



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.”

## HVD3/RC/DI/ \_ \_ \_

- Optical Integrated VDS - Voltage detecting system in accordance with IEC 61243-5
- The VDS supplies continuously :
  - an impulsive optical signal for local voltage indication
  - a synchronous optical signal to be analysed by phase comparator (HVFD) or to be connected for remote voltage indication by special relay ( RHV or 3RHV)
- 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\* :.....0.5 - 300 pF  
 Power supply :.....no auxiliary power requested  
 Power consumption :.....< 1mW  
 Led :.....3000mcd/20mA  
 Dielectric strength :.....275KV  
 Surge Strength :.....650KV

Suitable for K152SR ELASTIMOLD BUSHING  
**Conform to ENEL: GLI, R EMC 01 and R CLI 01**

IP degree protection :.....IP64

\*Versions with customized features can be provided.

### Material

Box :..... Polyurethan resin (2-component)

Connection input : .AMP waterproof connectors(\*)  
 Cable with AMP connector (\*)  
 .....faston 6.3X0.8 (IP30)  
 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

HVD3-RC-DI

Rev./Mod A	Data 01.10.2001	Rev./Mod B	Data 20.09.2002	Rev./Mod C	Data 10.01.2005	Rev./Mod	Data	Rev./Mod	Data	Rev./Mod	Data
Descrizione: MODIFICATO INGOMBRO		Descrizione: AGGIUNTA CODIFICA ABB ADDA		Descrizione: MODIFICA TABELLA		Descrizione:		Descrizione:		Descrizione:	

  

**CODICE PER L'ORDINE:**  
 Descrizione :Segnalatore presenza tensione e concordanza fasi  
 Codice : HVD3/RC/DI/     

Codice di identificazione tensione di servizio/capacità  
 vedi tabella dis. 43911548 Fig. 2

F: per presa segnale capacitivo con faston sul dispositivo  
 W: per presa segnale capacitivo con connettore water-proof  
 A: per presa segnale capacitivo con connettore faston AMP a 3 vie

  

**NOTE :**

- Presa per segnali dai capacitivi con faston tipo AMP 6.3x0.8 oppure con connessione water-proof AMP
- Lunghezza cablaggi 200 mm. circa
- Definire nell'ordine capacità del divisore capacitivo (tranne quando vengono forniti da Electronsystm MD) e tensione di servizio.
- La dima di foratura per le lamiere è evidenziata in tratto-punto.

  

Fig.	Material/Materiale	N° Series / Serie	Finishing / Finitura
Filing Room	Thread quality tolerance Tolleranza filetti qualità "Fg-5S" UNI 5541-65	General tolerance for machining / Tolleranze generali per lavorazioni meccaniche:	Extra-fine / Fine Medium / Media Coarse / Grossolana
Archivio	Coord.Punching N.C. mach. Coord. punzon. a C.N. JS11	Quality for linear dimension Qualità per quote lineari:	JS12 JS13 JS15
Prep. P. GUZZETTI	Resp. Dep. Uff. Tecnico	Title SEGNALATORE PRESENZA TENSIONE HVD3/RC/DI/ - - - - -ASPETTO E INGOMBRO-	Lang. Lingua Scale Scala 1:1
App. P. CIBOLDI	Resp. Dep. Uff. Tecnico	Appartus Approccio	Scale Scala 1:1
Rev./Mod.	0 01.10.2001 : Emissione nuovo disegno	Doc. No. N° Doc.	43911521
<b>ELECTRONSYSTEM MD S.r.l.</b>			