

UX36

High-Voltage Test Equipment

Product Sheet — English Translation

Overview

The UX36 family comprises high-voltage test equipment for electrical insulation and dielectric-strength testing. The series includes AC models and, on request or in specific configurations, AC/DC and DC versions. Options and ratings depend on the exact model.

This document is an English translation of the supplied German product sheet. Model names, article numbers, units and technical values have been retained as shown in the source. Please confirm the exact configuration with the manufacturer before purchasing or using the equipment.

1. Overview

The top model in the high-voltage tester range

The source brochure describes the UH36SX as a universal high-voltage tester designed to meet different test standards. Developed in close cooperation with users, it is intended to be intuitive and easy to operate. Applications include production and assembly lines, workshops and laboratories. A future-ready software and hardware platform, together with an intelligent interface concept, supports straightforward adaptation and flexibility.

General feature	Description
Test voltage	Standard 5 kV AC; AC/DC versions available. 100–5,000 V AC, floating. Versions above 5 kV or 500 VA available.
Test current	0.1–100 mA
Transformer output	From 500 VA
Short-circuit current	More than 200 mA
Adjustable test time	1–99 seconds / 1–99 minutes, or continuous
Display	LED display with continuous indication of setpoint and actual values
Fault indication	Acoustic, visual and via interface
Test parameter sets	Freely programmable
Ramp function	Freely programmable
Test / burn mode	Switchable
Regulated test voltage	Standard
Keypad lock	Standard
Special functions	Open-lead and contact monitoring; automatic start
Dimensions (W × H × D)	585 × 212 × 325 mm
Interfaces	Digital I/O for PLC, RS232, CAN, safety circuit and warning lamp (EN 50191)

2. Functions

- Monitoring of test leads for broken wires and monitoring of contact with the test object. This supports process reliability and helps demonstrate that the test object was actually tested.
- Freely programmable parameter sets for safe, quick switching between test settings.
- Ramp function for gentler testing.
- Automatic start: when HTP06C test guns are pressed against the test object, the test voltage is enabled only after both test tips have made secure contact. This helps prevent voltage spikes and ensures the specified test duration.
- Regulated test voltage to maintain a constant voltage despite mains fluctuations.
- Safety circuit with two positively guided safety relays, in line with the safety concept specified by EN 50191.
- Current and voltage measured directly on the high-voltage side for precise measurement.
- Burn function to help locate the defective point.
- Keypad lock to prevent accidental changes to parameters.
- Floating high voltage for increased safety.
- Acoustic, visual and interface-based fault indication.
- Acoustic signal at the start and end of the test.
- Fault-type display for faster fault localization.
- Remote-control mode for fully automatic control by a PC or PLC.
- Setup options include start conditions, language, digital input/output behaviour, ramp options, contact monitoring and cable-break monitoring.

- Updateable via interface, allowing customer-specific changes through remote maintenance.

3. Interfaces and Connections

Control interface

Digital interface for connecting a PLC, foot switch, or result/operator panel. Signals include Start, Stop, Pass/Fail and Test in Progress.

RS232 / PC interface

Connects the tester to a PC. Settings can be made through the interface and the device automatically sets the requested test values. The interface also supports continuous data acquisition and status monitoring. DataView data-management software or drivers for custom PC applications are available on the PC side.

RS232 / ASCII output

For direct connection to a terminal program or protocol printer. As an alternative to remote PC control, the tester continuously transmits results in ASCII format. The printout language can be selected.

CAN interface

Allows expansion of the test system with additional features and expansion stages. Multiple devices and CAN components can be interconnected and remotely controlled.

Safety circuit

For implementing a suitable safety circuit in accordance with EN 50191. Three wiring options are available for compliant testing with test guns, a safety test enclosure or within a transfer line.

Warning-lamp connection

For connection of a warning-light combination with one red and one green rotating beacon, in accordance with EN 50191.

4. Contacting the Test Object

- Front high-voltage outputs: two floating high-voltage outputs are provided at the front of the unit via suitable HVS06C panel sockets.
- Each output is two-pole and accepts an HVP06C plug (outer diameter 6 mm and inner diameter 2 mm). Together with the two-pole HTP06C high-voltage test guns, this arrangement can generate a defined start signal and provide continuous cable-break monitoring.
- In automated test stations, contact monitoring can also be implemented. Each test point must then be contacted twice.
- A rear high-voltage output is available as an option.

5. Product Description

The top model in the high-voltage tester range

With a footprint of approximately 585 × 325 mm and a weight of only 20–30 kg, the UH36SX is described in the source as the most compact unit in its performance class. Its robust industrial quality, modern design and flexible concept are intended for industrial applications, development laboratories and technical service centres.

Intuitive operating concept

Large LED displays are easy to read. Test parameters and results—including test voltage, current and test time—are displayed simultaneously so the operator can see the current test status at all times. Parameters are adjusted independently using dedicated keys. The UH36SX offers nine freely programmable test programs, which can be selected or programmed at the press of a button.

Test/burn functions and the freely programmable ramp can be enabled just as easily. The ramp function raises the test voltage to the setpoint over a selectable time.

A dedicated menu allows basic settings to be tailored to the application, including language, start conditions, digital input/output behaviour, ramp settings, individual keypad locks and contact/cable-break monitoring options for use with test guns, safety enclosures or PLCs.

Useful features included as standard — up to 6 kV AC

The source states that the UH36SX addresses problems such as voltage spikes during contact, residual voltage, maintaining the specified test time and unreliable contact with the test object. This helps avoid pre-damaging the object during testing and supports traceability of the test process.

6. Applications

- Floating-potential testing with test guns.
- Testing with fixed connections and two-hand operation.
- Testing with a safety test enclosure providing enforced protection against contact.
- Use as a semi-automatic or fully automatic system component within an assembly line.

7. Technical Data — UX36

UX36: AC high-voltage testing up to 6,000 V. AC/DC versions available on request.

Category	Parameter	Specification
Test voltage	Output voltage	100–6,000 V AC standard; 0.1–6 kV AC. Higher-voltage versions listed in the variants section.
	Resolution	10 V
	Measurement uncertainty	1%
	Voltage frequency	50 / 60 Hz, depending on mains supply
	Waveform	Sine wave, depending on mains supply
	Voltage stability	Output regulated to ± 10 V using a PI controller
	Actual / setpoint display	Red LED displays, 13 mm actual value and 10 mm setpoint
Test current	Output current	0.1–100 mA
	Measuring range	0–120 mA
	Setting range	0.1–100 mA
	Resolution	0.1 mA
	Measurement uncertainty	1%
	Short-circuit current	> 200 mA / > approx. 1,100 V
	Actual / setpoint display	Red LED displays, 13 mm actual value and 10 mm setpoint
Test time	Setting range	0–99 seconds / 0–99 minutes, or continuous
	Resolution	0.1–1 second / 0.1–1 minute
	Display	Red LED displays, 13 mm actual value and 10 mm setpoint
General output data	Transformer output	More than 500 VA
Special functions	Ramp function	Voltage ramps up to the selected test voltage; test timing starts only after the target voltage is reached. Freely programmable.
	Contact monitoring (up to 6 kV AC)	Monitors contact with the test object when a suitable four-pole contacting fixture is used.
	Broken-lead monitoring (up to 6 kV AC)	Monitors test leads for broken wires.
	Burn function	Burns out the defective point; approx. 1 second at rated output.
	Minimum-current monitoring	Monitors a preset minimum current during testing, in conjunction with DataView.
	Automatic start / stop via test gun	The HTP06C test gun detects correct contact with the test object through a special hardware arrangement (patented).
	Zero-crossing switch	The unit switches the test voltage on or off only at the zero crossing.

8. UX36 Device Characteristics

Category	Parameter	Specification
General	Mains connection	230 V, 50 / 60 Hz
	Power consumption	Max. 8 A
	Display	13 mm and 10 mm LED displays; continuous indication of setpoint and actual values
	Test parameter setting	Manual or fully automatic via interface
	Programming	9 freely programmable test parameter sets
	Fault signalling	Acoustic, visual and via interface
	Dimensions (W × H × D)	585 × 212 × 325 mm
	Weight	Approx. 20–30 kg
	Housing	Plastic, RAL 7035
	Temperature range	5–45 °C
	Standard accessories	Operating instructions, mains cable, safety-circuit plug
	Calibration	Factory calibration certificate included
	Control / digital I/O	Start, Stop, Pass/Fail and Test in Progress
Interfaces	RS232 remote-control interface	PC connection; also direct connection to terminal software or protocol printer
	CAN	System expansion for additional features and expansion stages
Connections	High-voltage outputs	Two floating high-voltage outputs, each two-pole, with socket for HVP06C plug (outer diameter 6 mm, inner diameter 2 mm)
	Safety circuit	For implementation of a suitable safety circuit in accordance with EN 50191
	Warning-lamp connection	For a warning-light combination in accordance with EN 50191
Test start	Test gun start/stop	Automatic start and four-pole technology (up to 6 kV AC)
	Front-panel start button	Starts the test using the button on the front panel
	Interface start/stop	Starts the test via PLC or PC interface
	External switch	Starts the test via digital I/O, e.g. a foot switch
Setup	Keypad lock	Individually configurable
	Output options	Individual configuration of result outputs
	Buzzer options	Individual configuration of acoustic signals
	LED display	Adjustable brightness of display elements
	Start options	Individual setting of start mode
	Special functions	Settings for automatic start, broken-lead monitoring and contact monitoring
	Language / external printer mode	English, German, Swedish, Italian, Spanish and Dutch. Print on pass, fail or always.
	Ramp options	Ramp time and ramp-down behaviour
	Test time	Test-time scaling

9. Model Variants

The following variants and values are transcribed from the supplied German brochure. The source uses a mix of naming conventions and some model descriptions may be configuration-specific. Please verify before ordering.

Model Variants (1–12 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
204555	UX36-01DC0800TPT	0.1–1 kV DC	1–800 mA	800 VA	> 800 mA
202381	UX36E-3C10	0.1–3 kV AC	0.5–1,000 mA	3,000 VA	> 1,000 mA
202596	UX36E-3/6C10	0.1–3 kV AC; 0.1–6 kV AC	0.5–1,000 mA; 0.5–500 mA	3,000 VA	> 200 mA
203089	UX36-0304ADC0150TPT	0.1–3 kV AC; 0.1–4 kV DC	0.5–150 mA AC; 0.1–100 mA DC	500 VA	> 200 mA
206865	UX36-ADC-0304-0500-TPT	0.1–3 kV AC; 0.1–4 kV DC	0.5–500 mA AC; 0.1–350 mA DC	1,500 VA	> 200 mA
202794	UX36-3/6P6	0.1–3 kV AC; 0.1–6 kV AC	0.5–200 mA; 0.5–100 mA	600 VA	> 200 mA
202793	UX36-3/6P12	0.1–3 kV AC; 0.1–6 kV AC	0.5–400 mA; 0.5–200 mA	1,200 VA	> 400 mA
202377	UX36-3,5C2	0.1–3 kV AC	0.5–200 mA	700 VA	> 200 mA
206693	UX36-SGT03DC-300	0.1–3 kV DC	0.5–300 mA	300 VA	> 200 mA
203505	UX36-ADC-0608-0200-TPT	0.1–6 kV AC; 0.1–8 kV DC	0.5–200 mA AC; 0.1–140 mA DC	1,200 VA	> 200 mA
203037	UX36-ADC-0507-0100-TPT	0.1–5 kV AC; 0.1–7 kV DC	0.5–100 mA AC; 0.1–70 mA DC	500 VA	> 200 mA
202194	UX36-5C2	0.1–5 kV AC	0.5–200 mA	1,000 VA	> 200 mA

Model Variants (13–24 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
201926	UX36-AC-05-0300-TPT	0.1–5 kV AC	0.5–300 mA	1,500 VA	> 300 mA
204114	UX36-AC-05-0500-TPT	0.1–5 kV AC	1–500 mA	2,500 VA	> 500 mA
206000	UX36-AC-06-0100-TPT	0.5–6 kV AC	0.5–100 mA	600 VA	> 200 mA
202351	UX36-AC-06-0200-TPT	0.5–6 kV AC	0.5–200 mA	1,200 VA	> 200 mA
203129	UX36-0608ADC0100TPT	0.1–6 kV AC; 0.1–8 kV DC	0.5–100 mA AC; 0.1–70 mA DC	600 VA	> 200 mA
206594	UX36-0608ADC0300TPT	0.1–6 kV AC; 0.1–8 kV DC	0.5–300 mA AC; 0.1–200 mA DC	1,800 VA	> 200 mA
202511	UX36-8C1	0.5–8 kV AC	0.5–100 mA	800 VA	> 50 mA
204344	UX36-ADC-0810-0200-TPT	0.1–7.5 kV AC; 0.1–10 kV DC	0.5–200 mA AC; 0.1–150 mA DC	1,500 VA	> 200 mA
206554	UX36-TPT8/11ADC-150	0.1–8 kV AC; 0.1–11 kV DC	0.5–150 mA AC; 0.1–100 mA DC	1,200 VA	> 200 mA
202513	UX36-8C1,6	0.5–8 kV AC	0.5–160 mA	1,280 VA	> 200 mA
204358	UX36-TPT10DC-10	0.1–10 kV DC	0.1–10 mA	Not stated	< 12 mA, current-limited per EN 50191
202475	UX36-1014ADC0050OPT	0.1–10 kV AC; 0.1–14 kV DC	0.5–50 mA AC; 0.1–30 mA DC	500 VA	> 200 mA

Model Variants (25–36 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
206202	UX36-AC-10-0050-TPT	0.5–10 kV AC	0.5–50 mA	500 VA	> 50 mA
205248	UX36-AC-10-0100-TPT	0.5–10 kV AC	0.5–100 mA	1,000 VA	> 100 mA
202387	UX36-10C2	0.5–10 kV AC	0.5–200 mA	2,000 VA	> 200 mA
204334	UX36-AC-10-0250-TPT	0.5–10 kV AC	0.5–250 mA	2,500 VA	> 200 mA
205124	UX36-AC-10-1000-TPW	0.5–10 kV AC	0.5–1,000 mA	10,000 VA	> 200 mA
205125	UX36-AC-10-1500-TPW	0.5–10 kV AC	0.5–1,500 mA	15,000 VA	> 200 mA
201852	UX36-AC-12-0050-TPT	0.5–12 kV AC	0.5–50 mA	600 VA	> 50 mA
202187	UX36-12C1	0.5–12 kV AC	0.5–50 mA	600 VA	> 200 mA
202320	UX36-12C1E	0.5–12 kV AC	0.5–100 mA	1,200 VA	> 100 mA
205688	UX36-AC-12-0200-TPT	0.5–12 kV AC	0.5–200 mA	2,400 VA	> 200 mA
202219	UX36-15kV	0.5–15 kV AC	0.5–33 mA	500 VA	> 50 mA
202441	UX36-ADC-1521-0033-OPT	0.5–15 kV AC; 0.5–21 kV DC	0.5–33 mA AC; 0.5–24 mA DC	500 VA	> 50 mA

Model Variants (37–48 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
206797	UX36-ADC-1521-0100-OPT	0.5–15 kV AC; 0.5–21 kV DC	0.5–100 mA AC; 0.5–33 mA DC	1,500 VA	> 50 mA
204728	UX36-AC-15-0100-OGT	0.5–15 kV AC	0.5–100 mA	1,500 VA	> 100 mA
206817	UX36-ADC-1521-0200-OPW	0.5–15 kV AC; 0.5–21 kV DC	0.5–200 mA AC; 0.5–140 mA DC	3,000 VA	> 50 mA
202118	UX36-20kV	0.5–20 kV AC	0.5–25 mA	500 VA	> 100 mA
202577	UX36-20P10	0.5–20 kV AC	0.5–50 mA	1,000 VA	> 50 mA
203906	UX36-AC-20-0100-OGT	0.5–20 kV AC	0.5–100 mA	2,000 VA	> 200 mA
202690	UX36-AC-20-0150-OGW	0.5–20 kV AC	0.5–150 mA	3,000 VA	> 200 mA
206448	UX36-25kV	0.5–25 kV AC	0.5–50 mA	1,250 VA	> 50 mA
203421	UX36-AC-25-0100-OGW	0.5–25 kV AC	0.5–100 mA	2,500 VA	> 50 mA
206903	UX36-AC-25-0125-OGW	0.5–25 kV AC	0.5–125 mA	3,125 VA	> 50 mA
204304	UX36-AC-25-0150-OGW	0.5–25 kV AC	0.5–150 mA	3,750 VA	> 50 mA
202576	UX36-30kV	0.5–30 kV AC	0.5–16 mA	500 VA	> 50 mA

Model Variants (49–60 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
206873	UX36-AC-30-0200-OGW	1–30 kV AC	1–200 mA	6,000 VA	> 200 mA
206688	UX36-30AC0400OGW	1–30 kV AC	1–400 mA	12,000 VA	> 200 mA
202597	UX36-40kV	0.5–40 kV AC	0.5–25 mA	1,000 VA	> 30 mA
202598	UX36-40kV	0.5–40 kV AC	0.5–50 mA	2,000 VA	> 70 mA
202599	UX36-60kV	0.5–60 kV AC	0.5–5 mA	300 VA	> 10 mA
202383	Two-part test system up to 75 kV AC	0.5–75 kV AC	0.5–100 mA	7,500 VA	> 100 mA
202600	Two-part test system up to 75 kV AC	0.5–75 kV AC	0.5–200 mA	15,000 VA	> 200 mA
202468	UX36-0608P12	Range 1: 0.1–3 kV AC / 0.1–4.2 kV DC; Range 2: 0.5–6 kV AC / 0.5–8.5 kV DC	Range 1: 0.5–400 mA AC / 0.5–300 mA DC; Range 2: 0.5–200 mA AC / 0.5–150 mA DC	1,200 VA	> 400 / 200 mA
202602	UX36E-0608C4	Range 1: 0.1–3 kV AC / 0.1–4.2 kV DC; Range 2: 0.5–6 kV AC / 0.5–8.4 kV DC	Range 1: 0.5–400 mA AC / 0.5–280 mA DC; Range 2: 0.5–200 mA AC / 0.5–140 mA DC	1,500 VA	> 200 / 400 mA
202475	UX36-TPT10/14ADC-50	0.5–10 kV AC; 0.5–14 kV DC	0.1–50 mA AC; 0.5–30 mA DC	500 VA	> 200 mA
206537	UX36-TPT12/16ADC-50	0.5–12 kV AC; 0.5–16 kV DC	0.1–50 mA AC; 0.5–30 mA DC	600 VA	> 200 mA
202441	UX36-1520P5	0.5–15 kV AC; 0.5–20 kV DC	0.5–30 mA AC; 0.5–25 mA DC	500 VA	> 30 mA

Model Variants (61–61 of 61)

Article no.	Model	Test voltage	Current range	Transformer	Short-circuit current
202451	UX36-2028CL	0.5–20 kV AC; 0.5–28 kV DC	0.5–3 mA AC; 0.5–10 mA DC	500 VA	> 30 mA; current-limited

Additional AC/DC types are available on request.

End of translated product sheet. Technical data reproduced from the supplied source document; the source may contain model-specific details and typographical inconsistencies. Confirm the relevant data with ETL before use.