

WITT EPM 3 – Earth Potential Meter

- EPM 80



* Product like copy

Application

This measurement device monitors the potentials of the connected grounds and evaluates the occurring voltages (see technical specifications).

Description

While operating DC railways with the running rail as return conductor various ground resistances generate voltages that might be dangerous for humans or buildings. One of the measures to protect humans from impermissible contact voltages is the temporary short-circuit of the various grounding systems according to DIN EN 50122-1.

Function

The voltage between the earths or return conductor respectively that are to be monitored is continuously measured. By exceeding the threshold setting a switching command is given via a potential-free changeover for the activation of further devices such as an earth short-circuiting device or an isolator. The limit value can be set on the front panel.

General Data

Supply voltage	110 to 375 VDC or 85 to 264 VAC
Power consumption	Neutral < 100 mW Release < 500 mW
Operating temperature	-20 ... 50 °C
Protection according to ICE 34	IP 50
Test voltage	10 kVDC
Dimensions (W x H x D)	110 x 155 x 125 mm
Connections	Screw terminals

Input

Voltage metering	adjustable DC 60 - 120 V
Trigger time	5 - 35 ms
Input resistance	> 60 kOhm
Maximum input voltage	10 kVDC for 200 ms

Output

Threshold exceeded	Relay, 1 changer
Switching voltage	max. 5000 VDC
Switching current	max. 3 ADC
Switching power	max. 50 W
Separation voltage	max. 10 kVDC