



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.

HVD3/RM/ _ _ _ _

- 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)
- another synchronous optical signal on the back for remote voltage indication to connect with special relay (RHV/R or RHV/M).
- LED life time guaranteed - min. 30 years
- Surge arresters does not applied because only optical signals are available on the front of panel

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)

Connection output :optical fiber

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

24/06/02

Rev./Mod A	Data 05.12.2006	Rev./Mod B	Data 24.09.2007	Rev./Mod	Data	Rev./Mod	Data	Rev./Mod	Data
Descrizione: MODIFICATO USCITA FASTON		Descrizione: RIMOSSO PIATRINA		Descrizione:		Descrizione:		Descrizione:	

ORDERING CODE:
Description : High voltage detector
Code : HVD3/RM/

code for identification of voltage/capacity see dis. 43911548 Fig. 2

F : Plugs for capacitive signal by faston
W : Plugs for capacitive signal by water-proof
A : Plugs for capacitive signal by cable connector

NOTE :

- Plugs for signal coming from capacitor divider by faston 6.3x0.8 mm or other connection as described in order code.
- During order define capacity of divider and rated voltage (not requested in case of use of Electronsystm MD divider).
- Drilling template is shown by dashed-line.
- Suitable for connection with relè type RHV/M, RHV/R (Electronsystm MD) by dedicated snap-in optical rear connector.
- A : Fixing holes by M3,5X19
- B : Optical signal

Fig.	Material/Materiale		N° Series / Serie	Finishing / Finitura
Filling Room Archivio	Thread quality tolerance Tolleranza filetti qualità *Eg.-5S* UNI 5541-65	General tolerance for machining / Tolleranze generali per lavorazioni meccaniche:		
		Coord.Punching N.C. mach. Coord. punzon. a C.N. JS11	Extra-fine / Fine	JS12
			Medion / Media	JS13
			Coarse / Grossolana	JS15

Prep. G. FORLANI	Resp. Dep. Uff. Tecnico	Title	HIGH VOLTAGE MINI DETECTOR HVD3/RM/_____ -DIMENSION AND FEATURES-
App. P. GUIZZETTI	Resp. Dep. Uff. Tecnico	Appartus Approvechio	Scale 1:1
Rev./Mod. 0 06.06.2002 : Emissione nuovo disegno		Doc. No. 43911732	Scale 1/1

ELECTRONSYSTEM MD S.r.l.

DIS. 43911531

Attacco snap-in fibra ottica

DIS. 43922234

1 = L1
2 = L2
3 = L3