DATASHEET - M22-AK10



Assembly of contact element with screw terminals and fixing adapter, 1 $\ensuremath{\text{N}/\text{0}}$



Part no. M22-AK10 Catalog No. 216504 Alternate Catalog M22-AK100

No.

EL-Nummer 4355432

(Norway)

Delivery program

Description Connection technique Screw terminals Front fixing Degree of Protection Connection to SmartWire-DT Contacts N/D = Normally open Contact sequence Contact travel diagram, stroke in connection with front element Contact diagram Configuration Assembly of contact element with screw terminals and fixing adapter Screw terminals Front fixing IP20 no Contact Travel diagram, stroke in connection with front element Contact diagram Contact diagram Contact diagram Configuration Assembly of contact element with screw terminals and fixing adapter Screw terminals Front fixing IP20 no Contact Travel diagram, stroke in connection with front element 0	Delivery program	
Connection technique Fixing Front fixing Pron fixing Pront fixing P	Basic function accessories	Contact elements
Front fixing Degree of Protection Connection to SmartWire-DT Contacts N/O = Normally open Contact sequence Contact travel diagram, stroke in connection with front element Contact diagram Contact diagram Contact diagram Configuration Front fixing Prote fixing Prote fixing Prote fixing Prote fixing Prote fixing Protection Pro	Description	Assembly of contact element with screw terminals and fixing adapter
Degree of Protection Connection to SmartWire-DT Contacts N/0 = Normally open Contact sequence Contact travel diagram, stroke in connection with front element Contact diagram Contact diagram Configuration P20 no 1 N/0 1 N/0 1 13 1 3 1 4 1 4 Contact travel diagram, stroke in connection with front element Contact diagram 0 2.8 5.5 Configuration	Connection technique	Screw terminals
Contacts N/O = Normally open Contact sequence Contact travel diagram, stroke in connection with front element Contact diagram Contact diagram Contact diagram Configuration Invio	Fixing	Front fixing
Contacts N/0 = Normally open Contact sequence Contact travel diagram, stroke in connection with front element Contact diagram Contact diagr	Degree of Protection	IP20
Contact travel diagram, stroke in connection with front element Contact diagram Contact d	Connection to SmartWire-DT	no
Contact travel diagram, stroke in connection with front element Contact diagram Contact diagram Contact diagram Contact diagram The stroke in connection with front element 1	Contacts	
Contact travel diagram, stroke in connection with front element Contact diagram Contact diagram Configuration 13 14 14 3 6 2 5	N/O = Normally open	1 N/0
Contact diagram Configuration Configuration Description 1		13
Configuration 0 2.8 5.5 1/4 3/6 2/5	Contact travel diagram, stroke in connection with front element	
	Contact diagram	0 2.8 5.5
Connection technique Screw terminals	Configuration	1/4 3/6 2/5
	Connection technique	Screw terminals

Technical data

Conorol

General			
Standards			IEC 60947-5-1
Lifespan, mechanical	Operations	x 10 ⁶	>5
Operating frequency	Operations/h		≦ 3600
Actuating force		n	≦5
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
Terminal capacities		mm ²	
Solid		mm ²	0.75 - 2.5
Stranded		mm ²	0.5 - 2.5

Flexible with ferrule		mm ²	0.5 - 1.5
Contacts			
Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			III/3
Control circuit reliability			
at 24 V DC/5 mA	H _F	Fault probabili	< 10 ⁻⁷ , < 1 fault in 10 ⁷ operations
at 5 V DC/1 mA	H _F	Fault probabili	$< 5 \times 10^{-6}$, < 1 failure in 5×10^{6} operations
Max. short-circuit protective device			
Fuseless		Туре	PKZM0-10/FAZ-B6/1
Fuse	gG/gL	Α	10
Switching capacity			
Rated operational current	I _e	Α	
AC-15			
115 V	I _e	Α	6
220 V 230 V 240 V	Ie	Α	6
380 V 400 V 415 V	I _e	Α	4
500 V	I _e	Α	2
DC-13			
24 V	I _e	Α	3
42 V	I _e	Α	1.7
60 V	I _e	Α	1.2
110 V	I _e	Α	0.8
220 V	I _e	Α	0.3
Lifespan, electrical			
AC-15			
230 V/0.5 A	Operations	x 10 ⁶	1.6
230 V/1.0 A	Operations	x 10 ⁶	1
230 V/3.0 A	Operations	x 10 ⁶	0.7
DV-13			
12 V/2.8 A	Operations	x 10 ⁶	1.2

Design verification as per IEC/EN 61439

Technical data for design verification			
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Rated operational current for specified heat dissipation	In	Α	6
Heat dissipation per pole, current-dependent	P_{vid}	W	0.11
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
EC/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 7.0

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@ss10.0.1-27-37-13-02 [AKN342013])

Number of contacts as change-over contact			0
Number of contacts as normally open contact			1
Number of contacts as normally closed contact			0
Number of fault-signal switches			0
Rated operation current le at AC-15, 230 V	A	A	6
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Front fastening
Lamp holder			None

Approvals

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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

