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60 Years of Excellence

Multi Channel Multifunction Safety Compliance Analyzer
SME1180S Series

Advance Features

- Five-in-one integrated system, single machine to achieve all the safety testing needs
  1. High Power AC Withstanding Voltage Test
  2. DC withstanding Voltage test
  3. Insulation Resistance test
  4. Ground Resistance Test
  5. Conductivity Test
- 500VA power AC Withstand Voltage design
- Insulation resistance test up to 6kV
- Single screen display test mode, time, voltage, current, resistance value, test steps
- Open short circuit detection OSC
- ARC detection ARC function
- Crash Voltage test function
- List display function: Simultaneously display the test results of multi-step settings and sequential execution
- Storage: 100 files, 50 steps/file
- 7-inch capacitive touch screen, 800×480 resolution

Model			SME1180S				SME1181S			
Scanning module			**SM1180S-004**	**SM1180S-001**	**SM1180S-002**	**SM1180S-003**	**SM1180S-004**	**SM1180S-001**	**SM1180S-002**	**SM1180S-003**
Function & Channels	High Voltage : ACW, DCW, IR		4	8	8	-	4	8	8	-
	CK Contact Check		Y	Y	Y	N	Y	Y	Y	N
	Ground Resistance (GB)	Channel	4	8	-	8	4	8	-	8
		Wire	Four Wire	Two Wire	-	Four Wire	Four Wire	Two Wire	-	Four Wire
	Conduction		Y							
Pressure Resistance Test										
Output Voltage	AC	Range	0.05 ~ 5.0kV							
		Waveform	50/60Hz ± 0.1% Sine Wave							
		Output Power	500VA (5.0kV/100mA)				200VA			
	DC	Range	0.05 ~ 6.0kV							
		Output Power	150VA (6.0kV/25mA)							
	Load Variation Rate		± (1% set value + 10V) (Rating Power)							
	Resolution		2V							
	Accuracy		± (1% set value + 5V)							

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Current Test	AC	Range	V≤ 4kV	0.001mA ~ 120mA				0.001mA ~ 40mA			
			V>4kV	0.001mA ~ 100mA				0.001mA ~ 40mA			
		Resolution		0.001mA							
		Accuracy	120mA	0.1mA ~ 120.0mA ± (1% Reading + 0.6mA)							
			30mA	0.01mA ~ 29.99mA ± (1% Reading + 0.15mA)							
			3mA	0.001mA ~ 2.999mA ± (1% Reading + 0.015mA)							
	DC	Range	V≥1.5kV	0.0001 ~ 25.00mA				0.0001mA ~ 20mA			
			V<1.5kV	0.0001 ~ 20.00mA				0.0001mA ~ 20mA			
		Resolution		0.1μA							
		Accuracy	25mA	0.01mA ~ 25.00mA ± (1% Reading + 0.12mA)							
			3mA	0.001mA ~ 2.999mA ± (1% Reading + 0.015mA)							
			5.1μA	0.1μA ~ 299.9μA ± (1% Reading + 1.5μA)							
Time Setting	Testing Time			0.3 ~ 999s, 0 for continuous test							
	Rising Time			0.1 ~ 999s, 0 for closed							
	Falling Time			0.1 ~ 999s, 0 for closed							
	Waiting Time			0.1 ~ 999s, 0 for closed (DC withstanding voltage only)							
Arc Detection	AC			1.0mA ~ 20.0mA				1.0mA ~ 20.0mA			
	DC			1.0mA ~ 10.0mA							
Maximum short-circuit current (AC test only)				200mA				80mA			
Fast Discharge Function				Automatic discharge after test (DCW)							
Insulation Resistance Test											
Voltage	Outputs			DC : 0.05 ~ 6.0kV							
	Resolution			2V							
	Accuracy			± (1% Reading + 5V)							
Resistance	Test Range			0.05MΩ ~ 50.0GΩ							
	Test Accuracy	V ≥1kV		1MΩ ~ 1GΩ ± (3% Reading + 1M)							
				1GΩ ~ 10GΩ ± (7% Reading + 0.2G)							
				10GΩ ~ 50GΩ ± (10% Reading + 0.5G)							
		500V≤V<1kV		0.1MΩ ~ 1GΩ ± (3% Reading + 1M)							
				1GΩ ~ 10GΩ ± (7% Reading + 0.2G)							
				10GΩ ~ 50GΩ ± (10% Reading + 0.5G)							
		V<500V		1MΩ ~ 1GΩ ± (5% Reading + 100V/Vs*10M)							
Time Setting	Testing Time			0.3 ~ 999s, 0 for continuous test							
	Rising Time			0.1 ~ 999s, 0 for closed							
	Falling Time			0.1 ~ 999s, 0 for closed							
	Waiting Time			0.1 ~ 999s, 0 for closed							
Fast discharge function				Automatic discharge after test							
AC Ground Resistance Testing											
Output Current	Range			1.00 ~ 40.00A							
	Resolution			0.01A							
	Accuracy			± (2% set value + 2 words)							

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Test Voltage	Range		3.00 ~ 8.00V							
	Resolution		0.01V							
	Accuracy		± (2% set value + 3 words)							
Test Voltage	Range		3.00 ~ 8.00V							
	Resolution		0.01V							
	Accuracy		± (2% set value + 3 words)							
Test Frequency			50/60Hz ± 0.1%							
Output Adjustment Ratio			± (1% output value + 0.02A)							
Resistance Test	Range	1.00 ~ 10.00A	0 ~ 600mΩ							
		10.01 ~ 30.00A	0 ~ 200mΩ							
		30.01 ~ 40.00A	0 ~ 150mΩ							
	Accuracy	1.00 ~ 3.00A	0 ~ 600mΩ ± (3% Reading + 3words)							
		3.01 ~ 10.00A	0 ~ 600mΩ ± (2% Reading + 2words)							
		10.01A ~ 30.00A	0 ~ 200mΩ ± (2% Reading + 2words)							
		30.01A ~ 40.00A	0 ~ 150mΩ ± (2% Reading + 2words)							
Testing Time			0.5 ~ 999s, 0 for continuous test							
Conductivity Test										
Test Current		0.1A	0.00 ~ 10.00Ω							
		0.01A	10.1 ~ 100.0Ω							
		0.001A	101 ~ 1000Ω							
		0.0001A	1001 ~ 10000Ω							
Resistance Test Accuracy		0 ~ 1000Ω	± (1% Reading + 3words)							
		1001 ~ 10000Ω	± (1% Reading + 10words)							
Testing Time			0.3 ~ 999s, 0 for continuous test							
OSC Open/short circuit detection										
Sampling standard capacitance range			0.001 ~ 40nF							
Open Circuit Judgment Range			10% ~ 100%							
Short Circuit Judgment Range			100% ~ 500%							
Safety and Security Functions										
Electric shock protection			0.5mA ± 0.25mA selectable : ON or OFF							
Startup protection interlock			High Voltage outputs is allowed only if the pin is connected low							
Panel Operated Protection			Key lock							
Alarm Indication			Pass : Short tone, Green light, Fall :long tone, Red Light							
Synchronized output test for withstand voltage and grounting			5kVac/30mAac and 30Aac/150mΩ							
Storage and Interface										
Internal Storage			Up to 100 files can be stored and each file can be edited with 50 steps							
Standard Interface			RS232, USB DEVICE, USB HOST, LAN, HANDLER							
Optional Interface			GPIB							

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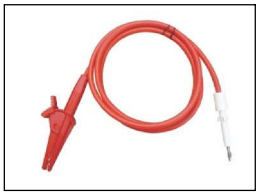
General Specifications									
Parameter Comparison Temperature		18˚C ~ 28˚C, Humidity : 30% ~ 70% RH							
Normal Operating Temperature		0˚C ~ 45˚C, Humidity 20% ~ 90% RH							
Storage Ambient Temperature		-10˚C ~ 55˚C , Humidity <80% RH							
Power Supply		100V ~ 240VAC, 47Hz ~ 63Hz							
Power		No load <100W, Rated Power : 1200W							
Dimension (W X H X D)		430 X 132 X 550mm							
Weight		40kg				38kg			
Accessories	Standard	Mains Cord, HV Test Cable 90003R							
	Optional	High Current Test Cable SMA26035B, Leakage Current Test Cable SMA90022							

Leakage Current Test Cable
SMA90022



High Voltage Test Cable
90003R

High Current Test Cable
SMA26035B

Rear Panel with
SME1180S-001

SME1180S-001

SME1180S-002

SME1180S-003

SME1180S-004

Subject to change

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