



Contactor, 3p, 12A, for lamp load (HQL)



Powering Business Worldwide™

Part no. DILL12(24V50HZ)
Article no. 104401
Catalog No. XTCT012C00U

Delivery program

Product range			DILL Lighting contactors
Application			Contactors for lighting systems
Utilization category			AC-1: Non-inductive or slightly inductive loads, resistance furnaces
Rated operational current			
AC-5a			
220 V 230 V	I_e	A	12
380 V 400 V	I_e	A	12
AC-5b			
220 V 230 V	I_e	A	14
380 V 400 V	I_e	A	14
AC-1			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	A	27
Contact sequence			
Actuating voltage			24 V 50 Hz

Technical data

Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	$\times 10^6$	1
Operating frequency, mechanical			
AC operated	Operations/h		60
Maximum operating frequency		Ops./h	
Electrical	Operations/h		60
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +60
Enclosed		°C	- 25 - 40
Storage		°C	- 40 - 80
Mounting position			
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
Mechanical shock resistance		g	6.9
Degree of Protection			IP00
Weight			

AC operated		kg	0.42
Main conducting paths			
Rated impulse withstand voltage	U_{imp}	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V AC	690
Rated operational voltage	U_e	V AC	690
Making capacity		A	238
Breaking capacity	380 ... 400 V	A	170
Lifespan, electrical	Operations		10000
Short-circuit protection maximum fuse			
400 V	gG/gL 500 V	A	63

AC

AC-1			
Rated operational current			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th}=I_e$	A	27
at 60 °C	$I_{th}=I_e$	A	24
AC-5a operation			
220 V 230 V	I_e	A	12
380 V 400 V	I_e	A	12
AC-5b operation			
220 V 230 V	I_e	A	14
380 V 400 V	I_e	A	14
380 V 400 V	I_e	A	14
Electric lamps			
Filament bulbs		A	14
Mercury blended lamps		A	12
Fluorescent lamp load 10 x 58 W at 230/240 V AC			
Conventional reactor starter circuit		A	20
Duo circuit		A	20
Electronic upstream devices		A	12
High-pressure mercury vapour lamps		A	12
Metal-halide lamps		A	12
High-pressure sodium lamps		A	12
Low-pressure sodium lamps		A	7.5
Maximum permissible compensation capacitance		μF	470

Additional technical data

like the contactor	DIL		M17
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Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	14
Heat dissipation per pole, current-dependent	P_{vid}	W	0.4
Equipment heat dissipation, current-dependent	P_{vid}	W	1.2
Static heat dissipation, non-current-dependent	P_{vs}	W	2.1
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
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.

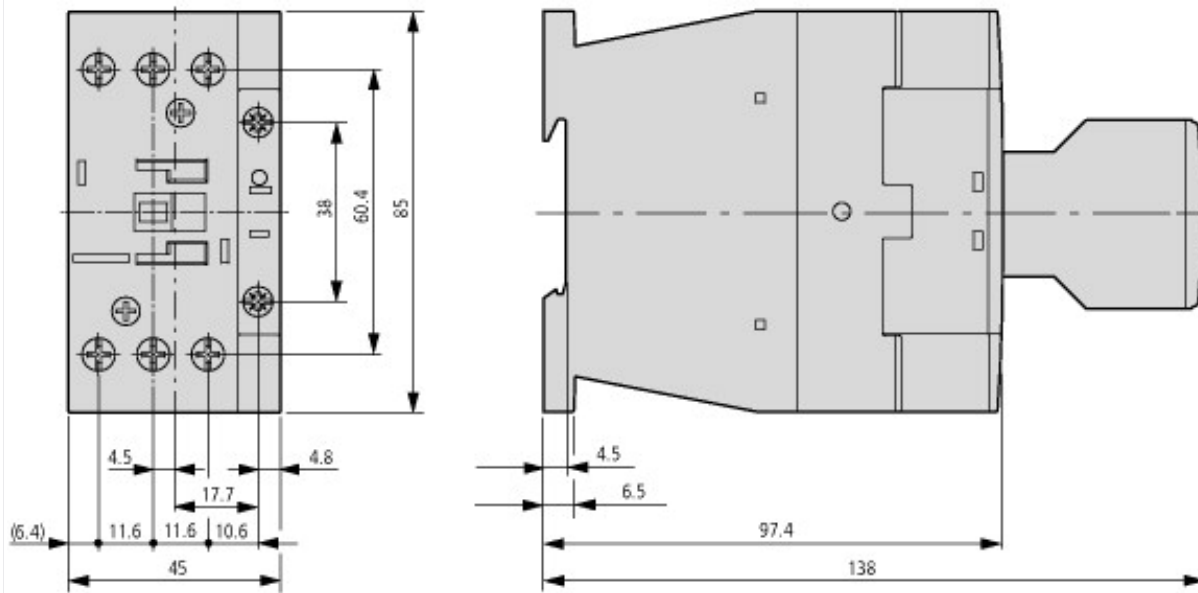
Technical data ETIM 6.0

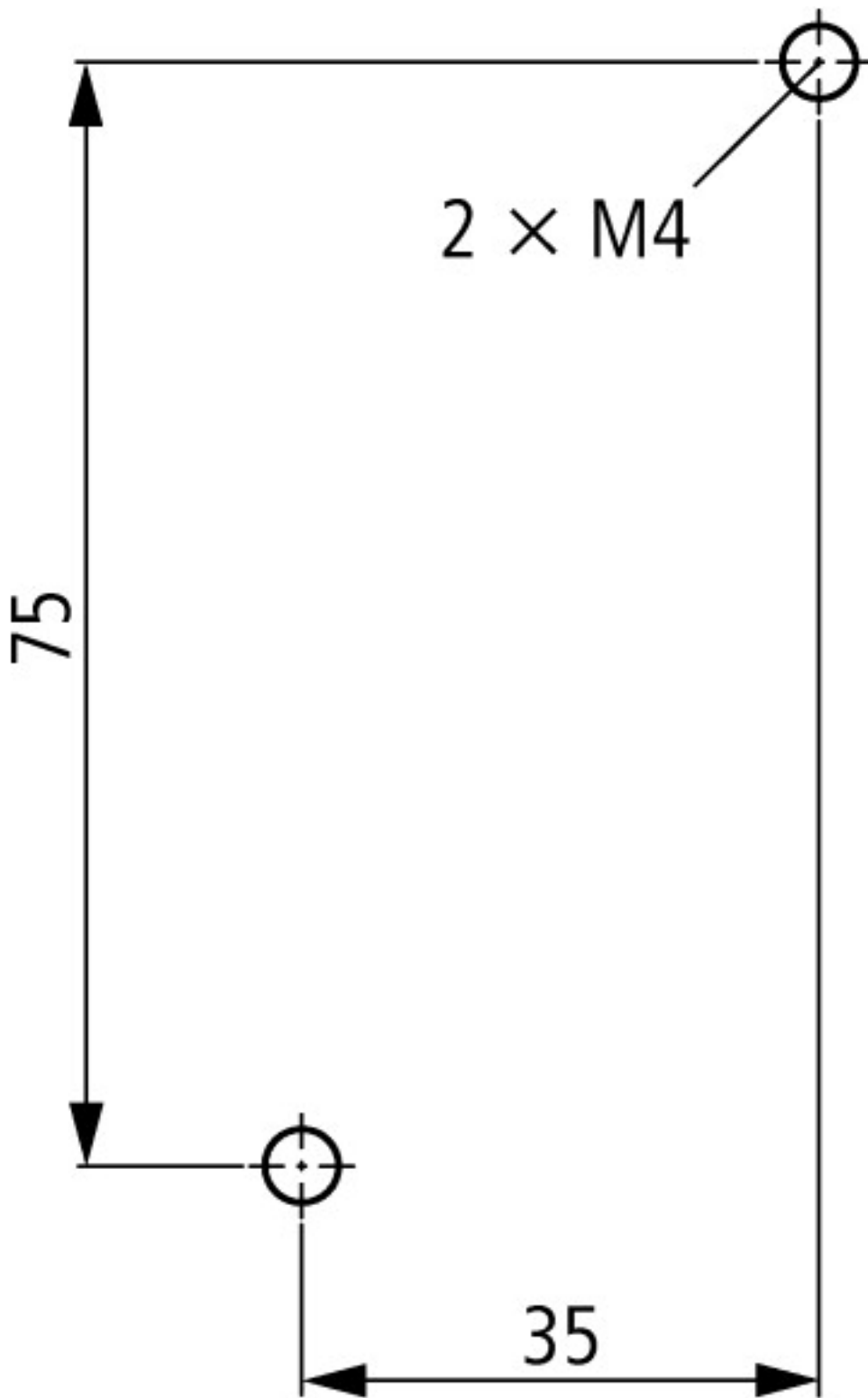
Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss8.1-27-37-10-03 [AAB718012])		
Rated control supply voltage U_s at AC 50HZ	V	24 - 24
Rated control supply voltage U_s at AC 60HZ	V	0 - 0
Rated control supply voltage U_s at DC	V	0 - 0
Voltage type for actuating		AC
Rated operation current I_e at AC-1, 400 V	A	12
Rated operation current I_e at AC-3, 400 V	A	0
Rated operation power at AC-3, 400 V	kW	0
Rated operation current I_e at AC-4, 400 V	A	0
Rated operation power I_e at AC-4, 400 V	kW	0
Modular version		No
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as normally closed contact		0
Type of electrical connection of main circuit		Screw connection
Number of normally closed contacts as main contact		0
Number of main contacts as normally open contact		3

Approvals

Product Standards		IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.		E29096
UL Category Control No.		NLDX
CSA File No.		012528
CSA Class No.		3211-04
North America Certification		UL listed, CSA certified
Specially designed for North America		No

Dimensions





distance at side to earthed parts: 6 mm

DILL12...20

Additional product information (links)

IL03407047Z (AWA2100-2322) Lighting contactors

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ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407047Z2010_10.pdf