

Model

VDIS01

TYPE CONFORMITY CERTIFICATE N° 24/1317P_IND

Description

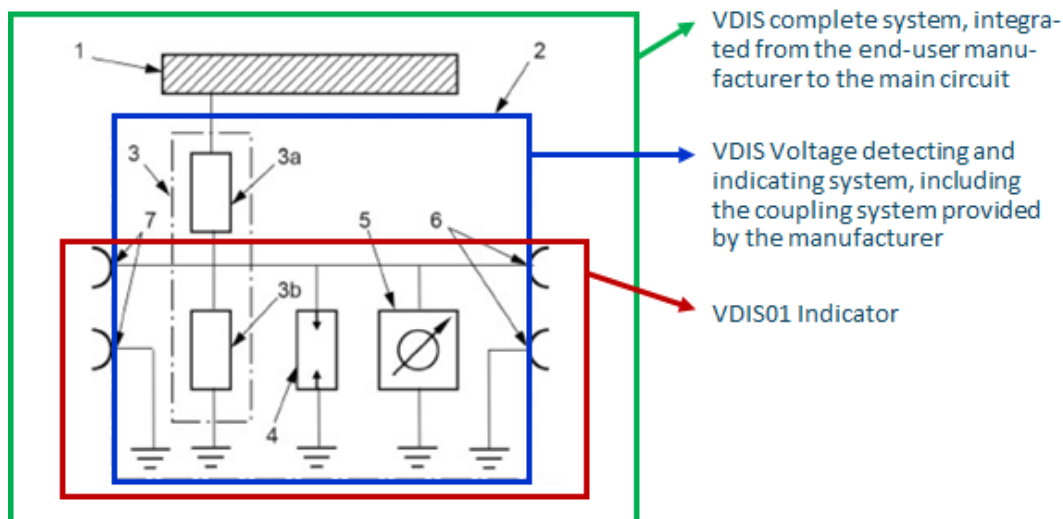
The **voltage detecting and indication system** is a fixed visual presence-voltage detection device for High/Medium-Voltage electrical distribution boards compliances with product standard IEC 62271-213.

Our VDIS01 is **type conformity certified**: CERTIFICATE N° 24/1317P_IND https://www.torresansrl.it/prodotti/vdis-01-certified-iec-62271-213/?attachment_id=3706&download_file=u867f6oakw1ag

IEC 62271-213:2021 is applicable to the voltage detecting and indicating system (VDIS) to be installed on indoor and outdoor high-voltage equipment. **VDIS01 Indicator is part of "integrated VDIS system"** which includes the coupling system and the connection with main circuit, both integrated by the end-user manufacturer.

EN 62271-213 Typical structure of an integrated VDIS system

The product standard EN 62271-213:2021 defines the technical requirements of "integrated VDIS system" or "complete VDIS" with reference to a typical configuration in which components are integrated into a high voltage end application.



1. Main circuit; 2. VDIS Voltage detecting and indicating system; 3. Coupling system; 3a. Coupling element; 3b. Adjustment element (optional); 4. Voltage limiting element; 5. Indicator; 6. Testing point (including earthing socket-outlet); 7. Connecting point (optional)

Features

- The visual indications are LED indicators of amber color.
- Connections points to phases L1, L2, L3 and grounding PE are available on the back by fast-on type connections and as testing points on the front by plug bushing type connections (diameter 4mm, length 19mm, pitch between each phase bushing and the single earth point 14mm).
- Panel mounting (two mounting holes)
- Rear fast-on connections points 4mm
- Front bushings; testing points with a diam of 4mm

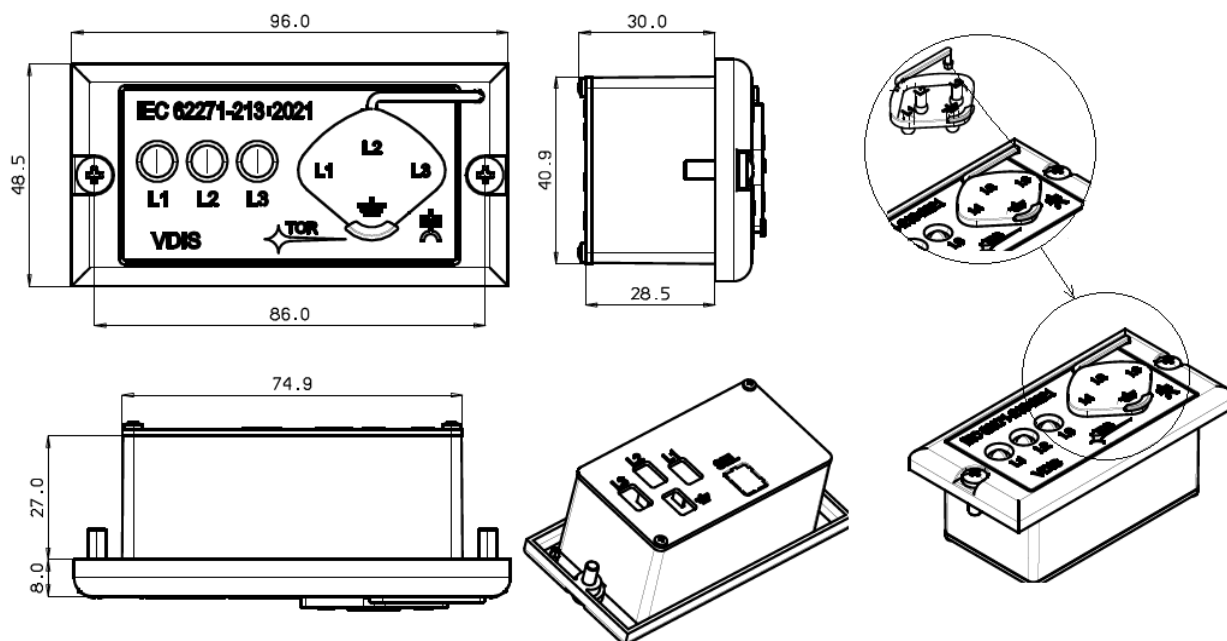
	Technical features	Unit	Value	Rev
1.	Phase Voltage range - U_N	kVac	24 -36	
2.	Line Frequency	Hz	47 ~ 53	
3.	Indicator	--	LED – amber color	
4.	Angle of view (vs center line)	degree	30°	
5.	Threshold on-current IVDS – I_t	uA	1,67 – 2,5uA	
6.	Threshold on Voltage - IVDS – U_T (range)	VAC	4V (4-5VAC)	
7.	Impedence IVDS - X_C range	OHM	2 – 2,4 MEG	
8.	Nr ground connections (total) - back panel	--	1x Faston 0,8x6,35	
9.	Nr phase connections - for each phase - back panel	--	3x Faston 0,8x6,35	
10.	Nr ground bushing (total) – front panel Testing point	--	1x Bushing diam 4 mm x 19 mm	
11.	Nr phase bushings - for each phase - front panel Testing	--	3x Bushing diam 4 mm x 19 mm	
12.	Compensation capacitors /Adjustement Element (customizable* and selectable by dip switch)		Tbd (1*)	
13.	Humidity without condensation – RH	%	95%	
14.	Operating Temperature (ambient air)	°C	- 25 ~ +40	
15.	Storage Temperature	°C	- 25 ~ +55	
16.	Front Testing point connections - bushings	Ø	4mm	
17.	Rear Point connections - fast-on	--	4,75 x 0,8	
18.	IP protection code - EN 60529	--	IP20	
19.	Case	--	Polycarbonate	
20.	Dimensions LxDxP	mm	96 x48 x 38	
21.	Vibrations – sinusoidal 3-axes - IEC60068-2-6	Hz/mm/g	10 / ±0,15/- 58/ ±0,15 / 2 150/ ±0,15/ 2	
22.	Impact – IEC62262	--	IK07	
23.	Standard	--	IEC62271-213:2022 (2*)	

(1*) The value of the compensation capacitor depends on the specific final VDIS integration application (capacitance of Adjustment element)

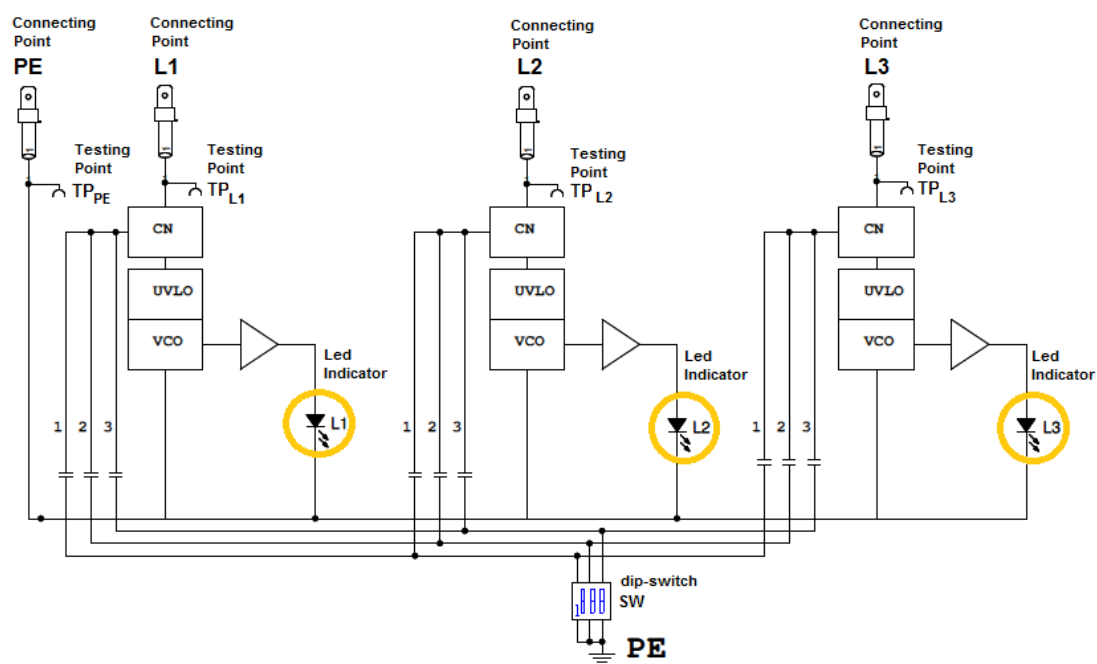
(2*) The product is compliant to the standard for technical requirements applicable to its function (indicator) and interfaces (ref. Table 4 – IEC 62271-213 for Test piece type test requirements).

- VDIS01 indicator passed type tests required for product certification, as per EN 62271-213 standards.
- Integration and application of VDIS in final command and control equipment is the responsibility of end user manufacturer. TOR is available for support and assistance.

Outline drawing



Block diagram

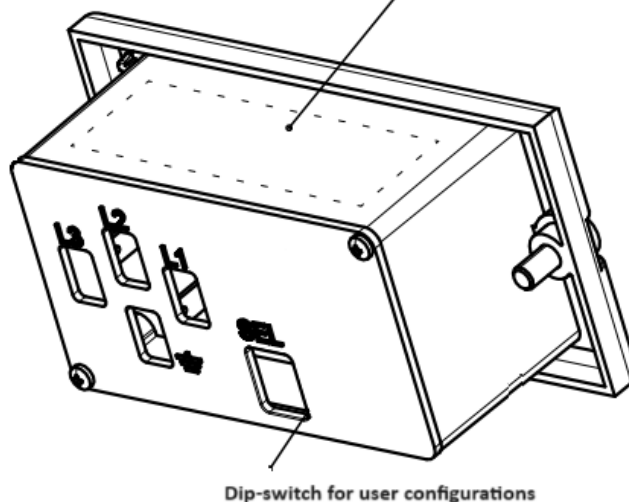


Dip switch user configuration

Label for user with Dip-Switch positions

DIP	GROUP	SENSITIVITY	DIP	GROUP	SENSITIVITY
	P0	High		P2	Low
	P1	Medium		P3	Very Low

label for user with Dip-Switch positions



Dip-switch for user configurations

Code	Description
A71VDIS01	VDIS Voltage Detecting and Indicating System IEC 62271-213 Standard configuration: - Compensation capacitor values for customer-specific VDIS system integration: C1=2.2 nF, C2=4.7 nF, C3=15 nF - Dark gray color On request, available: - Other compensation capacitor values to be defined - Rubber cap of test terminal protections on the front - Light gray color

Extract from Type Conformity Certificate N° 241317P_IND

The certificate is available at:

https://www.torresansrl.it/prodotti/vdis-01-certified-iec-62271-213/?attachment_id=3706&download_file=u867f6oakw1ag

SGS

TYPE CONFORMITY CERTIFICATE
N° 24/1317P_IND

SGS Italia job n° 24.24994

MANUFACTURING SITE:
COSTRUZIONI Elettromeccaniche P. TORRESAN S.r.l.
Via Giuseppe di Vittorio 307/5,
20099 Sesto San Giovanni (MI) – Italy

CERTIFIED CHARACTERISTICS:

Technical requirements according to reference documentation – position:
“STANDARD/TECHNICAL SPECIFICATION”

TYPE/MODEL:

Torresan code	Description	Document list
A71VDIS01	Integrated voltage detecting system 24-36 kVac - 47-53 Hz	Technical dossier VDIS-08-01 02/10/2024

TRADE MARK:

STANDARD/TECHNICAL SPECIFICATION:
Standard CEI 62271-213 dated 05/2022
Standard EN IEC 62271-213 dated 08/2021
SGS Italia Certification scheme - SCP 004/1 Rev.03

TEST REPORT:
RPL.P dated 02/10/2024 ref.: 24.24994

AUDIT REPORT:
RVI.P dated 02/10/2024 ref.: 24.24994

Above mentioned reports refer to the last edition of the current certificate

SGS Italia S.p.A.
On behalf of Business Manager
Rosalba Fanale

SGS Italia S.p.A.

ACCREDIA
ENTE ITALIANO DI ACCREDITAMENTO

PSD/SP 0015
Membro degli Accordi di Mutual Riconoscimento
EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

Issuance date: October 8th, 2024

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