

# CA PFS-100R SERIES

## LOAD RESISTOR FOR POWER FAIL SIMULATORS VERIFICATION



### FOR TESTS ACCORDING TO ...

- > EN 61000-4-11
- > EN 61000-4-29
- > EN 61000-4-34
- > IEC 61000-4-11
- > IEC 61000-4-29
- > IEC 61000-4-34






### CA PFS-100R - LOAD RESISTOR FOR POWERFAIL GENERATORS

The standard EN / IEC 61000-4-11 for power fail generators requires a load resistor of 100 ohm for the verification of the rise and fall time of voltage dips and voltage interruptions. The CA PFS-100R consists of a low inductive, high thermally resistant carbon resistor, designed for the measurement of rise and fall times. The built-in fan allows continuous operation at 230 V mains voltage.

### HIGHLIGHTS

- > According to EN/IEC 61000-4-11, -29, -34
- > Low inductive 100 Ohm carbon load resistor
- > Forced air cooled with ventilators
- > 230 VAC continuous, 400 VAC 30 minutes maximum
- > Auto switch off when cooling fails

### APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  TELECOM
-  RESIDENTIAL

**TECHNICAL DETAILS**

**APPLICATION**

**GENERAL INFORMATION**

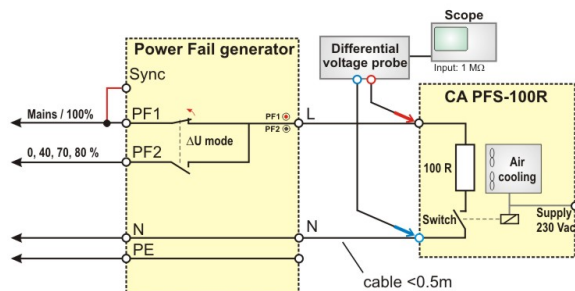
Based on the rises- and falltimes, specified in EN/IEC 61000-4-11, the PowerFail generator needs to be verified with a 100 ohm load resistor. The load resistor current of 2.3 A requires a power dissipation of 529 W. The active air cooling keeps the load resistor temperature stable, and allows to operate continuous with a stabilized load resistance.

The following guidelines are recommended for the test setup for the rise- and falltime verification of the PowerFail generator:

The cable between the generator output and the load resistor CA PFS-100R must be as short as possible (max. 0.5 m). Connect two cables in parallel for reduce the inductance.

For the verification the PowerFail generator must be set in dU mode with 100% mains voltage at the PF1 input and the reduced dip voltage (0 %, 40 %, 70 % or 80 %) at the PF2 input.

The rise and fall time is measured with a differential voltage probe and a digital oscilloscope. Scope Input impedance = 1 Mohm



**MODEL**

100 OHM LOW INDUCTIVE RESISTOR	
CA PFS-100R-115	100 Ohm low inductive resistor, Forced air cooling, 115 V, 50/60 Hz
CA PFS-100R-230	100 Ohm low inductive resistor, Forced air cooling, 230 V, 50/60 Hz

**TECHNICAL DATA**

LOAD RESISTOR	
Resistor	100 ohm
Accuracy	± 10 %
Rated voltage	230 V, constant 400 V, max. 30 min
Power	529 W, continuous, 1600 W max. 30 min
Connectors	4 mm safety lab connectors
Cooling	forced air cooling with 5 ventilators

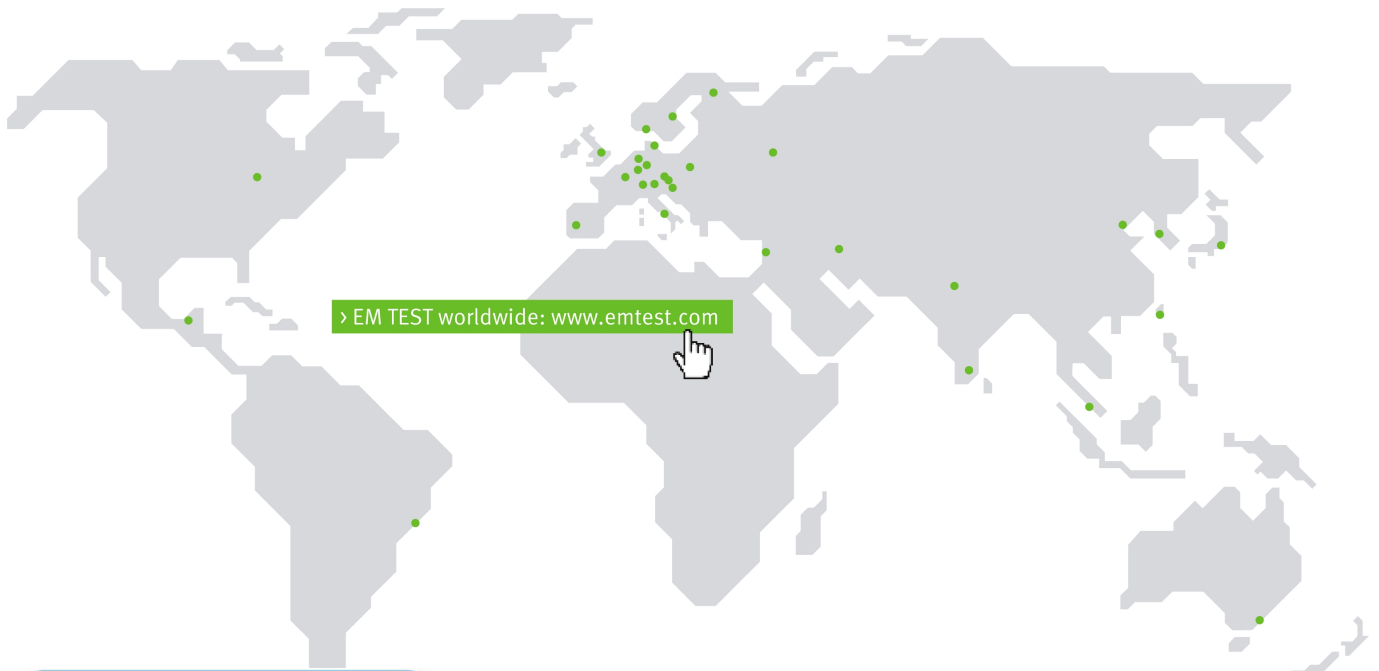
PROTECTION	
Temperature	Overtemperature protection
Cooling function	Switch off when ventilators are not running

AMBIENT CONDITIONS	
Temperature operating	0° to 35°
Humidity	80 % non condensing

GENERAL DATA (CONTROL)	
Line Voltage	230 V ± 10 %
Fuse	2x 3,15 AT (230 V)

DIMENSIONS AND WEIGHT	
Dimensions	615 mm x 113 mm x 190 mm (LxWxH)
Weight	5.45 kg

# COMPETENCE WHEREVER YOU ARE



> EM TEST worldwide: [www.emtest.com](http://www.emtest.com)

**Accelonix BV**  
Luchthavenweg 18b • NL-5657 EB •  
Eindhoven • The Netherlands •  
T: +31 40 750 1650 • E: [info@accelonix.nl](mailto:info@accelonix.nl)

## CONTACT EM TEST DIRECTLY

### Switzerland

AMETEK CTS GmbH > Sternenhofstraße 15 > 4153 Reinach > Switzerland  
Phone +41 (0)61 204 41 11 > Fax +41 (0)61 204 41 00  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [sales.conducted.cts@ametek.com](mailto:sales.conducted.cts@ametek.com)

### Germany

AMETEK CTS Europe GmbH > Customer Care Center EMEA > Lünener Straße 211  
> 59174 Kamen > Germany  
Phone +49 (0) 2307 26070-0 > Fax +49 (0) 2307 17050  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [info.cts.de@ametek.com](mailto:info.cts.de@ametek.com)

### Poland

AMETEK CTS Europe GmbH > Biuro w Polsce > ul. Twarda 44 > 00-831 Warsaw > Poland  
Phone +48 (0) 518 643 12  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [Infopolska.cts@ametek.com](mailto:Infopolska.cts@ametek.com)

### USA / Canada

AMETEK CTS US > 52 Mayfield Ave > Edison > NJ 08837 > USA  
Phone +1 732 417 0501  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [usasales.cts@ametek.com](mailto:usasales.cts@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](http://www.emtest.com) > E-mail: [info@emtest.com.cn](mailto: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](http://www.emtest.co.kr) > E-mail: [sales@emtest.co.kr](mailto:sales@emtest.co.kr)

### Singapore

AMETEK Singapore Pte. Ltd > No. 43 Changi South Avenue 2 > 04-01 Singapore  
48164  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [singaporesales.cts@ametek.com](mailto:singaporesales.cts@ametek.com)

### Great Britain

AMETEK GB > 5 Ashville Way > Molly Millars Lane > Wokingham > Berkshire  
RG41 2 PL > Great Britain  
Phone +44 845 074 0660  
Internet: [www.ametek-cts.com](http://www.ametek-cts.com)

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.