Eaton 197915

Eaton Moeller® series DILH Contactor, Ith =Ie: 1050 A, 110 - 120 V 50/60 Hz, AC operation, Screw connection

PRODUCT NAME	Eaton Moeller® series DILH contactor
CATALOG NUMBER	197915
PRODUCT LENGTH/DEPTH	216 mm
PRODUCT HEIGHT	237 mm
PRODUCT WIDTH	160 mm
PRODUCT WEIGHT	8.85 kg
CERTIFICATIONS	UL Category Control No.: NLDX UL 60947-4-1 VDE 0660 IEC/EN 60947-4-1 CE marking CSA Class No.: 3211-04 UL File No.: E29096 UL/CSA CSA file No. 012528 North America (UL listed, CSA certified) EN 45545: Fire protection on railway vehicles IEC 61373: Vibration and shock, tested for category 1 class B
CATALOG NOTES	• Contacts according to EN 50012 • EN 45545 - Fire protection on railway vehicles: Fire protection class of all plastics according to UL94: V-0 / plastic weight in total: 2.576 kg • For rated operational voltage

Powering Business Worldwide

	above 800 V AC addditional phase seperators DILH800-XKP have to be used • Conventional thermal current Ith of main contacts (1-pole, open) at 60°

ACCESSORIES	Fitting options auxiliary contacts: on the side: 2 x DILM820-XHI11(V)-SI; 2 x DILM820-XHI11-SA
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.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.

CHARACTERISTIC CURVE	eaton-contactors-dilh-characteristic-curve.eps
MCAD MODEL	eaton-iec-contactors-3d-models-dilh600-800-S22.stp
	eaton-contactors-dilh600-dilh800-il034082zu.pdf
	eaton-contactors-contact-dilm-wiring-diagram-004.eps
	eaton-contactors-dimensions-006.eps eaton-contactors-mounting-dilm-3d-drawing-002.eps

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:	Suppressor circuit in actuating electronics
OPERATING FREQUENCY	1000 mechanical Operations/h (DC operated) 1000 mechanical Operations/h (AC operated)
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	12000 V
UTILIZATION CATEGORY	AC-1: Non-inductive or slightly inductive loads, resistance furnaces
CONNECTION	Screw terminals
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-40 °C
AMBIENT STORAGE	80 °C

TEMPERATURE - MAX	
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
CONVENTIONAL THERMAL CURRENT ITH (3-POLE, ENCLOSED)	800 A
CONVENTIONAL THERMAL CURRENT ITH AT 55°C (3-POLE, OPEN)	895 A
CONVENTIONAL THERMAL CURRENT ITH OF MAIN CONTACTS (1-POLE, OPEN)	2138 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W
APPLICATION	Mains contactors for resistive loads from 1000 A
PRODUCT CATEGORY	Contactors
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Rail connection
SCREWDRIVER SIZE	0.8 x 5.5/1 x 6 mm, Terminal screw, Control circuit cables, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
VOLTAGE TYPE	AC
DEGREE OF PROTECTION	IP00
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	2
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	3
RATED BREAKING CAPACITY AT 1000 V	1575 A
RATED BREAKING CAPACITY AT 220/230 V	4800 A

RATED BREAKING CAPACITY AT 380/400 V	4800 A
RATED BREAKING CAPACITY AT 500 V	4800 A
RATED BREAKING CAPACITY AT 660/690 V	2000 A
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	120 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	120 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	110 V
OVERVOLTAGE CATEGORY	III
BEHAVIOR IN MARGINAL AND TRANSITIONAL CONDITIONS	Sealing - Pick-up phase (0.7 x Uc min - 1.15 x Uc max): Contactor switches on properly Sealing - Voltage interruptions (0 - 0.2 x Uc min ≤ 10 ms: Time is bridged specifically Sealing - Voltage drops (0.2 - 0.6 x Uc min ≤12 ms: Time is bridged specifically Sealing - Voltage drops (0.6 - 0.7 x Uc min: Contactor remains switched on Sealing - Voltage drops (0.2 - 0.6 x Uc min) > 12 ms: Drop-out of the contactor Sealing - Excess voltage (1.15 - 1.3 x Uc max): Contactor remains switched on Sealing - Pick-up phase (0 - 0.7 x Uc min: Contactor does not switch on Sealing - Voltage interruptions 0 - 0.2 x Uc min) > 10 ms: Drop-out of the contactor
DUTY FACTOR	100 %
ELECTROMAGNETIC	Designed for operation in

COMPATIBILITY	industrial environments. Its use in residential environments may cause radio-frequency interference, requiring additional noise suppression.
LIFESPAN, MECHANICAL	3,000,000 Operations (AC operated) 3,000,000 Operations (DC operated)
PICK-UP VOLTAGE	0.85 - 1.1 V AC x Us
POWER CONSUMPTION, PICK-UP, 50 HZ	715 VA, Pull-in power, Coil in a cold state and 1.0 x Us 645 W, Pull-in power, Coil in a cold state and 1.0 x Us
SAFE ISOLATION	1000 V AC, Between coil and contacts, According to EN 61140
POWER CONSUMPTION, PICK-UP, 60 HZ	645 W, Pull-in power, Coil in a cold state and 1.0 x Us 715 VA, Pull-in power, Coil in a cold state and 1.0 x Us
SCREW SIZE	M10, Terminal screw M3.5, Terminal screw
POWER CONSUMPTION, SEALING, 50 HZ	3.3 W, Coil in a cold state and 1.0 x Us
POWER CONSUMPTION, SEALING, 60 HZ	3.3 W, Coil in a cold state and 1.0 x Us
RESISTANCE	500 mΩ (Admissible transitional contact resistance - of the external control circuit device when actuating A11)
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)
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 2.5) mm^2 1 x (0.75 - 2.5) mm^2
SHOCK RESISTANCE	10 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 8 g, N/C auxiliary contact,

	Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 10 g, N/O main contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
TERMINAL CAPACITY (SOLID)	2 x (0.75 - 2.5) mm^2 1 x (0.75 - 2.5) mm^2
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 14
SIGNAL LEVEL	5 V - 15 V, PLC signal level (A3 - A4) to IEC/EN 61131-2 (type 2), Magnet systems
TERMINAL CAPACITY (BUSBAR)	50 mm width, Main connection
TERMINAL CAPACITY (FLEXIBLE WITH CABLE LUG)	50 - 240 mm^2
SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	830 A, Maximum motor rating (UL/CSA)
TERMINAL CAPACITY (STRANDED WITH CABLE LUG)	70 - 240 mm^2
POWER CONSUMPTION	Control transformer with uk ≤ 7%
TIGHTENING TORQUE	24 Nm, Main cable connection screw/bolt 1.2 Nm, Screw terminals
WIDTH ACROSS FLATS	16 mm
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED INSULATION VOLTAGE (UI)	1000 V
RATED MAKING CAPACITY UP TO 440 V (COS PHI TO IEC/EN 60947)	6000 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	0 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 400 V	0 A
RATED OPERATIONAL	800 A

CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	
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 OPERATIONAL POWER (NEMA)	0 kW
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	1000 V
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	3.3 W
STRIPPING LENGTH (CONTROL CIRCUIT CABLE)	10 mm
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	60 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	50 ms
CONVENTIONAL THERMAL CURRENT ITH AT 40°C (3-POLE, OPEN)	1050 A
CONVENTIONAL THERMAL CURRENT ITH AT 50°C (3-POLE, OPEN)	940 A
CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN)	855 A
ALTITUDE	Max. 2000 m
OPERATING VOLTAGE AT AC, 50 HZ - MIN	110 V
OPERATING VOLTAGE AT AC, 50 HZ - MAX	120 V
OPERATING VOLTAGE AT AC, 60 HZ - MIN	110 V
OPERATING VOLTAGE AT AC, 60 HZ - MAX	120 V

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	

Eaton House
30 Pembroke Road
Dublin 4,
Eaton.com

Follow us on social media to get the latest product and support information.