



218059
M22-LED230-B

Overview

Specifications

Resources



Delivery program

Technical data

Design verification as
per IEC/EN 61439

Technical data ETIM 7.0

Approvals

Dimensions

DELIVERY PROGRAM

Basic function accessories
LED elements

Connection technique
Screw terminals

Fixing
Front fixing

Rated operational voltage [U_e]
85 - 264 V AC, 50/60 Hz V

Rated operational current [I_e]
5 - 15 mA

Power consumption [P_{max}]
0.33 W

Lifespan to EN 60064 at $t_a = +25\text{ °C}$ [t_{mean} (AC)]
100000 h

Degree of Protection
IP20

At 230 V

Colour

Blue



Connection to SmartWire-DT
no

Approval



Connection technique
Screw terminals

Notes

For indicator lights, illuminated pushbutton actuators, 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

Standards
IEC 60947-5-1

Operating torque (screw terminals)
□ 0.8 Nm

Degree of Protection
IP20

Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature
Open
-25 - +70 °C

Ambient temperature
Storage
- 40 - + 80 °C

Mounting position
As required

Mechanical shock resistance according to IEC
60068-2-27

Shock duration 11 ms, half-sinusoidal
> 30 g

Mechanical shock resistance
30
Shock duration 11 ms
Sinusoidal
according to IEC 60068-2-27 g

Terminal capacities
Solid
0.75 - 2.5 mm²

Terminal capacities
Stranded
0.5 - 2.5 mm²

Contacts

Rated impulse withstand voltage [U_{imp}]
6000 V AC

Rated insulation voltage [U_i]
500 V

Overvoltage category/pollution degree
III/3

Indoor and protected outdoor installation

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat
dissipation [I_h]
0 A

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

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

Static heat dissipation, non-current-dependent [P_{vs}]
1 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.

Low-voltage industrial components (EG000017) / Lamp holder block for control circuit devices (E0000204)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Bulb socket block for command and alarm devices (ecl@ss10.0.1-27-37-12-09 [AKF027014])

Transformer integrated
No

With integrated voltage decreasing resistor
No

With light source
Yes

With integrated diode
Yes

Lamp holder
None

Rated voltage U_e at AC 50 Hz
85 - 264 V

Rated voltage U_e at AC 60 Hz
85 - 264 V

Rated voltage U_e at DC
0 - 0 V

Voltage type for actuating
AC

Lamp type
LED

Connection type auxiliary circuit
Screw connection

Colour lamp
Blue

Type of fastening
Front fastening

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

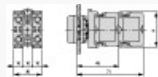
CSA File No.
012528

CSA Class No.
3211-03

North America Certification
UL listed, CSA certified

Degree of Protection
UL/CSA Type: -

DIMENSIONS



A = 37.2

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

