DATASHEET - 11DDILE



Auxiliary contact module, 1N/0 early+1N/C late, surface mounting, screw connection



Part no. 11DDILE Catalog No. 049824 Alternate Catalog XTMCXFAL11

No.

EL-Nummer 0004110174

(Norway)

Delivery program

Delivery program			
Accessories			Auxiliary contact modules
Function			for standard applications
Number of poles			2 pole
Connection technique			Screw terminals
Rated operational current			
AC-15			
220 V 230 V 240 V	l _e	Α	4
380 V 400 V 415 V	l _e	Α	2
Contacts			
N/O _E : NO early-make			1 N/0 _E
NC_L = NC late-break			1 NC _L
Mounting type			Front fixing
			-\frac{1^{57}}{58} \frac{65}{66}
For use with			DILEM-10(-G)() DILEM-4(-G)() DILER40(-G) DILER31(-G) DILER22 DILEEM-10(-G)() DILEEM-10(-G)() DILEEM-10(-G)() DILEM12-10(-G)() DILEM12-10(-G)()
Code number and version of combination			
Distinctive number			51
with basic device			DILER-40(-G)
			42
with basic device			DILER-31(-G)
			33
with basic device			DILER-22

Technical data

General

donoral			
Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10 ⁶	10
DC operated	Operations	x 10 ⁶	20
Component lifespan at $U_e = 240 \text{ V}$			
AC-15	Operations	x 10 ⁶	0.2
DC			
$L/R = 50$ ms: 2 contacts in series at $I_e = 0.5$ A	Operations	x 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			Jamp 116at, Cyclic, to 1EO 00000°2°30
Open		°C	-25 - +50
Enclosed		°C	- 25 - 40
Ambient temperature, storage		°C	- 40 - 80
Mounting position			A
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	2 x (0.75 - 1.5) Single 18 – 14/Double 18 – 14
		AVVU	-
Terminal screw		Ci	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-Annex L)	1		No
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage	U _e	V AC	600
Safe isolation to EN 61140	-6		
		V A C	200
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 _{th}	Α	10
AC-15			
220 V 230 V 240 V	I _e	Α	4
380 V 400 V 415 V	I _e	Α	2
500 V	l _e	Α	1.5
DC current			
			Switch-on and switch-off conditions based on DC-13, time constant as specified.
DC L/R ≦ 15 ms			
Contacts in series:		Α	
1	24 V	Α	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)

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	Α	10
DC	V	250
DC	Α	0.5

Design verification as per IEC/EN 61439

Fechnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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.	uiss	°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 b observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed.

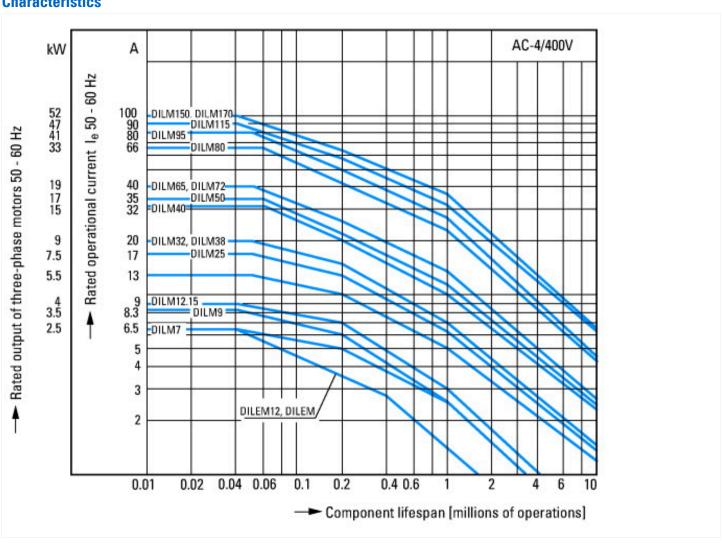
Technical data ETIM 7.0

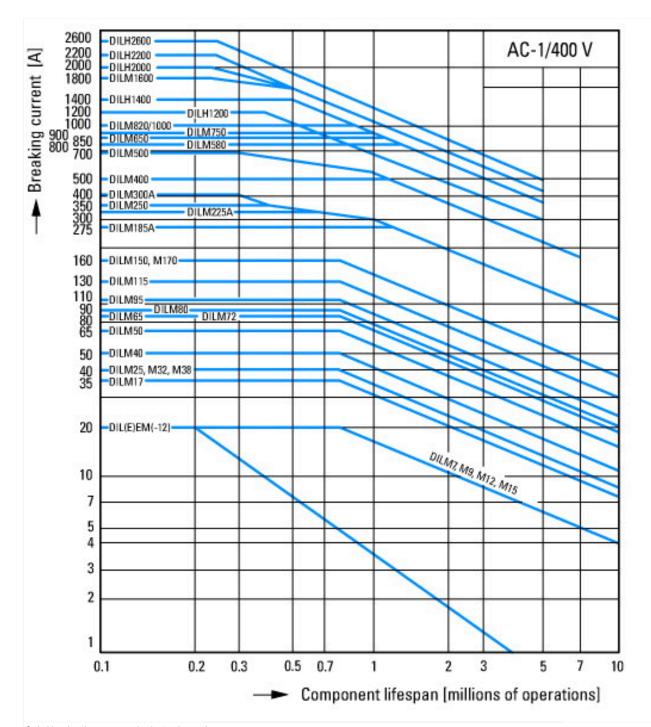
Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])			
Number 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	١	4
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Front fastening
Lamp holder			None

Approvals

Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
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
Specially designed for North America	No

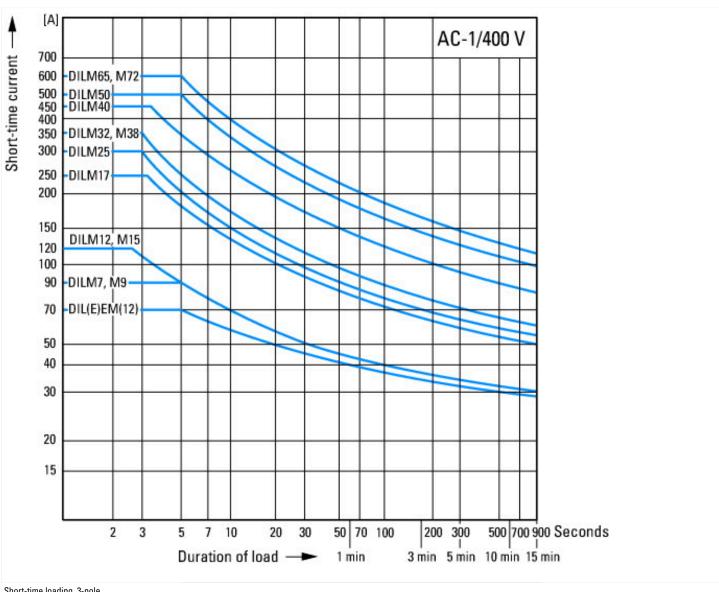
Characteristics





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

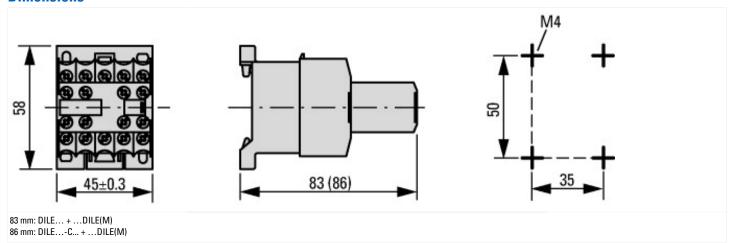
Electric heat



Short-time loading, 3-pole

Time interval between two loading cycles: 15 minutes

Dimensions



Eaton 049824 ED2019 V56.0 EN

Assets (links)

Declaration of CE Conformity

00003110

Instruction Leaflets

IL03407009Z2018_04

Additional product information (links)

IL03407009Z (AWA2100-0882) Mini contactor relay