DATASHEET - DILA-XHIR22

Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Microswitch, Front fixing, Screw terminals, DILA, DILM7 - DILM38

Part no.	**DILA-XHIR22**
	139580
EL Number (Norway)	**4110223**

General specifications

Product name	Eaton Moeller® series DILA Accessory Auxiliary contact module
Part no.	DILA-XHIR22
EAN	4015081363582
Product Length/Depth	45 millimetre
Product height	42 millimetre
Product width	36 millimetre
Product weight	0.05 kilogram
Certifications	IEC/EN 60947-4-1 CSA File No.: 012528 UL 508 CSA-C22.2 No. 14-05 UL Category Control No.: NKCR VDE 0660 CE UL File No.: E29184 CSA UL IEC/EN 60947 CSA Class No.: 3211-03
Product Tradename	DILA
Product Type	Accessory
Product Sub Type	Auxiliary contact module

Features & Functions

Features	Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)
Functions	For standard applications For electronic applications
Fitted with:	Interlocked opposing contacts Switching elements according to EN 50005
Number of poles	Four-pole
Electric connection type	Screw connection

General information

Connection	Screw terminals
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, electrical	1,300,000 Operations (at DC-12, 24 V / 50 mA) 1,300,000 Operations (at 230 V, AC-15, 3 A)
Lifespan, mechanical	10,000,000 Operations (AC operated) 10,000,000 Operations (DC operated)
Model	Top mounting
Mounting method	Front fastening
Operating frequency	9000 Operations/h
Overvoltage category	III
Pollution degree	3
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
Type	Front mounting auxiliary contact

Climatic environmental conditions

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 capacities

Terminal capacity (flexible with ferrule)	1 x (0.75 - 1.5) mm^2, Screw terminals 2 x (0.75 - 1.5) mm^2, Screw terminals
Terminal capacity (solid)	1 x (0.75 - 2.5) mm^2, Screw terminals 2 x (0.75 - 2.5) mm^2, Screw terminals
Terminal capacity (solid/stranded AWG)	18 - 14, Screw terminals
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

Electrical rating

Conventional thermal current ith at 60°C (3-pole, open)	16 A
Conventional thermal current ith of auxiliary contacts (1-pole, open)	0.5 A
Rated operational current (Ie)	6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series) 10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in series) 0.5 A at DC-12, 24 V 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) 3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series) 0.5 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in series) 1 A at 60 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) 10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series) 0.3 A at DC-12, 60 V 0.1 A at AC-12, 240 V 2.5 A at 24 V, DC L/R ≤ 50 ms (with 3 contacts in series) 0.25 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series)
Rated operational current (Ie) - min	1 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 operational current (Ie) at DC-13, 24 V	2.5 A
Rated operational current (Ie) at DC-13, 60 V	1 A
Rated operational current (Ie) at DC-13, 110 V	0.5 A
Rated operational current (Ie) at DC-13, 220 V, 230 V	0.25 A
Rated operational voltage (Ue) - min	3 V
Rated operational voltage (Ue) at DC - max	60 V
Rated insulation voltage (Ui)	690 V
Rated operational voltage (Ue) at AC - max	500 V
Short-circuit protection rating	Max. 10 A gG/gL, Fuse, Without welding, Auxiliary contacts
Short-circuit protection rating without welding	10 A gG/gL, 500 V, Max. Fuse, Contacts 1.6 A gG/gL, Max. Fuse, Electrical specifications for microswitch auxiliary contacts 53-54 and 81-82
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)	0.1 A, 250 V DC, (UL/CSA)

Contacts

Code number	51E in combination with DILA(C)-40 42 in combination with DILA(C)-31 33 in combination with DILA(C)-22
Control circuit reliability	$\lambda < 5.3 \times 1/10^8$ (1 failure at 19,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = 1 mA) $\lambda < 1/10^8$ (1 failure at 100,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = 5.4 mA)
Number of contacts (change-over contacts)	0
Number of contacts (normally closed contacts)	2
Number of contacts (normally open contacts)	2

Design verification

Equipment heat dissipation, current-dependent Pvid	0 W

Heat dissipation capacity Pdiss			0 W
Heat dissipation per pole, current-dependent Pvid			0.16 W
Rated operational current for specified heat dissipation (In)			4 A
Static heat dissipation, non-current-dependent Pvs			0 W
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			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			Does not apply, since the entire switchgear needs to be evaluated.
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.
10.8 Connections for external conductors			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.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
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) / Auxiliary contact block (EC000041)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss13-27-37-13-02 [AKN342018])			
Number of contacts as change-over contact			0
Number of contacts as normally open contact			2
Number of contacts as normally closed contact			2
Number of fault-signal switches			0
Rated operation current Ie at AC-15, 230 V		A	4
Type of electric connection			Screw connection
Model			Clip-on
Mounting method			Front fastening
Lamp holder			None