



Test certificate

No.: 07_157-10 **Version:** 1/2

Customer : Gustav Klauke GmbH
Postfach 10 05 52
42805 Remscheid

Test object : - Pressure terminal connectors, "R" Series
- Pressure terminal connectors, "L" Series

Type : See Page 3 and 4 of this report.

Manufacturer : Gustav Klauke GmbH

Date of receipt : -

Date of test : 2008 - 2010

Applied test regulations : IEC 61238-1:2003

Test carried out : Type test

Test result : Gustav Klauke GmbH has declared that the "L" Series connectors are manufactured to the same construction design as the "R" Series pressure terminal connectors according to IEC 61238-1.

After testing of the "R"-series we certify that the "R"- and the "L"-series comply with the Class A connectors requirements of IEC 61238-1 (DIN EN 61238-1).

Specialist testers : A. Cichowski; C. Pieper; H. Walter

Dortmund, 29.07.2010



Dr.-Ing. D. Borneburg
Manager test laboratory



Dipl.-Ing. H. Walter
Test engineer

Report No. 07_157-10 contains 4 pages.

Scope of accreditation and type of documentation see overleaf.
Test results in this report are only valid for the tested objects. A partly duplication or publication is not allowed without written permission by RWE Eurotest. The authenticity of this report is only ensured with RWE-coinage on the first page.

Summary

RWE Eurotest GmbH carried out type tests according to IEC 61238-1:2003 on pressure terminal connectors, "R" Series manufactured by Gustav Klauke GmbH.

After testing of the "R"-series we certify that the "R"- and the "L"-series comply with the Class A connectors requirements of IEC 61238-1 (DIN EN 61238-1).

For details of the tests performed see the following test certificates:

07_157-1

Test object: Connector 2R6
Test cable: HCP 10 mm² / stranded compacted
Compression tools: K05

07_157-4

Test object: Connector 9R12
Test cable: HCP 120 mm² / stranded not compacted
Compression tools: EK22plus

07_157-2

Test object: Connector 11R16
Test cable: HCP 185 mm² / stranded not compacted
Compression tools: EK22plus

07-157-7

Test object: Connector 214R20
Test cable: HCP 400 mm² / stranded compacted
Compression tools: PK25/2

Gustav Klauke GmbH has declared that the "L" Series connectors are manufactured to the same construction design as the "R" Series pressure terminal connectors according to IEC 61238-1. A detailed description of the "R"- and "L"-series is presented on Page 3 and 4 of this report. The corresponding certificates are archived by RWE Eurotest. The documents can be inspected on request.

Pressure terminal connectors, "R" Series:

Straight, Cat. Nos. 91R, 92R, 93R, 94R, 95R followed by a 1-digit number, may be followed by Suffix bk.

Straight, Cat. Nos. 1R, 2R, 3R, 4R, 5R, 6R, 7R, 8R, 9R, 10R, 11R, 12R, 13R, or 14R, followed by /1 or 2-digit number, may be followed by Suffix MS and/or by Suffix bk, Ni, Pb.

Angled-45 degree, Cat. Nos. 41R, 42R, 43R, 44R, 45R, 46R, 47R, 48R, 49R, 50R, 51R, 52R, 53R, or 54R, followed by a /1 or /2-digit number, by Suffix -45, may be followed by Suffix MS and/or by Suffix bk, Ni, Pb.

Angled-90 degree, Cat. Nos. 41R, 42R, 43R, 44R, 45R, 46R, 47R, 48R, 49R, 50R, 51R, 52R, 53R or 54R, followed by a /1 or /2- digit number, may be followed by Suffix MS and/or by Suffix bk, Ni, Pb.

Narrow Palm Type, Cat. Nos. 5SG, 6SG, 7SG, 8SG, 9SG, 10SG, 11SG, 12SG, or 13SG, followed by /1 or 2-digit number, may be followed by Suffix bk, Ni.

Fork Type, Cat. Nos. 91C, 92C, 93C, 94C, 95C, 96C, or 97C, followed by a 1-digit number, may be followed by Suffix bk.

Pressure cable connectors, "R" Series,

Butt-Type, Cat. Nos. 17R, 18R, 19R, 20R, 21R, 22R, 23R, 24R, 25R, 26R, 27R, 28R, 29R, 30R, 31R, 32R, 33R, or 34R, may be followed by Suffix bk, Ni.

Cross-Connectors, Type KV1.5, KV2.5, KV4, KV6, KV10, KV16, KV25, KV35, KV50, KV70, KV95, KV120, KV150, KV185, or KV240, may be followed by Suffix bk, Ni, Pb.

T-Connectors, Type TV1.5, TV2.5, TV4, TV6, TV10, TV16, TV25, TV35, TV50, TV70, TV95, TV120, TV150, TV185, or TV240, may be followed by Suffix bk, Ni, Pb.

Pressure terminal connectors, "L" Series:

Straight, Cat. Nos. L0.75, L1.5, L2.5, L4, L6, L10, L16, L25, L35, L50, L70, L95, L120, L150, L185, L240, L300, L400, L500 or L630, followed by a 1 or 2-digit number, and by Suffix MS, may be followed by Suffix bk.

Angled-45 degree, Cat. Nos. L6, L10, L16, L25, L35, L50, L70, L95, L120, L150, L185, L240, L300, L400, followed by a /1 or /2- digit number, and by Suffix -45, may be followed by Suffix bk.

Angled-90 degree, Cat. Nos. L6, L10, L16, L25, L35, L50, L70, L95, L120, L150, L185, L240, L300, L400, followed by a /1 or /2- digit number, and by Suffix -90, may be followed by Suffix bk.

Pressure cable connectors, "L" Series, Butt-Type, Cat. Nos. LV0.75, LV1.5, LV2.5, LV4, LV6, LV10, LV16, LV25, LV35, LV50, LV70, LV95, LV120, LV150, LV185, LV240, LV300, LV400, LV500, or LV630, may be followed by Suffix bk.

Cross-connectors, Type KVL1.5, KVL2.5, KVL4, KVL6, KVL10, KVL16, KVL25, KVL35, KVL50, KVL70, KVL95, KVL120, KVL150, KVL185, or KVL240, may be followed by Suffix bk.

T-Connectors, Type TVL1.5, TVL2.5, TVL4, TVL6, TVL10, TVL16, TVL25, TVL35, TVL50, TVL70, TVL95, TVL120, TVL150, TVL185, or TVL240, may be followed by Suffix bk.

Testing Laboratory

The RWE Eurotest Testing Laboratory is an independent institute that has been approved according to European standards.

Our testing laboratory, accredited in conformity with DIN EN ISO/IEC 17025, is at the disposal of manufacturers and users alike for testing the conformity of electro technical products against standards and confirming fitness for use. Our accreditation by the Deutsche Akkreditierungsstelle Technik (DATech e.V.), a member of the Deutscher Akkreditierungsrat (DAR) accreditation council, guarantees our customers uniform testing procedures in conformity with European testing regulations and thus internationally accepted test results:

Whether you are a manufacturer or a user, you will have a strong partner with many years of testing experience at every stage of the product cycle. We will provide the following support for you:

- Type tests
- Sample tests
- Routine tests
- Commissioning tests
- Damage and fault analysis
- Material tests for safety features and equipment

Scope of accreditation

RWE Eurotest is accredited to carry out testing in the fields:

- High-voltage appliances and installations
- Low-voltage switchgear and control gear assemblies
- Cables
- Power cable accessories
- Pressed connectors and detachable cable clamps
- Corrosion protection
- EMC-testing
- Oil-examinations

The detailed listing of the scope of accreditation is available at our homepage www.rweeurotest.com.

Documentations

- Test certificates will be issued for passed tests performed against standards in the scope of accreditation.
- Test reports will be issued for tests at least performed against one standard in the scope of accreditation.