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SWITCH TO THE FUTURE

66 Atex

Rev. 1 04/09/2017

ENGLISH

RELAY SERIES 66 ATEX
SAFETY INSTRUCTIONS

1 GENERAL SAFETY INFORMATION

EX 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 the following harmonized European Standards:
EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018, EN 60079-15:2010.
The relay furthermore complies with the standard EN IEC 60079-15:2019.

2 TRANSPORT, STORAGE

On receipt verify that the relay has not been damaged during transport.
If damaged, do not install and immediately advise the transport service.

3 INSTALLATION

EX Installation must comply with the rules of the standard 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.

Utility Model - IB6622001 - 10/23
FINDER S.p.A. con unico socio
10040 - ALMESE (TO) - ITALY

4 MARKING

Ex	
Specific marking of explosion protection	
II Component for surface plant (different from mines)	
3 Category 3: normal level of protection	
GAS	**G** explosive atmosphere due to presence of combustible gas vapour or mist
	Ex ec Increased safety (type of protection for category 3G)
	Ex nC Sealed device (type of protection for category 3G)
	IIC Gas group
	Gc Equipment Protection Level
−40°C ≤ Ta ≤ +70°C Ambient temperature	
EPTI 17 ATEX 0299 U EPTI: laboratory which issues the voluntary type certificate 17: year of issue of certificate 0299: number of CE type certificate **U: Ex component**	
Xyy: production batch identification (X year, yy week)	

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5 ELECTRICAL CHARACTERISTICS

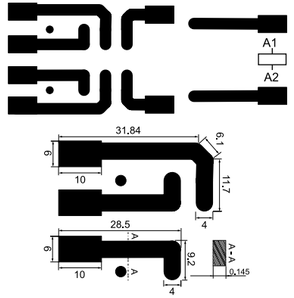
66.22 / 66.82.x.xxx.xxx3

CHARACTERISTICS OF CONTACTS
Rated current / maximum peak current A:
66.22: 25/50 (NO) | 66.82: 30/50 (NO) | all models: 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_N V AC (50 / 60 Hz):
6, 12, 24, 110 / 115, 120 / 125, 230, 240
Rated Voltage U_N 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_N

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.

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SCHEDULE OF LIMITATIONS

1 The Ex component cannot be installed in an enclosure with a glass or transparent plastic window or cover unless suitably protected against natural or artificial light radiation
2 The Ex Component shall be only installed inside enclosure that ensures a degree of protection IP54 (or greater depending on the final installation of the Ex Equipment) according to the standard EN 60529 and EN 60079-0 and that complies with the requirements of type of protection “Ex e” and EPL Gc or better
3 The cross-section of conductors connected to the terminals must be at least 4 mm² for the Type 66.82. The minimum cross-section of the tracks of the printed circuit board must be 0.58 mm², while the width must be at least 4.01 mm for Type “66.22….S”.
Refer to this document for tracks layout references
4 The service temperature of the Ex component, when installed in the final Ex Equipment, shall be included in the range −40°C ≤ Ts ≤ +112°C; this operating temperature interval is considered respected as long as the average local ambient temperature is included in the range −40°C ≤ Ta ≤ +70°C and no significant source of heating or cooling are installed close to the Ex Component. These installation conditions are such that the Ex component can be considered as a device having a limit temperature not exceeding 130 °C for the purpose of evaluating the temperature class in the Ex Equipment
5 The electrical connections of the Ex Component shall be carried out following the details reported in this document and according to the applicable requirements given in §4.2 of the EN IEC 60079-7:2015+A1:2018 standard

6 SPECIAL CONDITION FOR SAFE USE

EX 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 mm² for the Type 66.82.
The minimum cross-section of the tracks of the printed circuit board must be 0.58 mm², 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.

7 MAINTENANCE AND REPAIR

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

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