

Product Information Sheet



UH28C

Hi Pot Tester

Summary

The newest model in the successful UH28 series – the Hi Pot Tester that is sold worldwide most often

As a universal Hi Pot Tester, the UH28C is ideal for use in industrial applications, the laboratory as well as the workshop.

The test voltage can be switched on and off either manually or by remote control. Practical use and intuitive usage stood in the forefront when the UH28C was developed. This means that we have managed to build a Hi Pot Tester that is economic and precise and provides highest safety through its easy readability and adjustability.

Test voltage:	Standard 0 - 5 000 V AC, potential free Variations with 1 kV, 2,5 kV, 6 kV, 12 kV AC
Measurement range:	0,1 - 100 mA
Transformer power:	500 VA
Short circuit current:	> 200 mA
Display:	Analogue display
Fault indication:	Acoustic, optical and via the port
Testing / Burning:	Switchable
Special features:	Adjustable measurement range, Zero voltage switch
Dimensions (W x H x D):	585 x 212 x 325 mm
Ports:	Digital IO for PLC, safety circuit and warning lights (EN 50191)

Features

- **Measurement of current and voltage with special measurement converters**
For accurate measurement
- **Potential free high voltage**
For maximum safety
- **Burn out function**
To recognise faulty positions
- **Adjustment of the current measurement range**
For optimum readability
- **Safety circuit with two controlled relays**
The best safety techniques as required by the EN 50191
- **Fault indication: acoustic, optical and via the port**
For reliable detection of defective products
- **The high voltage is turned on or off in the zero voltage run**
This prevents surge peaks and protects your test object
- **Remote control mode**
For the fully automatic remote control of the test equipment via a PLC
- **Set up**
Individual setting of the trip current

Ports and connections

- **Control port**

Digital interface to a PLC terminal, a foot switch or a result or operating panel with signals such as Start, Stop, Pass / Fail and Test in Progress.

- **Safety circuit**

For implementation of the safety circuit as required by the EN 50191. There are 3 possible switching possibilities in order to comply with standards when testing using test pistols, test enclosures or within a transfer line.

- **Signal light connection**

To connect a signal light combination, each with a red and a green high visibility beacon as required by the EN 50191.

- **Analogue exit for voltage and current (optional)**

To plot the test and result parameters

Contact with the test object

- **High voltage exits (front)**

Contact is through 2 potential free high voltage exits via suitable built-in sockets HVS06N on the front of the equipment.

The exits are – as defined by worldwide standards – each 1-pole with a socket for plug HVP06N (Ø 4 mm).

- **Connections on the back of the equipment**

Optionally the exits to the test object can additionally be lead out of the back of the equipment.

Product description

Hi Pot Tester UH28C – economic and precise

Easy operation and readability, as well as precise measurement technology make the newest model a classic in the UH28C series. It is extremely robust and has proved itself many times over. A completely reliable concept for rough every day industrial life – also in the shortest sequences within automatic plants.

The large, analogue displays are reliably readable. The test parameters such as test voltage and current are displayed simultaneously. The test voltage is turned on manually using a large dial. There are two areas (0 - 100 mA and 0 - 10 mA) available for measuring and displaying the measured current. The trip current can be infinitely varied between 0 - 100 mA. Switching between the functions of testing and burning is done using the key switch.

The UH28C has everything that is important for throughput rate and personnel safety: potential free high voltage, acoustic failure indication, operation of the required warning lights and the remote control connection for a PLC.

Desk top apparatus or 19 inch built-in apparatus

The UH28C is built in two different mechanical forms:

- As Standard desk top version
Is available in rugged metal case with practical handles on the sides, can also be ordered with installation handle or carrying handle.
- As 19 inch built-in apparatus (UH28CS-R)

Examples of usage

- Potential free testing with a test pistol
- Testing with fixed connections and two-hand operation
- Testing with safety test cage (unavoidable contact protection)
- As an automatic system component within a production line

Technical specifications

UH28C: AC-Hi Pot Tester		
Test voltage	Output voltage:	Standard 0 - 5 000 V AC, depending on the type of appliance Variations with 1 kV, 2,5 kV, 6 kV, 12 kV V AC
	Adjustment range:	Standard 0 - 5 000 V AC, depending on the type of appliance Variations with 1 kV, 2,5 kV, 6 kV, 12 kV V AC
	Resolution:	100 V analogue
	Accuracy:	2,5 %
	Output frequency:	50 Hz / 60 Hz, depending on the mains supply
	Waveform:	Sinus, depending on the mains supply
	Output stability:	Depending on the mains voltage
Test current	True value display:	Analogue display 50 mm x 100 mm
Test current	Output current:	The standard equipment: > 100 mA
	Measurement range:	0 - 100 mA
	Adjustment range:	0 - 10 mA / 0 - 100 mA
	Resolution:	2 mA analogue
	Accuracy:	2,5 %
	Short circuit current:	> 200 mA / > approx. 1 200 V
General output data	True value display:	Analogue display 50 mm x 100 mm
General output data	Transformer capability:	> 500 VA
	Variations:	1 000 VA, 1 500 VA, 2 500 VA Depending on the equipment variation from page 6
Special features	Burn out function:	Burning out of the faulty positions
	Zero volt switch:	The UH36 can only be switched on or off in the zero voltage run of the test voltage.

Specifications of the UH28C:		
General	Mains connection:	230 V, 50 Hz
	Power input:	Max. 8 A
	Display:	Analogue display 50 mm x 100 mm, true values are permanently displayed
	Setting of the test parameters:	Manually
	Warning signals:	Acoustic, optical and via the port
	Dimensions (W x H x D):	585 x 212 x 325 mm
	Weight:	Approx. 22,1 kg (Variations upto 30 kg)
	Casing:	Aluminium, RAL 7035
	Temperature:	5 - 45 °C
	Basic equipment:	Operating manual, power cable, safety circuit plug
Calibration:	Includes manufacturers certificate of calibration	
Ports	Control / digital IO:	Start, Stop, Pass / Fail and Test in Progress
Connections	High voltage exits:	Contact to the test object is via 2 potential free high voltage connectors that are both 1-pole with plug for socket HVP06N (Ø 4 mm).
	Safety circuit:	To implement the appropriate safety circuit as detailed by EN 50191
	Warning light connection:	To connect a warning light combination as detailed by EN 50191
Starting the test	Start and stop signal via port:	The test can be started via a PLC
	Start button on apparatus:	Test can be started by pressing the button on the front of the apparatus
	Start button via external switch:	The test can be started via a digital IO e.g., via a foot button

Variations



Hi Pot Tester UH28C

Standard

Test voltage:	0 - 5 000 V AC
Measurement range:	0,1 - 100 mA
Transformer capability:	500 VA
Short circuit current:	> 200 mA

Art.-No.: 200366

Special designs:



Hi Pot Tester UH28CS-1kV

Art.-No.: 200440

Test voltage: 0 - 1 000 V AC
Measurement range: 0,1 - 100 mA
Transformer capability: 500 VA
Short circuit current: > 200 mA



Hi Pot Tester UH28CS-2,5kV

Art.-No.: 201011

Test voltage: 0 - 2 500 V AC
Measurement range: 0,1 - 100 mA
Transformer capability: 500 VA
Short circuit current: > 200 mA



Hi Pot Tester UH28CS-6kV

Art.-No.: 200689

Test voltage: 0 - 6 000 V AC
Measurement range: 0,1 - 100 mA
Transformer capability: 600 VA
Short circuit current: > 200 mA



Hi Pot Tester UH28CS-12kV

Art.-No.: 202301

Test voltage: 0 - 12 000 V AC
Measurement range: 0,1 - 50 mA
Transformer capability: 600 VA
Short circuit current: > 200 mA



Hi Pot Tester UH28CSX-12C1

Art.-No.: 202085

Test voltage: 0 - 12 000 V AC
Measurement range: 0,1 - 100 mA
Transformer capability: 1 200 VA
Short circuit current: > 200 mA



Hi Pot Tester UH28CS-2,5C2

Art.-No.: 201287

Test voltage: 0 - 2 500 V AC
Measurement range: 0,1 - 200 mA
Transformer capability: 500 VA
Short circuit current: > 200 mA