DATASHEET - DILK50-10(24V60HZ)



Contactor for capacitors, with series resistors, 50 kVAr, 24 V 60 Hz

Powering Business Worldwide*

Part no. DILK50-10(24V60HZ)
Catalog No. 294069
Alternate Catalog XTCC050D10B6

Delivery program

		DILK Contactors for capacitors
		Contactors for power factor correction
		with series resistors
Q	kVAr	25
Q	kVAr	50
0	kVAr	65
Q	kVAr	85
		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
		24 V 60 Hz
	α α	Q kVAr Q kVAr Q kVAr

Instructions In the case of group compensation multi-stage capacitor banks are connected to the mains, as required. Transient currents of up to 180 × le could flow between the capacitors. The capacitors are pre-charged via the early-make auxiliary contacts and the fitted wire resistors, thereby reducing the inrush current. The main contacts then close in a time-delayed manner and bring about the continuous current. Due to their special contacts, the contactors for the capacitors are weld-resistant for capacitors with inrush current peaks

Due to their special contacts, the contactors for capacitors are weld-resistant for capacitors with inrush current peaks up to 180 × I_e.

Technical data

General

General			
Standards			IEC/EN 60947
Ambient temperature			
Open		°C	-25 - +60
Enclosed		°C	- 25 - 40
Mounting position			30°
Degree of Protection			IP00
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Altitude		m	Max. 2000
Weight basic unit			
AC operated		kg	1.171
Terminal capacity main cable			
Solid		mm^2	1 x (2.5 - 16)
Flexible with ferrule		mm ²	1 x (2.5 - 35)
Stranded		mm^2	1 x (16 - 50)
Solid or stranded		AWG	12 - 2
Flat conductor	Lamellenzahl x Breite x Dicke	mm	1 x (6 x 9 x 0.8)

ated power of AC-6b three-phase capacitors, 50 - 60 Hz			
Open			
230 V	Q	kVAr	25
400 V	Q	kVAr	50
525 V	Q	kVAr	65
690 V	Q	kVAr	85
Rated operational current I _e of three-phase capacitors			
Open			
230 V	I _e	A	72
400 V	l _e	Α	72
525 V		A	72
	l _e		
690 V	l _e	Α	72
of three-phase capacitors enclosed	I _e		
230 V	l _e	Α	65
400 V	I _e	Α	65
525 V	I _e	Α	65
690 V	I _e	Α	65
Making capacity (i-peak value) without damping		x I _e	180
Component lifespan	Operations	x 10 ⁶	0.15
Maximum operating frequency	·	Ops./h	
		Ops/h	120
Max. operating frequency Magnet systems		0µ8/11	120
/oltage tolerance			
AC operated	Pick-up	x U _c	0.8 - 1.15
Drop-out voltage AC operated	Drop-out	x U _c	0.3 - 0.6
Power consumption of the coil in a cold state and 1.0 x U_S	Drop out	λ ος	
	D: 1	1/4	
50 Hz	Pick-up	VA	45
50 Hz	Sealing	VA	1.5
50 Hz	Sealing	W	4.1
60 Hz	Pick-up	VA	45
60 Hz	Sealing	VA	1.5
60 Hz	Sealing	W	4.1
Outy factor		% DF	100
Changeover time at 100 % U _S (recommended value)			
Main contacts			
AC operated			
Closing delay		ms	
Switching times of main contacts AC operated Closing delay, min.		ms	50
Opening delay		ms	
Switching times of main contacts AC operated Opening delay, min.		ms	40
Arcing time		ms	10
lectromagnetic compatibility (EMC)			
mitted interference			according to EN 60947-1
nterference immunity			according to EN 60947-1
dditional technical data	DII		MCE
ke the contactar ating data for approved types	DIL		M65
pecial Purpose Ratings			
Capacitor Switching			
240V 60Hz 3phase		A	72.1
(TO V 1001 (1001 GAE		kVar	30
			- 11/
240V 60Hz 3phase			
		A kVar	72.1 60

600V 60Hz 3phase kVar 75	
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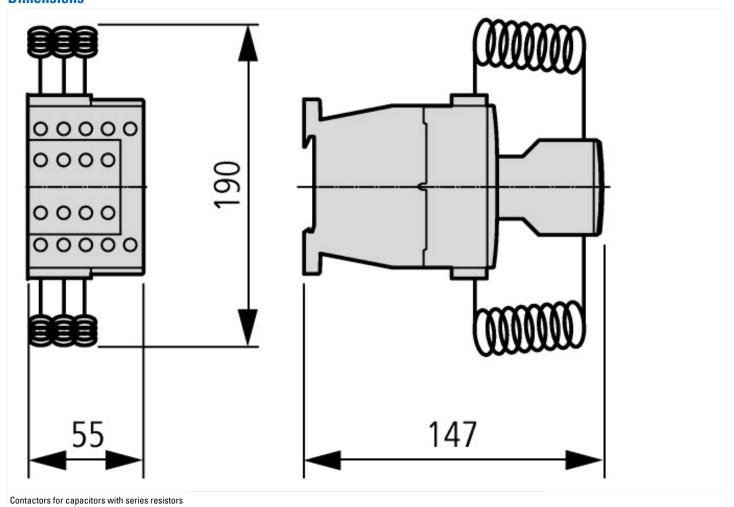
Design verification as per IEC/EN 61439

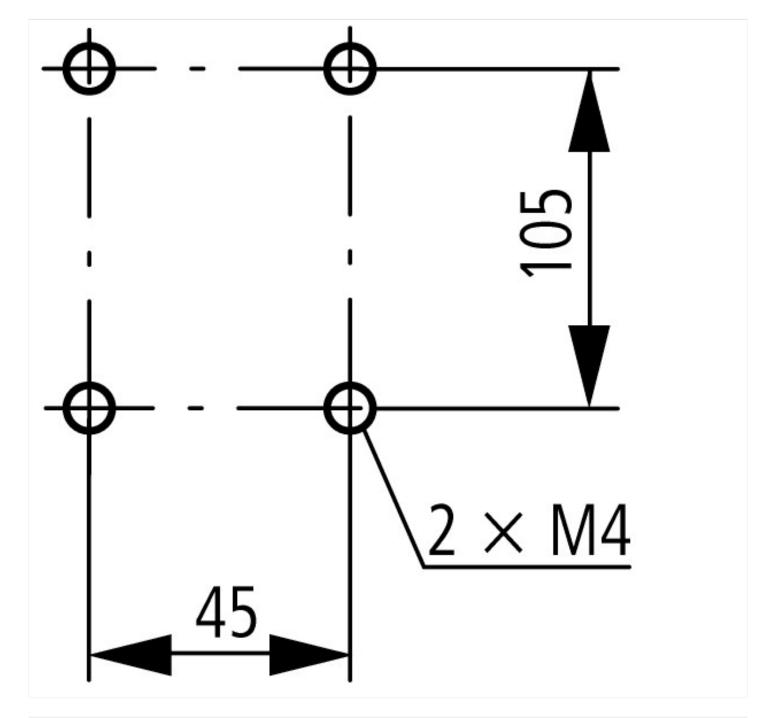
Design Verification as per IEG/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	72
Heat dissipation per pole, current-dependent	P _{vid}	W	7.1
Equipment heat dissipation, current-dependent	P _{vid}	W	21.3
Static heat dissipation, non-current-dependent	P _{vs}	W	4.1
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) / Capacitor contactor (EC001079)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Capacitor contactor (ecl@ss8.1-27-37-10-06 [AGZ569012])			
Rated control supply voltage Us at AC 50HZ		V	0 - 0
Rated control supply voltage Us at AC 60HZ		V	24 - 24
Rated control supply voltage Us at DC		V	0 - 0
Voltage type for actuating			AC
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as normally closed contact			0
Type of electrical connection of main circuit			Screw connection
Number of main contacts as normally open contact			3
Number of normally closed contacts as main contact			0
Rated blind power at 400 V, 50 Hz		kvar	50

Dimensions





Assets (links)

Declaration of CE Conformity

00002884

Instruction Leaflets

IL03407038Z2018_06

Additional product information (links)

IL03407038Z (AWA2100-2272) Contactors for capacitors

IL03407038Z (AWA2100-2272) Contactors for capacitors

 $ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407038Z2018_06.pdf$