PRÜFTECHNIK

Product sheet

Ground Bound Tester RS36A - 6 V AC / 10 A, 12 V AC / 25A / 1 - 300 mOhm

Product Images

Additional Information

Article number	200676
PE - Testing of Protective Earth	10 A AC or 25 A AC, 1 - 200 mΩ (25 A range), 1 - 300 mΩ (10 A range), 6 - 12 V, 4 - wire measurement

Short Description

- Switch-off via limit value and peak detection
- Ramp function, key lock, minimum current monitoring
- Remote controllable (ASCII, Windows DLL, .NET Framework assembly, LabVIEW via .NET Framework Assembly, DataView)
- Source-sense-operation, automatic start for test pistols
- Contacting and cable break monitoring
- 15 freely programmable parameter sets
- Error message: acoustic, visual and via interface
- Safety circuit with two positively driven safety relays

Description

4-wire measurement technology with separate source (current) and sense path (measurement)
The resistance of the test leads to the device under test is not measured.

Start button in the test probe
The defined switching on of the power source after contacting prevents damage to the surface of the test object.

Result display in the grip part of the test probe
For improved test comfort, the operator always has the result status in view without having direct visual contact with the test device.

Monitoring the test current
The standardised test current (minimum value) is permanently monitored, falling below this value leads to a fault.

Key lock
The key lock prevents accidential modification of the test parameters and can be configured individually. For example, all buttons can be locked or individual functions (e.g.calling up test programmes) can still be permitted.

Test device for "stand-alone-operation" or remote control via interfaces
The tester cann be remote-controlled via PC software (DataView user interface), a customised application (Windows DLL, .NET Framework Assembly, LabView via .NET Framework Assembly), simple command parameters (ASCII) or digitally via a PLC (digital IO).

Freely programmable parameter sets
15 freely programmable parameter sets are available for safe and fast changing of test test parameters.

Error message: Acoustic, visual and via interface
Faulty test objects can thus be reliably recognised. The type of fault is also shown flashing.

Individual setting of
Start options, key lock, language and mode selection for external printer, behaviour of digital inputs and outputs, ramp options, options for contact and cable break monitoring, brightness of display elements and much more.

Updateable via interface
For customised changes and updates.

Technical specifications

Ground Bound Tester RS36A-25 10 / 25 A AC, 500 / 200 mOhm

Specifications, Device Characteristics	
Test Current	
Range:	10 A AC and > 25 A AC
Resolution, digit:	0.1 A

Measurement uncertainty, accuracy:	1 % of measured value +/- 2 digits
Wave form:	sinusoidal, depending on mains
Display for actual value:	LED-Display 13 mm, red
Display for desired value:	LED-Display 10 mm, red

Resistance

Range:	1 - 500 mΩ within 10 A range, 1 - 200 mΩ within 25 A range
Resolution, digit:	1 mΩ
Measurement uncertainty:	1 % of measured value +/- 2 digits
Display for actual value:	LED-Display 13 mm, red
Display for desired value:	LED-Display 10 mm, red

Test Time

Range:	1 s - 99 min, continuous
Ramptime range:	0.5 s - 99 s
Resolution up to 10 s:	0.1 s (Digit)
Resolution display > 10 s:	1 s
Measurement uncertainty:	+/- 1 digit
Start of test time:	The test time will only be started if the set test voltage is reached.
Minimum test time:	1 s
Display for actual value:	LED-Display 13 mm, red
Display for desired value:	LED-Display 10 mm, red

General Data

Mains supply:	230 V, 50 Hz / 60 Hz
Mains connection:	Schuko-plug
Tolerance mains voltage:	+/- 10 %
Current consumption:	max. 8 A
Fuse:	8 A, T, 5 x 20 mm, 250 V
Displays:	LED, permanent display of actual and desired values
Setting of test parameters:	manually or fully automatic via interface (Windows DLL, ASCII, .net framework assembly, DataView)
Programming:	15 sets of parameters, freely programmable
Error signalling:	acoustic, optical and via interface
Outputs from panel:	2 x sockets for DUT contacting, optional on back side
Dimensions (W x H x D):	308 x 168 x 273 mm
Weight:	approx. 15.8 kg
Gehäuse:	synthetic material, RAL 7035

Basic equipment:	manual, mains cable, safety circuit plug
Calibration:	factory calibration, traceable to national standards, incl. certificate DAkkS-calibration according to DIN EN ISO / IEC optional available

Environmental Conditions

Casing:	IP20
Humidity:	max. 80 %, non condensating
Allowed range of temperature:	+ 5 up to + 40 °C
Max. height above sea level:	2 000 m
Cooling:	passive, active cooling optional available

Interfaces

Control- /Digital-IO:	start, stop, result GOOD, result BAD and test running
RS232 for remote control:	computer connection for terminal programming and controlling by customer specific software applications, optional usage of a protocol printer
CAN interface:	for expanding the test system by additional devices

Expanded Device-Setup

Key lock:	individual setup
Signal configurator:	individual setup for digital result outputs
Buzzer options:	individual setup of acoustic signals
LED-Display:	individual LED brightness
Start options:	individual setup of start modes
Language and mode selection for external printer:	printout at pass, fail, continuous or switch off Formats: List or CSV

Options for Test Start

Start via test probe signal:	The test starts by pressing the start button included in the test probe.
Automatic start via safety circuit:	The test can be started by closing the test cage.
Start button on the device:	The test is started by pressing the button on the front of the device.
Start via serial interface:	Start via higher-level control system (PLC or PC)
Start via digital interface:	Start via digital IO such as PLC, footswitch, pushbutton, etc. ...
Start options:	individual setup of start modes

Outputs - DUT, Safety Components

Socket for DUT housing contact:	7-pole socket on the front:

	Connection for contacting the test object via a test probe with start button and result LEDs. Optionally, a clamp can also be plugged in for permanent connection.
Socket for DUT mains:	4-pole socket on the front: Connection for contacting the test object via a suitable cable adapter with e.g. Schuko plug or clamps for test objects with open cable ends. Optionally, a second test probe or a tap-off terminal can be plugged in for a permanent connection.

Electrical Safety and Norms

EN61010-1:	Safety requirements for electrical equipment for measurement, control, and laboratory use
EN61326-1:	Electrical equipment for measurement, control and laboratory use - EMC requirements
EN 61000-3-3 / EN 61000-3-2:	Electromagnetic compatibility EMC)
EN 50191:	Errection and operation of electrical test eqipment
Contamination level:	2
Protection class:	1

Interfaces

Control interface / Digital-IO:
Digital interface for connection to a PLC, footswitch or a remote panel including signalling of start, stop, good result, bad result, faulty test object and in operation.

RS232 / PC-interface:
For connection to the PC. All test parameters can be set by the higher-level control system - the desired test values are automatically set by the device. The interface also allows permanent data logging and monitoring of status information. On the PC side, the DataView data management package or drivers (Windows DLL, ASCII, .net framework assembly) are available for your own PC application.

RS232 / ASCII printout:
For direct connection to a terminal programme or a protocol printer. As an alternative to PC remote control, the tester permanently transmits the results in ASCII format. The language of the printout can be set.

CAN-Interface:
For expanding the test system for additional features and further expansion stages. Any number of ETL devices and CAN components can be linked and remotely controlled via this interface.

Contact details

ETL Prüftechnik GmbH

Hauptsitz / Headquarter
Lembergstraße 23
70825 Korntal-Münchingen

Version number: 6.0