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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Utility connections in port –
Part 2: High and low voltage shore connection systems – Data communication
for monitoring and control**

**Alimentation des navires à quai –
Partie 2: Systèmes de connexion à quai à haute et basse tensions – Description
de l'interface de communication de données dédiées au suivi et contrôle**



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CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	8
3 Terms, definitions and abbreviations	8
4 General	9
4.1 Power connection single line diagram	9
4.2 Data communication diagram.....	9
4.3 Physical layer	10
4.4 Protocol and IP-address.....	11
5 Interface shore	11
5.1 Shore: version number.....	11
5.2 Shore communication fault detection register.....	12
5.3 Shore operation modes	12
5.3.1 Basic operation modes	12
5.3.2 Optional operation mode cable test.....	13
5.3.3 Operation modes synchronization.....	13
5.3.4 Operation mode fault	13
5.4 Alarms	14
5.5 Warning	14
5.6 Status of switches.....	15
5.7 Optional commands	15
5.8 Status and diagnostic.....	15
5.8.1 General status and diagnostic.....	15
5.8.2 Special start up status and diagnostic.....	16
5.8.3 Stop power status and diagnostic	18
5.9 Start up information	18
5.10 Droop values	19
5.11 Energy meter values.....	20
5.12 Start up data	20
6 Interface ship.....	20
6.1 Version number	20
6.2 Ship communication fault detection register	21
6.3 Operation modes	21
6.3.1 Basic operation modes	21
6.3.2 Optional operation mode cable test.....	22
6.3.3 Operation modes synchronization.....	22
6.4 Alarms	22
6.5 Warning	23
6.6 Status of switches.....	23
6.7 Commands	23
6.8 Status and diagnostic.....	25
6.8.1 General status and diagnostic.....	25
6.8.2 Start up status and diagnostic.....	26
6.8.3 Stop power status and diagnostic	27
6.8.4 Additional status and diagnostic	27

6.9	Start up information	27
6.10	Droop values	28
6.11	Start up data	28
7	Start up procedure	29
7.1	General.....	29
7.2	Data flow	29
7.2.1	Initialize start up	29
7.2.2	Choice droop values	29
7.2.3	Choice power and synchronize mode.....	30
7.2.4	Start of power	30
7.2.5	Optional cable test.....	31
7.2.6	Synchronizing.....	31
8	Procedure stop	32
9	Format of data types (big endian format)	33
9.1	Format of data type WORD (One register)	33
9.2	Format of data type DWORD (Two registers)	33
9.3	Format of data type STRING (Zero terminated string of single byte ASCII characters)	34
10	Verification and testing	34
Annex A	(normative) Cruise ship communication system requirements	35
A.1	Scope	35
A.2	Radio communication.....	35
A.3	Safety and control circuits (Figure C.3 of IEC/ISO/IEEE 80005-1:2012)	35
A.4	Ship SCADA	37
A.4.1	General	37
A.4.2	Connector.....	37
A.4.3	Modbus RTU	37
Annex B	(normative) Modbus register list.....	41
B.1	Scope	41
B.2	Shore interface	41
B.3	Ship interface.....	48
Figure 1	– Power connection single line diagram	10
Figure 2	– Data communication general diagram	10
Figure 3	– Format of data type WORD	33
Figure 4	– Format of data type DWORD.....	34
Figure 5	– Format of data type STRING	34
Figure A.1	– Safety and control circuits connectors for cruise ships	36
Figure A.2	– SCADA straight plug / box mounting receptacle MS 3102E / MS3106E (MIL-DTL-5015)	37
Table 1	– Checking of compatibility of the shore side.....	11
Table 2	– Detection of communication fault.....	12
Table 3	– Basic operation modes	12
Table 4	– Optional operation mode cable test	13
Table 5	– Operation modes synchronization.....	13
Table 6	– Operation mode fault.....	13

Table 7 – Shore alarms.....	14
Table 8 – Shore warnings	14
Table 9 – Shore status of switches	15
Table 10 – Shore commands	15
Table 11 – Shore general status and diagnostic.....	15
Table 12 – Shore status and diagnostic/ droop values	16
Table 13 – Shore status and diagnostic/ choice power and synchronization	17
Table 14 – Shore status and diagnostic/ start of power	17
Table 15 – Shore status and diagnostic/ optional cable test	17
Table 16 – Shore status and diagnostic/ synchronization	18
Table 17 – Shore stop power status and diagnostic	18
Table 18 – Shore start up information	19
Table 19 – Shore droop values	19
Table 20 – Shore energy meter values.....	20
Table 21 – Shore start up data.....	20
Table 22 – Checking of compatibility of the ship side	20
Table 23 – Detection of communication fault.....	21
Table 24 – Ship basic operation modes.....	21
Table 25 – Ship optional operation mode cable test	22
Table 26 – Ship operation modes synchronization	22
Table 27 – Ship alarms	22
Table 28 – Ship warnings.....	23
Table 29 – Ship status of switches	23
Table 30 – Ship commands.....	24
Table 31 – Ship general status and diagnostic.....	25
Table 32 – Ship status and diagnostic/ droop values.....	26
Table 33 – Ship status and diagnostic/ start of power	26
Table 34 – Optional ship status and diagnostic/ cable test	27
Table 35 – Ship status and diagnostic/ synchronization	27
Table 36 – Ship stop power status and diagnostic.....	27
Table 37 – Ship additional status and diagnostic.....	27
Table 38 – Ship start up information	28
Table 39 – Ship droop values.....	28
Table 40 – Ship start up data	29
Table A.1 – Safety signals and control circuits for cruise applications	36
Table A.2 – Modbus configuration.....	38
Table B.1 – Modbus register list for shore side	41
Table B.2 – Modbus register list for ship side.....	48

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UTILITY CONNECTIONS IN PORT –

Part 2: High and low voltage shore connection systems – Data communication for monitoring and control

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It is published as a triple logo (IEC, ISO and IEEE) standard.

The text of this standard is based on the following IEC documents:

FDIS	Report on voting
18/1490/FDIS	18/1495/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

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Texts in italics in this standard are for signals of the data packets.

A list of all parts in the IEC 80005 series, published under the general title *Utility connections in port*, can be found on the IEC website.

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¹ A list of IEEE participants can be found at the following URL:
http://standards.ieee.org/downloads/80005-2/80005-2-2016/80005-2-2016_wg-participants.pdf

INTRODUCTION

Onshore power supply systems need communication between the ship side and the shore side. Different kinds of communication have to be distinguished, see Clause 3.

This Part 2 of IEC/IEEE 80005 series deals with the non-safety related communication. It covers the requirements of the HVSC systems described in Part 1 and is also intended to cover the requirements of a forthcoming standard for LV shore connection systems.

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UTILITY CONNECTIONS IN PORT –

Part 2: High and low voltage shore connection systems – Data communication for monitoring and control

1 Scope

This part of IEC/IEEE 80005 describes the data interfaces of shore and ships as well as step by step procedures for low and high voltage shore connection systems communication for non-emergency functions, where required. This standard specifies the interface descriptions, addresses and data type. This standard also specifies communication requirements on cruise ships, in Annex A.

Application of this standard relates to annexes of IEC/ISO/IEEE 80005-1.

This standard does not specify communication for emergency functions as described in IEC/ISO/IEEE 80005-1.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC/ISO/IEEE 80005-1:2012, *Utility connections in port – Part 1: High Voltage Shore Connection (HVSC) Systems – General requirements*

3 Terms, definitions and abbreviations

For the purposes of this document, the terms and definitions given in IEC/ISO/IEEE 80005-1, as well as the following apply.

3.1

communication for emergency function

hard wired signals that trip the feeding circuit breakers (ship side and shore side)

3.2

communication for non-emergency function

data exchange between shore and the ship for informational purposes

Note 1 to entry: If such data exchange requires tripping of the circuit breaker it will also be communicated via the trip signal.

3.3

register

16 bit location for storing data

3.4

High Byte

HB

high byte of a register, the leftmost eight bits