Specifications



Photo is representative





Eaton 116012

Eaton Moeller® series M22 Function element, for combination with RMQ-Titan operating elements M22-..., 2 changeover contact, Base fixing, red

General specifications		
PRODUCT NAME	Eaton Moeller® series M22 Function element	
CATALOG NUMBER	116012	
MODEL CODE	M22-SWD-K22LEDC-R	
EAN	4015081157525	
PRODUCT LENGTH/DEPTH	45 mm	
PRODUCT HEIGHT	42 mm	
PRODUCT WIDTH	17 mm	
PRODUCT WEIGHT	0.013 kg	
CERTIFICATIONS	CSA File No.: 2324643 EN 50178 UL UL File No.: E29184 CSA UL Category Control No.: NKCR IEC/EN 61131-2 CSA Class No.: 3211-07	
GLOBAL CATALOG	116012	



Product specification	S
AIR DISCHARGE	8 kV, according to IEC 61131-2, level 3, ESD
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	Does not apply, since the

Resources	
CATALOGS	eaton-rmq-titan-brochure- br047004en-en-us.pdf
	eaton-pushbuttons-signal- towers-sensors-assortment- overview-catalog-ca047003en-en- us.pdf
	Flip catalog - Product Range Catalog - Command and indication
CONTROL TRAVEL DIAGRAM	eaton-operating-diagram-m22- contact-element-contact-travel- diagram-009.eps
DECLARATIONS OF CONFORMITY	eaton-function-element- declaration-of-conformity- eu250506en.pdf
DRAWINGS	eaton-operating-button-symbol- 006.eps
	eaton-operating-function-m22- function-element-3d-drawing.eps
	eaton-operating-m22-function- element-flow-diagram-002.eps
ECAD MODEL	ETN.116012.edz
FLYERS	eaton-rmq-titan-selection-aid- brochure-fl047002-en-us.pdf
INSTALLATION INSTRUCTIONS	IL04716004Z2021_10.pdf
INSTALLATION VIDEOS	RMQ Flat Design
MANUALS AND	MN05006001Z_EN
USER GUIDES	MN05006002Z EN
MCAD MODEL	DA-CS- funktionselement_k22_led_boden
	DA-CD- funktionselement k22 led boden
MULTIMEDIA	MCI MultiColor Light Indicator RMQ compact solution
	RMQ small E-Stop emergency- stop button
	MCI Multicolor Light Indicator M22 with SmartWire-DT
	easyE4 SmartWire-DT module with Remote Touch Display and RMQ multi color indicator

PROTECTION OF ASSEMBLIES	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	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
ELECTRIC CONNECTION TYPE	Flat plug-in connection
	Flat plug-in connection
ТҮРЕ	
POLLUTION DEGREE	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN
POLLUTION DEGREE BURST IMPULSE	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3
TYPE POLLUTION DEGREE BURST IMPULSE ADDRESSING AMBIENT OPERATING	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 Address set automatically
TYPE POLLUTION DEGREE BURST IMPULSE ADDRESSING AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 Address set automatically 70 °C
TYPE POLLUTION DEGREE BURST IMPULSE ADDRESSING AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 Address set automatically 70 °C -30 °C
TYPE POLLUTION DEGREE BURST IMPULSE ADDRESSING AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE TEMPERATURE - MAX AMBIENT STORAGE	1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 Address set automatically 70 °C -30 °C
TYPE POLLUTION DEGREE BURST IMPULSE ADDRESSING AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE TEMPERATURE - MAX AMBIENT STORAGE TEMPERATURE - MIN EQUIPMENT HEAT DISSIPATION, CURRENT-	2 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 Address set automatically 70 °C -30 °C 80 °C

eaton-control circuit-devices rmq-titan-fl144090en-en-us.pdf
eaton-rmq-mci-multi-color-light- indicator-flyer-fl047005en-en- us.pdf
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eaton-rmq-chemical-resistance- flyer-fl047011en-en-us.pdf
eaton-rmq-flat-enclosure-flyer- fl047003en-en-us.pdf
eaton-modular-plc-m22-function- element-wiring-diagram-002.eps

HEIGHT OF FALL (IEC/EN 60068-2-32) - MAX	0.3 m
NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	2
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	2
NUMBER OF SWITCHES (FAULT SIGNAL)	0
CONNECTION TO SMARTWIRE-DT	Yes
ENVIRONMENTAL CONDITIONS	Condensation: prevent with appropriate measures
MOUNTING POSITION	As required
CONNECTION TYPE	SWD: Plug, 8-pole Base fixing
MOUNTING METHOD	Front fastening
CONNECTION	SmartWire-DT plug connector M22-SWD-ILP
CONTACT DISCHARGE	4 kV, according to IEC/EN 61131-2, Level 2, ESD
OVERVOLTAGE CATEGORY	Not applicable
DEGREE OF PROTECTION	IP20
CONSTANT ACCELERATION	1 g, 8.4 - 150 Hz, according to IEC/EN 61131-2, Vibrations
MODEL	Top mounting
CONSTANT AMPLITUDE	3,5 mm, 5 - 8.4 Hz, according to IEC/EN 61131-2, Vibrations
LAMP HOLDER	LED not exchangeable
FUNCTIONS	For combination with RMQ-Titan operating elements M22 Diagnosis function
ELECTROMAGNETIC FIELDS	1 V/m at 2.0 - 2.7 GHz (according to IEC/EN 61131-2:2008) 10 V/m at 80 - 1000 MHz (according to IEC/EN 61131-2:2008) 3 V/m at 1.4 - 2 GHz (according to IEC/EN

	61131-2:2008)
RADIATED RFI	10 V (IEC/EN 61131-2:2008, Level 3)
DROP AND TOPPLE	50 mm Drop height, Drop to IEC/EN 60068-2-31
RADIO INTERFERENCE CLASS	Class A (EN 55011)
RELATIVE HUMIDITY	5 - 95 % (non-condensing, IEC/EN 60068-2-30)
LED INDICATOR	Status indication of SmartWire-DT network: Green LED Status indication of Switching state: Yellow LED
STATION	SmartWire-DT slave, SmartWire-DT network
STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS	0.3 W
PRODUCT CATEGORY	SmartWire-DT RMQ connections
RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V	0 A
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	0 A
SHOCK RESISTANCE	15 g, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 11 ms, 9 Impacts

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	



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