VOLTAGE DETECTING SYSTEMS

04/05/07

HVD3/V/_ _ _ _

- Optical Integrated VDS - Voltage detecting system in accordance with IEC 61243-5 where applicable
- The device supplies continuously :
- A synchronous optical signal which can be used either for local voltage indication or as phase signal to be analysed by phase comparator (PD)
- LED life time guaranteed - min. 30 years
- Surge arresters does not applied because only optical signals are available on the front of panel

This VDS is based on the sharing of voltage between capacitor C1 (high voltage) and capacitor C2 (low voltage) ; the signal at C2 terminals is transformed in an optical signal, which separately points out voltage and phase of the line involved.
Thanks to this new system the signals of voltage get to the operator through a galvanic (optical) insulation, which never transfers voltage, even in case of failure of capacitor C1.
The IEC Standard 61243-5 1997-06 is applicable to our Voltage indicator. At page 11 point 1.2, the standard concerns VDS “based on fundamentally different principles (for examples optical systems, ” ...) ; they “should meet the requirements of this standard where applicable.”
The very small size allows to reduce space in your panel and in the meanwhile maximizes the ratio quality/cost.

Technical features

High voltage :..... 3 - 170 KV
Primary Capacitance* :.....….....3 - 300 pF
Power supply :.....no auxiliary power requested
Power consumption :.....< 1mW
Led :.....3000mcd/20mA
Dielectric strength :.....275KV
Surge Strength :.....650KV
EMC/IEC tested.....ENG96/026630
IP degree protection :.....IP64

*Versions with customized features can be provided.

Material

Box :..... plastic housing filled by
Polyurethan resin (2-component)

Connection input :…AMP waterproof connectors(*)
or….....faston 6.3X0.8 (IP30)

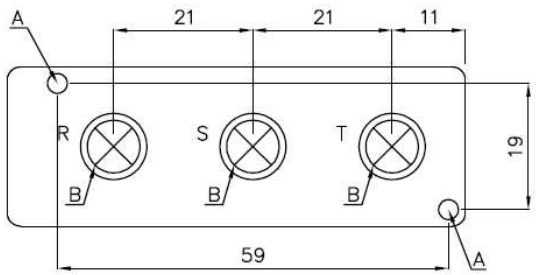
Cable : .....Reiter Lappkabel 0015703 approved
VDE(NYSLYCYö-J)
SEV(CH-NO5VC4V5-F)
UL(AWM Style 2587)
CSA(AWM I A/B II A/B) (*)
(*) on request

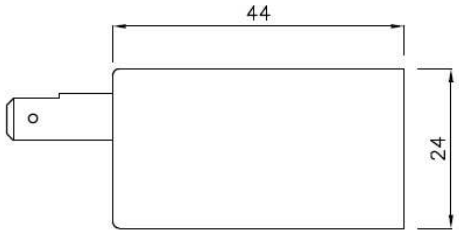
VOLTAGE DETECTING SYSTEMS

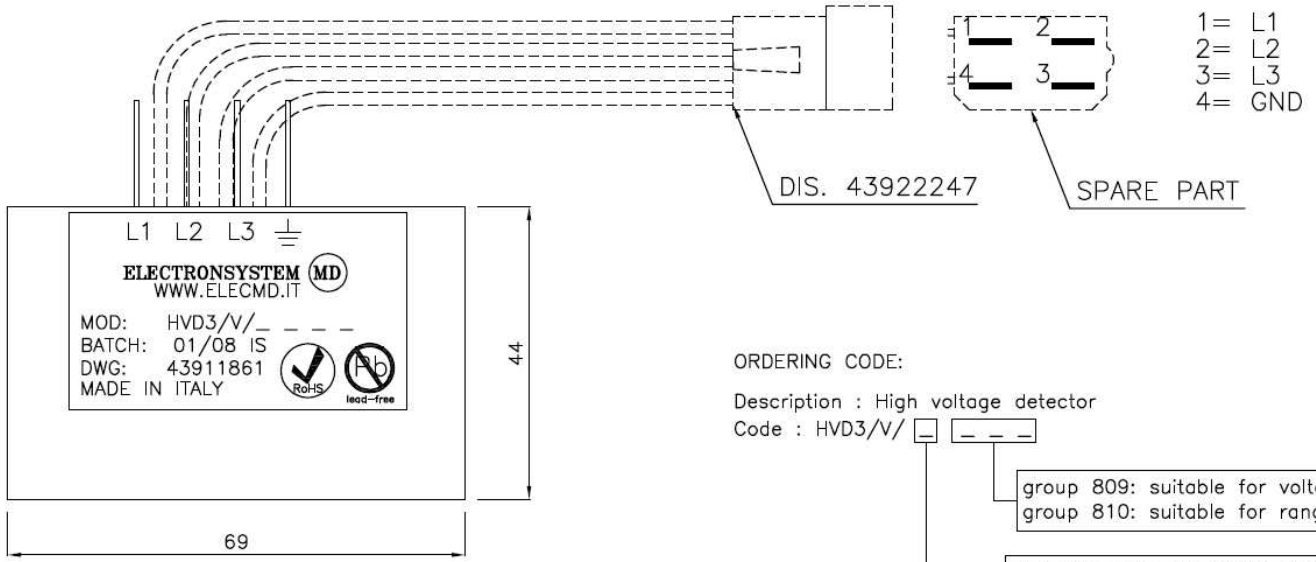
ELECTRONSYSTEM MD

04/05/07

Rev./Mod	Data	Descrizione:
A	30.05.06	MODIFICHE GENERALI
B	12.06.2006	CAMBIO GRUPPO
C	27.09.2006	MODIFICATO USCITA FASTON
D	18.12.2006	AGGIUNTO CABLAGGIO







ORDERING CODE:

Description : High voltage detector

Code : HVD3/V/ [_] [_ _ _]

- group 809: suitable for voltage range 3,3–12 kV
  group 810: suitable for range 12–24 kV
- F : Plugs for capacitive signal by faston
  A : Plugs for capacitive signal by cable connector

NOTE :

–Plugs for signal coming from capacitor divider by faston 6.3x0.8 mm

–Sensitivity suitable for capacitive divider of 17 pF

–A : Fixing holes by M3.5X19

–B : Optical signal

Piano di Campionamento (UNI 4842–75)	
LIVELLO	LQA
L2	1

Fig.	Material/Materiale	N° Series / Serie	Finishing / Finitura
Filing Room Archivio	Thread quality tolerance Tolleranza filetti qualita' "6g–6S" UNI 5541–65	General tolerance for machining / Tolleranze generali per lavorazioni meccaniche: Coord.Punching N.C. mach. Coord. punzon. a C.N. JS11	Quality for linear dimension Qualita' per quote lineari: ~~Extra fine / Fine~~ JS12; Median / Media JS13; Coarse / Grossolana JS15

Prep. Dis. G. FORLANI	Resp. Dep. Uff. Resp. Uff. Tecnico	Title Titolo	HIGH VOLTAGE MINI DETECTOR HVD3/V/_ _ _ _ –DIMENSION AND FEATURES–
App. App. P. GUIZZETTI			
Rev./Mod. 0 06.06.2002 : Emissione nuovo disegno		Apparatus Apparecchio	Lang. Lingua
ELECTRONSYSTEM MD S.r.l.		Doc. No. N° Doc. 43911861	Scale Scala 1:1; Sh.No. N° Pag. 1/1