



S DC series High Voltage Insulation Testers

HV insulation under full control

Features

- Easy operation
- Robust construction, low weight
- Integrated timer:
 - max. 30 min for S-25 DC (standard)
 - max. 60 min for S-50 / 80 / 110 / 120 DC (option)
- Discharge device:
 - integrated (S-25 DC),
 - external ground-discharge rod (S-50 / 80 / 110 / 120 DC)
- Internal battery charger with deep discharge protection (S-25 DC)
- Voltage measurement direct at HV output
- Short-circuit-proof output:
 - electronically limited output current (S-25 DC)
 - protection by overcurrent tripping (S-50 / 80 / 110 / 120 DC)
- Protective ground connection
- Mains-independent by internal rechargeable battery (S-25 DC)



Overview

The S-xx DC series devices are universal high voltage testers. They are extremely robust, but also lightweight, compact and easily portable thanks to a transport case on wheels (only for S-50 / 80 / 110 / 120 DC).

Capacitive loads, such as shielded power cables, will be properly and automatically discharged in case of an error or at the end of testing time by the integrated discharge device.

Key switch, switch-on interlock and a protective ground circuit ensure maximum safety.

S-25 DC stands out in particular. Not just with modest dimensions. Thanks to an internal rechargeable battery it enables mains-independent testing.

Fields of application

- Testing at recommissioning of cable systems after maintenance and repair
- Testing of newly installed cables an cable joints before commissioning
- Voltage testing at cable sheath (S-25 DC)
- Regular preventive cable testing (S-50 DC / 80 DC / 110 DC / 120 DC)
- Testing of electrical equipment





page 2 / 4 sonel.com

Technical specification

		S-25 DC	S-50 DC	S-80 DC	S-110 DC	S-120 DC
Index		WMGBS25DC	WMGBS50DC	WMGBS80DC	WMGBS110DC	WMGBS120DC
Power supply		internal recharge- able battery mains, switchable 115 / 230 V, 50-60 Hz external DC voltage source 1115 V DC	mains 220240 V, 50 / 60 Hz (optional: 115 V, 60 Hz)			
Power consumption		max. 120 VA	max. 900 VA			
Output voltage		• 025 kV DC • infinitely adjustable • negative polarity • ripple < 0,25%	• 050 kV DC • infinitely adjustable • negative polarity	• 080 kV DC • infinitely adjustable • negative polarity	• 0110 kV DC • infinitely adjustable • negative polarity	• 0120 kV DC • infinitely adjustable • negative polarity
Rated output current at max. output voltage		1.5 mA electronically limited	6 mA	5 mA	4 mA	3.5 mA
Battery operation at full load		45 min	-			
Discharge - integrated automatic discharge device		3000 J 9.6 μF at 25 kV	7500 J 6 μF at 50 kV	12 250 J 4 μF at 75 kV 3.5 μF at 80 kV	15 000 J 3 μF at 100 kV 2.5 μF at 110 kV	18 750 J 2.4 µF at 125 kV 2.6 µF at 120 kV
Voltage measuring range		030 kV	050 kV	080 kV	0110 kV	0130 kV
Current measuring ranges		0200 µA / 02 mA manual or automatic switching between ranges	0100 μA / 1 mA / 10 mA manual switching between ranges			
Operating temperature			-25+55°C			
Storage temperature			-40+70°C			
Weight	Operating unit	13.5 kg	13 kg			
	High voltage unit	-	17 kg	18.5 kg	20 kg	20.5 kg
Dimensions	Operating unit	473 x 152 x 275 mm	370 x 200 x 280 mm			
	High voltage unit	-	210 x 380 x 310 mm	210 x 400 x 310 mm	210 x 420 x 310 mm	210 x 430 x 310 mm

page 3 / 4 sonel.com

Standard accessories

S-25 DC





Protective bag



Protective bag



Power cable



Discharge rod



Protective ground cable, 3 m

Connection cables for external DC power supply



Protective ground cable, 3 m



Operation ground cable, 3 m



Operation ground cable, 3 m



High voltage connecting cable (shielded), 3 m



High voltage connecting cable, 2 m



Start keys



Service pack



User manual



Start keys



User manual

Optional accessories

S-25 DC



Transport case



S-50 DC / S-80 DC / S-110 DC / S-120 DC



Transport case with wheels

WAWALXXL1



Transport case with wheels

Transport case

WAWALXXL2



page 4 / 4 sonel.com