

Auxiliary contact module, 2 pole, 2 NC, Front fixing, Screw terminals, DILE(E)M, DILER

Part no.	02DILE
Catalog No.	010240
Alternate Catalog No.	XTMCXFA02
EL-Nummer (Norway)	4130371

Delivery program

Accessories	Auxiliary contact modules		
Description	with interlocked opposing contacts Switching elements according to EN 50005 Switching elements according to EN 50012 are to be preferred. Version E combinations correspond to EN 50011 and are to be preferred.		
Function	for standard applications		
Number of poles	2 pole		
Connection technique	Screw terminals		
Rated operational current			
AC-15			
220 V 230 V 240 V	I _e	A	4
380 V 400 V 415 V	I _e	A	2
Contacts			
N/C = Normally closed	2 NC		
Mounting type	Front fixing		
For use with	DILEM-10(-G)(...) DILEM-01(-G)(...) DILEM-4(-G)(...) DILER40(-G) DILER31(-G) DILER22 DILEEM-10(-G)(...) DILEEM-01(-G)(...) DILEM12-10(-G)(...) DILEM12-01(-G)(...)		
Instructions	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 Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)		
Code number and version of combination			
Distinctive number	42 E		
with basic device	DILER-40(-G)		
	33		
with basic device	DILER-31(-G)		
	24		
with basic device	DILER-22		

Technical data

General			
Standards	IEC/EN 60947, VDE 0660, UL, CSA		
Lifespan, mechanical			
AC operated	Operations	$\times 10^6$	10
DC operated	Operations	$\times 10^6$	20
Component lifespan at U _e = 240 V			
AC-15	Operations	$\times 10^6$	0.2
DC			
L/R = 50 ms: 2 contacts in series at I _e = 0.5 A	Operations	$\times 10^6$	0.15
Maximum operating frequency	Operations/h	9000	
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30		

Ambient temperature			
Open	°C	-25 - +50	
Enclosed	°C	-25 - 40	
Ambient temperature, storage	°C	-40 - 80	
Mounting position			
Mounting position			As required, except vertical with terminals A1/A2 at the bottom
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
Basic unit with auxiliary contact module	g		
N/O contact	g	10	
N/C contact	g	8	
Degree of Protection			IP20
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Weight	kg	0.03	
Terminal capacities	mm ²		
Screw terminals			
Solid	mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)	
Flexible with ferrule	mm ²	1 x (0.75 - 1.5) 2 x (0.75 - 1.5)	
Solid or stranded	AWG	Single 18 – 14/Double 18 – 14	
Terminal screw		M3.5	
Pozidriv screwdriver	Size	2	
Standard screwdriver	mm	0.8 x 5.5 1 x 6	
Max. tightening torque	Nm	1.2	

Contacts

Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L)			Yes
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U _i	V AC	690
Rated operational voltage	U _e	V AC	600
Safe isolation to EN 61140			
between coil and auxiliary contacts		V AC	300
between the auxiliary contacts		V AC	300
Rated operational current		A	
Conventional free air thermal current, 1 pole			
Notes			At maximum permissible ambient air temperature.
Conv. thermal current	I _{th}	A	10
AC-15			
220 V 230 V 240 V	I _e	A	4
380 V 400 V 415 V	I _e	A	2
500 V	I _e	A	1.5
DC current			Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≤ 15 ms		A	
Contacts in series:			
1	24 V	A	2.5
2	60 V	A	2.5
3	110 V	A	1.5
3	220 V	A	0.5
Control circuit reliability	Failure rate	λ	<10 ⁻⁸ , < one failure at 100 million operations (at U _e = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA)
Short-circuit rating without welding			
Maximum overcurrent protective device			
220 V 230 V 240 V	PKZM0	4	

380 V 400 V 415 V	PKZM0	4	
Short-circuit protection maximum fuse			
500 V	A gG/gL	6	
500 V	A fast	10	
Current heat loss at I_{th}			
AC operated	W	1.5	
DC operated	W	1.5	
Current heat loss per auxiliary circuit at I_e (AC-15/230 V)	CO	0.24	

Rating data for approved types

Auxiliary contacts			
Pilot Duty			
AC operated		A600	
DC operated		P300	
General Use			
AC	V	600	
AC	A	10	
DC	V	250	
DC	A	0.5	

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	4
Heat dissipation per pole, current-dependent	P_{vid}	W	0.24
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 8.0

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@ss10.0.1-27-37-13-02 [AKN342013])

Number of contacts as change-over contact		0
Number of contacts as normally open contact		0
Number of contacts as normally closed contact		2
Number of fault-signal switches		0
Rated operation current I_e at AC-15, 230 V	A	4
Type of electric connection		Screw connection
Model		Top mounting
Mounting method		Front fastening
Lamp holder		None