

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



Part no. **DILK50-10(230V50HZ,240V60HZ)**
294076

General specifications	
Product name	Eaton Moeller® series DILK capacity contactor
Part no.	DILK50-10(230V50HZ,240V60HZ)
EAN	4015082940768
Product Length/Depth	147 millimetre
Product height	190 millimetre
Product width	55 millimetre
Product weight	1.171 kilogram
Certifications	CSA Class No.: 3211-04 UL 60947-4-1 IEC/EN 60947 CSA File No.: 012528 UL CSA IEC/EN 60947-4-1 CSA-C22.2 No. 60947-4-1-14 UL File No.: E29096 CE UL Category Control No.: NLDX
Product Tradename	DILK
Product Type	Capacity contactor
Product Sub Type	None
Catalog Notes	Due to their special contacts, the contactors for capacitors are weld-resistant for capacitors with inrush current peaks up to 180 × I# In the case of group compensation multi-stage capacitor banks are connected to the mains, as required. Transient currents of up to 180 × Ie could flow between the capacitors.
Features & Functions	
Fitted with:	Series resistors
General information	
Application	Contactors for power factor correction
Degree of protection	IP00
Lifespan, electrical	150,000 Operations
Operating frequency	120 Operations/h
Product category	DILK Contactors for capacitors
Protection	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Voltage type	AC
Climatic environmental conditions	
Ambient operating temperature - min	-25 °F
Ambient operating temperature - max	60 °F
Ambient operating temperature (enclosed) - min	25 °F
Ambient operating temperature (enclosed) - max	40 °F
Electro magnetic compatibility	
Emitted interference	According to EN 60947-1
Interference immunity	According to EN 60947-1
Terminal capacities	
Terminal capacity (copper band)	1 x (6 x 9 x 0.8) mm (Number of segments x width x thickness), Main cables
Terminal capacity (flexible with ferrule)	1 x (2.5 - 35) mm ² , Main cables
Terminal capacity (solid)	1 x (2.5 - 16) mm ² , Main cables
Terminal capacity (solid/stranded AWG)	12 - 2, Main Cables
Terminal capacity (stranded)	1 x (16 - 50) mm ² , Main cables
Electrical rating	

Rated operational current (Ie)		72 A at 525 V (three-phase capacitors, open) 65 A at 525 V (three-phase capacitors, enclosed) 65 A at 230 V (three-phase capacitors, enclosed) 72 A at 690 V (three-phase capacitors, open) 72 A at 400 V (three-phase capacitors, open) 65 A at 400 V (three-phase capacitors, enclosed) 65 A at 690 V (three-phase capacitors, enclosed) 72 A at 230 V (three-phase capacitors, open)
Switching capacity		
Switching capacity (auxiliary contacts, general use)		10 A, 600 V AC, (UL/CSA) 1 A, 250 V DC, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)		P300, DC operated (UL/CSA) A600, AC operated (UL/CSA)
Magnet system		
Arcing time		10 ms
Drop-out voltage		AC operated: 0.6 - 0.3 x UC, AC operated
Duty factor		100 %
Pick-up voltage		0.8 - 1.15 V AC x Uc
Power consumption, pick-up, 50 Hz		45 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz
Power consumption, pick-up, 60 Hz		45 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz
Power consumption, sealing, 50 Hz		1.5 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz 4.1 W, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz
Power consumption, sealing, 60 Hz		4.1 W, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz 1.5 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz
Rated control supply voltage (Us) at AC, 50 Hz - min		230 V
Rated control supply voltage (Us) at AC, 50 Hz - max		230 V
Rated control supply voltage (Us) at AC, 60 Hz - min		240 V
Rated control supply voltage (Us) at AC, 60 Hz - max		240 V
Rated control supply voltage (Us) at DC - min		0 V
Rated control supply voltage (Us) at DC - max		0 V
Switching time (AC operated, make contacts, closing delay) - min		50 ms
Contacts		
Making capacity without damping (I-peak value)		180 x Ie
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		1
Special purpose ratings		
Special purpose rating of capacitor switching		72.1 A, 480 V 60 Hz 3phase, (UL/CSA) 30 kVar, 240 V 60 Hz 3phase, (UL/CSA) 75 kVar, 600 V 60 Hz 3phase, (UL/CSA) 72.1 A, 600 V 60 Hz 3phase, (UL/CSA) 60 kVar, 480 V 60 Hz 3phase, (UL/CSA) 72.1 A, 240 V 60 Hz 3phase, (UL/CSA)
Design verification		
Equipment heat dissipation, current-dependent Pvid		21.3 W
Heat dissipation capacity Pdis		0 W
Heat dissipation per pole, current-dependent Pvid		7.1 W
Rated operational current for specified heat dissipation (In)		72 A
Static heat dissipation, non-current-dependent Pvs		4.1 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 8.0

Low-voltage industrial components (EG000017) / Capacitor contactor (EC001079)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Capacitor contactor (ec1@ss10.0.1-27-37-10-06 [AGZ569015])			
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			0
Type of electrical connection of main circuit			Screw connection
Number of normally open contacts as main contact			3
Number of normally closed contacts as main contact			0
Rated blind power at 400 V, 50 Hz	kvar		50