in terminals
APPLICATION	Contactor relays
PRODUCT CATEGORY	DILA relays
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
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	3.0 x 0.5 mm, Terminal screw
VOLTAGE TYPE	AC
CODE NUMBER	31E
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) $\lambda < 5 \times 1/10^7$ (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)	Push-in clamp connection

DUTY FACTOR	100 %
LIFESPAN, MECHANICAL	20,000,000 Operations (AC operated)
MOUNTING METHOD	DIN-rail/screw
PICK-UP VOLTAGE	0.8 - 1.1 V AC x Uc (voltage tolerance - dual frequency coil 50/60 Hz) 0.85 - 1.1 V AC x Uc
SAFE ISOLATION	400 V AC, Between coil and auxiliary contacts, According to EN 61140 400 V AC, Between auxiliary contacts, According to EN 61140
POWER CONSUMPTION, PICK-UP, 60 HZ	25 VA, AC, Dual-frequency coil at 60 Hz 27 VA, AC, Dual-frequency coil at 60 Hz
POWER CONSUMPTION, SEALING, 60 HZ	3.3 VA, Dual-frequency coil in a cold state and 1.0 x Us 1.4 W, Dual-frequency coil in a cold state and 1.0 x Us 4.2 VA, Dual-frequency coil in a cold state and 1.0 x Us
TERMINAL CAPACITY (FLEXIBLE WITH UNISOLATED FERRULE)	1 x (0.5 - 2.5) mm ² 2 x (0.5 - 2.5) mm ²
TERMINAL CAPACITY (FLEXIBLE WITH ULTRASONIC WELDED CABLE END)	1 x (0.5 - 2.5) mm ² 2 x (0.5 - 2.5) mm ²
RATED OPERATIONAL CURRENT (IE)	6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in series) 4 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in series) 10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in series) 3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series) 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series) 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series) 4 A at 24 V, DC L/R ≤ 50 ms (with 3 contacts in series) 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series) 6 A at 60 V, DC L/R ≤ 15 ms

	(with 1 contact in series) 1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in series) 2 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in series) 16 A
TERMINAL CAPACITY (FLEXIBLE)	1 x (0.5 - 2.5) mm ² 2 x (0.5 - 2.5) mm ²
	3.3 VA, Dual-frequency coil in a cold state and 1.0 x Us
POWER CONSUMPTION, SEALING, 50 HZ	4.2 VA, Dual-frequency coil in a cold state and 1.0 x Us 1.4 W, Dual-frequency coil in a cold state and 1.0 x Us
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	4 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V	4 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V	1.5 A
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
STRIPPING LENGTH (MAIN CABLE)	10 mm
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	21 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN	15 ms

SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	18 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MIN	9 ms
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.5 - 1.5) mm ² 1 x (0.5 - 2.5) mm ²
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)	20 - 14
SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING	10 A gG/gL, 500 V, Max. Fuse, Contacts
TERMINAL CAPACITY (SOLID)	1 x (0.5 - 2.5) mm ² 2 x (0.5 - 2.5) mm ²

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

