

The EC3239 Voltage Divider is designed to monitor medium and high voltage distribution systems and electrostatic processes such as Electrostatic Precipitators. The 0-20 mA proportional current output signal is suitable for monitoring DC voltages up to 100KV.

Overview

A voltage divider is introduced in parallel to the precipitator field, in the electrical circuitry for the purpose of accurate measurement of the precipitator voltage.

In the conventional systems a dropping resistance of the order of 80 - 200 M ohms is used and few volts are fed to the voltage controller for the purpose of measurement. Of late it has been observed that in the high resistivity applications - such as clinker cooler, fly ash collection in boilers - the voltage divider provides a parallel path for the precipitator current and that is comparable to the precipitator current itself.



All the latest control techniques to overcome back corona resort to pulse blocking. In such cases the current level is maintained to a very low value and the precipitation grossly depends on the charge holding capacity of the electrical field. The parallel path for the discharge of such capacitance reduces the charge holding capacity. The only solution to this problem is to increase the input impedance of the voltage feedback circuit.

The DV239 is not merely a voltage divider but a transmitter with near infinite input impedance. This ensures the charge of the Esp to be held at its highest level and allows very high charge ratios for elimination of severe back corona conditions.

Key Features

- High speed response for transient monitoring.
- Rugged construction for harsh environmental conditions.
- Very low bleed current.
- Two wire current transmitter and high voltage shield for noise immunity.
- Calibration traceable to National Standards.

Specifications

Maximum Input	100 kV
Output	0-20 mA. Max 500 ohms at 24V DC
Frequency Response	3dB at 100 Hz
External Connection	2 wire cable (output), M10 stud (HV)
Burden	5W max. (input), 5mW (output)
Environment	0-45°C, 0-80% RH, non-condensing
Net Weight	3 kg
Package Size	550 x 200 x 200 mm
Standard	  N14532

EC3239 Voltage Divider



EC3239 Dimensions

