DNV·GL

Certificate No:
TAA00001DC

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Automatic Telephone System

with type designation(s)
Phontech 6200 series

Issued to
Jotron A.S.
TJODALYNG, Norway

is found to comply with
DNV GL rules for classification – Ships

Application :

See page 2

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2018-03-05**
This Certificate is valid until **2023-03-04**.
DNV GL local station: **Sandefjord**

Approval Engineer: **Frederik Tore Elter**

for **DNV GL**

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.

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Product description

Phontech ICS 6200 Automatic Telephone System series covers the following components:

Analoge Phone System:

Component	Type	Sub Modules	Module number	Location
Central Unit	ICS 6200		Phontech 6200	Protected
	ICS 6200R		Phontech 6200R	
		Analogue telephone interface	FXS	
		ISDN U Interface	UPN	
		Analogue telephone trunk interface	FXO	
		Audio line/ key interface	E&M	
		Ethernet	LAN	
		Analogue telephone interface	FXS	
		ISDN U Interface	UPN	
		Analogue telephone trunk interface	FXO	
		Audio line/ key interface	E&M	
		Ethernet	LAN	
Patch panel			Phontech 6205 Phontech 6220	
Bridge Telephone Units		Flush mounted Speakerphone with Call Relay	Phontech 5113	
Speaker Phone		Flush mounted Speakerphone with Backlight and Call Relay	Phontech 5123	
Telephone units for use in harsh environments		WP Rugged Industrial Telephone	Phontech 5111	
		WP Rugged Industrial Telephone with Headset Interface	Phontech 5111-H	
Auxiliary equipment	Headset	6035 (connection with Phontech 5113)		
	Beacons	EHS-24x (connection with Phontech 5113)		
	LAN	FCDC2 - Flowire Ethernet Converter		

IP Phone system:

Component	Type	Module number	Location
Lan Switch	7200	Phontech 7200 (PoE Switch)	Protected
Bridge Telephone Units	Zenitel	CRM-V-HS CRM-V	
Telephone units for use exposed to weather.	FHF	ResistTel IP2	Exposed
		ExResistTel IP2/IP152	
	Zenitel	TFIE-1 TFIX-1	
Cable organizer		Phontech 9040	Protected
Other locations	Zenitel	IP Desktop Master Station	Protected
Auxilary equipment	Headset	Peltor Headset P-MT7 (6035)	NA
	Beacon/Sounder	AL-100X (connection with ResistTel IP2	Exposed
	Beacon/Sounder	EHS-220X (Connection with ExResistTel IP2/IP152	NA
		AL-100X (Connection with ExResistTel IP2)	Exposed

PA function (components for independent PA system):

Component	Type	Module number	Location
Central Unit	ICS 6200	6200	Protected
	ICS 6200R	ICS 6200R	
Amplifier	1671		
Access Panel	6216		

Application/Limitation

- ICS Central is to be installed in a manner that does not impair bridge personnel night vision, as the display back-light is not dimmable.
- The Phontech 6200 Automatic Telephone is to be installed in accordance to makers installation manual chapter 2.10.1 (INSTALLATION MANUAL Phontech 6200) and may fulfill requirements for Automatic Phone System depending on installation.
- The Phontech 6200 may fulfill requirements for Public Address System, if installed as an independent system with components listed for PA in this certification. Installation is to be in accordance to makers installation manual chapter 2.10.1 and 2.6 (INSTALLATION MANUAL Phontech 6200).
- The Phontech 6200 Analogue and IP phone system may be integrated.
- The Phontech 6200 IP phone system may provide VoIP interface, as listed in chapter 6 (INSTALLATION MANUAL Phontech 6200). Phones interfaced are to have lowest priority and to be installed outside of the bridge and locations required by SOLAS.*

*Note: Models Snom 710 and 720 IP phones have been part of functional testing for VoIP, these phones are not part of certification and do not fullfil IEC 60945 requirements and may only be used in locations outside of the bridge and locations required by SOLAS.

Type Approval documentation

DNV GL No	Title	Drawing No	Rev.
62	Certificate: ResistTel Series telephones	TAA00000RT	1
61	Certificate: VINGTOR ACM System	TAA00000ZN	1
58	INSTALLATION MANUAL Phontech 6200		
54	Report: Nemko EN 60945:2002 - Partial testin, Digital communication system - ICS 6200R	E17239.00	
51	Report: Nemko EN 60945:2002 - LAN Switch Phontech 7200	E15270.03	
50	Certificate: TA DNVGL IEC 60945 Phontec 7200	TAA00000HX	
49	Report: Nemko EN 60945:2002: Partial testing - Phontech 6216 Emergency PA Microphone - Phontech 6216	E17158.00	
48	Report: Nemko EN 60945 (2002) (EN 55024 (1998) + A1 (2001) + A2 (2003)) - Bridge Control Telephone Unit Type 5123	E10242.01	
47	Technical data sheet 5113 Telephone	17151-DS-5113	Rev.02
46	Technical data sheet 5123 Telephone	17150-DS-5123	Rev.01
45	Manual: Operation manual - Phontech Type 5111	BA 9620-10	02.jul
44	Report: Intertek IEC 60945 - Environmental - Phontech Type 5111	2214421KAU-002a	
43	Report: Intertek IEC 60945 - EMC - Phontech Type 5111	2214421KAU-001a	
41	Report: Nemko IEC 60945 - PA/GA Power Amplifier Phontech 1671	E17059.00	Rev 00
38	Report: Nemko IEC 60945 - Patch Panel ICS 6200, ICS 6220, ICS 6225, ICS 9040	E16193.00	Rev 00

DNV GL No	Title	Drawing No	Rev.
37	Report: Nemko IEC 60945 - Intercom/Telephone exchange for maritime use ICS 6200	E13029.01	Rev 01
36	Manual: Users Manual For Phontech 6200 Terminals	P/N: 87477 (v.C)	Rev. no.: 4
35	Manual: Installation Manual Phoneech 6200	p/n 87299 v.G	Rev. no.: 6
31	Report: Phontech 6200 Integrated Communication System - Test procedure	FAT ICS6200	Rev. no.: 5
18	Report: Jotron, Phontech 6200 Integrated Communication System, Performance Test Report	09601-100-TP Report	2
16	Manual: Jotron, User manual for Phontech 6200 terminals	87477	A
15	Report: Nemko, Environmental test report for Phontech ICS 6200	E13029.01	1
14	Report: Nemko, Environmental test report for Type 5123 Telephone Unit	E10242.01	1
11	Manual: Phontech 6200, Installation Manual	87299	A

Tests carried out

- Environmental testing: IEC 60945 (2002)
- Performance testing: Functional tests according to DNV Type Approval program 848.25
  Functional tests according to DNV Type Approval program 848.22 (Applicable parts for PA)

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.