

**Auxiliary contact module, 2 pole, 2 N/O, Front fixing, Screw terminals,  
DILE(E)M, DILER**


**Part no.**                    **20DILE**  
**010208**  
**EL Number**            **4130373**  
**(Norway)**

<b>General specifications</b>		
Product name		Eaton Moeller® series DILE Accessory Auxiliary contact module
Part no.		20DILE
EAN		4015080102083
Product Length/Depth		36 millimetre
Product height		32 millimetre
Product width		45 millimetre
Product weight		0.03 kilogram
Certifications		CSA UL UL Category Control No.: NKCR CSA-C22.2 No. 14-05 CE UL 508 CSA File No.: 012528 CSA Class No.: 3211-03 IEC/EN 60947-4-1 VDE 0660 UL File No.: E29184 IEC/EN 60947
Product Tradename		DILE
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)) Conventional thermal current at maximum permissible ambient air temperature. 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 DILE(E)M Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified. Switching elements according to EN 50012 are to be preferred. Version E combinations correspond to EN 50011 and are to be preferred.
<b>Features &amp; Functions</b>		
Electric connection type		Screw connection
Features		Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)
Fitted with:		Switching elements according to EN 50005 Interlocked opposing contacts
Functions		For standard applications
Number of poles		Two-pole
<b>General information</b>		
Degree of protection		IP20
Lifespan, mechanical		20,000,000 Operations (DC operated) 10,000,000 Operations (AC operated) 200,000 Operations (at 240 V, AC-15) 150,000 Operations (at 240 V, DC, L/R = 50 ms: 2 contacts in series 0.5 A)
Model		Top mounting
Mounting method		Front fastening
Mounting position		As required (except vertical with terminals A1/A2 at the bottom)
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
Shock resistance		10 g, N/O contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

		8 g, N/C contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
<b>Climatic environmental conditions</b>		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		50 °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)		2 x (0.75 - 1.5) mm <sup>2</sup> 1 x (0.75 - 1.5) mm <sup>2</sup>
Terminal capacity (solid)		2 x (0.75 - 2.5) mm <sup>2</sup> 1 x (0.75 - 2.5) mm <sup>2</sup>
Terminal capacity (solid/stranded AWG)		Single 18 – 14, double 18 – 14
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>		
Rated operational voltage (Ue) at AC - max		600 V
Rated insulation voltage (Ui)		690 V
Rated operational current (Ie)		1.5 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in series) 0.5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series) 2.5 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series) 2.5 A at 24 V, DC L/R ≤ 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		2 A
Rated operational current (Ie) at AC-15, 500 V		1.5 A
Safe isolation		300 V AC, Between auxiliary contacts, According to EN 61140 300 V AC, Between coil and auxiliary contacts, According to EN 61140
<b>Short-circuit rating</b>		
Short-circuit protection rating		10 A fast, 500V, Maximum fuse, Short-circuit rating without welding, Contacts
Short-circuit protection rating without welding		6 A gG/gL, 500 V, Max. Fuse, Contacts
<b>Conventional thermal current Ith</b>		
Conventional thermal current Ith of auxiliary contacts (1-pole, open)		10 A
<b>Switching capacity</b>		
Switching capacity (auxiliary contacts, general use)		0.5 A, 250 V DC, (UL/CSA) 10 A, 600 V AC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)		A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)
<b>Contacts</b>		
Code number		60E 51 in combination with DILER-31(-G) 42 in combination with DILER-22
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 contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		0
Number of contacts (normally open contacts)		2
<b>Design verification</b>		
Equipment heat dissipation, current-dependent Pvid		0 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		0.24 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 (ecI@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			0
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