Part no.

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

TM-1-8290/EZ



		000693 1456155	L	
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 CSA-C22.2 No. 14-05 Certified by UL for use in Canada IEC/EN 60947-5-1 IEC/EN 60947
Product Tradename				ТМ
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 sid	de)			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				111
Pollution degree				3
Rated impulse withstand volta	age (Uimp)			4000 V AC
Suitable for				Front mounting center
Switching angle				90 °
Туре				ON-OFF switch
Ambient operating temperatur	re - min			-25 °C
Ambient operating temperatur	re - 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 <sup>2</sup> , solid or stranded 14 AWG, solid or flexible with ferrule

- 14 AWG, solid or stranded 14 AWG, solid or flexible with ferrule 1 x 1.0 mm<sup>2</sup>, flexible with ferrules to DIN 46228 1 x 1.5 mm<sup>2</sup>, flexible 2 x 1.5 mm<sup>2</sup>, flexible

- 2 x 1.0 mm<sup>2</sup>, flexible with ferrules to DIN 46228

	2 x 1,5 mm <sup>2</sup> , 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	
Rated operational power at AC-23A, 400 V, 50 Hz	3 kW
Rated operational voltage (Ue) at AC - min	500 V 500 V
Rated operational voltage (Ue) at AC - max Rated uninterrupted current (Iu)	10 A
Uninterrupted current	Rated uninterrupted current lu 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	Description of the section so its hard and the her such stand
-	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.
-	

10.9.2 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)

Variation an animitanance/service Variation as maintenance/service soutchImage: soutchImage: soutchVariation as maintenance/service soutchImage: soutchImage: soutchVariation as metaneous spin installationImage: soutchImage: soutchVariation as metaneous spin installationImage: soutchImage: soutchVariation as metaneous spin installationImage: soutchImage: soutchNumber of wortchesImage: soutchImage: soutchNande operation voltage UA ACCImage: soutchImage: soutchNated operation voltage UA ACCImage: soutchImage: soutchRated operation voltage UA ACCImage: soutchImage: soutchNumber of availing volta	Low-voltage industrial components (E6000017) / Switch disconnector (EC000216)					
Varian as maintenance/service switch         No           Version as samegrency tep installation         No           Number of switche         No           Number of switche         So           Ratid permanent current tal AC-23, 400 V         So           Ratid permanent current tal AC-23, 400 V         Ratid permanent current tal AC-23, 400 V           Ratid opermanent current tal AC-23, 400 V         Ratid           Ratid opermanent current tal AC-23, 400 V         Ratid           Ratid opermanent current tal AC-23, 400 V         Ratid           Namber of power at AC-23, 400 V         Ratid           Switching power at AC-24, 400 V         Ratid           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as normally closed contact         No           Suitable fori	Electric engineering, automation, process control engineering / Low-voltage switch technology [AKF060013])	//Off-load s	witch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03			
Version as servering which         No           Version as onergency stop installation         No           Version as onergency stop installation         No           Number of switches         No           Number of switches         No           Name rate outgency stop installation         No           Rated operation voltage Ue AC         No           Rated operation voltage La Construction         No           Rated operation voltage La Construction         No           Stothing power at AC-3;400 V         No           Conditional trade short-circuit current lq         No           Number of swilling contacts as normally clease contact         No           Number of swilling contacts as normally clease contact         No           Number of swilling contacts as normally clease contact         No           Number of swilling contacts as normaliny contacts         No	Version as main switch		No			
Version as enversing switch         No           Version as reversing switch         No           Number of switches         I           Namker rated operation switches         I           Rated operation power at AC-3.400 V         I           Rated operation power at AC-3.400 V         I           Rated short-since current tow         I           Rated short-since current tow         I           Switching power at AC-3.400 V         I           Number of axiliary contexts as normally closed context         I           Number of axiliary contexts as normally closed context         I           Number of axiliary contexts as normally closed context         I           Switching register         I           Number of axiliary contexts as normall	Version as maintenance-/service switch		No			
Varian as roversing switch         Image: switch set operation voltage Us AC         Image: switch set operatich set operatich set operation voltage US AC         Imag	Version as safety switch		No			
Number of switches         Image of switches	Version as emergency stop installation		No			
Ar. rated operation voltage U e ACV60Rated operating voltageV50Rated operating voltageA1Rated permanent current I AC-23, 400 VAARated operation power at AC-3, 400 VCKW0Rated operation power at AC-3, 400 VCKW0Rated operation power at AC-3, 400 VKW00Rated operation power at AC-3, 400 VKW00Rated operation power at AC-3, 400 VKW00Number of power at AC-3, 400 VKW00Switching power at 400 VKW00Number of power at AC-3, 400 VKW00Number of auxiliary contacts an ormally closed contactKW00Number of auxiliary contacts as normally closed contactKWNoNoNumber of auxiliary contacts as normally closed contactKWNoNoNumber of auxiliary contacts as normality closed c	Version as reversing switch		No			
Rated operating voltage     00 - 300       Rated permanent current lu     A       Rated permanent current at AC-23, 400 V     A       Rated operation power at AC-23, 400 V     B       Switching withsand current lcw     M       Rated operation power at AC-23, 400 V     B       Switching power at AC-23, 400 V     B       Switching power at AC-23, 400 V     G       Switching power at AC-23, 400 V     M       Switching power at AC-23, 400 V     M </td <td>Number of switches</td> <td></td> <td>1</td>	Number of switches		1			
Red permanent current lu         A         D           Red permanent current lu AC-23, 400 V         A         0           Ret de permanent current la AC-23, 400 V         C         A           Ret de permanent current la AC-23, 400 V         C         A           Ret de permanent current la AC-21, 400 V         C         A           Ret de persion power at AC-23, 400 V         C         A           Ret de operation power at AC-23, 400 V         C         A           Stricting power at AC-23, 400 V         C         A           Conditioned rated short-circuit current lq         KM         0           Conditioned rated short-circuit current lq         KM         0           Number of auxiliary contacts as normally closed contact         KM         0           Number of auxiliary contacts as change-over contact         KM         0           Number of auxiliary contacts as change-over contact         M         0           Number of auxiliary contacts as change-over contact         M         0           Number of auxiliary contacts as change-over contact         M         0           Stricting release optional         M         N           Stricting release optional         M         N           Strictin foror mounting -bloic         M	Max. rated operation voltage Ue AC	V	500			
Aread permanent current at AC-23, 400 V         A         Constraint of the second seco	Rated operating voltage	V	500 - 500			
Rated operation power at AC-21, 400 V       Image: A	Rated permanent current lu	А	10			
Rate operation power at AC-3, 400 V         Image: Add operation power at AC-23, 400 V	Rated permanent current at AC-23, 400 V	А				
Rated short-time withstand current low         KM         Q           Rated operation power at AC-23, 400 V         KM         3           Switching power at 400 V         KM         0           Conditioned rated short-circuit current lq         KM         0           Number of poles         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         0           Number of auxiliary contacts as normally open contact         KM         No           Number of auxiliary contacts as normally open contact         No         No           Number of auxiliary contacts as normally open contact         No         No           Number of auxiliary contacts as normally open contact         No         No           Suitable for from nounting         No         No         No           Suitable for front nounting entre         M	Rated permanent current at AC-21, 400 V	А	0			
Reted operation power at AC-23, 400 V         Image: construction of the section of the sectin	Rated operation power at AC-3, 400 V	kW	0			
Witching power at 400 VImage: A power	Rated short-time withstand current lcw	kA	0			
Arror         KA         Output           Number of poles         1         1           Number of auxiliary contacts as normally closed contact         I         0           Number of auxiliary contacts as normally closed contact         I         0           Number of auxiliary contacts as change-over contact         I         0           Number of auxiliary contacts as change-over contact         I         0           Number of auxiliary contacts as change-over contact         I         No           Number of auxiliary contacts as change-over contact         I         No           Number of auxiliary contacts as change-over contact         I         No           Notact drive optional         I         I         No           Notact drive optional         I         I         No           Notact drive optional         I         I         I         No           Suitable for from mounting entre         I <td>Rated operation power at AC-23, 400 V</td> <td>kW</td> <td>3</td>	Rated operation power at AC-23, 400 V	kW	3			
Number of poles         I         I           Number of auxiliary contacts as normally closed contact         I         I           Number of auxiliary contacts as normally open contact         I         I           Number of auxiliary contacts as normally open contact         I         I           Number of auxiliary contacts as change-over contact         I         I           Motor drive optional         I         I         I           Not drive integrated         I         I         I           Voltage release optional         I         I         I           Suitable for floor mounting 4-hole         I         I         I           Suitable for instruction stallation         I         I         I         I           Suitable for instruction stallation         I <td>Switching power at 400 V</td> <td>kW</td> <td>0</td>	Switching power at 400 V	kW	0			
Aumber of auxiliary contacts as normally closed contact <ul> <li>Aumber of auxiliary contacts as normally open contact</li> <li>Autor drive optional</li> <li>Autor drive optional</li> <li>Autor drive integrated</li> <li>Autor drive integrated</li></ul>	Conditioned rated short-circuit current Iq	kA	0			
Number of auxiliary contacts as normally open contact       Image: Participation of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact         Muber of auxiliary contacts as normally open contact       Image: Participation of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact         Muber of auxiliary contacts as normally open contact       Image: Participation of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact         Muber of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact         Muber of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact       Image: Participation of auxiliary contacts as change-over contact         Suitable for fort mounting 4-hole       Image: Participation of auxiliary contracts       Image: Participation of auxiliary contacts       Image: Participation of auxiliary contacts         Suitable for fort mounting 6-hole       Image: Participation of auxiliary contacts       Image: Participation of auxiliary contacts       Image: Participation of auxiliary contacts         Suitable for fort mounting 6-hole       Image: Participation of auxiliary contacts       Image: Participation of auxiliary contacts       Image: Participation of auxiliary contacts         Suitable for fort mounting 6-hole       <	Number of poles		1			
Number of auxiliary contacts as change-over contact       Image: Contact as a change-over contact         Motor drive optional       No         Motor drive integrated       No         Voltage release optional       No         Device construction       Image: Contact as a change-over contact         Suitable for floor mounting       Image: Contact as a change-over contact         Suitable for front mounting 4-hole       Image: Contact as a change-over contact         Suitable for fort mounting centre       Image: Contact as a change-over contact         Suitable for intermediate mounting       Image: Control element         Suitable for intermediate mounting       Image: Control element         Type of control element incircuit       Image: Contact and contac	Number of auxiliary contacts as normally closed contact		0			
Motor drive optional         No           Motor drive integrated         No           Voltage release optional         No           Device construction         Motor drive integrated           Suitable for floor mounting         Built- in device fixed built- in technique           Suitable for front mounting 4-hole         Motor drive integrated           Suitable for front mounting centre         Motor drive integrated           Suitable for intermediate mounting         Motor drive integrated           Suitable for	Number of auxiliary contacts as normally open contact		0			
Motor drive integrated         Mode           Voltage release optional         No           Device construction         Built-in device fixed built-in technique           Suitable for floor mounting         Built-in device fixed built-in technique           Suitable for floor mounting 4-hole         No           Suitable for front mounting centre         Voltage release optional           Suitable for intermediate mounting         Yes           Suitable for intermediate mounting         No           Colour control element         Soltable           Type of centre financiation         Soltable           Type of electrical connection of main circuit         Soltable           Spee of protection (IP), front side         Soltable	Number of auxiliary contacts as change-over contact		0			
Voltage release optionalNoDevice constructionBuilt-in device fixed built-in techniqueSuitable for floor mountingNoSuitable for fnot mounting 4-holeNoSuitable for front mounting 4-holeNoSuitable for front mounting centreYesSuitable for distribution board installationNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementSoloType of control elementSolor thumb-gripType of electrical connection of main circuitSolorSupe of protection (IP), front sideSolorBeree of protection (IP), front sideSolorSolorSteree connection of main circuitBeree of protection (IP), front sideSolorSolorSteree connection of main circuitSolorSteree connection of main circuit <t< td=""><td>Motor drive optional</td><td></td><td>No</td></t<>	Motor drive optional		No			
Device constructionBills-in device fixed built-in techniqueSuitable for floor mountingNoSuitable for front mounting 4-holeNoSuitable for front mounting centreYesSuitable for distribution board installationNoSuitable for intermediate mountingNoSuitable for intermediate mountingNoSoltable for intermediate mountingNoSuitable for intermediate mountingSuitableSuitable for intermediate mounting<	Motor drive integrated		No			
Suitable for floor mountingNoSuitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationMoSuitable for distribution board installationNoSuitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementSoType of control elementNoInterlockableNoType of electrical connection of main circuitMoPegree of protection (IP), front sideMoInterlockableSorew connectionInterlockableNoType of entrol elementNoType of entrol elementNoType of entrol element in circuitNoType of entrol element in circuitNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsci NoNoSubsc	Voltage release optional		No			
Suitable for front mounting 4-holeNoSuitable for front mounting centreYesSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementBlackType of control elementNoInterlockableNoType of electrical connection of main circuitSer of connectionDegree of protection (IP), front sideSer of connection	Device construction		Built-in device fixed built-in technique			
Suitable for front mounting centreYesSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementBlackType of control elementNoInterlockableNoType of electrical connection of main circuitSorew connectionDegree of protection (IP), front sideSorew connection	Suitable for floor mounting		No			
Suitable for distribution board installation       No         Suitable for intermediate mounting       No         Colour control element       Soitable for intermediate mounting         Type of control element       Short thumb-grip         Interlockable       No         Type of electrical connection of main circuit       Soitable for element         Interlockable       Screw connection	Suitable for front mounting 4-hole		No			
Suitable for intermediate mountingNoSuitable for intermediate mountingNoColour control elementBlackType of control elementShort thumb-gripInterlockableNoType of electrical connection of main circuitSerew connectionDegree of protection (IP), front sideSolow	Suitable for front mounting centre		Yes			
Colour control elementBlackType of control elementShort thumb-gripInterlockableNoType of electrical connection of main circuitSorew connectionDegree of protection (IP), front sideImage: Social content	Suitable for distribution board installation		No			
Type of control element     Short thumb-grip       Interlockable     No       Type of electrical connection of main circuit     Connection       Degree of protection (IP), front side     Good	Suitable for intermediate mounting		No			
Interlockable     No       Type of electrical connection of main circuit     Screw connection       Degree of protection (IP), front side     IP65	Colour control element		Black			
Type of electrical connection of main circuit     Screw connection       Degree of protection (IP), front side     IP65	Type of control element		Short thumb-grip			
Degree of protection (IP), front side	Interlockable		No			
	Type of electrical connection of main circuit		Screw connection			
	Degree of protection (IP), front side		IP65			
Degree of protection (NEMA) 12	Degree of protection (NEMA)		12			