

Specifications

Photo is representative

Eaton 199637

Eaton Moeller® series DILA Contactor relay, 220 V 50/60 Hz, 4 N/O, Push in terminals, AC operation

General specifications

PRODUCT NAME	Eaton Moeller® series DILA Control relay
CATALOG NUMBER	199637
MODEL CODE	DILA-40(220V50/60HZ)-PI
EAN	4015081983384
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

Features & Functions

FEATURES	Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module
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FITTED WITH:	Positive operation contacts
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General

APPLICATION	Contactors relays
DEGREE OF PROTECTION	IP20
SHOCK RESISTANCE	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 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
LIFESPAN, MECHANICAL	20,000,000 Operations (AC operated)
MOUNTING METHOD	DIN-rail/screw
CONNECTION	Push in terminals
OPERATING FREQUENCY	9000 Operations/h
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	DILA relays
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
VOLTAGE TYPE	AC

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
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AMBIENT OPERATING TEMPERATURE - MAX	60 °C
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AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	25 °C
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AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
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AMBIENT STORAGE TEMPERATURE - MIN	40 °C
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AMBIENT STORAGE TEMPERATURE - MAX	80 °C
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CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
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Terminal capacities

TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.5 - 1.5) mm ² 1 x (0.5 - 2.5) mm ²
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TERMINAL CAPACITY (SOLID)	1 x (0.5 - 2.5) mm ² 2 x (0.5 - 2.5) mm ²
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TERMINAL CAPACITY (SOLID/STRANDED AWG)	20 - 14
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STRIPPING LENGTH (MAIN CABLE)	10 mm
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SCREWDRIVER SIZE	3.0 x 0.5 mm, Terminal screw
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Electrical rating

RATED OPERATIONAL CURRENT (IE)	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)
	3 A at 110 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)
	6 A at 60 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)
	10 A at 24 V, DC L/R \leq 15 ms (with 1 contact 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)
	1 A at 220 V, DC L/R \leq 50 ms (with 3 contacts in series)
	16 A

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 INSULATION VOLTAGE (UI)

690 V

RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX

690 V

SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING

10 A gG/gL, 500 V, Max. Fuse, Contacts

SAFE ISOLATION

400 V AC, Between coil and auxiliary contacts, According to EN 61140
400 V AC, Between

Magnet system

DUTY FACTOR

100 %

PICK-UP VOLTAGE

0.8 - 1.1 V AC x U_c (voltage tolerance - dual frequency coil 50/60 Hz)
0.85 - 1.1 V AC x U_c

POWER CONSUMPTION, PICK-UP, 60 HZ

27 VA, AC, Dual-frequency coil at 60 Hz
25 VA, AC, Dual-frequency coil at 60 Hz

POWER CONSUMPTION, SEALING, 50 HZ

4.2 VA, Dual-frequency coil in a cold state and 1.0 x U_s
1.4 W, Dual-frequency coil in a cold state and 1.0 x U_s
3.3 VA, Dual-frequency coil in a cold state and 1.0 x U_s

POWER CONSUMPTION, SEALING, 60 HZ

3.3 VA, Dual-frequency coil in a cold state and 1.0 x U_s
1.4 W, Dual-frequency coil in a cold state and 1.0 x U_s
4.2 VA, Dual-frequency coil in a cold state and 1.0 x U_s

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN

220 V

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX

220 V

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN

220 V

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX

220 V

RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN

0 V

RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX

0 V

SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN

15 ms

SWITCHING TIME (AC OPERATED, MAKE

21 ms

auxiliary contacts, According to EN 61140
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Communication

CONNECTION TO SMARTWIRE-DT	No
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CONTACTS, CLOSING DELAY) - MAX

SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MIN	9 ms
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SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	18 ms
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Contacts

CODE NUMBER	40E
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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)
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NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
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NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	0
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NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	4
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NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
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NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	4
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Resources

CATALOGUES

[Product Range Catalog](#)
[Switching and protecting
motors](#)

[eaton-product-overview-
for-machinery-catalogue-
ca08103003zen-en-us.pdf](#)

DECLARATIONS OF CONFORMITY

[DA-DC-00004811.pdf](#)

[DA-DC-00004789.pdf](#)

DRAWINGS

[eaton-contactors-
dimensions-007.eps](#)

ECAD MODEL

[ETN.199637.edz](#)

INSTALLATION VIDEOS

[WIN-WIN with push-in
technology](#)

MCAD MODEL

[dil_m7_15_pi.dwg](#)

[dil_m7_15_pi.stp](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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