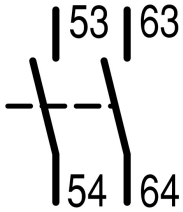
Auxiliary contact module, 2N/O

Part no.	**20DILE**
Catalog No.	**010208**
Eaton Catalog No.	**XTMCXFA20**
EL-Nummer (Norway)	**4130373**

Powering Business Worldwide™

Delivery program

Product range			Accessories
Accessories			Auxiliary contact modules
Description			with interlocked opposing contacts
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/O = Normally open			2 N/O
Mounting type			Front fixing
Contact sequence			
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			60 E
with basic device			DILER-40(-G)
			51
with basic device			DILER-31(-G)
			42
with basic device			DILER-22

Technical data

Auxiliary contacts

flexible with ferrule			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, 3 pole, 50 - 60 Hz			
Open			
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			
DC-13 L/R - 15 ms			
Contacts in series:		A	
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 (at U_e = 24 V DC, U_{min} = 17 V, I_{min}= 5.4 mA)	Failure rate	λ	$<10^{-8}$, < one failure at 100 million operations
Component lifespan at U_e = 240 V			
AC-15	Operations	x 10^6	0.2
DC			
Footnote			Switch-on and switch-off conditions based on DC-13, time constant as specified
L/R = 50 ms: 2 contacts in series at I_e = 0.5 A	Operations	x 10^6	0.15
Short-circuit rating without welding			
Maximum overcurrent protective device			
Short-circuit protection only			PKZM0-4
Short-circuit protection maximum fuse			
500 V		A gG/gL	6
500 V		A fast	10
Current heat loss at I_{th}			
Per contact		W	1.5
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	18 - 14
Stripping length		mm	8
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

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 max.		°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.

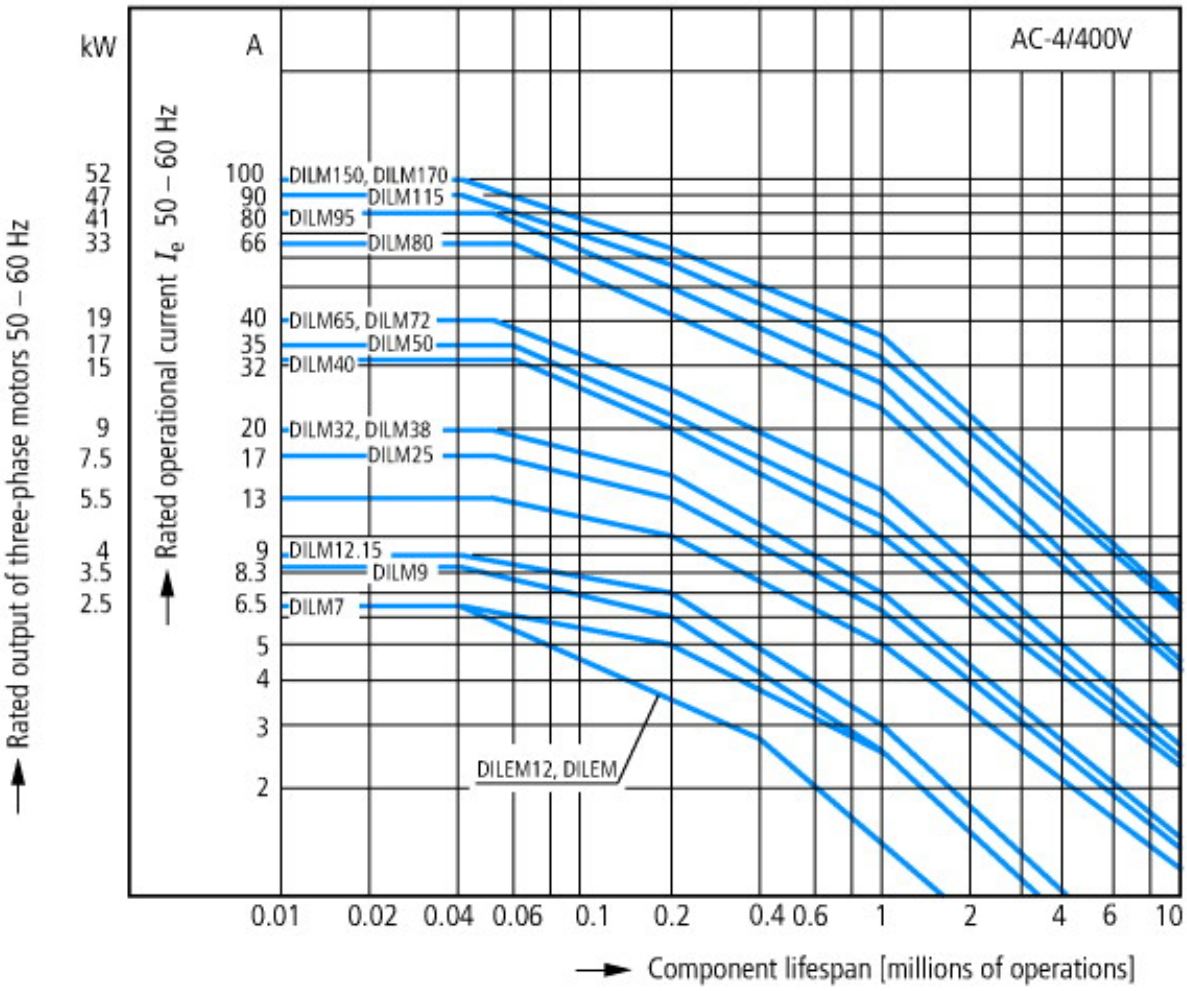
Technical data ETIM 6.0

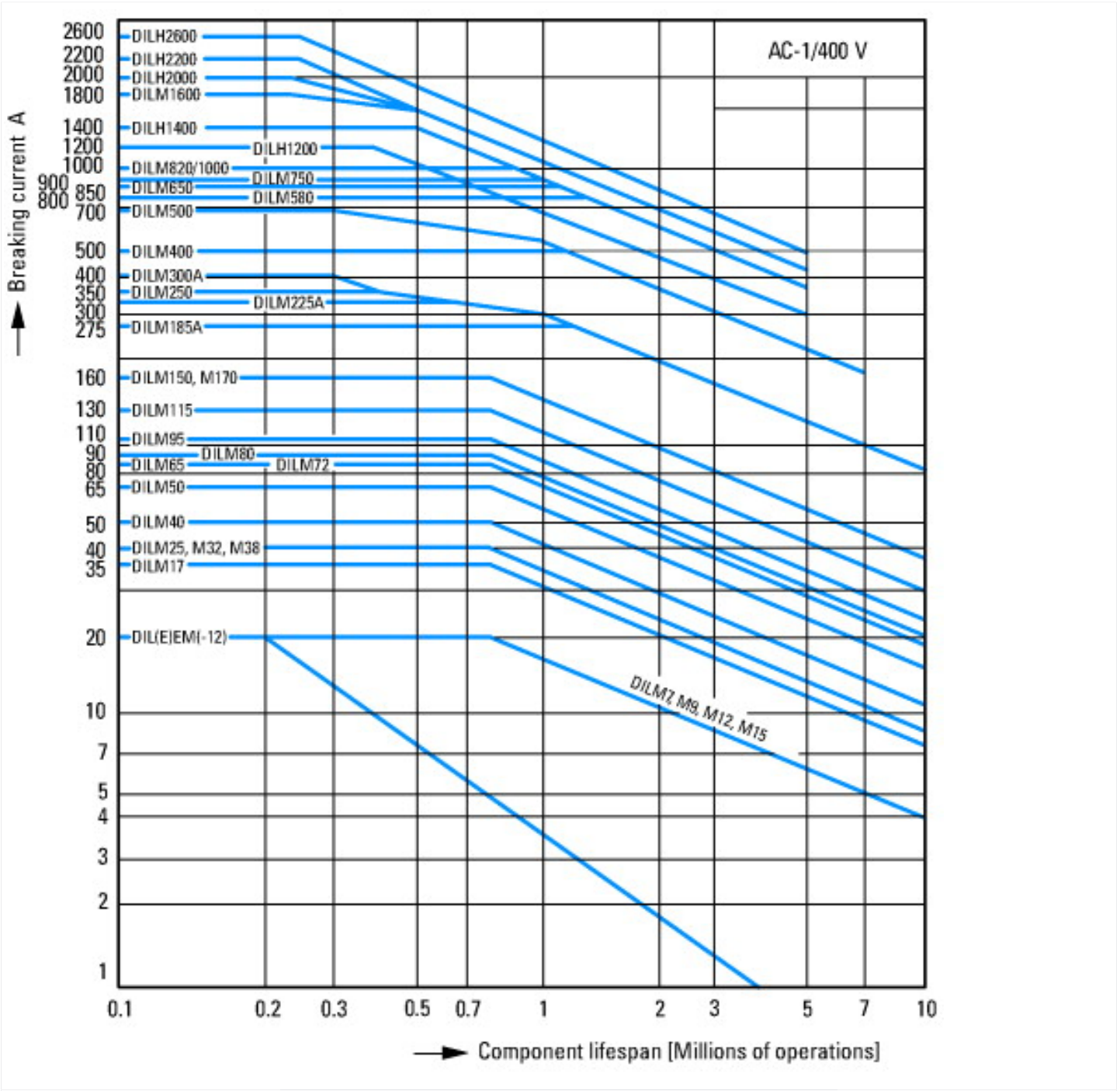
Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss8.1-27-37-13-02 [AKN342010])			
Number of contacts as change-over contact			0
Number of contacts as normally open contact			2
Number of contacts as normally closed contact			0
Rated operation current Ie at AC-15, 230 V		A	4
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Front fastening

Approvals

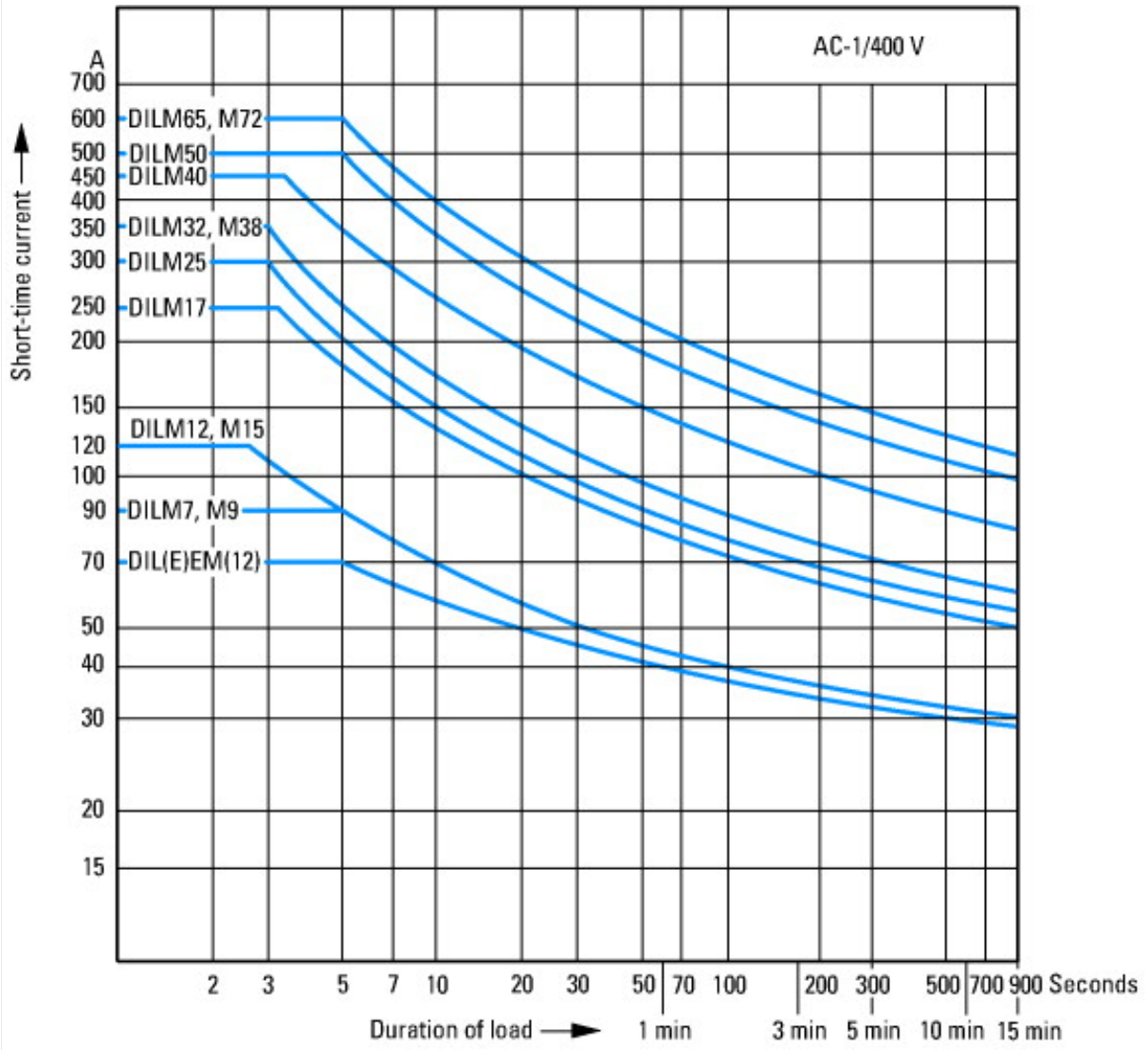
Product Standards			IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			012528
CSA Class No.			3211-03
North America Certification			UL listed, CSA certified
Specially designed for North America			No

Characteristics



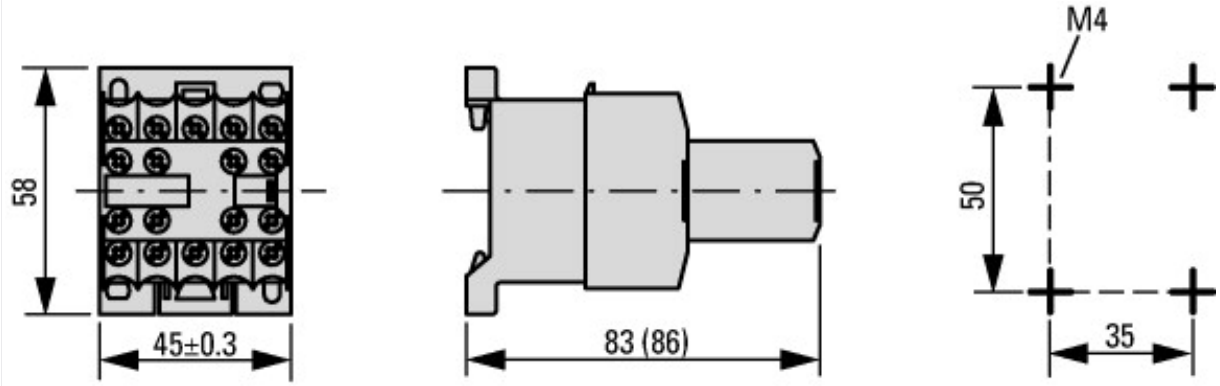


Switching duty for non-motor loads, 3-pole, 4-pole
Operating characteristics
Non-inductive or slightly inductive loads
Electrical characteristics
Make: 1 x rated current
Break: 1 x rated current
Utilization category
100 % AC-1
Typical applications
Electric heat



Short-time loading, 3-pole
Time interval between two loading cycles: 15 minutes

Dimensions



83 mm: DILE… + …DILE(M)
86 mm: DILE…-C… + …DILE(M)

Additional product information (links)

IL03407009Z (AWA2100-0882) Mini contactor relay	
IL03407009Z (AWA2100-0882) Mini contactor relay	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407009Z2016_03.pdf
UL/CSA: Approved rating data	http://de.ecat.moeller.net/flip-cat/?edition=HPLTE&startpage=5.84