

Specifications



Eaton 177290

Eaton Moeller® series RS Safety switch, RS, 1 N/O, 1 NC, Reed contacts, Ue 24 V DC, -10 - +55 °C, Plastic, Connecting cable 150 mm with plug connection M12 x 1, Sn 8 - 19 mm

General specifications

PRODUCT NAME	Eaton Moeller® series RS Safety switch
CATALOG NUMBER	177290
MODEL CODE	RS2-11-Q4
EAN	4015081717439
PRODUCT LENGTH/DEPTH	52 mm
PRODUCT HEIGHT	13 mm
PRODUCT WIDTH	26 mm
PRODUCT WEIGHT	0.057 kg
CERTIFICATIONS	UL Category Control No.: NRKH, NRKH7 CSA File No.: UL report applies to both US and Canada UL EN ISO 13849 Certified by UL for use in Canada IEC 62061 CE ISO 14119 UL File No.: E166051
CATALOG NOTES	Reed contacts
GLOBAL CATALOG	177290



Powering Business Worldwide

Product specifications

TYPE	Safety position switch
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.
10.3 DEGREE OF PROTECTION OF	Does not apply, since the entire switchgear needs to

Resources

CATALOGS	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf eaton-pushbuttons-signal-towers-sensors-assortment-overview-catalog-ca047003en-en-us.pdf
DECLARATIONS OF CONFORMITY	DA-DC-00004658.pdf DA-DC-00004647.pdf
DRAWINGS	eaton-proximity-switches-rs-safety-switch-dimensions.eps eaton-proximity-switches-rs-safety-switch-dimensions-004.eps eaton-proximity-switches-rs-safety-switch-3d-drawing-002.eps eaton-general-esr5-safety-relay-symbol.eps
ECAD MODEL	DA-CE-ETN.RS2-11-Q4
INSTALLATION INSTRUCTIONS	eaton-moeller-series-rs-safety-switch-instruction-leaflet-il053002zu.pdf
MCAD MODEL	DA-CD-rs2 DA-CS-rs2
SALES NOTES	eaton-safety-switches-rs-titan-flyer-fl053001en-en-us.pdf

ASSEMBLIES	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.
ELECTRIC CONNECTION TYPE	Connector M12
ENCLOSURE MATERIAL FINISHING	Plastic-coated
ENCLOSURE MATERIAL	Plastic
ENCLOSURE TYPE	Cuboid
RATED OPERATIONAL CURRENT (IE) AT DC-13, 125 V	0 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V	0 A
RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	0.3 A
RATED SWITCHING DISTANCE (SN) - MAX	19 mm
RATED SWITCHING DISTANCE (SN) - MIN	8 mm
SENSOR HEIGHT	13 mm
SENSOR LENGTH	52 mm
WIDTH SENSOR	26 mm
PRODUCT CATEGORY	Non-contacting safety switch
ACTION	2020122120328-Mechanical Limit

	Switches.xlsm-Data
EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-10 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
HEAT DISSIPATION CAPACITY PDISS	0 W
NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1
NUMBER OF SAFETY AUXILIARY CONTACTS	1
RATED OPERATIONAL CURRENT (IE) AT AC-15, 125 V	0 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	0 A
RATED OPERATIONAL CURRENT (IE) AT AC-15, 24 V	0 A
MOUNTING POSITION	As required
MATERIAL	Plastic
CONNECTION TYPE	Plug-in connection M12 x 1
DEGREE OF PROTECTION	IP67 NEMA Other
INTERFACE TYPE	None
TERMINAL CAPACITY (AWG)	22
RELATIVE HUMIDITY	90 % (at 55 °C)
RATED OPERATIONAL VOLTAGE	24 V DC
REPETITION ACCURACY	≤ 10 % (deviation)

SHOCK RESISTANCE	30 g, Shock duration 11 ms, Half-Sinusoidal
SUITABLE FOR	Safety functions
VIBRATION RESISTANCE	0 - 2000 Hz, 1 mm
SAFETY PARAMETER (EN ISO 13849-1)	20,000,000 switching cycles, B10d PL e, Performance level
SAFETY PARAMETER (IEC 62061)	SIL: 3
SWITCHING CONTACT TYPE	Other

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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