

Contactor for capacitors, with series resistors, 33.3 kVAr, 230 V 50 Hz, 240 V 60 Hz



Part no. **DILK33-10(230V50HZ,240V60HZ)**
294054

General specifications		
Product name		Eaton Moeller® series DILK capacity contactor
Part no.		DILK33-10(230V50HZ,240V60HZ)
EAN		4015082940546
Product Length/Depth		147 millimetre
Product height		190 millimetre
Product width		55 millimetre
Product weight		1.02 kilogram
Certifications		CSA Class No.: 3211-04 UL File No.: E29096 CSA-C22.2 No. 60947-4-1-14 UL IEC/EN 60947 CSA CE UL 60947-4-1 CSA File No.: 012528 UL Category Control No.: NLDX IEC/EN 60947-4-1
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)	50 A at 525 V (three-phase capacitors, open) 50 A at 690 V (three-phase capacitors, open) 45 A at 400 V (three-phase capacitors, enclosed) 45 A at 525 V (three-phase capacitors, enclosed) 45 A at 690 V (three-phase capacitors, enclosed) 45 A at 230 V (three-phase capacitors, enclosed) 50 A at 400 V (three-phase capacitors, open) 50 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)	A600, AC operated (UL/CSA) P300, DC 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	1.5 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz 4.1 W, 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	48 A, 480 V 60 Hz 3phase, (UL/CSA) 48 A, 600 V 60 Hz 3phase, (UL/CSA) 48 A, 240 V 60 Hz 3phase, (UL/CSA) 50 kVar, 600 V 60 Hz 3phase, (UL/CSA) 40 kVar, 480 V 60 Hz 3phase, (UL/CSA) 20 kVar, 240 V 60 Hz 3phase, (UL/CSA)
Design verification	
Equipment heat dissipation, current-dependent Pvid	6.6 W
Heat dissipation capacity Pdis	0 W
Heat dissipation per pole, current-dependent Pvid	2.2 W
Rated operational current for specified heat dissipation (In)	40 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 (eci@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		33.3