

Contactor, 3p, 18A, for lamp load (HQL)

Part no. DILL18(24V50HZ)
Article no. 104404
Catalog No. XTCT018C00U



**Delivery program** 

zomor, 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 <sub>e</sub>	Α	18
380 V 400 V	I <sub>e</sub>	Α	18
AC-5b			
220 V 230 V	I <sub>e</sub>	Α	21
380 V 400 V	I <sub>e</sub>	Α	21
AC-1			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	Α	40
Contact sequence			$A1 \  \  \  \  \  \  \  \  \  \  \  \  \ $
Actuating voltage			24 V 50 Hz

## **Technical data**

General			
Standards			IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10 <sup>6</sup>	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			30° 30°
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 <sub>imp</sub>	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V AC	690
Rated operational voltage	U <sub>e</sub>	V AC	690
Making capacity		Α	350
Breaking capacity	380 400 V	Α	250
Lifespan, electrical	Operations		10000
Short-circuit protection maximum fuse			
400 V	gG/gL 500 V	Α	100
AC			
AC-1			
Rated operational current			
Conventional free air thermal current, 3 pole, 50 - 60 Hz			
Open			
at 40 °C	$I_{th} = I_e$	Α	40
at 60 °C	$I_{th} = I_e$	Α	35
AC-5a operation			
220 V 230 V	I <sub>e</sub>	Α	18
380 V 400 V	I <sub>e</sub>	Α	18
AC-5b operation			
220 V 230 V	I <sub>e</sub>	Α	21
380 V 400 V	I <sub>e</sub>	Α	21
380 V 400 V	I <sub>e</sub>	Α	21
Electric lamps			
Filament bulbs		Α	21
Mercury blended lamps		Α	16
Fluorescent lamp load 10 x 58 W at 230/240 V AC			
Conventional reactor starter circuit		Α	26
Duo circuit		Α	26
Electronic upstream devices		Α	18
High-pressure mercury vapour lamps		Α	18
Metal-halide lamps		Α	18
High-pressure sodium lamps		Α	18
Low-pressure sodium lamps		Α	10
Maximum permissible compensation capacitance		μF	470
Additional technical data			
I	DII		

like the contactar DIL M25

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	Α	21
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	3
Static heat dissipation, non-current-dependent	$P_{vs}$	W	2.1
Heat dissipation capacity	P <sub>diss</sub>	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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

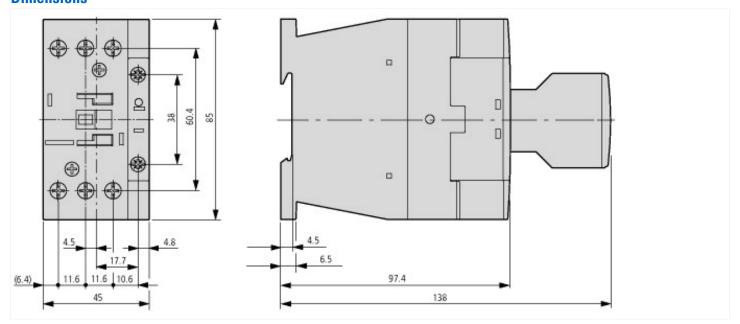
## **Technical data ETIM 6.0**

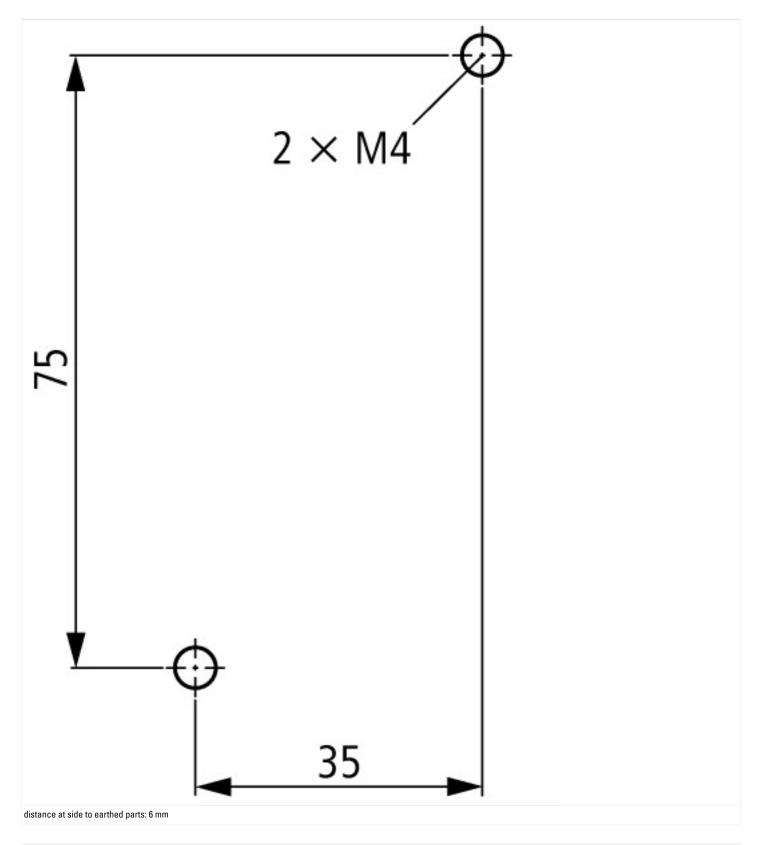
Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss8.1-27-37-10-03 [AAB718012])			
Rated control supply voltage Us at AC 50HZ		V	24 - 24
Rated control supply voltage Us at AC 60HZ		V	0 - 0
Rated control supply voltage Us at DC		V	0 - 0
Voltage type for actuating			AC
Rated operation current le at AC-1, 400 V		Α	18
Rated operation current le at AC-3, 400 V		Α	0
Rated operation power at AC-3, 400 V		kW	0
Rated operation current le at AC-4, 400 V		Α	0
Rated operation power le 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**





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

#### IL03407047Z (AWA2100-2322) Lighting contactors

IL03407047Z (AWA2100-2322) Lighting contactors

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL03407047Z2010\_10.pdf