

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Miscellaneous Internal Communication Equipment**

with type designation(s)

ResistTel Series telephones

Issued to

FHF Funke + Huster Fernsig GmbH
Mülheim an der Ruhr, Germany

is found to comply with

DNV GL rules for classification – Ships and offshore units**Application :****See page 2.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Temperature	D
Humidity	B
Vibration	A
EMC	B
Enclosure	C

This Certificate is valid until **2021-11-03**.Issued at **Høvik** on **2016-12-02**for **DNV GL**DNV GL local station: **Høvik Bridge Systems**Approval Engineer: **Steinar Kristensen**

Jan Tore Grimsrud
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-018280-3**
Certificate No: **TAA00000RT**
Revision No: **1**

Product description

Article. no.	Type Designation	Description
FHF11264301	ResistTel	Weatherproof Telephone ResistTel black
FHF1126430102	ResistTel	Weatherproof Telephone ResistTel red
FHF11264302	ResistTel ZB	Weatherproof Telephone ResistTel ZB black without keypad
FHF1126430202	ResistTel ZB	Weatherproof Telephone ResistTel ZB red without keypad
FHF11286101	ExResistTel	Ex-Telephone ResistTel black
FHF1128610102	ExResistTel	Ex-Telephone ResistTel red
FHF11286102	ExResistTel ZB	Ex-Telephone ResistTel ZB black without keypad
FHF1128610202	ExResistTel ZB	Ex-Telephone ResistTel ZB red without keypad
FHF11286201	ExResistTel	Ex-Telephone ResistTel with blind plugs for metal cable gland M20 x 1.5
FHF11286202	ExResistTel ZB	Ex-Telephone ResistTel ZB with blind plugs for metal cable gland M20 x 1.5
FHF11264321	ResistTel MB	Weatherproof phone ResistTel MB
FHF11286121	ExResistTel MB	Ex-Telephone ExResistTel MB
FHF11286180	ExResistTel IP2	Ex-Telephone ResistTel IP2 black
FHF11264380	ResistTel IP2	Weatherproof Telephone ResistTel IP 2 black
FHF1126438002	ResistTel IP2	Weatherproof Telephone ResistTel IP 2 red
FHF11264381	ResistTel IP2	Weatherproof Telephone ResistTel IP2 black with 2xLAN connection
FHF1126438102	ResistTel IP2	Weatherproof Telephone ResistTel IP2 red with 2xLAN connection
FHF11264382	ResistTel IP2	Weatherproof Telephone ResistTel IP2 black with relay
FHF1126438202	ResistTel IP2	Weatherproof Telephone ResistTel IP2 red with relay
FHF11264383	ResistTel IP2	Weatherproof Telephone ResistTel IP2 black with 2xLAN + relay
FHF1126438302	ResistTel IP2	Weatherproof Telephone ResistTel IP2 red with 2xLAN + relay

MB: memory button
ZB: Central operation

Application/Limitation

1. Products covered by this certificate have been tested according to criteria for IEC 60945 location "Exposed", except for clause 8.8- Rain and Spray where tests have been performed according to IEC 60529, IP 66.
2. Any Ex-equipment (equipment to be used in areas with explosive atmosphere) listed in this certificate are subject to separate Ex- approvals.

Tests carried out

- Environmental tests: DNVGL-CG-0339 (Nov. 2015) and IEC 60945 (2002) including Corrigendum 1 (2008)

Type Approval documentation

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DNV GL No.	Doc. ID	Rev.	Description
20	WP1446-01	A	Report: FhF, Temperature test for ExResistTel and ResistTel phones
19	Wp1357-13	2011-01-21	Report: FHF, Function test at limit temperatures
4	U153677E1	2	Report, Phoenix Testlab, Environmental test report Industrial Telephones
1	BSh-883	-	Report: BSH, test report Compass Safe Distance for ExResistTel and ExResistTel IP2
5	BSh-942	-	Report: BSH, Test report Compass Safe Distance for ResistTel IP2
2	E144934E1		Report: Phoenix Testlab, EMC test report ExResistTel
3	E144934E2		Report: Phoenix Testlab, EMC test report ExResistTel IP2
14	E153677E1	1	Report: Phoenix Testlab, EMC test report ResistTel IP2
8	PEX22010000363	03-13-2012	Report: VDE, IP test report ExResistTel IP2

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.