### **DATASHEET - 11DILE**



Auxiliary contact module, 2 pole, 1 N/O, 1 NC, Front fixing, Screw terminals, DILE(E)M, DILER



Part no. 11DILE Catalog No. 010224 Alternate Catalog XTMCXFA11

No.

**EL-Nummer** 4130372

(Norway)

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		, 6.0	9.4

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 <sub>e</sub>	Α	4
380 V 400 V 415 V	I <sub>e</sub>	Α	2
Contacts			
N/0 = Normally open			1 N/O
N/C = Normally closed			1 NC
Mounting type			Front fixing
Contact sequence			53 <u>6</u> 1  54 62
For use with			DILEM-10(-G)() DILEM-01(-G)() DILEM-4(-G)() DILER40(-G) DILER31(-G) DILER22 DILEEM-10(-G)() DILEEM-01(-G)() DILEEM12-10(-G)() DILEM12-10(-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)N 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			51 E
with basic device			DILER-40(-G)
			42
with basic device			DILER-31(-G)
			33
with basic device			DILER-22

### **Technical data**

#### General

delieral			
Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10 <sup>6</sup>	10
DC operated	Operations	x 10 <sup>6</sup>	20

Component lifespan at $U_{\rm e}$ = 240 V			
AC-15	Operations	x 10 <sup>6</sup>	0.2
DC			
$L/R = 50$ ms: 2 contacts in series at $I_e = 0.5$ A	Operations	x 10 <sup>6</sup>	0.15
Maximum operating frequency	Operations/h		9000
Climatic proofing			Damp heat, constant, to IEC 60068-2-78
Ambientamentus			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 <sup>2</sup>	
Screw terminals			
Solid		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.75 - 1.5)
			2 x (0.75 - 1.5)
Solid or stranded		AWG	Single 18 – 14/Double 18 – 14
Terminal screw		0:	M3.5
Pozidriv screwdriver Standard screwdriver		Size	2 0.8 × 5.5
Standard Screwdiver		mm	1x6
Max. tightening torque		Nm	1.2
Contacts			W.
Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-Annex L) $$			Yes
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage	U <sub>e</sub>	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		Α	
Conventional free air thermal current, 1 pole			
Notes		^	At maximum permissible ambient air temperature.
Conv. thermal current	I <sub>th</sub>	Α	10
AC-15 220 V 230 V 240 V		۸	4
	l <sub>e</sub>	Α	
380 V 400 V 415 V	l <sub>e</sub>	Α	2
500 V	l <sub>e</sub>	А	1.5
DC current			Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≦ 15 ms			owner-on and switch-on conditions based on bo-13, time constant as specified.
Contacts in series:		A	
1	24 V	A	2.5

2	60 V	Α	2.5
3	110 V	Α	1.5
3	220 V	Α	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 <sub>th</sub>			
AC operated		W	1.5
DC operated		W	1.5
Current heat loss per auxiliary circuit at $I_{\rm e}$ (AC-15/230 V)		CO	0.24
Rating data for approved types			
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			

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Α

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Α

600

10

250

0.5

# Design verification as per IEC/EN 61439

AC AC

DC

DC

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	4
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.24
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
EC/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.

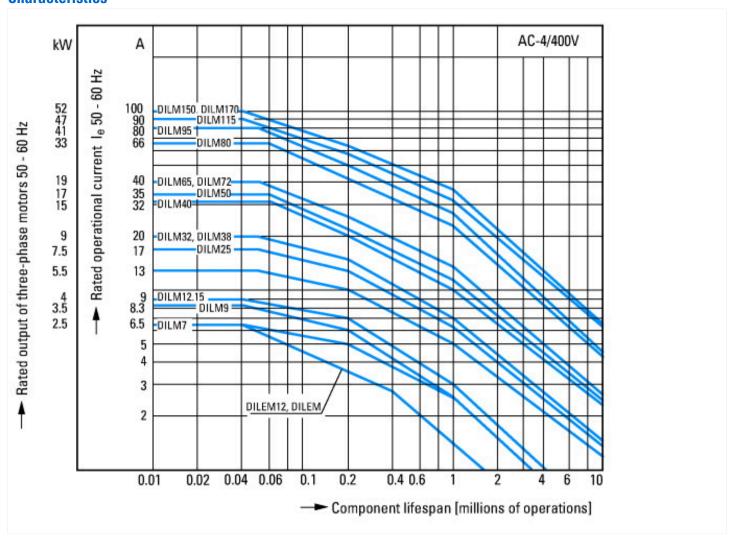
## **Technical data ETIM 7.0**

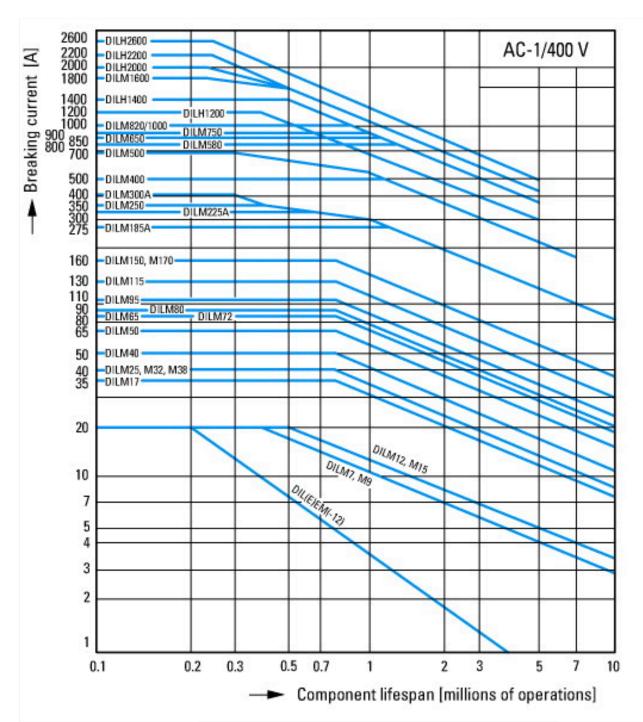
Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])			
Number of contacts as change-over contact			0
Number of contacts as normally open contact			1
Number of contacts as normally closed contact			1
Number of fault-signal switches			0
Rated operation current le at AC-15, 230 V		Α	4
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Front fastening
Lamp holder			None

### **Approvals**

UL File No. E29184  UL Category Control No. NKCR  CSA File No. 012528  CSA Class No. 3211-03  North America Certification UL listed, CSA certified	PP	
UL Category Control No.  CSA File No.  CSA Class No.  NKCR  012528  CSA Class No.  3211-03  North America Certification  UL listed, CSA certified	Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
CSA File No. 012528 CSA Class No. 3211-03 North America Certification UL listed, CSA certified	UL File No.	E29184
CSA Class No. 3211-03  North America Certification UL listed, CSA certified	UL Category Control No.	NKCR
North America Certification  UL listed, CSA certified	CSA File No.	012528
	CSA Class No.	3211-03
Specially designed for North America No	North America Certification	UL listed, CSA certified
	Specially designed for North America	No

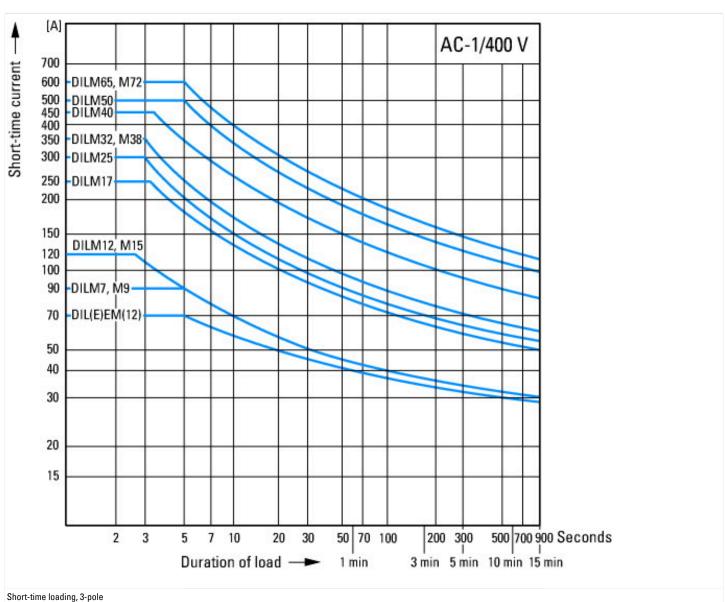
### **Characteristics**





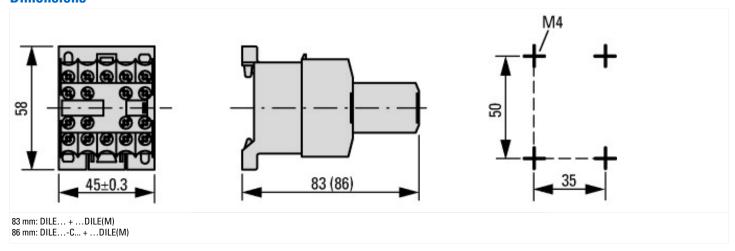
Switching duty for non-motor loads, 3-pole, 4-pole Operating characteristics
Non-inductive or slightly inductive loads
Electrical characteristics
Make: 1 x rated current
Break: 1 x rated current
Utilization category
100 % AC-1

Typical applications Electric heat



Time interval between two loading cycles: 15 minutes

#### **Dimensions**



### **Additional product information (links)**

IL03407009Z (AWA2100-0882) Mini contactor relay

IL03407009Z (AWA2100-0882) Mini contactor relay

 $https://es-assets.eaton.com/DOCUMENTATION/AWA\_INSTRUCTIONS/IL03407009Z2020\_05.pdf$