

**Auxiliary contact module, 4 pole, Ith= 16 A, 3 N/O, 1 NC, Front fixing,  
Screw terminals, DILA, DILM7 - DILM38**



**Part no. DILA-XHI31**

**276427**

**EL Number**

**4130218**

**(Norway)**

<b>General specifications</b>	
Product name	Eaton Moeller® series DILA Accessory Auxiliary contact module
Part no.	DILA-XHI31
EAN	4015082764272
Product Length/Depth	45 millimetre
Product height	38 millimetre
Product width	36 millimetre
Product weight	0.048 kilogram
Certifications	CSA Class No.: 3211-03 UL File No.: E29184 UL Category Control No.: NKCR UL 508 CSA File No.: 012528 UL CE IEC/EN 60947 CSA-C22.2 No. 14-05 IEC/EN 60947-4-1 CSA VDE 0660
Product Tradename	DILA
Product Type	Accessory
Product Sub Type	Auxiliary contact module
Catalog Notes	Auxiliary contacts used as mirror contacts (according to IEC/EN 60947-4-1 Appendix F (not N/C late open)) Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside the auxiliary contact modules, also for the integrated auxiliary contacts of the DILM 7 - DILM32 Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified. Version E combinations correspond to EN 50011 and are to be preferred.
<b>Features &amp; Functions</b>	
Features	Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)
Functions	For standard applications
Fitted with:	Switching elements according to EN 50005 Interlocked opposing contacts
Number of poles	Four-pole
Electric connection type	Screw connection
<b>General information</b>	
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, electrical	1,300,000 Operations (at 230 V, AC-15, 3 A)
Lifespan, mechanical	10,000,000 Operations (DC operated) 10,000,000 Operations (AC 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

<b>Climatic environmental conditions</b>		
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
<b>Terminal capacities</b>		
Terminal capacity (flexible with ferrule)		1 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals 2 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals
Terminal capacity (solid)		2 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals 1 x (0.75 - 2.5) mm <sup>2</sup> , 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
<b>Electrical rating</b>		
Conventional thermal current I <sub>th</sub> at 60°C (3-pole, open)		16 A
Rated operational current (I <sub>e</sub> )		0.5 A at 110 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 110 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) 1 A at 220 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) 3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series) 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) 5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series) 1 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in series)
Rated operational current (I <sub>e</sub> ) at AC-15, 220 V, 230 V, 240 V		4 A
Rated operational current (I <sub>e</sub> ) at AC-15, 380 V, 400 V, 415 V		4 A
Rated operational current (I <sub>e</sub> ) at AC-15, 500 V		1.5 A
Rated operational current (I <sub>e</sub> ) at DC-13, 24 V		2.5 A
Rated operational current (I <sub>e</sub> ) at DC-13, 60 V		1 A
Rated operational current (I <sub>e</sub> ) at DC-13, 110 V		0.5 A
Rated operational current (I <sub>e</sub> ) at DC-13, 220 V, 230 V		0.25 A
Rated insulation voltage (U <sub>i</sub> )		690 V
Rated operational voltage (U <sub>e</sub> ) 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
Safe isolation		400 V AC, Between auxiliary contacts, According to EN 61140 400 V AC, Between coil and auxiliary contacts, According to EN 61140
Switching capacity (auxiliary contacts, general use)		10 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)
<b>Contacts</b>		
Code number		53 in combination with DILA(C)-22 62 in combination with DILA(C)-31 71E in combination with DILA(C)-40
Control circuit reliability		$\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for U# = 24 V DC, U <sub>min</sub> = 17 V, I <sub>min</sub> = 5.4 mA)
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		3
<b>Design verification</b>		
Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0.16 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		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			3
Number of contacts as normally closed contact			1
Number of fault-signal switches			0
Rated operation current I <sub>e</sub> at AC-15, 230 V		A	4
Type of electric connection			Screw connection
Model			Clip-on
Mounting method			Front fastening
Lamp holder			None