

# 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.

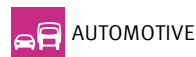
For verification the 16 signal and data lines the CA LV124-D1R and CA LV124-D1000R are used.

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



**TECHNICAL DETAILS**

**POWER LINE VERIFICATION**

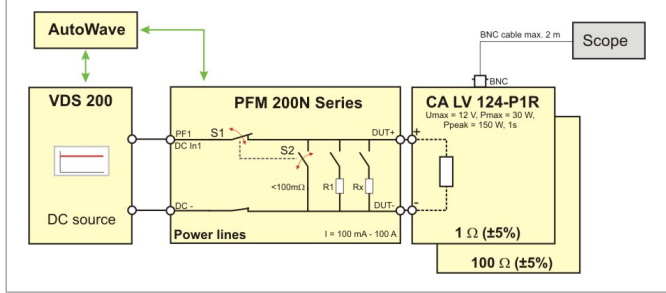
**TEST PROCEDURE**

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.

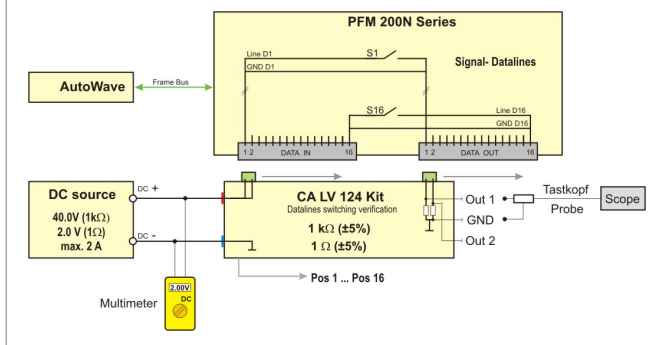


**SIGNAL AND DATALINES**

**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.

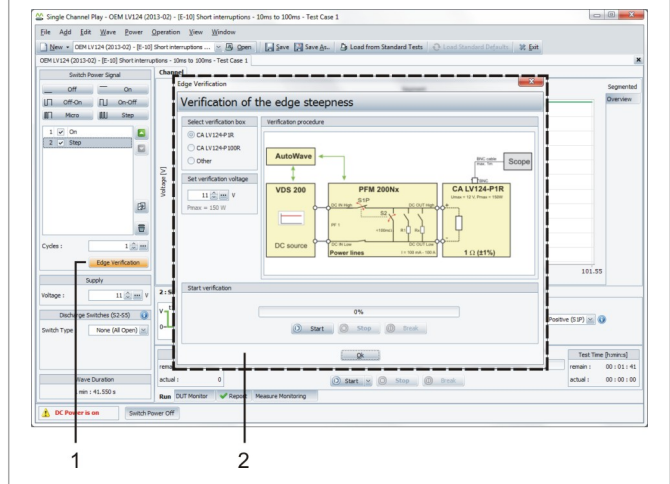


**SOFTWARE**

**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

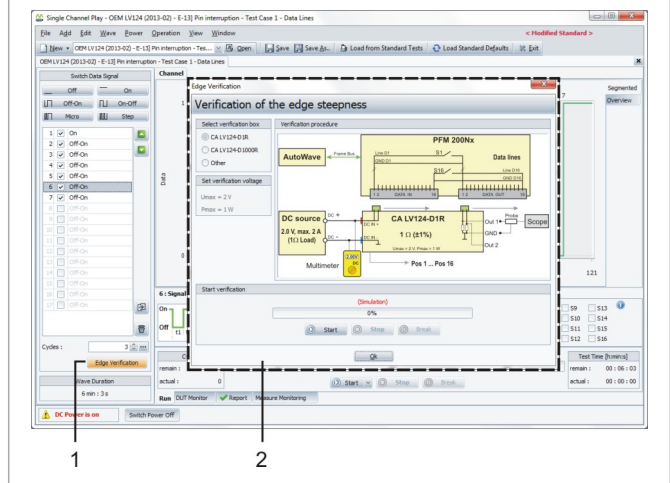


**SOFTWARE**

**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**

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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, 1s 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



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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.