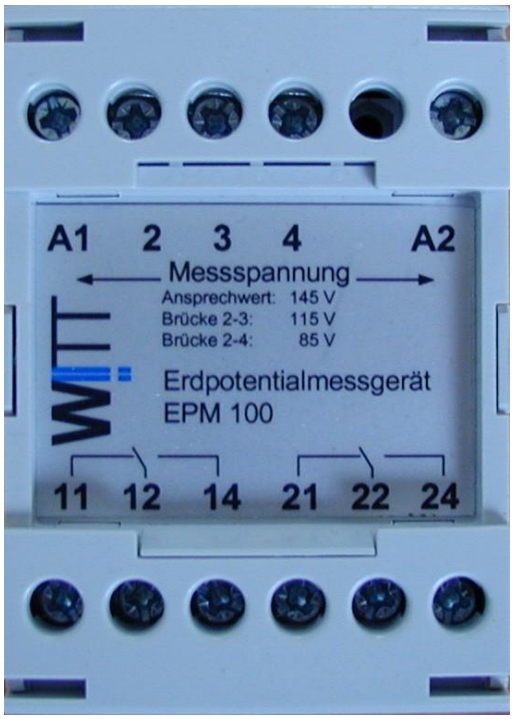
WITT EPM 4 – Earth Potential Monitoring

- EPM 100



* Product like copy

Application

This measurement device monitors the potentials of the connected grounds and evaluates the occurring voltages (see technical specifications). This device does not need any auxiliary power supply; the electrical power is supplied by the monitored input voltage.

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. The EPM 4 monitors the relevant potentials and delivers reports for further actions.

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.

Witt Solutions GmbH · Dyrotzer Ring 3, 14641 Wustermark · Tel.: +49 33234 2433-0
Fax: +49 33234 2433-02 · sales@witt-online.com · www.witt-solutions.de

General Data

Supply voltage	none
Power consumption	neutral < 0,15 W release < 1 W
Operating temperature	-20 ... 50 °C
Protection according to ICE 34	IP 40
Dimensions (W × H × D)	55 × 77 × 110 mm
Connections	screw terminals

Inputs

Voltage metering	85 / 115 / 145 V DC (other values on demand)
Input resistance	> 100 kOhm

Outputs

Threshold exceeded (not delayed)	Relay, 2 changer
Switching voltage	max. 250 V
Switching current	max. 8 A
Switching power	max. 2000 W AC / max. 60 W DC
Electric strength inductor – contact	max. 4 kVDC

Witt Solutions GmbH · Dyrotzer Ring 3, 14641 Wustermark ·Tel.: +49 33234 2433-0
Fax: +49 33234 2433-02 · sales@witt-online.com · www.witt-solutions.de