

UH28C

High Voltage Tester

5 000 V AC / 100 mA

Product Information Sheet





Short summary - overview

Item number	200366
Test voltage	100 – 5 000 V AC,
Test current, limit	0,5 - 100 mA
Power	> 500 VA
Short circuit current	> 200 mA, EN 61180
Potential free	suitable for testing with test pistols, according to EN 50191

Functions and range of application

- Over limit trip and over current detection
- Digital interface for remote control by PLC (Start, Stopp, In Operation, Failed)
- Signalling: Acoustic, optical and via digital interface
- Safety circuit

Universal usage

- Individual test device
- In semi-automatic test stations

Remote-controllable

- Digital interface for remote control by PLC (Start, Stopp, In Operation, Failed)

Usage

- Potential free testing with test pistols
- Semi-automatic testing on a production line.

Device views

Front side



- Analog indicators
 - Voltage – true value
 - Current – true or desired value (trip current)
- Rotary control for setting-up test parameters
- Function selection buttons
- Signalling: danger, test running, test fail

Back side



Interfaces and connections

- Control interface
 - Digital IO, safety circuit
- Signal lights
- Fuses
- Mains voltage connector

Detailed functional description

Shut-down over limit detection and over current detection

Insulation fault alarm will be triggered by a current over limit exceedance or by a over current detection in order to detect even low-energy spikes.

Test device for operating "Stand-Alone" or remotely controlled via interface

The test device can be digitally controlled by a PLC (Digital-IO).

Activating the test voltage

The test voltage can be activated by push buttons on the device front, or over the control interface on the back side.

Signalling: Acoustic, optical and communication interface

Faulty test objects can be reliably identified. Indication lights will also flash additionally.

Measuring of current and voltage directly on the high voltage section

Direct measurement guarantees accurate test results.

High voltage, potential-free

The test voltage is potential-free. This grants highest possible security for the operating person and is a requirement for performing high voltage tests by using test pistols.

Interfaces

Control interface / Digital-IO

Digital interface for connection to a PLC or a footswitch.

Safety circuit

For standardized testing with test pistols.

Signal light connector

For connecting a signal light combination consisting of red and green allround lights.

Specifications, device characteristics

Test voltage

Setup range	100 – 5 000 V AC
Measurement inaccuracy, precision	2,5 % of final scale value
Frequency of voltage	50 Hz / 60 Hz, depending on mains frequency
Curve shape	sine-shaped according to EN 61180, depending on mains
Voltage stability	output voltage not regulated
Power	> 500 VA
Zero-voltage switching	not available
Voltage ramp	not available
Display for actual value	analog indicator
Display for desired value	analog indicator

Test current

Setting range, threshold value	0 - 10 mA / 0 - 100 mA
Measurement inaccuracy, precision	2,5 % of final scale value
Short-circuit current	> 200 mA / > appr. 1 200 V
Burn function (optionally available)	burning the faulty area (max. burning time is 1 s)
Display for actual value	analog indicator
Display for desired value	analog indicator, switchable for true or desired value (trip current)

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	status lamps and analog indicators for test voltage and test current
Setting of test parameters	manually
Signalling	acoustic, optical and over interface
Outputs front panel	2 x high voltage outputs (1-poled socket)
Dimensions (W x H x D)	585 x 212 x 325 mm
Weight	appr. 22 kg
Casing	die-cast aluminium, RAL 7035
Basic equipment	manual, mains cable, safety circuit plug
Calibration	incl. certificate of factory-calibration traceable to national standards, DAkkS-calibration according to DIN EN ISO/IEC 17025 optional available

Environmental conditions

Casing	IP20
Humidity	max. 80 %, non condensing
Allowed range of temperature	+ 5 to + 40 °C
Max. height above sea level	2 000 m
Cooling	passive

Interfaces

Control- / Digital-IO	start, stopp, "fail" result, test running
-----------------------	---

Additional functions

Fault detection	switch off on threshold value and over current detection
-----------------	--

Start options for testing

Start button on the device	front panel button for test-start
Start by digital interface	digital I/O for example by a footswitch, PLC or a push button

Outputs – DUT, security components

High-Voltage outputs	the connection is made using the 2 potential-free high voltage output connectors (HV-Socket HVS06N). Each of the outputs is 1-poled (Ø 6 mm).
Safety circuit	For standardized testing with test pistols
Signal-light connector	for connecting a combined green/red signal light

Electrical safety and norms

EN 61010-1	safety regulations for electrical measurement, control- and lab- equipment
EN 61326-1	electrical measurement, control- and lab- equipment – EMC-requirements
EN 61000-3-3/EN 61000-3-2	Electromagnetic compatibility (EMC)
EN 50191	erection and operation of electrical test equipment
EN 60598-1	luminaire / Part 1: General requirements and tests
Contamination level	2
Protection class	1