DATASHEET - DILA-31(220V50/60HZ)-PI

Contactor relay, 220 V 50/60 Hz, 3 N/O, 1 NC, Push in terminals, AC operation

Powering Business Worldwide

Part no. DILA-31(220V50/60HZ)-PI
199639

Product name	Eaton Moeller® series DILA Control Relay
Part no.	DILA-31(220V50/60HZ)-PI
EAN	4015081983407
Product Length/Depth	75 millimetre
Product height	68 millimetre
Product width	45 millimetre
Product weight	0.227 kilogram
Certifications	EN 60947-5-1 IEC/EN 60947 VDE 0660
Product Tradename	DILA
Product Type	Control Relay
Product Sub Type	None
Catalog Notes	Coil terminal markings according to EN 50005 Contact numbers according to EN 50011 Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.
Features	Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module
Fitted with:	Positive operation contacts
Application	Contactor relays
Degree of protection	IP20
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
Lifespan, mechanical	20,000,000 Operations (AC operated)
Mounting method	DIN-rail/screw
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
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	60 °C
Ambient operating temperature (enclosed) - min	25 °C
Ambient operating temperature (enclosed) - max	40 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	80 °C
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Terminal capacity (flexible with ferrule)	1 x (0.5 - 1.5) mm^2, Control circuit cables 2 x (0.5 - 1.5) mm^2
Terminal capacity (solid)	2 x (0.5 - 2.5) mm^2, Control circuit cables 1 x (0.5 - 0.25) mm^2

Terminal capacity (solid/stranded AWG)			20 - 14
Stripping length (main cable)			10 mm
Screwdriver size			3.0 x 0.5 mm, Terminal screw
Rated operational current (Ie)			4 A at 24 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) 6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in series) 1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in series) 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series) 6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series) 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series) 1 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series) 3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series) 4 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in series) 2 A at 110 V, DC L/R ≤ 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 auxiliary contacts, According to EN 61140
Duty factor			100 %
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
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			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 3.3 VA, Dual-frequency coil in a cold state and 1.0 x Us
Power consumption, sealing, 60 Hz			1.4 W, Dual-frequency coil in a cold state and 1.0 x Us 3.3 VA, 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
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 contacts, closing delay) - max			21 ms
Switching time (AC operated, make contacts, opening delay) - min			9 ms
Switching time (AC operated, make contacts, opening delay) - max			18 ms
Connection			Push in terminals
Connection to SmartWire-DT			No
Code number			31E
Control circuit reliability			< 2 λ, < 1 failure at 100,000,000 Operations (at U# = 24 V DC, Umin = 17 V, Imin = 5.4 mA)
Number of auxiliary contacts (change-over contacts)			0
Number of contacts (normally closed contacts)			1
Number of contacts (normally open contacts)			3
Number of auxiliary contacts (normally closed contacts)			1
Number of auxiliary contacts (normally open contacts)			3

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Contactor relay (EC000196)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Contactor relay (ecl@ss10.0.1-27-37-10-01 [AAB716014])		
Rated control supply voltage Us at AC 50HZ	V	220 - 220

Rated control supply voltage Us at AC 60HZ		V	220 - 220
Rated control supply voltage Us at DC		V	0 - 0
Voltage type for actuating			AC
Rated operation current Ie, 400 V		A	4
Connection type auxiliary circuit			Spring clamp connection
Mounting method			DIN-rail/screw
Interface			No
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			3
Number of auxiliary contacts as normally closed contact, delayed switching			0
Number of auxiliary contacts as normally open contact, leading			0
Number of auxiliary contacts as change-over contact			0
With LED indication			No
Suitable for manual operation			No