DATASHEET - TM-1-8290/EZ

ON-OFF switches, TM, 10 A, centre mounting, 1 contact unit(s), Contacts: 1, 90 °, maintained, With 0 (Off) position, 0-1, Design number 8290

Powering Business Worldwide

Part no. TM-1-8290/EZ
000693

EL Number (Norway) 1456155

Product name	Eaton Moeller® series TM On-Off switch
Part no.	TM-1-8290/EZ
EAN	4015080006930
Product Length/Depth	74 millimetre
Product height	30 millimetre
Product width	30 millimetre
Product weight	0.03 kilogram
Certifications	CSA UL File No.: E36332 UL report applies to both US and Canada UL 508 UL Category Control No.: NLRV IEC/EN 60947-3 CSA-C22.2 No. 94 VDE 0660 UL CE CSA-C22.2 No. 14-05 Certified by UL for use in Canada IEC/EN 60947-5-1 IEC/EN 60947
Product Tradename	TM
Product Type	On-Off switch
Product Sub Type	None
Fitted with:	Black thumb grip and front plate
Inscription	0-1
Number of poles	1
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	1,000,000 Operations
Mounting method	Center mounting
Mounting position	As required
Number of contact units	1
Operating frequency	1200 Operations/h
Overvoltage category	III
Pollution degree	3
Rated impulse withstand voltage (Uimp)	4000 V AC
Suitable for	Front mounting center
Switching angle	90 °
Type	ON-OFF switch
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	50 °C
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
Terminal capacity	1 x 1.5 mm^2, solid or stranded 14 AWG, solid or flexible with ferrule 1 x 1.0 mm^2, flexible with ferrules to DIN 46228 1 x 1.5 mm^2, flexible 2 x 1.5 mm^2, flexible 2 x 1.0 mm^2, flexible with ferrules to DIN 46228

	2 x 1,5 mm^2, solid or stranded
Screw size	M2.5, Terminal screw
Tightening torque	3.5 lb-in, Screw terminals 0.4 Nm, Screw terminals
Rated operational current (Ie) at AC-21, 440 V	10 A
Rated operational power at AC-3, 380/400 V, 50 Hz	0 kW
Rated operational power at AC-23A, 400 V, 50 Hz	3 kW
Rated operational voltage (Ue) at AC - min	500 V
Rated operational voltage (Ue) at AC - max	500 V
Rated uninterrupted current (Iu)	10 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	0 kA
Rated short-time withstand current (Icw)	0 kA
Short-circuit protection rating	10 A gG/gL, Fuse, Contacts
Switching capacity (main contacts, general use)	10 A, Rated uninterrupted current max. (UL/CSA)
Switching capacity (auxiliary contacts, general use)	10A, IU, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	A300 (UL/CSA)
Assigned motor power at 115/120 V, 60 Hz, 1-phase	0.33 HP
Assigned motor power at 115/120 V, 60 Hz, 3-phase	0.75 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	0.75 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	1 HP
Assigned motor power at 277 V, 60 Hz, 1-phase	0.75 HP
Control circuit reliability	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Actuator color	Black
Actuator function	With 0 (Off) position Maintained
Actuator type	Short thumb-grip
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0.15 W
Rated operational current for specified heat dissipation (In)	10 A
Static heat dissipation, non-current-dependent Pvs	0 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	UV resistance only in connection with protective shield.
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.
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.

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC		V	500
Rated operating voltage		V	500 - 500
Rated permanent current Iu		A	10
Rated permanent current at AC-23, 400 V		A	
Rated permanent current at AC-21, 400 V		A	0
Rated operation power at AC-3, 400 V		kW	0
Rated short-time withstand current Icw		kA	0
Rated operation power at AC-23, 400 V		kW	3
Switching power at 400 V		kW	0
Conditioned rated short-circuit current Iq		kA	0
Number of poles			1
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
Motor drive optional			No
Motor drive integrated			No
Voltage release optional			No
Device construction			Built-in device fixed built-in technique
Suitable for floor mounting			No
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			Yes
Suitable for distribution board installation			No
Suitable for intermediate mounting			No
Colour control element			Black
Type of control element			Short thumb-grip
Interlockable			No
Type of electrical connection of main circuit			Screw connection
Degree of protection (IP), front side			IP65
Degree of protection (NEMA)			12

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