



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/MR/ \_ \_ \_ \_

- 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 (HVD3/RM) 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

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<p><b>ORDERING CODE:</b> Description : High voltage detector Code : HVD3/MR/ <input type="checkbox"/></p> <p>code for identification of voltage/capacity see dis. 43911548 Fig. 2</p> <p>F : Plugs for capacitive signal by faston W : Plugs for capacitive signal by water-proof A : Plugs for capacitive signal by cable connector</p>																																													
<p>Plano di Campionamento (UNI 4842-75)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">LIVELLO</td> <td style="width: 50%;">LOA</td> </tr> <tr> <td style="text-align: center;">L2</td> <td style="text-align: center;">1</td> </tr> </table> <p>Ci riserviamo tutti i diritti connessi con il presente documento e con l'oggetto o la materia ivi rappresentati con divieto di riproduzione, utilizzo o rendello accessibile a terzi in assenza di previa autorizzazione.</p>										LIVELLO	LOA	L2	1																																
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<p><b>NOTE :</b></p> <ul style="list-style-type: none"> <li>-Plugs for signal coming from capacitor divider by faston 6.3x0.8 mm or other connection as described in order code.</li> <li>-During order define capacity of divider and rated voltage (not requested in case of use of Electronsystem MD divider).</li> <li>-Drilling template is shown by dashed-line.</li> <li>-Suitable for connection with relè type RHV/M, RHV/R (Electronsystem MD) by dedicated snap-in optical rear connector.</li> </ul>																																													