



231078  
M22-XLED60



Overview



Specifications



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## DELIVERY PROGRAM

Basic function accessories  
LED elements

Function  
for connecting 12 - 30 V LED elements

Description  
LED resistor

Connection technique  
Screw terminals

Rated operational voltage [U<sub>e</sub>]  
42 ... 60 V AC/DC V

Degree of Protection  
IP20

Connection to SmartWire-DT  
no

Approval



Connection technique  
Screw terminals

#### 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

Degree of Protection  
IP20

Ambient temperature  
Open  
-25 - +70 °C

Ambient temperature  
Storage  
- 40 - + 80 °C

## DESIGN VERIFICATION AS PER IEC/EN 61439

### Technical data for design verification

Rated operational current for specified heat

dissipation [ $I_r$ ]  
0 A

Heat dissipation per pole, current-dependent [ $P_{id}$ ]  
0 W

Equipment heat dissipation, current-dependent  
[ $P_{id}$ ]  
0 W

Static heat dissipation, non-current-dependent [ $P_{is}$ ]  
0.5 W

Heat dissipation capacity [ $P_{diss}$ ]  
0 W

Operating ambient temperature min.  
-25 °C

Operating ambient temperature max.  
+70 °C

## 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 Strength of materials and parts  
10.2.3.1 Verification of thermal stability of enclosures  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
10.2.3.2 Verification of resistance of insulating materials to normal heat  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
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 Strength of materials and parts  
10.2.4 Resistance to ultra-violet (UV) radiation  
Meets the product standard's requirements.

10.2 Strength of materials and parts

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts

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 Insulation properties

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9 Insulation properties

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 7.0

Low-voltage industrial components (EG000017) / Accessories for control circuit devices (EC002024)

Type of electrical accessory

Resistor block

Type of mechanical accessory

Other

## APPROVALS

Product Standards

IEC/EN 60947-5; UL 508; CSA-C22.2 Nb. 14-05;

CSA-C22.2 Nb. 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...



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