

### **Guidelines on the Declaration of Conformity**

A conformity evaluation has been carried out for the product according to the EC Low Voltage Directive 2006/95/EC. The conformity evaluation is set out in writing in a separate document and can be requested if required.

### Guidelines on the EMC Directive (2004/108/EC)

The product cannot be operated independently according to the EMC Directive. Only after integration of the product into an overall system can this be evaluated in terms of the EMC. For electronic equipment, the evaluation has been verified for the individual product in laboratory conditions but not in the overall system.

### Guidelines on the Machinery Directive (2006/42/EC)

The product is a component for installation into machines according to the Machinery Directive 2006/42/EC. The products can fulfil the specifications for safety-related applications in coordination with other elements. The type and scope of the required measures result from the machine risk analysis. The product then becomes a machine component and the machine manufacturer assesses the conformity of the safety unit to the directive. It is forbidden to put the product into initial operation until it has been ensured that the machine accords with the stipulations in the directive.

### **Guidelines on the ATEX Directive**

Without a conformity evaluation, this product is not suitable for use in areas where there is a high danger of explosion. In order to use this product in areas where there is a danger of explosion, classification and marking according to the directive 94/9/EC must be carried out.

## Safety and Guidelines Signs



Immediate and impending danger which can lead to severe physical injuries or to death.

## CAUTION



Danger of injury to personnel and damage to machines.



### Please Observe! Guidelines on important points.

**General Guidelines** 

#### DANGER Danger of death!



Do not touch voltage-carrying cables and components.

### DANGER



Danger of burns when touching hot surfaces.



- Danger from devices caused by shortcircuits and earth short-circuits at the terminals.
- Electronic devices cannot be guaranteed fail-safe.
- The spark quenching unit can only be used for mains DC voltage.
  Therefore, please observe the voltage potentials on connection.

During the required risk assessment when designing the machine or system, the dangers involved must be evaluated and removed by taking appropriate protective measures.

To prevent injury or damage, only professionals and specialists should work on the devices. They must be familiar with the dimensioning, transport, installation, initial operation, maintenance and disposal according to the relevant standards and regulations.



Before product installation and initial operation, please read the Installation and Operational Instructions carefully and observe the Safety Regulations. Incorrect operation can cause injury or damage.

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# Installation and Operating Instructions for Spark Quenching Unit Type 070.000.6

## (B.0700006.GB)

## Application

Reduces spark production on the switching contacts occurring during DC-side switch-off of inductive loads.

- Voltage limitation according to VDE 0580 2000-07, Item 4.6
- Reduction of EMC-disturbance by voltage rise limitation, suppression of switching sparks
- Reduction of brake engagement times by a factor of 2 4 compared to freewheeling diodes

## Function

The spark quenching unit will absorb voltage peaks resulting from inductive load switching, which can cause damage to insulation and contacts. It limits these to 70 V and reduces the contact load.

Switching products with a contact opening distance of > 3 mm are suitable for this purpose.

## **Electrical Connection** (Terminals)

- 1 (+) Input voltage
- 2 (-) Input voltage
- 3 (-) Coil
- 4 (+) Coil
- 5 Free nc terminal
- 6 Free nc terminal

## **Technical Data**

Input voltage	max. 300 VDC, max. 615 V <sub>peak</sub> (rectified voltage 400 VAC, 50/60 Hz)
Switch-off energy	max. 9 J/2 ms
Power dissipation	max. 0,1 Watt
Rated voltage nc terminals	250 V
Protection	IP65, IP20 terminals
Ambient temperature	-25 °C up to +85 °C
Storage temperature	-25 °C up to +105 °C
Max. conductor connection diameter	2,5 mm², (AWG 26-12)
Max. terminal tightening torque	0,5 Nm

## Accessories

Mounting bracket set for 35 mm rail acc. EN 60715: Article No. 1803201



According to German notation, decimal points in this document are represented with a comma (e.g. 0,5 instead of 0.5).

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## Dimensions (mm)



## Wiring Example



**CAU** E189728 **C C**