DATASHEET - M22-LED-R



LED element, red, front mount, 12-30VAC/DC

Part no. M22-LED-R
Catalog No. 216558
Eaton Catalog No. M22-LED-RQ
EL-Nummer 4355368

(Norway)

Powering Business Worldwide

Delivery program

Product range Part group reference (e.g., DIL) Basic function accessories LED elements Single unit/Complete unit Connection technique Fixing Rated operational voltage Rated operational current Rated operational current min. Rated operational current min. Rated operational current, max (units: mA) Power consumption Lifespan to EN 80084 at t _a = +25 °C Degree of Protection Connection to SmartWire-DT Approval Accusator travel and actuation force as per DIN EN 60947-5-1, K.5.4.1	ery program			
Basic function accessories Single unit/Complete unit Connection technique Fixing Rated operational voltage Rated operational current Rated operational current Rated operational current, max. [units: mA] Rated operational current Rated operational current	range			Accessories
Single unit/Complete unit Connection technique Fixing Rated operational voltage Rated operational current Rated operational current min. Rated operational current, max. [units: mA] Power consumption Lifespan to EN 60064 at t ₀ = +25 °C Degree of Protection Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	p reference (e.g. DIL)			M22
Connection technique Fixing Rated operational current Rated operational current min. Rated operational current, max. [units: mA] Power consumption Lifespan to EN 80064 at t _e = +25 °C Degree of Protection Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	action accessories			LED elements
Fixing Rated operational current Rated operational current min. Rated operational current, max. [units: mA] Power consumption Lifespan to EN 60064 at t _a = +25 °C Degree of Protection Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	it/Complete unit			Single unit
Rated operational voltage Rated operational current Rated operational current min. Rated operational current, max. [units: mA] Power consumption Lifespan to EN 60064 at t _q = +25 °C Degree of Protection Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	on technique			Screw terminals
Rated operational current Rated operational current min. Rated operational current, max. [units: mA] Power consumption Lifespan to EN 60064 at t _n = 425 °C Degree of Protection Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,				Front fixing
Rated operational current min. Rated operational current, max. [units: mA] Power consumption Pmax W 0.26 Lifespan to EN 60064 at t _a = +25 °C tmean (AC) Degree of Protection Colour Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	erational voltage L	U _e	V	12 - 30 V AC/DC, 50/60 Hz
Rated operational current, max. [units: mA] e	pperational current			
Power consumption Pmax. W 0.26 Lifespan to EN 60064 at t _a = +25 °C Degree of Protection Pmax. W 0.26 100000 IP20 at 24 V Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	l operational current min.	l _e	mA	8
Lifespan to EN 60064 at t _a = +25 °C Degree of Protection Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	l operational current, max. [units: mA]	l _e	mA	15
Degree of Protection IP20 at 24 V Colour Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	onsumption F	P _{max} .	W	0.26
Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	to EN 60064 at t_a = +25 °C	t _{mean} (AC)	h	100000
Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,	f Protection			IP20
Connection to SmartWire-DT Approval Actuator travel and actuation force as per DIN EN 60947-5-1,				at 24 V
Actuator travel and actuation force as per DIN EN 60947-5-1,				
Actuator travel and actuation force as per DIN EN 60947-5-1,				
Actuator travel and actuation force as per DIN EN 60947-5-1,	on to SmartWire-DT			no
				LED
	or travel and actuation force as per DIN EN 60947-5-1,			
Minimum force for positive opening N 0	num force for positive opening	N		0
Connection technique Screw terminals	on 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)	Nm	≦ 0.8

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		°C	-25 - +70
Storage		°C	- 40 - + 80
Mounting position			As required
Mechanical shock resistance according to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal		g	> 30
Mechanical shock resistance		g	30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27
Terminal capacities		mm^2	
Solid		mm ²	0.75 - 2.5
Stranded		mm ²	0.5 - 2.5
Contacts			
Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			III/3

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
		W	0.45
Static heat dissipation, non-current-dependent	P _{vs}		
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 bobserved.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must bobserved.

Technical data ETIM 6.0

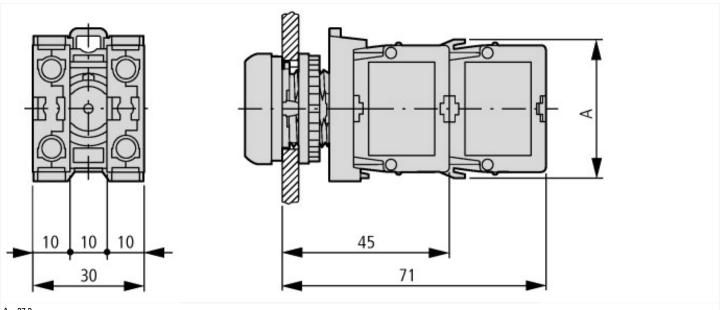
Low-voltage industrial components (EG000017) / Lamp holder block for control circuit devices (EC000204)

Electric engineering, automation, process control engineering / Low-voltage switc (ecl@ss8.1-27-37-12-09 [AKF027011])	h technology / Co	mmand	and alarm device / Bulb socket block for command and alarm devices
With integrated transformer			No
With integrated voltage decreasing resistor			No
With integrated lamp			Yes
With integrated diode			Yes
Lamp holder			None
Rated voltage Ue at AC 50 Hz	V	/	0 - 0
Rated voltage Ue at AC 60 Hz	V	/	0 - 0
Rated voltage Ue at DC	V	/	30 - 30
Voltage type for actuating			AC/DC
Type of lamp			LED
Connection type auxiliary circuit			Screw connection
Colour lamp			Red
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...

Assets (Links)

Declaration of Conformity

00002596

Additional product information (links)

IL04716002Z (AWA1160-1745) RMQ-Titan System