

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	NORIS Automation GmbH
Address	Muggenhofer Strasse 95, Nuernberg, 90429, Germany
Type	Switches - Limit
Description	Limit value switches series 5 Measuring transducers series 5 Refer to the Appendix for further details.
Trade Name	RH5, RP5, RPT5, RI5, RG5, RG51-S, RW5, RF5, RFW5, RTK5, VP5, VPT5, VTK5, VF5, VFS5, VFG5, VFW5
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – 2002.
Specified Standard	Manufacturer's specification IACS unified requirements E10 (Rev.8 Feb 2021)
Ratings	Refer to the Appendix for further details.
Additional Tests	Low temperature (-20°C/16h)

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This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 02/20002 (E3)

The Design Appraisal Document HTS/ETS 42334-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPES

RH5 ①-②with ①= 1, 2 and ②= A
 RP5 ①-②with ①= 1, 2 and ②= A
 RPT5 ①-②with ①= 1, 2 and ②= A
 RI5 ①-②with ①= 1, 2 and ②= A
 RG5 ①-②with ①= 1, 2 and ②= A
 RG51-S
 RW5 ①-②with ①= 3, 4, 5 and ②= A
 RW5 ①-②with ①= 3, 4, 5 and ②= S
 RF5 ①-②with ①= 00, 01, 02 and ②= R1, R2, A1, A2
 RFW5 ①-②with ①= 00, 01 and ②= R1, R2, A1, A2
 RTK5 ①-②with ①= 8, 9 and ②= A

VP5 ①-②with ①= 1, 2, 11 and ②= I1, I2, G1, G2
 VPT5 ①-②with ①= 1, 2, 11 and ②= I1, I2, G1, G2
 VTK5 ①-②with ①= 8, 9 and ②= I1, I2, G1, G2
 VF5 ①-②with ①= 00, 01, 02 and ②= I1, I2, G1, G2

VFS5 ①-②with ①= 00, 01, 02 and ②= I1, I2, G1, G2
 VFG5 ①-②with ①= 00, 01 and ②= I1, I2, G1, G2
 VFW5 ①-②with ①= 00, 01 and ②= I1, I2, G1, G2

①= measuring range

②= output

RATINGS

Type	Measuring range:
RH5	40 - 120°C, 5 - 70°C (NTC)
RP5	0 - 120°C, 0 - 150°C (Pt100)
RPT5	0 - 120°C, 0 - 150°C (Pt1000)
RI5	0 - 20 mA, 0 - 4 - 20 mA
RG5	0 - 10 V, 0 - 2 - 10 V
RG51-S	0 - 10 Vdc
RW5	0 - 20 Vac, 0 - 60Vac, 0 - 90Vac
RW5	0 - 20 Vac, 0 - 60Vac, 0 - 90Vac
RF5	5 - 100Hz, 20Hz - 1KHz, 50Hz - 10KHz
RFW5	5 - 100Hz, 20Hz - 1KHz
RTK5	0 - 600°C, 0 - 800°C (NiCr-Ni)

Output signal: normally closed contact
normally open contact

Type	Measuring range:
VP5	0 - 120°C, 0 - 150°C, -30 - 120°C (Pt100)
VPT5	0 - 120°C, 0 - 150°C, -30 - 120°C (Pt1000)
VTK5	0 - 600°C, 0 - 800°C (NiCr-Ni)
VF5	NORIS standardsignal
VFS5	1 - 10 Vac
VFG5	6 - 60 Vac
VFW5	terminal W of a 24 V automotive alternator

Output signal: 0 - 10V
2 - 10V
0 - 20mA
4 - 20mA