## **DATASHEET - E01**



### Contact element, 1 N/C, front mount, screw connection

Powering Business Worldwide\*

Part no. E01 Catalog No. 090401 Alternate Catalog E01

No.

**EL-Nummer** 4356332

(Norway)

**Delivery program** 

Delivery program	
Product range	Accessories
Single unit/Complete unit	Single unit
Basic function accessories	Contact elements
Connection technique	Blade terminal
Description	admissible operating voltage: 5 – 250 V
Contacts	
N/C = Normally closed	1 NC →
Notes	e safety function, by positive opening to IEC/EN 60947-5-1
Contact travel diagram, stroke in connection with front element	1.1 // / 1.2
Degree of Protection	IP20 with ISH2,8
Connection to SmartWire-DT	no

## **Technical data**

delleral			
Standards			IEC/EN 60947
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 100
Operating frequency	Operations/h		≦ 3600
Actuating force		n	≦3
Degree of protection, IEC/EN 60529			IP20 with ISH2,8
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +60

		0.0	05 40
Enclosed		°C	- 25 - 40
Mounting position			As required
Mechanical shock resistance		g	> 40 according to IEC 60068-2-27 Shock duration 11 ms Sinusoidal
Terminal capacities		$\text{mm}^2$	0.5 - 1.0
Blade terminal			2.8 x 0.8 mm to DIN 46244
Fast-on connectors			2.8 x 0.8 mm to DIN 46247 and IEC 60760
Contacts			
Rated impulse withstand voltage	$U_{imp}$	V AC	4000
Rated insulation voltage	Ui	V	250
Overvoltage category/pollution degree			III/3
Rated operational voltage	U <sub>e</sub>	V AC	250
Control circuit reliability			
at 24 V DC/5 mA	H <sub>F</sub>	Fault probabili	< 10 <sup>-7</sup> (i.e. 1 failure to 10 <sup>7</sup> operations)
at 5 V DC/1 mA	H <sub>F</sub>	Fault probabili	$< 5 \times 10^{-6}$ (i.e. 1 failure in 5 x $10^{6}$ operations)
Use of insulated ferrule ISH 2,8			>24 V AC/DC recommended >50 V AC or 120 V DC is mandatory, even on unused blade terminals
Max. short-circuit protective device			
Fuseless		Туре	FAZ-B6/1
Fuse	gG/gL	Α	10
Switching capacity			
Rated operational current	l <sub>e</sub>	Α	
AC-15			
24 V	I <sub>e</sub>	Α	4
48 V	I <sub>e</sub>	Α	4
110 V	I <sub>e</sub>	Α	4
220 V 230 V 240 V	I <sub>e</sub>	Α	4
DC-13			
24 V	I <sub>e</sub>	Α	1.5
42 V	I <sub>e</sub>	Α	1
60 V	I <sub>e</sub>	A	0.8
110 V	I <sub>e</sub>	Α	0.5
220 V	I <sub>e</sub>	Α	0.2
Lifespan, electrical AC-15 to IEC/EN 60947-5-1 at 230 V; $I_{\rm e}$ = rated operational current			- 100 - 100

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	4
Heat dissipation per pole, current-dependent	$P_{vid}$	W	0.1
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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		0
Number of contacts as normally closed contact		1
Number of fault-signal switches		0
Rated operation current le at AC-15, 230 V	Α	6
Type of electric connection		Screw connection
Model		Top mounting
Mounting method		Front fastening
Lamp holder		None

# **Approvals**

Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	46552
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified

## **Assets (links)**

**Declaration of CE Conformity** 

00002902

**Instruction Leaflets** 

IL04716016Z2018\_05