

Specifications



Photo is representative



Eaton 293988

Eaton Moeller® series DILK Contactor for capacitors, with series resistors, 12.5 kVAr, 230 V 50 Hz, 240 V 60 Hz

General specifications

PRODUCT NAME	Eaton Moeller® series DILK capacity contactor
CATALOG NUMBER	293988
MODEL CODE	DILK12- 11(230V50HZ,240V60HZ)
EAN	4015082939885
PRODUCT LENGTH/DEPTH	138 mm
PRODUCT HEIGHT	135 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.51 kg
WARRANTY	1 year
CERTIFICATIONS	CSA File No.: 012528 CE CSA-C22.2 No. 60947-4-1-14 UL Category Control No.: NLDX UL File No.: E29096 IEC/EN 60947 UL UL 60947-4-1 IEC/EN 60947-4-1 CSA CSA Class No.: 3211-04
PRODUCT TYPE	Capacity contactor



Powering Business Worldwide

Features Functions

FITTED WITH:	Series resistors
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Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
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AMBIENT OPERATING TEMPERATURE - MAX	60 °C
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AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
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AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
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Terminal capacities

TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.75 - 16) mm ² , Main cables
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TERMINAL CAPACITY (SOLID)	1 x (0.75 - 16) mm ² , Main cables
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TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 6, Main cables
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TERMINAL CAPACITY (STRANDED)	1 x 16 mm ² , Main cables
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General

APPLICATION	Contactors for power factor correction
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DEGREE OF PROTECTION	IP00
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LIFESPAN, ELECTRICAL	150,000 Operations
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CONNECTION	Screw terminals
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OPERATING FREQUENCY	120 Operations/h
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PRODUCT CATEGORY	DILK Contactors for capacitors
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PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
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VOLTAGE TYPE	AC
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Electro magnetic compatibility

EMITTED INTERFERENCE	According to EN 60947-1
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INTERFERENCE IMMUNITY	According to EN 60947-1
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Electrical rating

RATED OPERATIONAL CURRENT (IE)	18 A at 400 V (three-phase capacitors, open) 18 A at 525 V (three-phase capacitors, open) 18 A at 230 V (three-phase capacitors, open) 18 A at 690 V (three-phase capacitors, open) 16 A at 525 V (three-phase capacitors, enclosed) 16 A at 690 V (three-phase capacitors, enclosed) 16 A at 400 V (three-phase capacitors, enclosed) 16 A at 230 V (three-phase capacitors, enclosed)
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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 - 1.1 V AC x U_c

**POWER CONSUMPTION,
PICK-UP, 50 HZ** 58 VA, Dual-frequency coil
in a cold state and 1.0 x
U_s, at 50 Hz

**POWER CONSUMPTION,
PICK-UP, 60 HZ** 71 VA, Dual-frequency coil
in a cold state and 1.0 x
U_s, at 60 Hz

**POWER CONSUMPTION,
SEALING, 50 HZ** 2.1 W, Dual-frequency coil
in a cold state and 1.0 x
U_s, at 50 Hz
7.6 VA, Dual-frequency coil
in a cold state and 1.0 x
U_s, at 50 Hz

**POWER CONSUMPTION,
SEALING, 60 HZ** 9.3 VA, Dual-frequency coil
in a cold state and 1.0 x
U_s, at 60 Hz
2.1 W, Dual-frequency coil
in a cold state and 1.0 x
U_s, 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

**SWITCHING TIME (AC
OPERATED, MAKE
CONTACTS, CLOSING
DELAY) - MIN** 16 ms

**SWITCHING TIME (AC
OPERATED, MAKE
CONTACTS, CLOSING
DELAY) - MAX** 22 ms

**SWITCHING TIME (AC
OPERATED, MAKE
CONTACTS, OPENING
DELAY) - MAX** 14 ms

Contacts

**MAKING CAPACITY
WITHOUT DAMPING (I-
PEAK VALUE)**

180 x I_e

**NUMBER OF AUXILIARY
CONTACTS (NORMALLY
CLOSED CONTACTS)**

1

**NUMBER OF AUXILIARY
CONTACTS (NORMALLY
OPEN CONTACTS)**

1

Special purpose ratings

**SPECIAL PURPOSE
RATING OF CAPACITOR
SWITCHING**

18 A, 240 V 60 Hz 3phase,
(UL/CSA)
15 kVar, 600 V 60 Hz
3phase, (UL/CSA)
7.5 kVar, 240 V 60 Hz
3phase, (UL/CSA)
15 kVar, 480 V 60 Hz
3phase, (UL/CSA)
18 A, 480 V 60 Hz 3phase,
(UL/CSA)
14.4 A, 600 V 60 Hz
3phase, (UL/CSA)

Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	2.1 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.7 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	18 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.1 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.

Resources

	Product Range Catalog Switching and protecting motors
CATALOGS	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf SmartWire-DT Catalog
DECLARATIONS OF CONFORMITY	eaton-capacity-contactor-declaration-of-conformity-uk251239en.pdf eaton-capacity-contactor-declaration-of-conformity-eu250756en.pdf eaton-contactors-dilk-dimensions-004.eps eaton-contactors-dilk-dimensions.eps eaton-contactors-mounting-dilm-dimensions.eps eaton-contactors-mounting-dilm-dimensions-002.eps eaton-contactors-dilk-dimensions-002.eps eaton-contactors-dilk-3d-drawing.eps
DRAWINGS	
ECAD MODEL	DA-CE-ETN.DILK12-11(230V50HZ,240V60HZ)
INSTALLATION INSTRUCTIONS	IL03407038Z
INSTALLATION VIDEOS	WIN-WIN with push-in technology eaton-dilk12-25-drawing.dwg
MCAD MODEL	eaton-dilk12-25-3d-model.stp DA-CD-dil m17 38
SPECIFICATIONS AND DATASHEETS	Eaton Specification Sheet - 293988
WIRING DIAGRAMS	eaton-contactors-circuit-dilk-wiring-diagram-002.eps

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.

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:

