

# CVI SERIES CAPACITIVE VPIS & VDIS

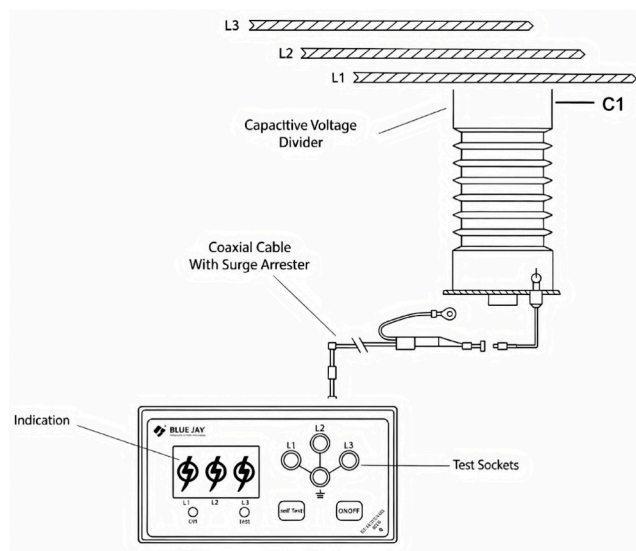
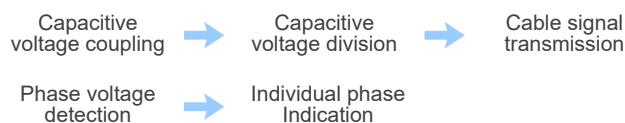
## FEEDER PROTECTION AND CONTROL

### Introduction

CVI Series provides capacitive voltage indication solutions for medium-voltage switchgear, covering both conventional VPIS and next-generation VDIS designs. Based on capacitive voltage sensing technology, the series enables reliable three-phase voltage status indication to support safe switchgear operation.

The series includes a conventional, non-display VPIS compliant with IEC 61243-5, and an advanced, display-equipped VDIS designed in accordance with IEC 62271-213. They deliver clear live-voltage judgement thresholds and integrated interlock functions to prevent hazardous mis-operation during cabinet commissioning and maintenance.

### Working Principle



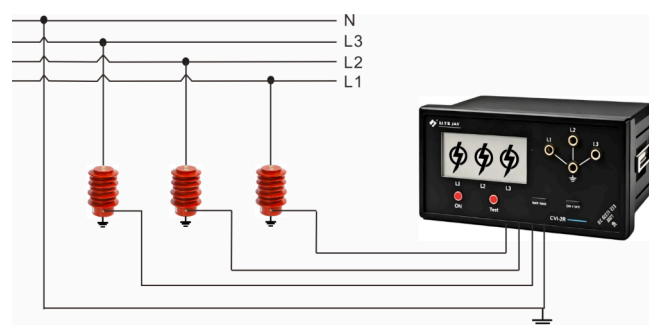
### Main Features

- Compact 96 × 48 mm panel design;
- Clear Single/ Three-Phase Voltage Indication;
- Capacitive Voltage Sensing Technology;
- >120%Un overvoltage indication function;
- 10-45%Un dual-stage voltage indication;
- With relay outputs for remote status monitoring;
- Available 85–265Vac/dc or self-powered versions;
- Compliant with IEC 62271-213 / IEC 61243-5 standards;

### Application

- Medium-voltage power distribution;
- Transmission and distribution systems;
- Power generation facilities applications;
- Industrial power distribution systems;
- Data center power infrastructure;
- Power system maintenance operations;

### Wiring Method



## Technical Characteristics

| Model               | CVI Series VPIS                                                                     | CVI-2R VDIS                                                                          |
|---------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Power supply        | Auxiliary power supply: 85-265Vac/dc<br>or self-powered version                     | 85-265Vac/dc                                                                         |
| Power consumption   | Less than 2W                                                                        |                                                                                      |
| Frequency           | 50-60Hz                                                                             |                                                                                      |
| Voltage threshold   | 0 to 40%Un                                                                          | 10% to 45%Un                                                                         |
| Adaptation capacity | 200pF/ 125pF /80pF/ 45pF                                                            |                                                                                      |
| LED indicator       | Ultra-high brightness LED, operating voltage < 2.5Vdc, service life > 50,000 hours. |                                                                                      |
| LCD display         | No LCD                                                                              | High-definition LCD screen                                                           |
| Digital output      | Optional 1-2 channels, passive, dry contact, NO<br>Load capacity: 5A@250Vac         | Standard 2 channel, passive, dry contact, NO<br>Load capacity: 10A @250Vac/5A@ 30Vdc |
| Withstand voltage   | Compliant with IEC 61243-5:2021                                                     | Compliant with IEC 62271-213                                                         |
| Dimension           | 96x48x43mm                                                                          | 96x48x66mm                                                                           |

| Adaptation capacity parameter table |          |          |           |           |
|-------------------------------------|----------|----------|-----------|-----------|
| Voltage Level (kV)                  | 6        | 10       | 24        | 35        |
| Adaptable Capacitance (pF)          | 200(±15) | 125(±15) | 80PF(±10) | 45(±10)   |
| Dimension (Height * Width)          | 140x95mm |          | 210x110mm | 320x145mm |