

CA LV 124 SERIES

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



FOR TESTS ACCORDING TO ...

- > BMW GS 95024-2-1
- > MBN LV 124-1
- > OEM LV 124
- > OEM LV 148
- > VW 80000

VERIFICATION SET FOR THE PFM 200N SERIES FOR VERIFY THE PULSES E10 AND E13 OF THE LV 124 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 data lines the CA LV124-D1R and CA LV124-D1000R are used.

As the LV 148 standard requires no data line verification, the CA LV148 consists of a CA LV148-P10R and CA LV148-P1000R for power line verification.

HIGHLIGHTS

- > **Low inductive, high precision load resistor for direct connection into the PFM 200N Series output power plugs**
- > **Load resistors for power lines verification**
- > **Load resistor 1.0 ohm and 1000 ohm for data line verification (LV 124)**
- > **Software procedure for verification with CA LV124 loads**

APPLICATION AREAS



AUTOMOTIVE

TECHNICAL DETAILS

POWER LINE VERIFICATION

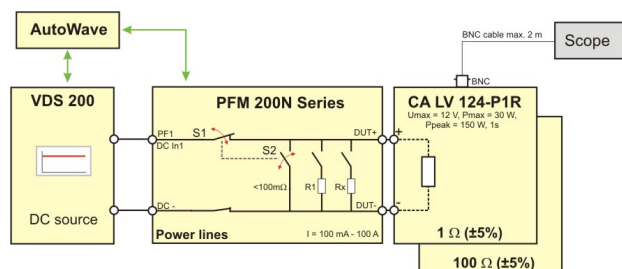
TEST PROCEDURE

LV 124 defines one reference measurement each with 100 ohm ($\pm 5\%$) and 1 ohm ($\pm 5\%$) 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.

LV 148 defines an equivalent reference measurement with 1000 ohm and 10 ohm.

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.

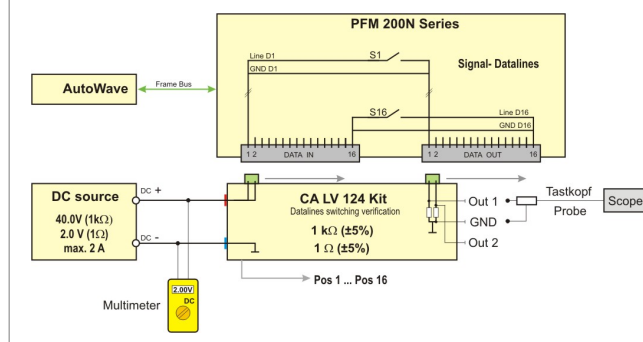


SIGNAL AND DATALINES

TEST PROCEDURE

One reference measurement each with 1 k ohm ($\pm 5\%$) and 1 ohm ($\pm 5\%$) 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

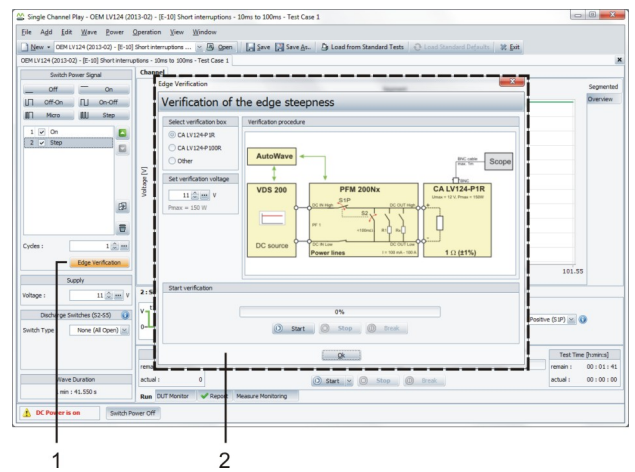
POWER LINE SETTINGS

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

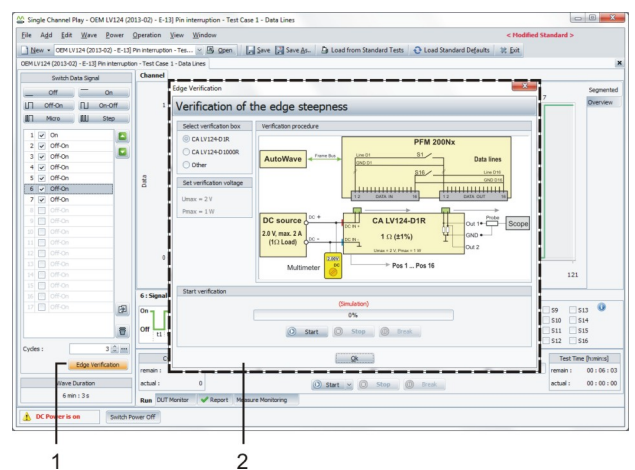
DATA LINE SETTINGS (LV 124 ONLY)

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



TECHNICAL DETAILS

TECHNICAL DETAILS

COMPONENTS CA LV 124 SET

	Load resistors for:
CA LV124-P1R	Power lines
CA LV124-P100R	Power lines
CA LV124-D1R	Data lines
CA LV124-D1000R	Data lines
BNC cable	BNC Measuring cable 2 m, Verification power lines
Power cable	2 Cable 0.5m red/black, Verification signal- data lines

COMPONENTS CA LV 148 SET

	Load resistors for:
CA LV148-P1000R	Power Lines
CA LV148-P10R	Power Lines
BNC cable	BNC Measuring cable 2 m, Verification power lines

CA LV124-P1R

Line	Power lines
Resistance	1 ohm
Accuracy	± 1 %
Max. Voltage	12 V
Max. Power	30 W, 150 W, 1 s peak
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, 100 W, 1 s peak
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, 4 W, 1 s peak
Dimension	120 mm x 65 mm x 40 mm
Weight	0.15 kg

CA LV124-D1000R

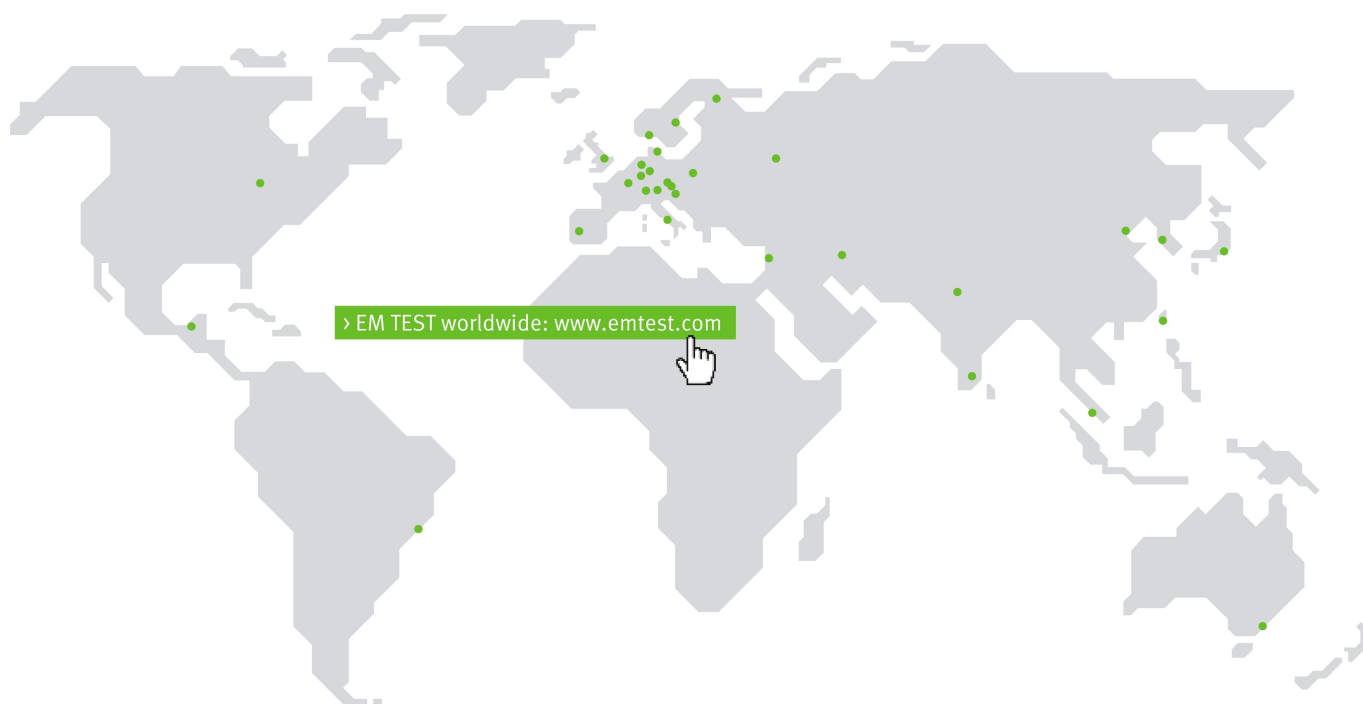
Line	Data lines
Resistance	1,000 ohm
Accuracy	± 2 %
Max. Voltage	40.0 V
Max. Power	1 W, 4 W, 1 s peak
Dimension	120 mm x 65 mm x 40 mm
Weight	0.15 kg

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)

COMPETENCE WHEREVER YOU ARE



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 > E-mail: 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 > E-mail: 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 > E-mail: 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 > E-mail: usasales.cts@ametek.com

P.R. China

AMETEK Commercial Enterprise (Shanghai) Co. Ltd. > Beijing Branch > Western Section, 2nd floor > Jing Dong Fang Building (B10) > Chaoyang District > Beijing, China, 100015
 Phone +86 10 8526 2111 > Fax +86 (0)10 82 67 62 38
 Internet: www.ametek-cts.com > E-mail: chinasales@ametek.com

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

Singapore

AMETEK Singapore Pte. Ltd > No. 43 Changi South Avenue 2 > 04-01 Singapore 48164
 Internet: www.ametek-cts.com > E-mail: 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

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.