DATASHEET - DILK25-11(230V50HZ,240V60HZ)



Contactor for capacitors, with series resistors, 25 kVAr, 230 V 50 Hz, 240 V 60 Hz $\,$



Powering Business Worldwide

Part no. DILK25-11(230V50HZ,240V60HZ)

Catalog No. 294032 Alternate Catalog XTCC025C11F

No

Delivery program

Application Description Rated power of AC-6b three-phase capacitors, 50 - 60 Hz Open 230 V 400 V 0 kVAr 525 V 0 kVAr 690 V Contact sequence Contact sequence Contactors for power factor correction with series resistors kVAr 5 kVAr 40 kVAr 40 kVAr 40 kVAr 40 kVAr	Don'tory program			
Description Rated power of AC-6b three-phase capacitors, 50 - 60 Hz Open 230 V 400 V 0 kVAr 525 V 0 kVAr 690 V Contact sequence A1 A2 A2 A2 A3 A3 A3 A1 A3 A1 A3 A3 A3 A3	Product range			DILK Contactors for capacitors
Open 230 V 400 V 525 V 690 V Contact sequence Q kVAr Q	Application			Contactors for power factor correction
Open Q kVAr 15 400 V Q kVAr 25 525 V Q kVAr 33.3 690 V Q kVAr 40 Contact sequence A1 A2 A2 A1 A2 A2 A1 A2	Description			with series resistors
230 V 400 V 0 kVAr 25 525 V 0 kVAr 33.3 690 V Contact sequence A1 A1 A1 A2 A1 A1	Rated power of AC-6b three-phase capacitors, 50 - 60 Hz			
400 V 525 V 0 kVAr 33.3 690 V Contact sequence Contact sequence Au Au Au Au Au Au Au Au Au A	Open			
525 V Q kVAr 33.3 690 V Q kVAr 40 Contact sequence	230 V	Q	kVAr	15
690 V Contact sequence Q kVAr 40 A1	400 V	Q	kVAr	25
Contact sequence A1	525 V	۵	kVAr	33.3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	690 V	Q	kVAr	40
Actuating voltage 230 V 50 Hz, 240 V 60 Hz	Contact sequence			
	Actuating voltage			230 V 50 Hz, 240 V 60 Hz

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

Open

Standards Ambient temperature Open Enclosed Open Open Open Open Open Open Open Ope	General			
Open Enclosed Mounting position Degree of Protection Protection against direct contact when actuated from front (EN 50274) Altitude Weight basic unit AC operated Solid Flexible with ferrule Stranded Solid or stranded Flat conductor Flat conductor Flat conductor AWG Solid or stranded Lamellenzahl x Breite x Dicke PC - 25 - 40 IP00 IP00 IP00 IP00 Max. 2000 Max. 2000 Max. 2000 Max. 2000 Max. 2000 IV (0.75 - 16) IX (0.75 - 16) IX 16 AWG IX 16 IX 16	Standards			IEC/EN 60947
Enclosed Mounting position Degree of Protection Protection against direct contact when actuated from front (EN 50274) Altitude Meight basic unit AC operated AC operated Solid Flexible with ferrule Solid Flexible with ferrule Solid or stranded Flat conductor Flat conductor Lamellenzahl x Braite x Dicke **C - 25- 40 - 25- 40 - 1P00 - 1P00 - 1P00 - Finger and back-of-hand proof - Finger and back-of-hand pro	Ambient temperature			
Mounting position Degree of Protection Protection Protection against direct contact when actuated from front (EN 50274) Altitude Weight basic unit AC operated AC operated Solid Flexible with ferrule Stranded Flat conductor Flat conductor AWG 18-6 Lamellenzahl x Braite x Dicke Dicke PD00 FIP00 Finger and back-of-hand proof Max. 2000 Max. 2000 Tinger and back-of-hand proof Max. 2000 Tinger and ba	Open		°C	-25 - +60
Degree of Protection Protection against direct contact when actuated from front (EN 50274) Altitude Weight basic unit AC operated AC operated Solid Flexible with ferrule Solid Flexible with ferrule Stranded Flat conductor Altitude Lamellenzahl Reiner Altitude Lamellenzahl	Enclosed		°C	- 25 - 40
Protection against direct contact when actuated from front (EN 50274) Altitude Weight basic unit AC operated Solid Flexible with ferrule Stranded Solid or stranded Flat conductor Flat conductor Protection against direct contact when actuated from front (EN 50274) Max. 2000 Max. 2000 Max. 2000 To mm Max. 2000 1	Mounting position			30°
Altitude Weight basic unit AC operated Kg 0.51 Terminal capacity main cable Solid Flexible with ferrule Stranded Solid or stranded Flat conductor Lamellenzahl x Breite x Dicke Mm Ax. 2000 Max. 2000 Max. 2000 Max. 2000 Max. 2000 Awa. 2000 Lamellenzahl x Breite x Dicke Mm Ax. 2000 Max. 2000 Max. 2000 Awa. 2000 Lamellenzahl x Breite x Dicke Mm Ax. 2000 Lamellenzahl x Breite x Dicke Max. 2000 Max. 2000 Awa. 2000 Lamellenzahl x Breite x Dicke	Degree of Protection			IP00
Weight basic unit AC operated Rg 0.51 Terminal capacity main cable Solid mm² 1 x (0.75 - 16) Flexible with ferrule Stranded Solid or stranded Flat conductor Lamellenzahl x Breite x Dicke Mg 0.51	Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
AC operated Terminal capacity main cable Solid Solid Flexible with ferrule Stranded Solid or stranded Flat conductor Kg 0.51 Terminal capacity main cable mm² 1 x (0.75 - 16) mm² 1 x (0.75 - 16) AWG 18 - 6 Lamellenzahl x Breite x Dicke mm	Altitude		m	Max. 2000
Terminal capacity main cable Solid mm² 1 x (0.75 - 16) Flexible with ferrule mm² 1 x (0.75 - 16) Stranded Stranded Solid or stranded Flat conductor Lamellenzahl x Breite x Dicke Dicke Tu (0.75 - 16) mm² 1 x (0.75 - 16) mm² 1 x 16 AWG 18 - 6	Weight basic unit			
Solid mm² 1 x (0.75 - 16) Flexible with ferrule mm² 1 x (0.75 - 16) Stranded mm² 1 x 16 Solid or stranded AWG 18 - 6 Flat conductor Lamellenzahl x Breite x Dicke mm²	AC operated		kg	0.51
Flexible with ferrule mm² 1 x (0.75 - 16) Stranded mm² 1 x 16 AWG 18 - 6 Flat conductor Lamellenzahl x Breite x Dicke mm	Terminal capacity main cable			
Stranded mm² 1 x 16 Solid or stranded AWG 18 - 6 Flat conductor Lamellenzahl x Breite x Dicke mm -	Solid		mm^2	1 x (0.75 - 16)
Solid or stranded AWG 18 - 6 Flat conductor Lamellenzahl x Breite x Dicke Dicke	Flexible with ferrule		mm^2	1 x (0.75 - 16)
Flat conductor Lamellenzahl mm - x Breite x Dicke	Stranded		mm^2	1 x 16
x Breite x Dicke	Solid or stranded		AWG	18 - 6
Rated power of AC-6b three-phase capacitors, 50 - 60 Hz	Flat conductor	x Breite x	mm	
	Rated power of AC-6b three-phase capacitors, 50 - 60 Hz			

230 V	Q	kVAr	15
400 V	Q	kVAr	25
525 V	٥	kVAr	33.3
690 V	٥	kVAr	40
Rated operational current I_e of three-phase capacitors			
Open			
230 V	l _e	Α	38
400 V	I _e	Α	38
525 V		A	38
	l _e		
690 V	l _e	А	38
of three-phase capacitors enclosed	le		
230 V	I _e	Α	34
400 V	le	Α	34
525 V	l _e	Α	34
690 V	I _e	Α	34
Making capacity (i-peak value) without damping	· ·	x I _e	180
	Oncretic		
Component lifespan	Operations	x 10 ⁶	0.15
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops/h	120
Magnet systems			
Voltage tolerance			
AC operated	Pick-up	x U _c	0.8 - 1.1
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 $\rm U_{S}$			
50 Hz	Pick-up	VA	58
50 Hz	Sealing	VA	7.6
50 Hz	Sealing	W	2.1
60 Hz	Pick-up	VA	71
60 Hz	Sealing	VA	9.3
60 Hz	Sealing	W	2.1
Duty factor	County	% DF	100
Changeover time at 100 % U _S (recommended value)		/0 DI	100
Main contacts			
AC operated			
Closing delay		ms	16 - 22
Opening delay		ms	8 - 14
Arcing time		ms	10
Current heat losses (3- or 4-pole)			
Open			
at I _e to AC-3/400 V		W	9.3
at I _e to AC-3/400 V		W	9.3
Impedance per pole		mΩ	2.65
Electromagnetic compatibility (EMC)			
Emitted interference			according to EN 60947-1
Interference immunity			according to EN 60947-1
Rating data for approved types			
Auxiliary contacts			
Pilot Duty			
AC operated			A600
DC operated			P300
General Use			
AC		V	600
		V A	600 10
AC			

Special Purpose Ratings		
Capacitor Switching		
240V 60Hz 3phase	Α	A 36
240V 60Hz 3phase	kVa	kVar 15
480V 60Hz 3phase	А	A 36
480V 60Hz 3phase	kVa	kVar 30
600V 60Hz 3phase	Α	A 38.4
600V 60Hz 3phase	kVa	kVar 40

Design verification as per IEC/EN 61439

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Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	38
Heat dissipation per pole, current-dependent	P _{vid}	W	3.1
Equipment heat dissipation, current-dependent	P _{vid}	W	9.3
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

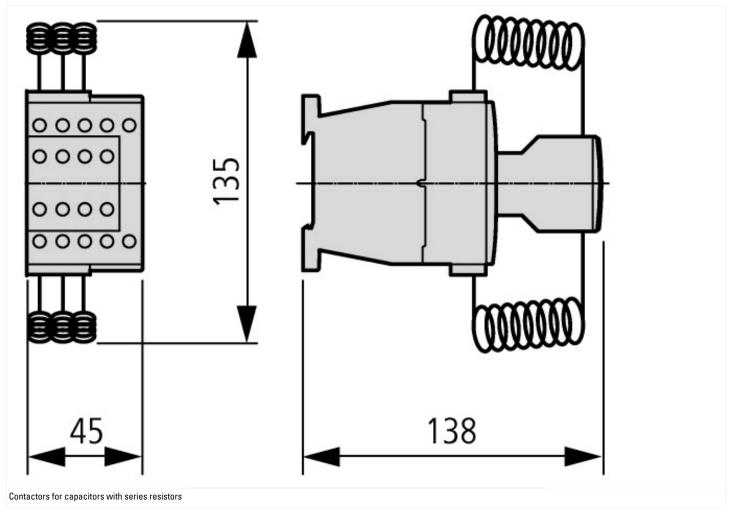
Low-voltage industrial components (EG000017) / Capacitor contactor (EC001079)				
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Capacitor contactor (ecl@ss8.1-27-37-10-06 [AGZ569012])				
Rated control supply voltage Us at AC 50HZ		V	230 - 230	
Rated control supply voltage Us at AC 60HZ		V	240 - 240	
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			1	

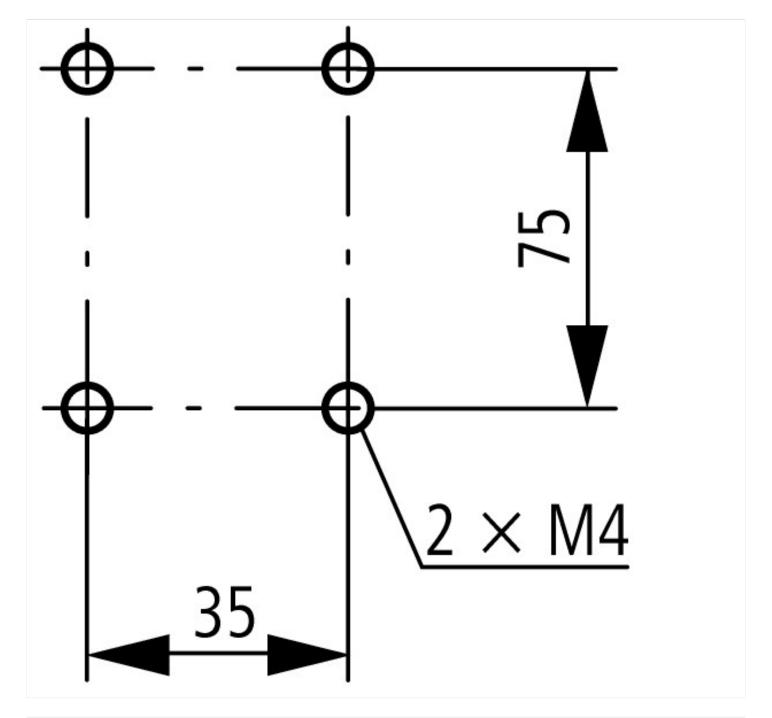
Type of electrical connection of main circuit		Screw connection
Number of main contacts as normally open contact		3
Number of normally closed contacts as main contact		0
Rated blind power at 400 V, 50 Hz	kvar	25

Approvals

Product Standards	IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; 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)

IL03407038Z (AWA2100-2272) Contactor for capacitors

IL03407038Z (AWA2100-2272) Contactor for capacitors

https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407038Z2018_06.pdf