emtest
the benchmark for emc

CA LV 124

CALIBRATION SET FOR OEM LV 124 AND OEM LV 148 AND RELATED STANDARDS

FOR TESTS ACCORDING TO ...

› BMW GS 95024-2-1
› BMW GS 95026
› Mercedes-Benz MBN LV 124-1
› OEM LV 124
› OEM LV 148
› VW 80000
› VW 82148

VERIFICATION SET FOR PFM 200N100 FOR VERIFY THE PULSES E10 AND E13 OF THE LV 124 AND LV 148 STANDARDS

The CA LV 124 set includes four load resistors for the verification of the pulses E10 and E13 of the LV 124 (2013). The load resistors CA LV124-P1R and CA LV124-P100R are used for power line verification.
For verification the 16 signal- and datalines the CA LV124-D1R and CA LV124-D1000R are used.

HIGHLIGHTS

- **Low inductive load resistor for direct connect into the PFM 200N100 output power plugs**
- **Load resistor 1.0 ohm and 100 ohm for power lines verification**
- **Load resistor 1.0 ohm and 1000 ohm for datalines verification**
- **High precision load resistors 1.0, 100 and 1000 ohms**
- **Software procedure for verification with CA LV124 loads**

APPLICATION AREAS

AUTOMOTIVE

emtest
the benchmark for emc

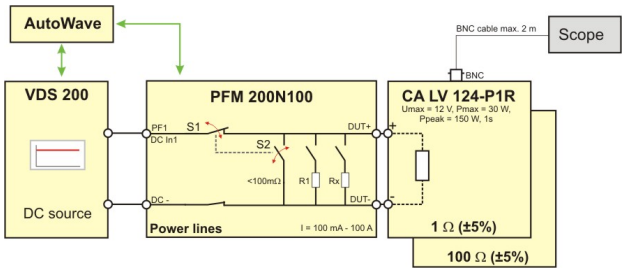
TECHNICAL DETAILS

POWER LINE VERIFICATION

TEST PROCEDURE

One reference measurement each with 100 ohm (±5%) and 1 ohm (±5%) as a DUT substitute must be performed and documented. Verification of the edge steepness must be provided with this test setup. Low-inductance parts must be used as resistors.

The load resistor must have the following characteristics to achieve the required pulse parameters:
- Low Inductive Component
- Shortest possible cables (a few cm) to the PFM output
- Probe must be as near as possible to the load resistor or, as with the CA LV 124-P, using a BNC connection directly on the load.

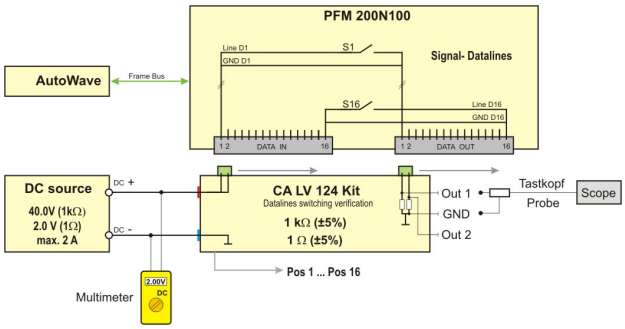


SIGNAL AND DATALINES

TEST PROCEDURE

One reference measurement each with 1 k ohm (±5%) and 1 ohm (±5%) as a DUT substitute must be performed and documented. Verification of the edge steepness must be provided with this test setup. Low-inductance parts must be used as resistors.

During the test, all even and odd I/O lines are switched alternately at the same time. With the test adapter is guaranteed that only one line is charged at each time.

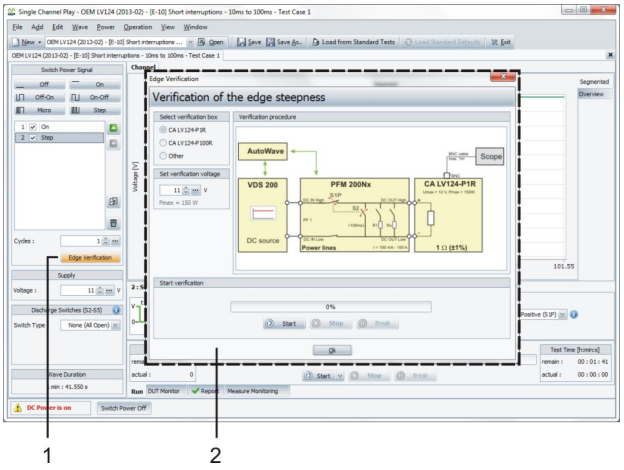


SOFTWARE

POWER LINE SETTINGS

The reference measurement can be selected by selecting Edge Verification in the software. There is a test window for call up the reference measurement settings.

1 Edge Verification:
Choose this option to perform the reference measurement.
2 Test Window for the reference measurement

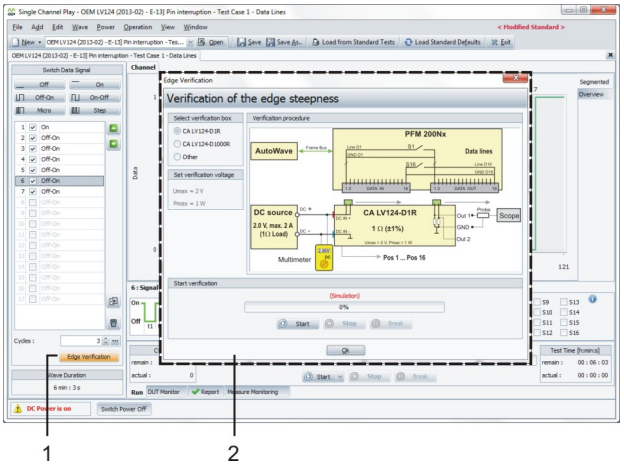


SOFTWARE

DATA LINE SETTINGS

The reference measurement can be selected by selecting Edge Verification in the software. There is a test window for call up the reference measurement settings.

1 Edge Verification:
Choose this option to perform the reference measurement.
2 Test Window for the reference measurement



emtest
the benchmark for emc

TECHNICAL DETAILS

COMPONENTS CA LV 124	
CA LV124-P1R	Load resistor for power lines
CA LV124-P100R	Load resistor for power lines
CA LV124-D1R	Load resistor for data lines
CA LV124-D1000R	Load resistor for data lines
BNC cable	BNC Measuring cable 2 m, Verification power lines
Power cable	2 Cable 0.5m red/black, Verification signal- data lines

CA LV124-P1R	
Line	Power lines
Resistance	1 ohm
Accuracy	± 1 %
Max. Voltage	12 V
Max. Power	30 W
Peak Power	150 W, 1 s
Dimension	185 mm x 105 mm x 58 mm
Weight	1.05 kg

CA LV124-P100R	
Line	Power lines
Resistance	100 ohm
Accuracy	± 1 %
Max. Voltage	100 V
Max. Power	30 W
Peak Power	100 W, 1s
Dimension	185 mm x 105 mm x 58 mm
Weight	0.90 kg

TECHNICAL DETAILS

CA LV124-D1R	
Line	Data lines
Resistance	1 ohm
Accuracy	± 2 %
Max. Voltage	2.0 V
Max. Power	1 W
Peak Power	4 W, 1 s
Dimension	120 mm x 65 mm x 40 mm
Weight	0.15 kg

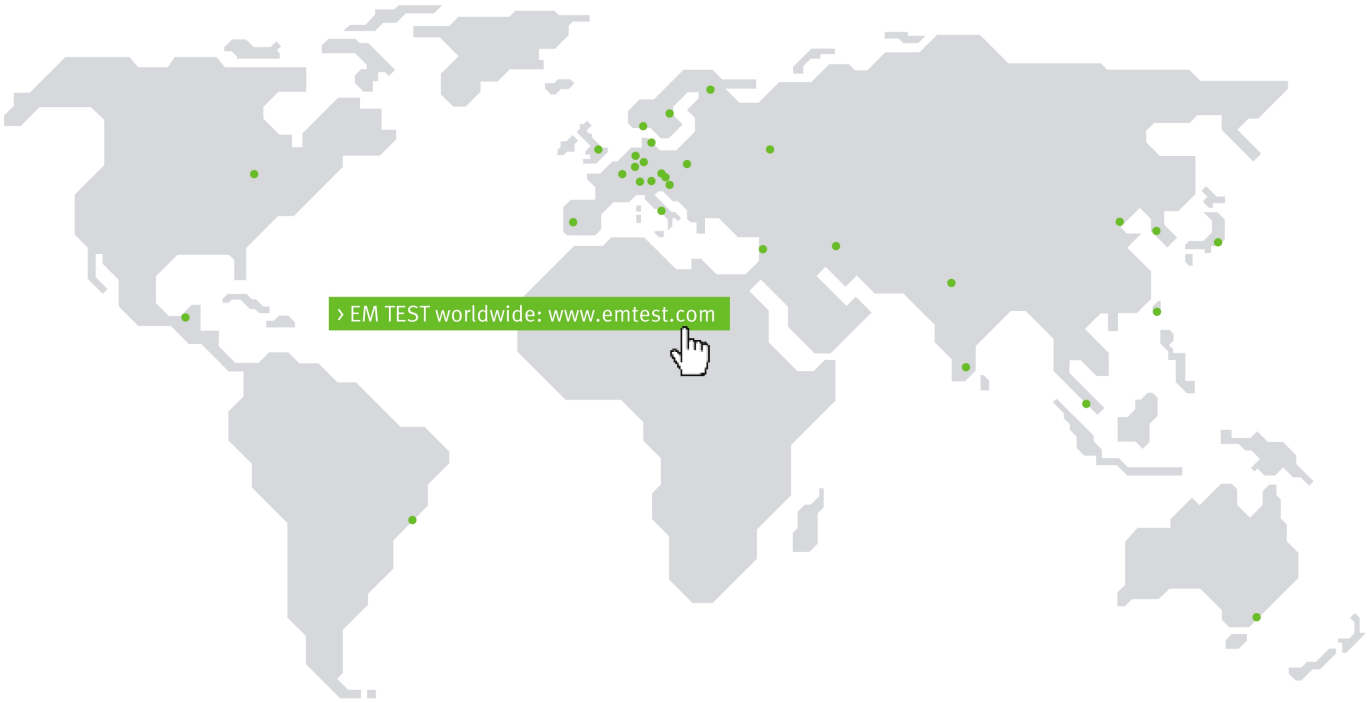
CA LV124-D1000R	
Line	Data lines
Resistance	1,000 ohm
Accuracy	± 2 %
Max. Voltage	40.0 V
Max. Power	1 W
Peak Power	4 W, 1 s
Dimension	120 mm x 65 mm x 40 mm
Weight	0.15 kg

GENERAL DATA

GENERAL DATA	
Reference temperature	23 °C ±5 °C
Temperature	10 °C to 35 °C
Humidity	25 % to 75 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1 060 mbar)

emtest
the benchmark for emc

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