Eaton 199666

Eaton Moeller® series DILM Contactor, 3 pole, 380 V 400 V 8.3 kW, 1 N/O, 1 NC, 230 V 50/60 Hz, AC operation, Push in terminals

PRODUCT NAME	Eaton Moeller® series DILM contactor
CATALOG NUMBER	199666
PRODUCT LENGTH/DEPTH	115 mm
PRODUCT HEIGHT	85 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.441 kg
CERTIFICATIONS	IEC/EN 60947 VDE 0660

Powering Business Worldwide

NUMBER OF POLES	Three-pole
FITTED WITH:	Mirror contact
OPERATING FREQUENCY	5000 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
CONNECTION TO SMARTWIRE-DT	No
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V AC
UTILIZATION CATEGORY	AC-4: Normal AC induction motors: starting, plugging, reversing, inching AC-1: Non-inductive or slightly inductive loads, resistance furnaces AC-3: Normal AC induction motors: starting, switch off during running
CONNECTION	Push in terminals
FRAME SIZE	FS2
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 TEMPERATURE - MAX	80 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
CONVENTIONAL THERMAL CURRENT ITH (1-POLE, ENCLOSED)	80 A
CONVENTIONAL THERMAL CURRENT ITH (3-POLE, ENCLOSED)	32 A
CONVENTIONAL	37 A

	dil_m8_38_pi.dwg
MCAD MODEL	eaton-iec-contactors-mcad-3d-models-dil-m8-38-pi.stp
	IL034094ZU
	eaton-contactors-dimensions-008.eps

THERMAL CURRENT ITH AT 55°C (3-POLE, OPEN)	
CONVENTIONAL THERMAL CURRENT ITH OF MAIN CONTACTS (1-POLE, OPEN)	88 A
APPLICATION	Contactors for Motors
PRODUCT CATEGORY	Contactors
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
ARCING TIME	10 ms
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Push-in connection
SCREWDRIVER SIZE	3.0 x 0.5 mm, Terminal screw 3 x 0.5 mm, Terminal screw
VOLTAGE TYPE	AC
DEGREE OF PROTECTION	IP20
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	3
RATED BREAKING CAPACITY AT 220/230 V	170 A
RATED BREAKING CAPACITY AT 380/400 V	170 A
RATED BREAKING CAPACITY AT 500 V	170 A
RATED BREAKING CAPACITY AT 660/690 V	120 A

RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	230 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	230 V
DROP-OUT VOLTAGE	AC operated: 0.6 - 0.3 x UC, AC operated
OVERVOLTAGE CATEGORY	III
DUTY FACTOR	100 %
EMITTED INTERFERENCE	According to EN 60947-1
INTERFERENCE IMMUNITY	According to EN 60947-1
LIFESPAN, MECHANICAL	10,000,000 Operations (AC operated)
PICK-UP VOLTAGE	0.8 - 1.1 V AC x Uc
POWER CONSUMPTION, PICK-UP, 50 HZ	62 VA, Dual-frequency coil in a cold state and 1.0 x Us 58 VA, Dual-frequency coil in a cold state and 1.0 x Us
SAFE ISOLATION	400 V AC, Between the contacts, According to EN 61140 400 V AC, Between coil and contacts, According to EN 61140
POWER CONSUMPTION, PICK-UP, 60 HZ	62 VA, Dual-frequency coil in a cold state and 1.0 x Us 58 VA, Dual-frequency coil in a cold state and 1.0 x Us
POWER CONSUMPTION, SEALING, 50 HZ	2.1 W, Dual-frequency coil in a cold state and 1.0 x Us
POWER CONSUMPTION, SEALING, 60 HZ	6.5 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz 9.1 VA, Dual-frequency coil in a cold state and 1.0 x Us, at 60 Hz 2.1 W, Dual-frequency coil in a cold state and 1.0 x Us
TERMINAL CAPACITY	1 x (0.75 - 2.5) mm^2, Main

(FLEXIBLE WITH UNISOLATED FERRULE)	cables 2 x (0.75 - 2.5) mm², Main cables 1 x (0.75 - 2.5) mm², Control circuit cables 2 x (0.75 - 2.5) mm², Control circuit cables 1 x (0.5 - 2.5) mm², Control circuit cables 2 x (0.5 - 2.5) mm², Control circuit cables 1 x (1 - 6) mm², Main cables 2 x (1 - 6) mm², Main cables
TERMINAL CAPACITY (FLEXIBLE WITH ULTRASONIC WELDED CABLE END)	1 x (0.75 - 2.5) mm², Main cables 2 x (0.75 - 2.5) mm², Main cables 1 x (0.75 - 2.5) mm², Control circuit cables 2 x (0.75 - 2.5) mm², Control circuit cables 1 x (0.5 - 2.5) mm², Control circuit cables 2 x (0.5 - 2.5) mm², Control circuit cables 1 x (1 - 10) mm², Main cables 2 x (1 - 6) mm², Main cables
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.5 - 1.5) mm², Control circuit cables 1 x (1 - 6) mm² 2 x (1 - 4) mm² 2 x (0.5 - 1.5) mm², Main cables
SHOCK RESISTANCE	10 g, N/O main contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 5 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 7 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms 6.5 g, N/O main contact, Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms 8 g, N/O auxiliary contact,

	Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms 2 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27 when tabletop-mounted, Half-sinusoidal shock 10 ms
TERMINAL CAPACITY (SOLID)	2 x (0.5 - 2.5) mm^2, Control circuit cables 1 x (0.5 - 0.25) mm^2 1 x (1 - 6) mm^2 2 x (1 - 6) mm^2
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 8, Main cables 20 - 14
TERMINAL CAPACITY (FLEXIBLE)	2 x (0.5 - 2.5) mm^2 2 x (1-6) mm^2 1 x (0.5 - 2.5) mm^2 1 x (1 - 10) mm^2
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 MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947)	238 A
RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V	45 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 440 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	18 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	12 A
RATED OPERATIONAL	10 A

CURRENT (IE) AT AC-4, 220 V, 230 V, 240 V	
RATED OPERATIONAL CURRENT (IE) AT AC-4, 400 V	10 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 440 V	10 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 500 V	10 A
RATED OPERATIONAL CURRENT (IE) AT AC-4, 660 V, 690 V	8 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, 110 V	35 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, 220 V	35 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, 60 V	35 A
RATED OPERATIONAL POWER AT AC-3, 240 V, 50 HZ	5 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	7.5 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ	8.7 kW
RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ	2.5 kW
RATED OPERATIONAL POWER AT AC-4, 240 V, 50 HZ	3 kW
RATED OPERATIONAL POWER AT AC-4, 380/400 V, 50 HZ	4.5 kW
RATED OPERATIONAL POWER AT AC-4, 415 V, 50 HZ	5 kW
RATED OPERATIONAL POWER AT AC-4, 440 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-4, 500 V, 50 HZ	6 kW

RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ	6.5 kW
RATED OPERATIONAL POWER (NEMA)	0 kW
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX	22 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN	16 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX	14 ms
SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MIN	8 ms
SHORT-CIRCUIT CURRENT RATING (BASIC RATING)	5 kA, 125 A max. fuse CLASS RK5, SCCR (UL/CSA) 5 kA, 125 A max. CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)	100 kA, 70 A CLASS J max. fuse, SCCR (UL/CSA) 30 kA, 30 A CLASS RK5, SCCR (UL/CSA) 65 kA, 32 A max. CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)	100 kA, 70 A CLASS J max. fuse, SCCR (UL/CSA) 30 kA, 30 A CLASS RK5, SCCR (UL/CSA)
SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 400 V	63 A gG/gL
SUITABLE FOR	Also motors with efficiency class IE3
SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 690 V	50 A gG/gL
SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION)	35 A gG/gL

AT 400 V	
SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 690 V	35 A gG/gL
OPERATING VOLTAGE AT AC, 50 HZ - MIN	24 V
OPERATING VOLTAGE AT AC, 50 HZ - MAX	690 V
OPERATING VOLTAGE AT AC, 60 HZ - MIN	24 V
OPERATING VOLTAGE AT AC, 60 HZ - MAX	690 V

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	

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