Eaton 104460

Eaton Moeller® series DILMF Contactors for Semiconductor Industries acc. to SEMI F47, 380 V 400 V: 40 A, RAC 120: 100 - 120 V 50/60 Hz, Screw terminals

PRODUCT NAME	Eaton Moeller® series DILMF contactor for semiconductor industries
CATALOG NUMBER	104460
PRODUCT LENGTH/DEPTH	132.1 mm
PRODUCT HEIGHT	115 mm
PRODUCT WIDTH	55 mm
PRODUCT WEIGHT	1.04 kg
CERTIFICATIONS	UL UL File No.: E29096 CSA-C22.2 No. 60947-4-1-14 CSA File No.: 012528 CSA IEC/EN 60947-4-1 UL 60947-4-1 UL Category Control No.: NLDX CE CSA Class No.: 2411-03, 3211-04
CATALOG NOTES	Also tested according to AC-3e.

Powering Business Worldwide

ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT	Screw connection
NUMBER OF POLES	Three-pole
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.
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.

SYSTEM OVERVIEW	eaton-contactors-mounting-dilmf-explosion-drawing.eps eaton-contactors-circuit-breaker-dilmf-explosion-drawing.eps
	IL03407033Z
	eaton-contactors-contact-dilm-wiring-diagram-003.eps
	eaton-contactors-dilm-dimensions-002.eps

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.
FITTED WITH:	Built-in suppressor circuit
POLLUTION DEGREE	3
UTILIZATION CATEGORY	AC-3: Normal AC induction motors: starting, switch off during running AC-1: Non-inductive or slightly inductive loads, resistance furnaces AC-4: Normal AC induction motors: starting, plugging, reversing, inching
CONNECTION	Screw terminals
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT STORAGE	80 °C

TEMPERATURE - MAX	
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	3 HP
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	10 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	7.5 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	15 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	30 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	40 HP
CONVENTIONAL THERMAL CURRENT ITH (1-POLE, ENCLOSED)	112 A
CONVENTIONAL THERMAL CURRENT ITH (3-POLE, ENCLOSED)	45 A
CONVENTIONAL THERMAL CURRENT ITH OF MAIN CONTACTS (1-POLE, OPEN)	125 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	6.6 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	2.2 W
APPLICATION	Contactors for Semiconductor Industries acc. to SEMI F47
PRODUCT CATEGORY	Contactors
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
VOLTAGE TYPE	AC
NUMBER OF AUXILIARY CONTACTS (NORMALLY	0

CLOSED CONTACTS)	
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	3
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	120 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	100 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	120 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	100 V
DROP-OUT VOLTAGE	AC operated: 0.5 - 0.2 x UC, AC operated
OVERVOLTAGE CATEGORY	III
DUTY FACTOR	100 %
EMITTED INTERFERENCE	According to EN 60947-1
INTERFERENCE IMMUNITY	According to EN 60947-1
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, SEALING, 50 HZ	1.3 W, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz 1.5 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 50 Hz
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	63 A, Maximum motor rating (UL/CSA)
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V

RATED INSULATION VOLTAGE (UI)	690 V
RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V	60 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	40 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	40 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 440 V	40 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	40 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	25 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 220 V, 230 V, 240 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 400 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 440 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 500 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 660 V, 690 V	14 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	40 A
RATED OPERATIONAL POWER AT AC-3, 240 V, 50 HZ	13.5 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	18.5 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	24 kW
RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ	5 kW

RATED OPERATIONAL POWER AT AC-4, 240 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-4, 380/400 V, 50 HZ	9 kW
RATED OPERATIONAL POWER AT AC-4, 415 V, 50 HZ	9.5 kW
RATED OPERATIONAL POWER AT AC-4, 440 V, 50 HZ	10 kW
RATED OPERATIONAL POWER AT AC-4, 500 V, 50 HZ	11 kW
RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ	12 kW
RATED OPERATIONAL POWER (NEMA)	22 kW
RESISTANCE PER POLE	1.86 mΩ
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	1.3 W
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	50 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	45 ms
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	5 kA, 250 A max. fuse, SCCR (UL/CSA) 5 kA, 250 A max. CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	100 kA, 150 A CLASS J max. fuse, SCCR (UL/CSA) 65 kA, 100 A max. CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	100 kA, 150 A CLASS J max. fuse, SCCR (UL/CSA)
SUITABLE FOR	SEMI F47, Magnet systems Also motors with efficiency class IE3
SPECIAL PURPOSE RATING OF BALLAST	79 A (480V 60Hz 3phase, 277V 60Hz 1phase)

ELECTRICAL DISCHARGE LAMPS	79 A (600V 60Hz 3phase, 347V 60Hz 1phase)
SPECIAL PURPOSE RATING OF ELEVATOR CONTROL	25.3 A, 200 V 60 Hz 3-ph, (UL/CSA) 34 A, 480 V 60 Hz 3-ph, (UL/CSA) 32 A, 600 V 60 Hz 3-ph, (UL/CSA) 28 A, 240 V 60 Hz 3-ph, (UL/CSA) 25 HP, 480 V 60 Hz 3-ph, (UL/CSA) 7.5 HP, 200 V 60 Hz 3-ph, (UL/CSA) 10 HP, 240 V 60 Hz 3-ph, (UL/CSA) 30 HP, 600 V 60 Hz 3-ph, (UL/CSA)
SPECIAL PURPOSE RATING OF RESISTANCE AIR HEATING	79 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (UL/CSA) 79 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (UL/CSA)
SPECIAL PURPOSE RATING OF TUNGSTEN INCANDESCENT LAMPS	74 A, 480 V 60 Hz 3phase, 277 V 60 Hz 1phase, (UL/CSA) 74 A, 600 V 60 Hz 3phase, 347 V 60 Hz 1phase, (UL/CSA)
CONVENTIONAL THERMAL CURRENT ITH AT 40°C (3-POLE, OPEN)	60 A
CONVENTIONAL THERMAL CURRENT ITH AT 50°C (3-POLE, OPEN)	57 A
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	50 A
RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ	25 kW
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	28 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	23 kW
ACTUATING VOLTAGE	RAC 120: 100 - 120 V 50/60 Hz
ALTITUDE	Max. 2000 m
OPERATING VOLTAGE AT	230 V

AC, 50 HZ - MIN	
OPERATING VOLTAGE AT AC, 50 HZ - MAX	690 V
OPERATING VOLTAGE AT AC, 60 HZ - MIN	230 V
OPERATING VOLTAGE AT AC, 60 HZ - MAX	690 V

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
:

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