

Test report
No. VB12 – 044eVersion: 1.0
Date of edition: 30th July 2021
Number of pages: 28Accredited testing laboratory
to ISO/IEC 17025 for
- Instrument transformers
- High voltage tests
Accreditation number: STS 0210**Object:** Type: **Hivoduct Druckluftkabel G05**

Serial No: G05_A_201_V01

Manufacturer: Hivoduct AG
CH-8192 Glattfelden**Test:** **Dry lightning impulse voltage withstand test (BIL) and dry power-frequency voltage withstand test in accordance with:**

IEC 60060-1 / 2010-09 High-voltage test techniques – Part 1: General definitions and test requirements

Content:	1. Description of object	2
	2. Dry lightning impulse voltage withstand test (BIL)	4
	3. Dry power-frequency voltage withstand test	25
	4. Document information	28

Test performed: Testing laboratory/ Location of tests: PFIFFNER Instrument Transformers Ltd.
Lindenplatz 17
CH-5042 HirschthalDate of tests: 7th July 2021

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Result: **Test successfully passed**

Signature:

Seal
PFIFFNER Testing LaboratoryNicola Fäsi
Test EngineerFlorian Elmiger
Head of Testing Laboratory

Management summary

This test report contains routine and type test of the described test object to certify the technical ratings and requirements according to the standards. All tests were passed successfully.

To demonstrate the limitation of the dry lightning impulse voltage withstand test the rated test voltage was increased till internal break down occurred.

Routine tests:

Dry power-frequency voltage withstand test	✓
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Type test:

Dry lightning impulse voltage withstand test (BIL)	✓
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Measuring uncertainty

The measuring uncertainty is calculated and can be given on request.

Traceability

The traceability of the measurements is referred to our reference systems which are periodically calibrated by Accredited Calibration Laboratories.

Participants

Mr Walter Holaus

Hivoduct AG

1. Description of object

Type:	Hivoduct Druckluftkabel G05
Fabrication No:	G05_A_201_V01
PIFFNER Order number:	-
Manufacturer:	Hivoduct AG CH-8192 Glattfelden
Outline drawing:	See page 3
Fabrication year:	2021
Rated frequency f_R :	50 / 60Hz
Highest voltage for equipment U_m :	12 kV to 52 kV
Rated power-frequency withstand voltage:	28 kV to 95 kV
Rated lightning impulse withstand voltage (peak):	125 kV to 250 kV, 1.2 / 50 μ s
Rated current I_r :	500 A to 2500 A
Insulation medium:	Dry air (N ₂ :80%, O ₂ :20%)
Test pressure:	Test object was filled and tested with dry air. The rated test pressure is 10 bar abs and it is mentioned in every test separately.

3.4 Test arrangement

