

# UH28C

## High Voltage Tester

12 000 V AC / 50 mA

### Product Information Sheet





## Short summary - overview

Item number	202301
Test voltage	200 - 12 000 V AC,
Test current, limit	0,5 - 50 mA
Power	> 600 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	200 – 12 000 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	> 600 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 - 5 mA / 0 - 50 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 385 mm
Weight	appr. 32,4 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, stop, "fail" result, test running
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## Additional functions

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