



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/F/DIP/_

- 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)
- Selectable sensitivity
- 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)

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

04/05/07

Rev./Mod Descrizione: Data Livello L2 LQA 1	Rev./Mod Descrizione: Data NOTE : -Correct capacitive coupling can be chosen by Dip-Switches in order to satisfy IEC requirements with any divider insulator. -Completely fulfills IEC 61243-5 standard ORDERING CODE: Description : High voltage detector Code : HVD3/F/DIP/	Rev./Mod Descrizione: Data ORDERING CODE: Description : High voltage detector Code : HVD3/F/DIP/	Rev./Mod Descrizione: Data ORDERING CODE: Description : High voltage detector Code : HVD3/F/DIP/	Rev./Mod Descrizione: Data ORDERING CODE: Description : High voltage detector Code : HVD3/F/DIP/	Rev./Mod Descrizione: Data ORDERING CODE: Description : High voltage detector Code : HVD3/F/DIP/
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69
44
R S T

59
19
A B B A

90°
44
24
1.5 6.9 1.5 6.9
DRILLING TEMPLATE
2xForo per vite 3.5 mm TSV

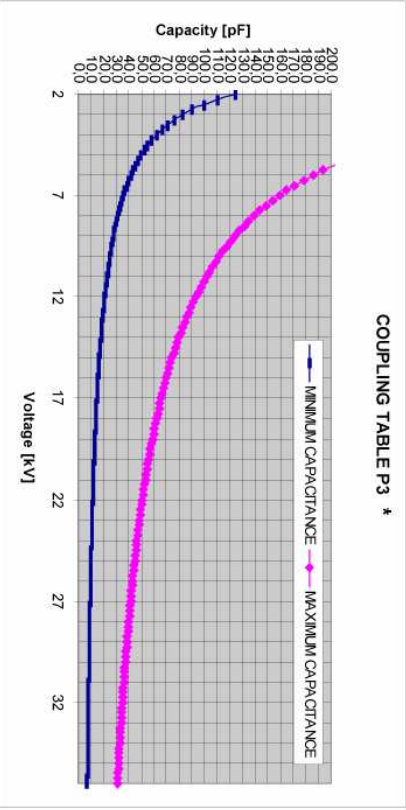
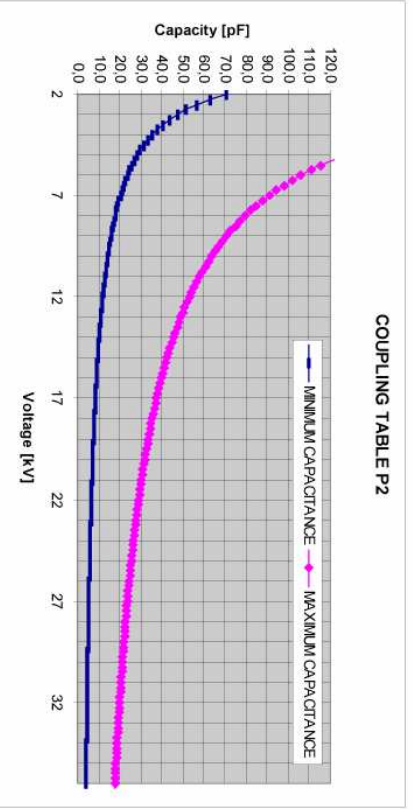
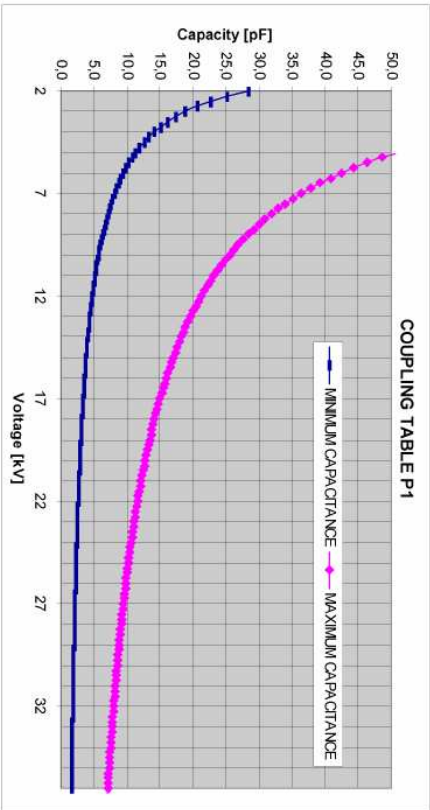
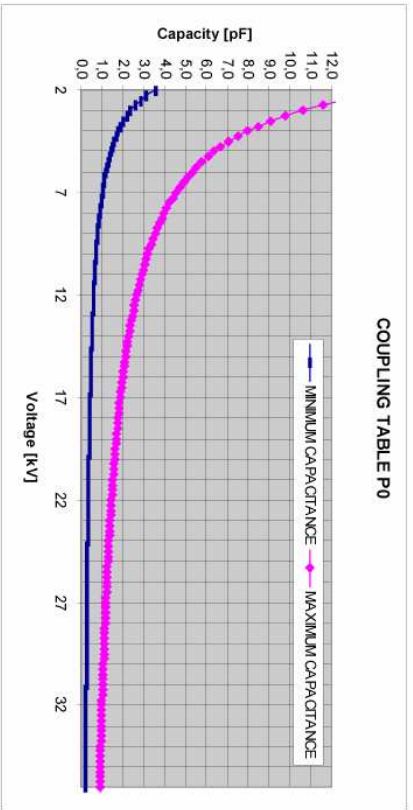
Dip Switch
44
24

Fig.	Material/Materiale		N° Series / Serie	Finishing / Finitura
Filing Room Archivio	Thread quality tolerance Tolleranza filetti: qualità "Fg-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 Medium / Media Coarse / Grossolana
Prep. G. FORLANI App. P. GUIZZETTI	Resp. Dep. Uff. Tecnico	Title Title HIGH VOLTAGE MINI DETECTOR HVD3/F/DIP/x -DIMENSION AND FEATURES-	Appartatus Apparecchio 43911997	Lang. Lingua Scale Scala 1:1 SP No. 1/2
ELECTRONSYSTEM MD S.r.l.				

VOLTAGE DETECTING SYSTEMS

04/05/07

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DIP-SWITCH SELECTION	
Capacitance	10 pF
Voltage	16 pF
3.3 kV	P0
7.2 kV	P0
12 kV	P1
17 kV	P1
24 kV	P2
36 kV	P2

DIP-SWITCH CONFIGURATION			
Setting	SW1	SW2	SW3*
P0	0	0	0
P1	1	0	0
P2	0	1	0
P3*	0	0	1

* OPTIONAL

Piano di Completamento (UNI ISO 2859)	
LIVELLO	LQA
L2	1

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Fig.	Material/Materiale	N° Series / Serie	Finishing / Finitura
Filling Room Archivio	Thread quality tolerance Tolleranza filetti: qualità "gg-65" UNI 5541-65	General tolerance for machining / Tolleranze generali per lavorazioni meccaniche:	JS12 JS13 JS15
Prep. G. FORLANI Dis.	Coord. Punching M.C. mech. Coord. punzon. a C.N. JS11	Quality for linear dimension "Qualità" per quote lineari	Coarse / Grossolano
App. P. GUIZZETTI Rev./Mod. 0 10.11.2008 : Emissione nuovo disegno	Resp. Dep. Uff. Tecnico	Title HIGH VOLTAGE MINI DETECTOR HVD3/F/DIP/x -COUPLING TABLES-	Scale 1:1 Sb. No. 2/2
ELECTRONSYSTEM MD S.r.l.		Apparatus N° Dec. 43911997	Scale 1:1 Sb. No. 2/2