

# EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

## Marine Equipment Directive (MED) 2014/90/EU

**PHOENIX TESTLAB**  
Notified Body Number **0700**

Recognised by



**0800S11/4822/007**

BUNDESAMT FÜR  
SEESCHIFFFAHRT  
UND  
HYDROGRAPHIE

This is to certify that:

PHOENIX TESTLAB did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

<b>Certificate No.</b>	PTL-MED-B-16-110942
<b>Manufacturer</b>	Hagenuk Marinekommunikation GmbH
<b>Address</b>	Hamburger Chaussee 25 24220 Flintbek, Germany
<b>Directive Reference (No &amp; Item designation)</b>	Directive 2014/90/EU, Regulation (EU) 2017/306 MED/5.14 MF/HF radio capable of transmitting and receiving DSC, NBDP and radiotelephony
<b>Brand Name / Model Name</b>	TRX3050 / TRX3015 MF/HF Transceiver with DSC 3002

### Specified Standards

IMO Res.A.694(17)	IEC 60945 Ed. 4.0 (2002) incl.	EN 300 338-1 V1.3.1 (2010-02)
IMO Res.A.806(19)	Corr. 1 (2008)	EN 300 338-2 V1.3.1 (2010-02)
IMO MSC/Circ.862	EN 61162 series	EN 300 373-1 V1.4.1 (2013-09)
ITU-R M.493-13 (10/09)	ETS 300 067 ed.1 (1990-11)	EN 301 843-5 V1.1.1(2004-06)
ITU-R M.541-9 (05/04)	ETS 300 067/A1 ed.1 (1993-10)	

Date of issue **2017-06-10** Expiry date: **2022-06-09**

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

The attached Schedule of Approval forms part of this certificate. This certificate consists of 5 pages.



Signed by Klaus Knörig  
Notified Body

## Schedule of Approval

### Technical description

Frequency Range	TX: 1.5 MHz – 30 MHz RX: 10 kHz – 30 MHz
Transmit Power	500 W (TRX 3050, TRX 3050 T) 150 W (TRX 3015, TRX 3015 T)

### System Components

TRX 3050 (500 Watt Version)		
Component	Name	Remark
DSC Controller	A) DSC 3002 U	Software Version 2.3.0.0 or Software Version 2.4.1.0
	B) DSC 3002 BP <b>and</b> UST 5000 DSC	
	C) DSC 3002 U <b>and</b> UST 5000 DSC	Software Version 2.4.1.0
Exciter/Receiver	ERX 3000	Software Version 8.39 or <sup>1</sup> Software Version 8.47
Power Amplifier	PA 3050	
ALE Module	ALE 3000, 3002, 3003	built-in option
DLP Module	DLP 3000	built-in option
Antenna Tuning Unit	ATU 3050	
Power Supply	PS 3050 AC <b>and/or</b> PS 3050 DC	
Telex Modem		external <sup>2</sup>

<sup>1</sup> Note: Software Versions 2.4.1.0 / 8.47 mandatory for configurations with additional split site control unit (DSC 3002 U in combination with UST 5000 DSC)

<sup>2</sup> for NBDP an interface (J34) to connect an external data interface is provided



<b>TRX 3050 T (500 Watt Version)</b>		
<b>Component</b>	<b>Name</b>	<b>Remark</b>
DSC Controller	A) DSC 3002 U	Software Version 2.3.0.0 or Software Version 2.4.1.0
	B) DSC 3002 BP <b>and</b> UST 5000 DSC	
	C) DSC 3002 U <b>and</b> UST 5000 DSC	Software Version 2.4.1.0
Exciter/Receiver	ERX 3000 T	Software Version 8.39 or <sup>1</sup> Software Version 8.47
Power Amplifier	PA 3050	
ALE Module	ALE 3000, 3002, 3003	built-in option
DLP Module	DLP 3000	built-in option
Antenna Tuning Unit	ATU 3050	
Power Supply	PS 3050 AC <b>and/or</b> PS 3050 DC	
Telex Modem		external <sup>2</sup>

<b>TRX 3015 (150 Watt Version)</b>		
<b>Component</b>	<b>Name</b>	<b>Remark</b>
DSC Controller	A) DSC 3002 U	Software Version 2.3.0.0 or Software Version 2.4.1.0
	B) DSC 3002 BP <b>and</b> UST 5000 DSC	
	C) DSC 3002 U <b>and</b> UST 5000 DSC	Software Version 2.4.1.0
DSC Controller	A) DSC 3002 U	Software Version 2.3.0.0 or Software Version 2.4.1.0
	B) DSC 3002 BP <b>and</b> UST 5000 DSC	
	C) DSC 3002 U <b>and</b> UST 5000 DSC	Software Version 2.4.1.0
Exciter/Receiver	ERX 3000	Software Version 8.39 or <sup>1</sup> Software Version 8.47
Power Amplifier	PA 3015	
ALE Module	ALE 3000, 3002, 3003	built-in option
DLP Module	DLP 3000	built-in option
Antenna Tuning Unit	ATU 3050 <b>or</b> ATU 3015	
Power Supply	PS 3050/3015 AC <b>and/or</b> PS 3050/3015 DC	
Telex Modem		external <sup>2</sup>

<sup>1</sup> Note: Software Versions 2.4.1.0 / 8.47 mandatory for configurations with additional split site control unit (DSC 3002 U in combination with UST 5000 DSC)

<sup>2</sup> for NBDP an interface (J34) to connect an external data interface is provided

<b>TRX 3015 T (150 Watt Version)</b>		
<b>Component</b>	<b>Name</b>	<b>Remark</b>
DSC Controller	A) DSC 3002 U	Software Version 2.3.0.0 or Software Version 2.4.1.0
	B) DSC 3002 BP <b>and</b> UST 5000 DSC	
	C) DSC 3002 U <b>and</b> UST 5000 DSC	Software Version 2.4.1.0
Exciter/Receiver	ERX 3000 T	Software Version 8.39 or <sup>1</sup> Software Version 8.47
Power Amplifier	PA 3015	
ALE Module	ALE 3000, 3002, 3003	built-in option
DLP Module	DLP 3000	built-in option
Antenna Tuning Unit	ATU 3050 <b>or</b> ATU 3015	
Power Supply	PS 3050/3015 AC <b>and/or</b> PS 3050/3015 DC	
Telex Modem		external 2

<sup>1</sup> Note: Software Versions 2.4.1.0 / 8.47 mandatory for configurations with additional split site control unit (DSC 3002 U in combination with UST 5000 DSC)

<sup>2</sup> for NBDP an interface (J34) to connect an external data interface is provided

### Approval Documentation

Operator Manuals	Operator Manual DSC 3002 U, DSC 3002, IST 5000 DSC Manual ID: 3067.530, V3.1, January 2016
	Operator Manual TRX 3015 Manual ID: 3032.778, V1.6, May 2016
	Operator Manual TRX 3050 Manual ID: 3067.784, V1.4, July 2013



### Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
IMO MSC/Circ.862	Hagenuk	CoC, 2017-03-21
DIN EN 60945, EMC test, clause 9, 10	MeßTechnikNord	05989.074.09
DIN EN 60945, clause 11.1, 12.1	MeßTechnikNord	06032.101.09
IEC 60945 clause 9, 10	Hagenuk	65299/99, Annex IV
EN 60945 clause 8.2.1, 8.3, 8.4	Phoenix Testlab	U091174E1
EN 60945 clause 8.2.1, 8.3, 8.4	Phoenix Testlab	U091875E1, 2nd version
EN 60945 clause 8.7, vibration	paconsult GmbH	09-2525
EN 60945 clause 8.7, vibration	paconsult GmbH	09-2525
EN 60945 clause 8.7, vibration	Hagenuk	65299/99, Annex I
EN 60945 clause 8.2.1, 8.3, 8.4, 8.7	Phoenix Testlab	U152676E2
EN 61162-1	BSH	BSH/4612/5141175/09-1
EN 300 338-1 V1.3.1	Phoenix Testlab	F091174E1
ETS 300 373	Hagenuk	65299/99, Annex II
EN 300 373-1 V1.4.1, clause 10.18	Phoenix Testlab	F162365E1
EN 300 373-1 V1.4.1, clause 10.18	Phoenix Testlab	F162365E2

### Places of production (if different from applicant)

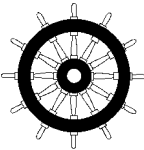
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### Limitations / Restrictions

- None -

### Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

3.  The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.