

AIF 503N SERIES

THREE-PHASE FLICKER IMPEDANCES UP TO 75A



FOR TESTS ACCORDING TO ...

- > EN 61000-3-11
- > EN 61000-3-3
- > IEC 60725
- > IEC 61000-3-11
- > IEC 61000-3-3
- > JIS C 61000-3-2







APPLICATION

The AIF 503N-series are three-phase flicker impedances with a nominal current from 16A up to 75A per phase offering two different impedance values. Z_{ref} is used as the flicker impedance as per IEC/EN 61000-3-3 and specified by IEC 60726. Z_{test} is used for equipment being intended for connection to a public low-voltage distribution system having a service current supply capability of 100A and above as specified in IEC/EN 61000-3-11.

HIGHLIGHTS

- > Impedances values as per IEC/EN 61000-3-3 & IEC/EN 61000-3-11
- > Non-saturable air coil inductors
- > Line voltage 3 x 400V
- > Line current up to 75A per phase (depending on model)
- > Automatic overcurrent protection
- > Status indication by LED
- > Remote-controlled by DPA 503N

APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  RESIDENTIAL
-  RENEWABLE ENERGY
-  TELECOM

TECHNICAL DETAILS

OVERVIEW

AIF 503N MODELS

AIF 503N16	Three-Phase Flicker Impedance 16A
AIF 503N32.1	Three-Phase Flicker Impedance 32A
AIF 503N63.1	Three-Phase Flicker Impedance 63A
AIF 503N75.1	Three-Phase Flicker Impedance 75A

TECHNICAL DETAILS

AIF 503N16

Line current	16A per phase
3-ph output	CEE connector 16A (3P,N,PE) 4mm Safety laboratory connectors
1-ph output	One for each phase (L1,L2,L3), connector country specific
Mains supply	115/230V, 25W, 50/60Hz
Housing	19", 3HU
Weight	approx. 20kg

AIF 503N32.1

Line current	32A per phase
3-ph output	CEE connector 32A (3P,N,PE), 4mm Safety laboratory connectors
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 25HU, moveable rack on castors
Weight	100kg
Size	1245mm x 553mm x 780mm

TECHNICAL DETAILS

AIF 503N63.1

Line current	63A per phase
3-ph output	High-current safety connectors 80A
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 38HU, moveable rack on castors
Weight	230kg
Size	1800mm x 600mm x 800mm

AIF 503N75.1

Line current	75A per phase
3-ph output	High-current safety connectors 80A
1-ph output	One for each phase (L1,L2,L3), connector country specific
1-ph low current	Connector on phase L1, Range: 100mA - 10A
Mains supply	115/230V, 200W, 50/60Hz
Housing	19", 38HU, moveable rack on castors
Weight	approx. 250kg
Size	1800mm x 600mm x 800mm

TECHNICAL DETAILS

COMMON DATA (ALL MODELS)

GENERAL	
Configuration	3-phase (3L/N/PE)
Line voltage	3 x 400V ± 10%
Line frequency	47Hz - 63Hz
Bypass for harmonics	Remote controlled switch
Interface	15-pin SubD (DPA 503N control)
Indicators	LED's indicating the active status (Bypass or impedance in use).

IMPEDANCE	
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 (not available in AIF 503N16)
Accuracy	Better than 3%
	Each inductor is a non-saturable air coil, matched manually to the specified value.

AMBIENT CONDITIONS	
Temperature	0°C to 35°C
Rel. humidity	80%, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)
Cooling	fans, active cooling control

OPTIONS

OUTPUT FOR VERY LOW CURRENTS	
VLCM Kit AIF 503N	
Measuring output	For very low current Connector on phase L1
Current range	5mA - 500mA
Accuracy	< 1% of measured value

COMPETENCE WHEREVER YOU ARE



CONTACT EM TEST DIRECTLY

Switzerland

EM TEST (Switzerland) GmbH > Sternenhofstraße 15 > 4153 Reinach > Switzerland
 Phone +41 (0)61/7179191 > Fax +41 (0)61/7179199
 Internet: www.emtest.ch > E-mail: sales.emtest@ametek.com

Germany

AMETEK CTS Germany GmbH > Lünener Straße 211 > 59174 Kamen > Deutschland
 Phone +49 (0)2307/26070-0 > Fax +49 (0)2307/17050
 Internet: www.emtest.com > E-mail: info.cts@ametek.de

France

EM TEST FRANCE > Le Trident - Parc des Collines > Immeuble B1 - Etage 3 > 36, rue Paul Cézanne > 68200 Mulhouse > France
 Phone +33 (0)389 31 23 50 > Fax +33 (0)389 31 23 55
 Internet: www.emtest.fr > E-mail: info@emtest.fr

Poland

EM TEST Polska > ul. Ogrodowa 31/35, 00-893 Warszawa > Polska
 Phone +48 (0)518 64 35 12
 Internet: www.emtest.com/pl > E-mail: infopolska.emtest@ametek.com

USA / Canada

AMETEK Compliance Test Solutions > 52 Mayfield Ave. > Edison > NJ 08837
 Phone +1 (732) 417-0501
 Internet: www.emtest.com > E-mail: sales.emtest@ametek.com

P.R. China

E & S Test Technology Limited > Rm 913, Leftbank > No. 68 Bei Si Huan Xi Lu > Haidian District > Beijing 100080 > P.R. China
 Phone +86 (0)10 82 67 60 27 > Fax +86 (0)10 82 67 62 38
 Internet: www.emtest.com > E-mail: info@emtest.com.cn

Republic of Korea

EM TEST Korea Limited > #405 > WooYeon Plaza > #986-8 > YoungDeok-dong > Giheung-gu > Yongin-si > Gyeonggi-do > Korea
 Phone +82 (31) 216 8616 > Fax +82 (31) 216 8616
 Internet: www.emtest.co.kr > E-mail: sales@emtest.co.kr

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