

66 Atex
Rev. 1 04/09/2017

# **ENGLISH**

# RELAY SERIES 66 ATEX SAFETY INSTRUCTIONS

### **1** GENERAL SAFETY INFORMATION

These safety instructions refer to the installation, utilization and maintenance of 66 series relays to be used in potentially explosive areas due to the presence of combustible GAS.

The information of these instructions are only for qualified personnel. The relays comply with the Essential Health and Safety Requirements applicable for ATEX Components, for potentially explosive atmospheres provided by European Standards:

## TRANSPORT, STORAGE

On receipt verify that the relay has not been damaged during transport.

EN 60079-0 (2012+A11/2013), EN 60079-15 (2010)

If damaged, do not install and immediately advise the transport service.

### **3**INSTALLATION

EN 60079-14 or with the current national standards.

Before the installation in an explosive atmosphere, the installer must ensure that the relay is suitable for the classified area in consideration of the different inflammable substances present in the installation area (please verify the marking on the relay cover before installation).

The relay must be installed only by qualified people with knowledge of electrical apparatus for explosive gas atmospheres and electrical installations in hazardous areas and has to be done with the relay and equipment at standstill, electrically dead and locked against restart.

### 4 MARKING



Specific marking of explosion protection

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Component for surface plant (different from mines)

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Category 3: normal level of protection

**G**explosive atmosphere due to presence of combustible gas vapour or mist

Ex nC

Sealed device (type of protection for category 3G)

IIC

Gas group

as grou

Equipment Protection Level

### $-40^{\circ}C \le Ta \le +70^{\circ}C$

Ambient temperature

#### EPTI 17 ATEX 0299 U

EPTI: laboratory which issues the CE type certificate 17: year of issue of certificate 0299: number of CE type certificate

### U: Ex component

### **5** ELECTRICAL CHARACTERISTICS

#### 66.22/66.82.x.xxx.xxx3

#### CHARACTERISTICS OF CONTACTS

Rated current/maximum peak current A: 25/50 (NO) -10/20 (NC) Rated voltage/maximum switching voltage V AC: 250/400

Rated load-Category AC1 VA: 6250 (NO) – 2500 (NC)

Rated load - Category AC15 VA: 1200 (NO)

Capacity for single phase motor (230 V AC) kW: 1.5 (NO)

Breaking capacity-Category DC1: 30/110/220 V A: 25/0.7/0.3 (NO)

#### **CHARACTERISTICS OF COIL**

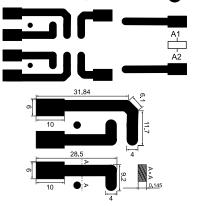
Rated Voltage U<sub>N</sub> V AC (50/60 Hz): 6, 12, 24, 110/115, 120/125, 230, 240 Rated Voltage U<sub>N</sub> V DC: 6, 12, 24, 110, 125 Rated Power AC/DC VA (50 Hz)/W: 3.6/1.7 Operating range AC/DC: (0.8...1.1) U<sub>N</sub>

#### GENERAL CHARACTERISTICS

Ambient temperature °C: –40...+70

#### 66.22....S

Use Dual layer pcb (dimensions mm). The tracks on both sides must meet the minimum Cu cross-section as stipulated in section 6.



#### 66.82

Retention force (push/pull) EN 61210: 96/88 N. Insertion/Disconnection force (after six disconnections) EN 61210: 80/18 N. Wiring cross section as stipulated in section 6.

### **6** SPECIAL CONDITION FOR SAFE USE

Maximum temperature recorded on the surface of the component (obtained under the following test conditions:

V coil = 253 V; I Terminal = 25 A; Tamb = 70°C) did not exceed 120°C. The cross-section of conductors connected to the terminals, must be at least 4 mm<sup>2</sup> for the Type 66.82.

The minimum cross-section of the tracks of the printed circuit board must be 0.58 mm<sup>2</sup>, while the width must be at least 4.01 mm for Types "66.22" and "66.22….S".

The component must be placed inside an enclosure that meets the general requirements for enclosures as per clause 6.3 of EN 60079-15. The connections must be made in compliance with the requirements of clause 7.2.4 or 7.2.5 of EN 60079-15.

### MAINTENANCE AND REPAIR



The user must not open, modify or repair this relay in any way.





