DATASHEET - DILA-40(400V50HZ,440V60HZ)



Contactor relay, 400 V 50 Hz, 440 V 60 Hz, 4 N/O, Screw terminals, AC operation



Part no. DILA-40(400V50HZ,440V60HZ) 276331

Product name	Eaton Moeller® series DILA Control relay
Part no.	DILA-40(400V50HZ,440V60HZ)
EAN	4015082763312
Product Length/Depth	75 millimetre
Product height	68 millimetre
Product width	45 millimetre
Product width Product weight	0.237 kilogram
Compliances	CE Marked
Certifications	CSA Std. C22.2 No. 14-05 UL 508 EN 60947-4-1 IEC 60947-4-1 VDE CSA Class No.: 3211-03 IEC/EN 60947-4-1 CSA File No.: 012528 UL File No.: E29184 CSA EN 60947-5-1 UL IEC/EN 60947 VDE 0660 CE UL Category Control No.: NKCR CSA-C22.2 No. 14-05
Product Tradename	DILA
Product Type	Control relay
Product Sub Type	None
Catalog Notes Ceatures & Functions	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 cont module
Fitted with:	Positive operation contacts
eneral information	
Application	Contactor relays
Degree of protection	IP20
Shock resistance	5 g, N/C auxiliary contact, Basic unit with auxiliary contact module, Mechanica according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 7 g, N/O auxiliary contact, Basic unit with auxiliary contact module, Mechanica according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
Lifespan, mechanical	20,000,000 Operations (AC operated)
Mounting method	DIN rail
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 actuate from front (EN 50274)
Rated impulse withstand voltage (Uimp)	6000 V AC
Voltage type	AC
limatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	0° 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 capacities	
Terminal capacity (flexible with ferrule)	$2 \times (0.75 - 2.5) \text{ mm}^2$, Screw terminals $1 \times (0.75 - 2.5) \text{ mm}^2$, Screw terminals
Terminal capacity (solid)	$1 \times (0.75 - 4) \text{ mm}^2$, Screw terminals $2 \times (0.75 - 2.5) \text{ mm}^2$, Screw terminals
Terminal capacity (solid/stranded AWG)	18 - 14, Screw terminals
Stripping length (main cable)	10 mm
Screw size	M3.5, Terminal screw
Screwdriver size	2, Terminal screw, Pozidriv screwdriver 0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver
Tightening torque	1.2 Nm, Screw terminals
lectrical rating	
Conventional thermal current ith at 60°C (3-pole, open)	16 A
Rated operational current (le)	1 A at 220 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) 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) 6 A at 110 V, DC L/R \leq 15 ms (with 3 contacts in series) 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) 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) 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)
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
Switching capacity (auxiliary contacts, general use)	15 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)
lagnet system	
Duty factor	100 %
Pick-up voltage	0.8 - 1.1 V AC x Uc (voltage tolerance - single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz)
Power consumption, pick-up, 50 Hz Power consumption, pick-up, 60 Hz	24 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz 24 VA, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Power consumption, sealing, 50 Hz	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
Power consumption, sealing, 60 Hz	1.4 W, AC, Single-frequency coil 50 Hz and Dual-frequency coil 50/60 Hz
Rated control supply voltage (Us) at AC, 50 Hz - min	400 V
Rated control supply voltage (Us) at AC, 50 Hz - max	400 V
Rated control supply voltage (Us) at AC, 60 Hz - min	440 V
Rated control supply voltage (Us) at AC, 60 Hz - max	440 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
Communication	

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10.2.5 Lifting 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 assemblies 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. 10.9.2 Power-frequency electric strength Is the panel builder's responsibility. 10.9.3 Impulse withstand voltage Is the panel builder's responsibility. 10.10 Temperature rise The panel builder is responsibility. 10.10 Temperature rise The panel builder's responsibility. 10.11 Short-circuit rating Is the panel builder's responsibility. The specifications for the switchgear mus observed. 10.12 Electromagnetic compatibility Is the panel builder's responsibility. The specifications for the switchgear mus observed. 10.13 Mechanical function The device meets the requirements, provided the information in the instruction	10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.
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observed. 10.13 Mechanical function The device meets the requirements, provided the information in the instruction	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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Contactor relay (EC000196)				
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Contactor relay (ecl@ss13-27-37-10-01 [AAB716019])				
Rated control supply voltage AC 50 Hz	V	400 - 400		
Rated control supply voltage AC 60 Hz	V	440 - 440		
Rated control supply voltage DC	V	0 - 0		
Voltage type for actuating		AC		
Rated operation current	А	16		
Rated operation current le, 400 V	Α	4		
Mounting method		DIN rail		
With LED indication		No		
Suitable for manual operation		No		
Interface		No		
Number of auxiliary contacts as normally closed contact		0		

Number of auxiliary contacts as normally open contact		4
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
Operating voltage AC 50 Hz	V	17 - 500
Operating voltage AC 60 Hz	V	17 - 500
Operating voltage DC	V	24 - 220
Voltage type (operating voltage)		AC/DC
Rated switch current	Α	16
Connection type auxiliary circuit		Screw connection
Width	mm	45
Height	mm	68
Depth	mm	75