



**Series element, 42-60VAC/DC, for LED 12-30V**

**Part no.** M22-XLED60  
**Article no.** 231078  
**Catalog No.** M22-XLED60Q

**Delivery program**

Product range			Accessories
Single unit/Complete unit			Single unit
Description			LED resistor
Function			for connecting 12 - 30 V LED elements
Connection technique			Screw terminals
Rated operational voltage	$U_e$	V	42 ... 60 V AC/DC
Degree of Protection			IP20
Connection to SmartWire-DT			no

**Notes**

For pushbutton actuators, indicator lights, illuminated pushbuttons and illuminated selector switch actuators, the following applies:

M22...-R only in combination with M22-LED...-R

M22...-G only in combination with M22-LED...-G

M22...-W only in combination with M22-LED...-W

M22...-Y only in combination with M22-LED...-W

M22...-B in combination with M22-LED...-W or M22-LED...-B

**Technical data**

**General**

Ambient temperature			
Open		°C	-25 - +70
Storage		°C	- 40 - + 80

**Design verification as per IEC/EN 61439**

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	0
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0.5
Heat dissipation capacity	$P_{diss}$	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
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) / Accessories for control circuit devices (EC002024)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Low-voltage switch technology (accessories) / Control circuit devices (accessories) (ecI@ss8.1-27-37-92-16 [ACO043008])			
Type of electrical accessory			Resistor block
Type of mechanical accessory			-

## Approvals

Product Standards			IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			012528
CSA Class No.			3211-03
North America Certification			UL listed, CSA certified
Degree of Protection			UL/CSA Type: -

## Dimensions

Pushbutton with M22-(C)K...
Pushbutton with M22-(C) LED... + M22-XLED...

## Additional product information (links)

<b>IL04716009Z (AWA1160-1747) Series element RMQ-Titan</b>	
IL04716009Z (AWA1160-1747) Series element RMQ-Titan	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716009Z2015_02.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716009Z2015_02.pdf</a>