

SEFELEC 32-C

Data Sheet



EARTH BOND TESTER

GENERAL SPECIFICATIONS

Mains	230 V AC ±10 % 50 to 60 Hz / single phase			
Mains protection	Temporized double fuse T10AH 250V			
Input power	950 VA max.			
Temperature range	Storage			Operation
	-10°C to +60°C			0°C to +45°C
	Specified accuracy after 1/2 hour warm-up and RH<50 %			
Altitude	Up to 2000 m			
Humidité Relative	80% max. @31°C			
Dimension & poids	Height	Width	Depth	Weight
	131 mm	440 mm	455 mm	14 kg



SEFELEC 32-C ADVANTAGES

- ✓ **Earth bonding:** under 6V / 32A 8V / 50A (optional)
- ✓ **Programmable test ramps:** Up, Steady, Down
- ✓ **ARM-Dual core control & 3D Nand :** technologies inside for more accuracy, stability and repeatability
- ✓ **Large internal memory:** for storing configurations and test results
- ✓ **Plug & Play solution:**
 - Real-time test monitoring on a 7" TFT touchscreen
 - High-speed testing enabled by embedded DSP
 - Sequence mode for automated multi-step testing
 - Automatic range selection for enhanced accuracy and ease of use
- ✓ **Compliance and safety:**
 - IEC 61010-2-034, safety standard specific to insulation testers and dielectric strength test benches
 - Dual SIL2 safety loop
- ✓ **Connectivity & Communication**
 - Ethernet / RS232 / USB / API ports as standard
 - IEEE488-2 interface optional
 - CAN bus for controlling extensions (Scanners)



TECHNICAL SPECIFICATIONS

Courant de mesure

Type	Sinusoidal, 50 Hz or 60 Hz depending on mains supply
Adjustment	0,5 A steps
Setting Range	5.0 to 32.0 A AC 5.0 to 50.0 A AC with SEFO-5X50A option
Accuracy	± (1% + 0.1 A) generation and measurement ± (1% + 0.2 A) with SEFO-5X50A option

Voltage

Generator (32 A AC)	6 V AC ±10%
Generator (50 A AC)	8 V AC ±10%
Voltage Drop Measurement / Measurement Range	0,01 to 9,99 V
Resolution	0,01 V
Précision (% de la lecture)	± (1.5% + 0.03 V) after 1 second holding time

Earth Bond Resistance Measurement

This function calculates the resistive value of the circuit from the generated current and the voltage across the sample (< 50 mΩ)

Measurement Range	0,1 to 1000,0 mΩ
Resolution	0,1 mΩ
Unit Indication	mΩ = 0,001 Ω
Accuracy (% of reading)	± (1,5% + 0,5 mΩ)
Overall Resistance Measurement Range	0,0 mΩ to 1000,0 mΩ

Measurement Thresholds (Resistance / Voltage Drop)

The instrument provides upper and lower thresholds, expressed either as resistance or voltage drop.

Resistance Thresholds	Adjustable from 0.1 mΩ to 1000.0 mΩ
Voltage Drop Thresholds	Adjustable from 0.01 to 9.99 V

Timing

Permanent Mode	Ramp time applies to the measurement. Output current equals the set value. Stops in case of fault or when the front panel emergency stop button is pressed.
AUTO Mode	The test consists of 3 successive phases: • Linear rise to the target value (Ramp-up) • Hold at programmed value (Hold) • Progressive return to 0 (Ramp-down)
Programming	Ramp-up & Ramp-down: 0.0 to 9999.0 s, step 0.1 s, accuracy ±20 ms Hold: 0.1 to 9999.0 s, step 0.1 s, accuracy ±20 ms
Timing Accuracy	± 20 ms

Measurement Cycle

Transformer protection by thermal circuit breaker: ≥ 25 A or ≥ 40 A with SEFO-5X50A option, depending on compliance with measurement cycles Up to 4 channels max.

The information below indicates maximum usage times for the earth bond test depending on the duty cycle

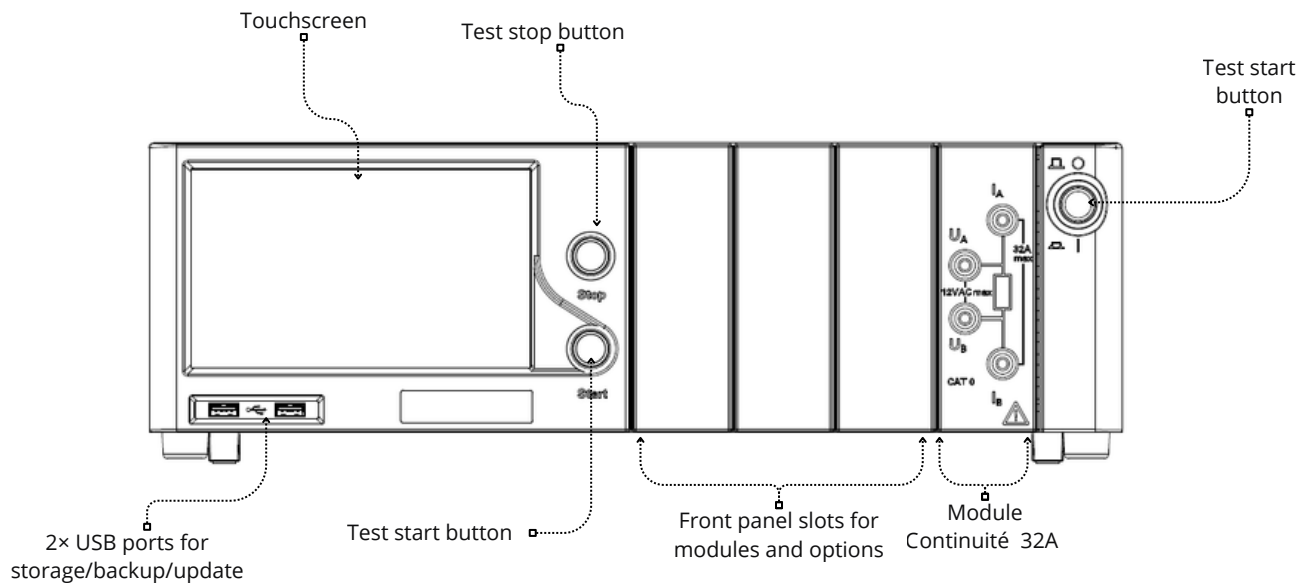
(½ cycle = 1 second current application over a total cycle of 2 seconds).

Note: All values are given for 32 A. Lower currents allow longer usage times.

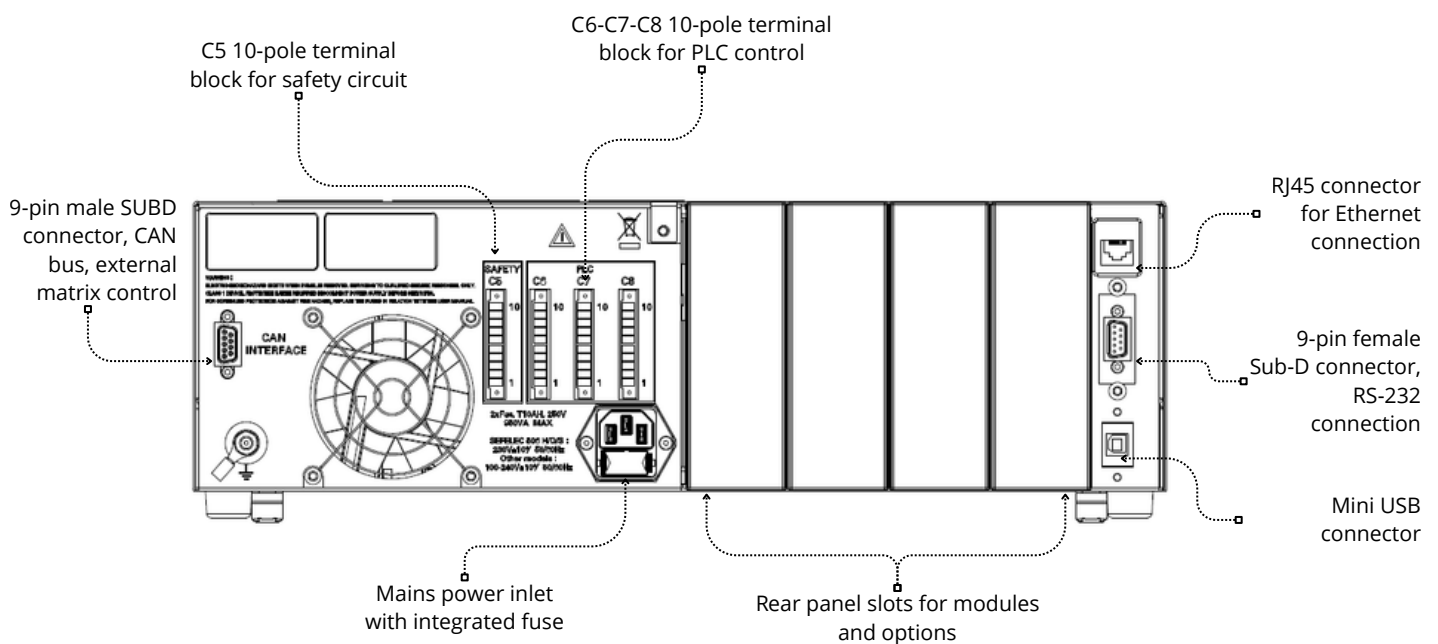
Cycle	Permanent	0,5	0,3
Max usage time	25 minutes	5 hours	Unlimited

DESIGN

FRONT PANEL



REAR PANEL





CUSTOMIZE YOUR SEFELEC 32-C

ACCESSORIES AND OPTIONS

Accessories	
SEFA-TE81-3202	2-wire earth bond probe 32A with remote control – length 2 m
SEFA-TE81-5002	2-wire earth bond probe 50A with remote control – length 2 m
SEFA-CO183-3202	2-wire earth bond cable 32A – length 2 m
SEFA-CO183-5002	Retractable 2-wire continuity probe 50A – length 2 m
SEFA-CO184-3202	Retractable 2-wire continuity probe 32A – length 2 m
SEFA-KR	19" rack mounting adapters
SEFA-CO160	Red/Green safety lamp
SEFA-5XLIGHT	Magnetic Red/Green safety lamp
SEFA-AO10	Two-hand test start control

Options	
SEFO-5XRC	Remote control connection module
SEFO-IEEE488	IEEE488-2 communication interface card
SEFO-5XREAR	Rear panel connection
SEFO-5X50A	Earth bond test at 50A AC
SEFM-4IHC	4-channel high-current internal scanner module
SEFM-8IHC	8-channel high-current internal scanner module

Discover also

More info at www.sefelec.com



SCANNER 64-SC

- High density: 8 to 512 Channels
- Maximum voltage 5kVAC 500VA and 6kVDC
- Insulation up to 200GΩ under 1000 VDC
- Earth continuity under 32A AC max.
- Compliant IEC 61010-2-034



Automatic wiring testers SYNOR 5000

- From 8 to 140,000 test points
- Continuity in 2 and 4 wires up to 10A
- Insulation up to 5000V DC
- Dielectric strength up to 4000V AC and 5500V DC
- Configuration: cabinet or compact case, mobile or remote



Measuring instruments SEFELEC 5X

- Dielectric strength 5 kVAC and 6 kVDC with 50 or 500VA power
- Insulation measurement under 1000VDC for measurements up to 2 TΩ
- Earth continuity testing under 32A or 50AAC