

DIL CONTACTORS
104404



Overview



Specifications



Resources

How to

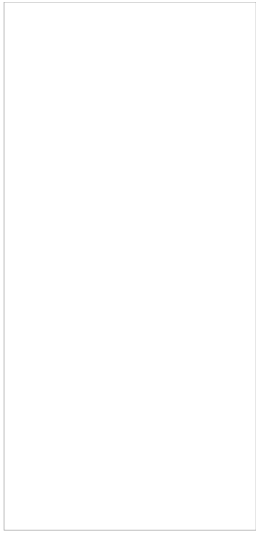
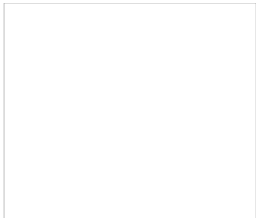
104404

Eaton Moeller® series DILL Lamp load contactor, 2
A, Contactors for lighting systems



[WIN-WIN with Push-in Terminals](#)

[How to improve wiring](#)



Designed to work together

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277377

Eaton Moeller® series DILM Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILM7-10 - DILM38-10

276426

Eaton Moeller® series DILA Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38

277376

Eaton Moeller® series DILM Auxiliary contact module, 2 pole, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, DILM7-10 - DILM38-10

276427

Eaton Moeller® series DILA Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILA, DILM7 - DILM38

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GENERAL SPECIFICATIONS

General specifications	>	PRODUCT NAME	Eaton Moeller® series DILL lamp load contactor
		CATALOG NUMBER	104404
Product specifications	>	MODEL CODE	DILL18(24V50HZ)
		EAN	4015081042210
		PRODUCT LENGTH/DEPTH	97 mm
		PRODUCT HEIGHT	85 mm
		PRODUCT WIDTH	45 mm
		PRODUCT WEIGHT	0.426 kg
		COMPLIANCES	CE Marked

CERTIFICATIONS

IEC 60947-4-1
 UL 508
 EN 60947-4-1
 CSA Std. C22.2 No. 14-05
 VDE
 IEC/EN 60947
 CSA
 VDE 0660
 UL 60947-4-1
 IEC/EN 60947-4-1
 UL Category Control No.: NLDX
 CSA Class No.: 3211-04
 CE
 CSA-C22.2 No. 60947-4-1-14
 UL File No.: E29096
 CSA File No.: 012528
 UL

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	21 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications must be observed.
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	0 kW
RATED OPERATIONAL POWER AT AC-4, 380/400 V, 50 HZ	0 kW
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	24 V
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	35 A

10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	100 A, Class J, max. Fuse, SCCR (UL/CSA) 100 kA, Fuse, SCCR (UL/CSA) 32 A, max. CB, SCCR (UL/CSA) 22 kA, CB, SCCR (UL/CSA)
RATED OPERATIONAL POWER (NEMA)	0 kW
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
AMBIENT STORAGE TEMPERATURE - MIN	40 °C
RATED BREAKING CAPACITY AT 380/400 V	250 A
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	125 A, max. Fuse, SCCR (UL/CSA) 5 kA, SCCR (UL/CSA) 125 A, max. CB, SCCR (UL/CSA)
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	24 V
OPERATING TEMPERATURE	-25° to 60°C
RATED MAKING CAPACITY (COS PHI TO IEC/EN 60947)	350 A
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
NUMBER OF POLES	Three-pole
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to
APPLICATION	Contactors for lighting systems
OPERATING FREQUENCY	60 mechanical Operations/h (AC operated) 60 electrical Operations/h
VOLTAGE TYPE	AC
PRODUCT CATEGORY	DILL Lighting contactors
POWER CONSUMPTION, PICK-UP, 50 HZ	52 VA, Dual-frequency coil in a cold state and 1.0 x
HEAT DISSIPATION CAPACITY PDISS	0 W
SPECIAL PURPOSE RATING OF TUNGSTEN INCANDESCENT LAMPS	35 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (U 35 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (U
SWITCHING TIME (AC OPERATED, MAKE CONTACTS,	8 ms

OPENING DELAY) - MIN	
PERMISSIBLE COMPENSATION CAPACITY	470 μ F
OPERATING VOLTAGE AT AC, 60 HZ - MAX	400 V
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP00
OVERVOLTAGE CATEGORY	III
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	14 ms
AMBIENT STORAGE TEMPERATURE - MAX	80 $^{\circ}$ C
POLLUTION DEGREE	3
RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V	18 A
POWER CONSUMPTION, PICK-UP, 60 HZ	67 VA, Dual-frequency coil in a cold state and 1.0 x
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	22 ms
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V AC
OPERATING VOLTAGE AT AC, 60 HZ - MIN	230 V
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	0 A
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN	16 ms
SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 400 V	100 A gG/gL
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
SHOCK RESISTANCE	6.9 g, N/O main contact, Mechanical, According to Halfsinusoidal shock 10 ms
DROP-OUT VOLTAGE	AC operated: 0.6 - 0.3 x UC, AC operated
POWER CONSUMPTION, SEALING, 60 HZ	2.1 W, Dual-frequency coil in a cold state and 1.0 x 8.7 VA, Dual-frequency coil in a cold state and 1.0 x
RESISTANCE PER POLE	2.65 m Ω
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	25 $^{\circ}$ C
OPERATING VOLTAGE AT AC, 50 HZ - MAX	400 V

10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications must be observed.
AMPERAGE RATING	18A
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted.
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	32 A, max. CB, SCCR (UL/CSA) 22 kA, CB, SCCR (UL/CSA) 100 A, Class J, max. Fuse, SCCR (UL/CSA) 100 kA, Fuse, SCCR (UL/CSA)
FREQUENCY RATING	50-60 Hz
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	3
RATED OPERATIONAL CURRENT (IE) AT AC-4, 400 V	0 A
POWER CONSUMPTION, SEALING, 50 HZ	2.1 W, Dual-frequency coil in a cold state and 1.0 x 7.1 VA, Dual-frequency coil in a cold state and 1.0 x
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
EMITTED INTERFERENCE	According to EN 60947-1
LIFESPAN, ELECTRICAL	10,000 Operations
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.1 W
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	AC-1: Non-inductive or slightly inductive loads, re
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be
OPERATING VOLTAGE AT AC, 50 HZ - MIN	230 V
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the instructions and the instruction leaflet (IL) is observed.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1 W
ACTUATING VOLTAGE	24 V 50 Hz
OPERATING TEMPERATURE - MIN	-25 °C

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	3 W
RATED OPERATIONAL CURRENT (IE)	18 A at AC-1, 380 V 400 V 26 A (Fluorescent lamp load - duo circuit) 18 A (High-pressure sodium lamps) 18 A at AC-1, 220 V 230 V 16 A (Mercury blended lamps) 18 A (Electronic upstream devices) 18 A (Metal-halide lamps) 26 A (Conventional reactor starter circuit) 18 A (High-pressure mercury vapor lamps) 10 A (Low-pressure sodium lamps) 21 A at AC-3, 220/230 V 21 A (Filament bulbs)
PICK-UP VOLTAGE	0.8 - 1.1 V AC x Uc
CONVENTIONAL THERMAL CURRENT ITH AT 40°C (3-POLE, OPEN)	40 A
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
INTERFERENCE IMMUNITY	According to EN 60947-1
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
OPERATING TEMPERATURE - MAX	60 °C
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
LIFESPAN, MECHANICAL	1,000,000 Operations (AC operated)
VOLTAGE RATING	24 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	35 A, Maximum motor rating (UL/CSA)
DUTY FACTOR	100 %
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
RATED INSULATION VOLTAGE (UI)	690 V
ALTITUDE	Max. 2000 m

Catalogs

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

PEP Eco-passport

System overview

Wiring diagrams

104404



Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power — today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy and helping to solve the world's most urgent power management challenges.

