

ACS 503

THREE-PHASE AC VOLTAGE SOURCE 20 KVA



FOR TESTS ACCORDING TO ...

- > EN 61000-3-11
- > EN 61000-3-12
- > EN 61000-3-2
- > EN 61000-3-3
- > IEC 61000-3-11
- > IEC 61000-3-12
- > IEC 61000-3-2
- > IEC 61000-3-3
- > JIS C 61000-3-2





ACS 503 is a three-phase AC source, specifically designed for harmonics and flicker testing. It meets the corresponding specifications as per EN/IEC 61000-3-2, EN/IEC 61000-3-3 and JIS C 61000-3-2 as well as per EN/IEC 61000-3-11 and EN/IEC 61000-3-12 for measuring DUTs having a nominal current of more than 16A per phase.

ACS 503 provides the perfect sinusoidal and stable voltage signal specified to perform fully compliant harmonics and flicker analysis despite of the mains supply frequency and steadyness of the voltage.

HIGHLIGHTS

- > **FREQUENCY (FUND.) 40HZ .. 80HZ**
- > **VERY LOW DISTORTION (THD)**
- > **VERY HIGH VOLTAGE STABILITY**
- > **OUTPUT POWER MAX. 20,000VA**
- > **OUTPUT VOLTAGE MAX. 300V(P-N)**
- > **HIGH OVERCURRENT CAPABILITY**
- > **INRUSH CURRENT CAPABILITY**
- > **REMOTE CONTROL VIA RS232**

APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  RESIDENTIAL

TECHNICAL DETAILS

OUTPUT

Voltage range	0V to 300V (p-n)
Voltage resolution	0.025% (12 bit)
Output frequency	40Hz to 80Hz
Frequency resolution	0.02Hz
Frequency accuracy, stability	100ppm
Output power	20,000VA
Output connector	Safety laboratory connectors 3ph CEE connector
Output current, 50Hz	Continuous: 34A max. per phase RMS (max. 3s): 81A Repetitive peak: 300A
Output current, 60Hz	Continuous: 36A max. per phase RMS (max. 3s): 83A Repetitive peak: 300A

REGULATION

Voltage sense	Internal or external 4 wires
Total harmonic distortion	Less than 0.1%
Output voltage stability	Better than 0.1%
Output voltage accuracy	Better than 0.5%
Max. compensatable drop on wires	5% f.s.
Protection	Overcurrent Overtemperature Overvoltage Undervoltage

INPUT

Supply voltage	3 x 400V +10%/-15%
Input current	Max. 72A
Line frequency	50Hz - 60Hz
Fuse	3 x 63A
Connector	Sockets

CONTROL

Interface	RS 232 9-pin SubD
Security	Safety circuit

AMBIENT CONDITIONS

Temperature	0°C to 35°C
Rel.Humidity	80%, non condensing

DIMENSIONS

Housing	Frame
Weight	400kg
Size	1670mm x 920mm x 625mm

ANALYZER DPA 503 FOR HARMONICS AND FLICKER

Input channels	6 (3x current & voltage)
Current measurement	Ext. current transformer
Interface	USB for control and data transfer

FLICKER IMPEDANCE AIF 503 AS PER EN/IEC 61000-3-3

Phase	3-phase (L1, L2, L3 and N)
Impedance phase	0.24ohm + j0.15ohm
Impedance neutral	0.16ohm + j0.10ohm
Line current	Max. 16A per phase
Bypass for harmonics	Remote controlled switch

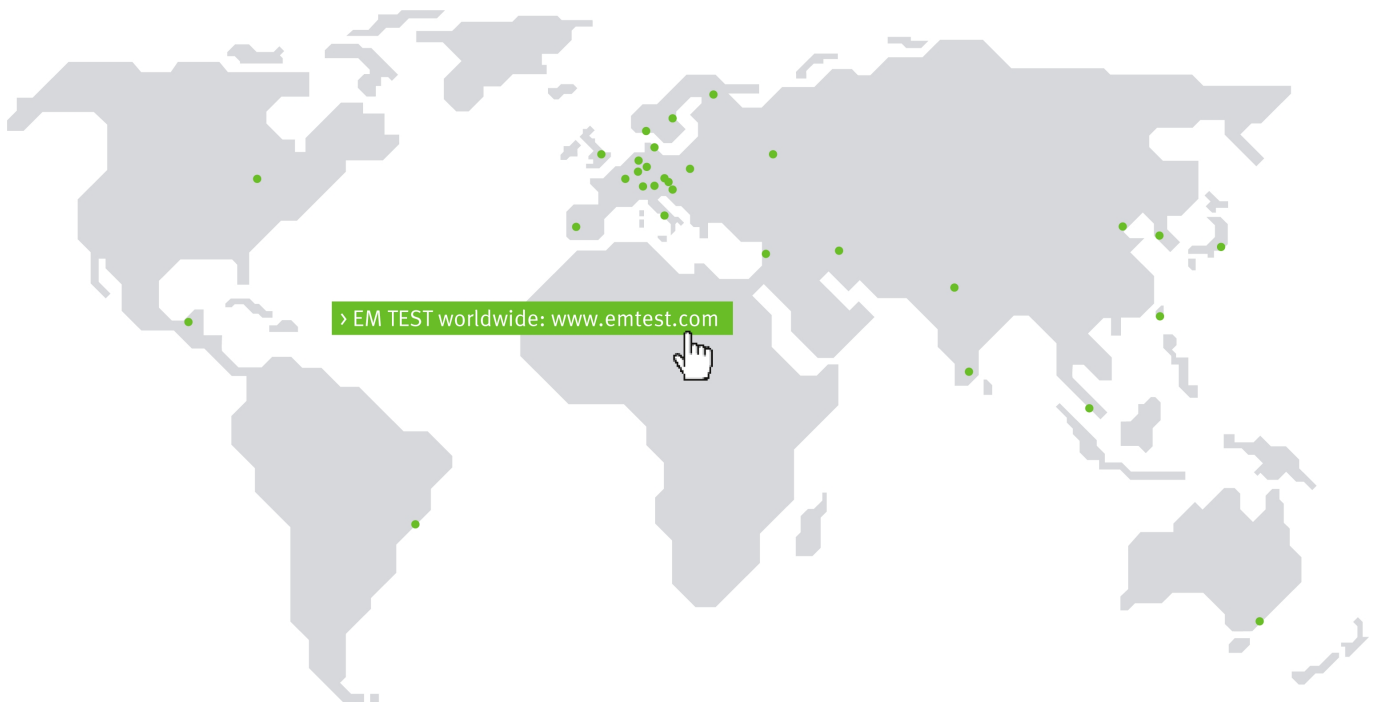
FLICKER IMPEDANCE AIF 503S1 AS PER EN/IEC 61000-3-3 AND EN/IEC 61000-3-11

Phase	3-phase (L1, L2, L3 and N)
Zref at 50Hz	RA = 0.24ohm XA = 0.15ohm RN = 0.16ohm XN = 0.10ohm
Ztest at 50Hz	RA = 0.15ohm XA = 0.15ohm RN = 0.10ohm XN = 0.10ohm
Line current	Max. 32A per phase
Bypass for harmonics	Remote controlled switch

SINGLE PHASE SOLUTION

ACS 500N6	AC source 6,000VA
ACS 500N2	AC source 2,000VA
DPA 500N	Single phase Harmonics and Flicker analyzer

COMPETENCE WHEREEVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release.
 Technical data subject to change without further notice.