

Illuminated pushbutton function element, SmartWire-DT, 1W, LED, white, base fixing

Powering Business Worldwide\*

Part no. M22-SWD-K11LEDC-W
Article no. 116003
Catalog No. M22-SWD-K11LEDC-WQ



#### **Delivery program**

Delivery program	
Basic function	Function elements
Function	for combination with RMQ-Titan operating elements M22
Fixing	Base fixing
Contacts	1 changeover contact
Contact sequence	
Contact travel diagram stroke in connection with front element	0 1.2 5.5
Configuration	2 3 1
Colour	
	white
Connection to SmartWire-DT	yes

## **Technical data**

#### General

Standards			IEC/EN 61131-2 EN 50178
Dimensions (W x H x D)		mm	12 x 45 x 42
Weight		g	10
Mounting position			As required
Ambient conditions, mechanical			
Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Vibrations (IEC/EN 61131-2:2008)			
Constant amplitude 3,5 mm		Hz	5 - 8.4
Constant acceleration 1 g		Hz	8.4 - 150
Mechanical shock resistance (IEC/EN 60068-2-27) semi-sinusoidal 15 g/11 ms		Impacts	9
Drop to IEC/EN 60068-2-31	Drop height	mm	50
Free fall, packaged (IEC/EN 60068-2-32)		m	0.3

### **Electromagnetic compatibility (EMC)**

Pollution degree Electrostatic discharge (IEC/EN 61131-2:2008)  Air discharge (Level 3)  Contact discharge (Level 2)  Electromagnetic fields (IEC/EN 61131-2:2008)  80 - 1000 MHz  1.4 - 2 GHz  2 - 2.7 GHz  Radio interference suppression (SmartWire-DT)  Burst (IEC/EN 61131-2:2008, Level 3)  Supply cable  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3)  Relative humidity  Condensation  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT network  Station type  Address allocation  SmartWire-DT slave  Address allocation				
Electrostatic discharge (IEC/EN 61131-2:2008)  Air discharge (Level 3) Contact discharge (Level 2)  Electromagnetic fields (IEC/EN 61131-2:2008)  80 - 1000 MHz  1.4 - 2 GHz 2 - 2.7 GHz Radio interference suppression (SmartWire-DT)  Supply cable  Supply cable  Supply cable  SmartWire-DT cable Radioted RFI (IEC/EN 61131-2:2008, Level 3)  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT network  Station type  SmartWire-DT network  Station type  Address allocation  Relative discovered and stations  Station type  SmartWire-DT slave automatic	Overvoltage category			Not applicable
Air discharge (Level 3) Contact discharge (Level 2)  Electromagnetic fields (IEC/EN 61131-2:2008)  80 - 1000 MHz  1.4 - 2 GHz 2 - 2.7 GHz Radio interference suppression (SmartWire-DT)  Surst (IEC/EN 6131-2:2008, Level 3)  Supply cable  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3)  Vy 10  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT slave Address allocation  SmartWire-DT slave Address allocation	Pollution degree			2
Contact discharge (Level 2)  kV 4  Electromagnetic fields (IEC/EN 61131-2-2008)  80 - 1000 MHz  1.4 - 2 GHz  2 - 2.7 GHz  Radioi interference suppression (SmartWire-DT)  Burst (IEC/EN 61131-2-2008, Level 3)  Supply cable  KV 2  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2-2008, Level 3)  Vy 10  Limatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT slave  Address allocation  Relative Auditions  SmartWire-DT slave  Address allocation	Electrostatic discharge (IEC/EN 61131-2:2008)			
Electromagnetic fields (IEC/EN 61131-2:2008)  80 - 1000 MHz  1.4 - 2 GHz  2 - 2.7 GHz  Radio interference suppression (SmartWire-DT)  Burst (IEC/EN 61131-2:2008, Level 3)  Supply cable  KV  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3)  Vy  10  Condensation Relative humidity  Condensation Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type Address allocation  SmartWire-DT slave Address allocation  SmartWire-DT slave Address allocation  SmartWire-DT slave Address allocation	Air discharge (Level 3)	k\	V	8
80 - 1000 MHz  1.4 - 2 GHz  V/m  1.4 - 2 GHz  V/m  2 - 2.7 GHz  V/m  1 EN 55011 Class A  ENSTAIL (IEC/EN 61131-2:2008, Level 3)  SmartWire-DT cable  Rediated RFI (IEC/EN 61131-2:2008, Level 3)  Vinctional Conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  Vinctional Class A  EN 55011 Class A  EN 55011 Class A  Vinctional Class A  Vinctional Class A  Vinctional Class A  EN 55011 Class A  Vinctional Class	Contact discharge (Level 2)	k\	V	4
1.4 - 2 GHz 2 - 2.7 GHz Radio interference suppression (SmartWire-DT) Burst (IEC/EN 61131-2:2008, Level 3) Supply cable  KV 2 SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3) V 10 Climatic environmental conditions Relative humidity Condensation Relative humidity, non-condensing (IEC/EN 60068-2-30) Relative humidity, non-condensing (IEC/EN 60068-2-30) SmartWire-DT network Station type Address allocation  SmartWire-DT slave Address allocation  SmartWire-DT slave Address allocation	Electromagnetic fields (IEC/EN 61131-2:2008)			
2 - 2.7 GHz Radio interference suppression (SmartWire-DT)  Burst (IEC/EN 61131-2:2008, Level 3)  Supply cable  kV 2  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3)  V 10  Climatic environmental conditions Relative humidity  Condensation Relative humidity, non-condensing (IEC/EN 60068-2-30) Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  I a condition smartwire-DT slave automatic  SmartWire-DT slave automatic	80 - 1000 MHz	V	//m	10
Radio interference suppression (SmartWire-DT)  Burst (IEC/EN 61131-2:2008, Level 3)  Supply cable  kV 2  SmartWire-DT cable Radiated RFI (IEC/EN 61131-2:2008, Level 3)  V 10  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  EN 55011 Class A  EN 55011 Class A  EN 55011 Class A   EN 55011 Class A   EN 55011 Class A   SmartWire-DT cable  SmartWire-DT slave  automatic	1.4 - 2 GHz	V	//m	3
Burst (IEC/EN 61131-2:2008, Level 3)  Supply cable  kV 2  SmartWire-DT cable  Radiated RFI (IEC/EN 61131-2:2008, Level 3)  V 10  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  KV 1  Take appropriate measures to prevent condensation  9 - 95  SmartWire-DT slave  automatic	2 - 2.7 GHz	V	//m	1
Supply cable kV 2  SmartWire-DT cable kV 1  Radiated RFI (IEC/EN 61131-2:2008, Level 3) V 10  Climatic environmental conditions Relative humidity	Radio interference suppression (SmartWire-DT)			EN 55011 Class A
SmartWire-DT cable kV 1 Radiated RFI (IEC/EN 61131-2:2008, Level 3) V 10 Climatic environmental conditions Relative humidity Take appropriate measures to prevent condensation Relative humidity, non-condensing (IEC/EN 60068-2-30) % 9 - 95 Condensation Protection (IEC/EN 60068-2-30) SmartWire-DT network Condensation SmartWire-DT network Condensation SmartWire-DT slave automatic	Burst (IEC/EN 61131-2:2008, Level 3)			
Radiated RFI (IEC/EN 61131-2:2008, Level 3)  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  V 10  Take appropriate measures to prevent condensation  9 - 95  SmartWire-DT slave  automatic	Supply cable	k۱	V	2
Radiated RFI (IEC/EN 61131-2:2008, Level 3)  Climatic environmental conditions  Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  V 10  Take appropriate measures to prevent condensation  9 - 95  SmartWire-DT slave  automatic				
Climatic environmental conditions Relative humidity  Condensation Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network Station type Address allocation  Condensation Take appropriate measures to prevent condensation  7 a y - 95  SmartWire-DT network  SmartWire-DT slave  automatic	SmartWire-DT cable	k۱	V	1
Relative humidity  Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT slave automatic	Radiated RFI (IEC/EN 61131-2:2008, Level 3)	V	,	10
Condensation  Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  Take appropriate measures to prevent condensation  9 - 95  SmartWire-DT slave  automatic	Climatic environmental conditions			
Relative humidity, non-condensing (IEC/EN 60068-2-30)  SmartWire-DT network  Station type  Address allocation  SmartWire-DT slave automatic	Relative humidity			
SmartWire-DT network Station type SmartWire-DT slave Address allocation automatic	Condensation			Take appropriate measures to prevent condensation
Station type SmartWire-DT slave Address allocation automatic	Relative humidity, non-condensing (IEC/EN 60068-2-30)	%	6	9 - 95
Address allocation automatic	SmartWire-DT network			
	Station type			SmartWire-DT slave
Status indication LED Green	Address allocation			automatic
	Status indication	LE	ED	Green

#### Fieldbus interface

Connections

Plug connectors

Baud rate setting	automatic	

Plug, 8-pole

M22-SWD-I...LP

# Design verification as per IEC/EN 61439

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	$P_{\text{vid}}$	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0.3
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-30
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 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 Insulation properties	
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 6.0**

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss8.1-27-37-13-02 [AKN342010])

Number of contacts as change-over contact

Number of contacts as normally open contact

Number of contacts as normally closed contact

Rated operation current le at AC-15, 230 V

Type of electric connection

Model

Mounting method

Flat plug-in connection

Top mounting

Front fastening

# **Approvals**

UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	2324643
CSA Class No.	3211-07
North America Certification	UL listed, CSA certified
Specially designed for North America	No

### **Additional product information (links)**

riadicional product informat				
IL04716004Z (AWA1160-2511) SmartWire-DT: RMQ-Titan				
IL04716004Z (AWA1160-2511) SmartWire-DT: RMQ-Titan	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716004Z2015_02.pdf			
MN05006001Z Handbuch SmartWire-DT, SWD-	Teilnehmer IP20			
MN05006001Z (AWB2723-1613) SmartWire-DT, Teilnehmer - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_DE.pdf			
MN05006001Z (AWB2723-1613) SmartWire-DT, Modules - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_EN.pdf			
MN05006001Z (AWB2723-1613) SmartWire-DT, modulo - italiano	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006001Z_IT.pdf			
MN05006002Z (AWB2723-1617) SmartWire-DT, The system				
MN05006002Z (AWB2723-1617) SmartWire-DT, Das System - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_DE.pdf			
MN05006002Z (AWB2723-1617) SmartWire-DT, The system - English	ftp://ftp.moeller.net/D0CUMENTATION/AWB_MANUALS/MN05006002Z_EN.pdf			
MN05006002Z (AWB2723-1617) SmartWire-DT, il sistema - italiano	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05006002Z_IT.pdf			