

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Bridge Navigational Watch Alarm System (BNWAS)

with type designation(s)
Totem BNWAS

Issued to
Totem Plus Europe GmbH
Hamburg, Germany

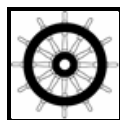
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/4.57. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res. A.694(17),
IMO Res. MSC.128(75), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1474

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-10-21**.

Issued at **Hamburg** on **2018-10-22**

DNV GL local station:
Hamburg



for **DNV GL SE**

Approval Engineer:
Jörg Rebel

Notified Body
No.: **0098**

Sven Dudzus
Head of Notified Body

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

The Totem Plus Bridge Navigational Watch Alarm System consists of the following equipment:

Touch Screen Display:	MON1.0
I/O Unit:	CBS1.0
Buzzer:	BZ1.0
Reset Unit:	RU1.1 (max. 6)
Wing Reset Unit:	WR1.1 (2 substitutive with Reset Units)
Alarm Unit:	AU1.0 (max. 20 in 7 groups)
Main Unit Cable:	CB2.0-03 (5m)
MotionDetector:	SRX360N (max. 8 in 4 groups)
Software version:	Totem BAMS V5.X

Up to 10 additional Wing Reset Units can be installed as additional bridge visual indications, audible alarms, and remote audible alarms. The reset button will be blocked in this case.

Application/Limitation

None

Type Examination documentation

DNV GL No	Document ID	Rev.	Description
1	TOTEMC 21335 BNWAS	2010-11-23	Report: EMC tests acc. to IEC 60945, 9 and 10
2	TOTEMC 21335 CBAS	2011-05-31	Report: EMC tests acc. to IEC 60945, 9 and 10
3	TOTENV IEC.21323	2010-12-16	Report: Environmental tests acc. to IEC 60945, 8.2 to 8.4, 8.7 and 11.2
4	-	2.1	Manual: Totem BAMS Installation Manual
5	-	2.1	Manual: Totem BAMS User Manual
6	45079	2018-09-03	Report: Tests acc. to IEC 62288, 4.4.1.2
7	TB-TR-20010	2018-10-21	Report: Tests acc. to IEC 62616, IEC 60945, 6.1 to 6.4, 13 to 15 and IEC 62288

Tests carried out

- Performance testing: IEC 62616 (2010)
- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008)
- Serial interface testing: IEC 61162-1 (2016), IEC 61162-2 (1998)
- Presentation of navigational information: IEC 62288 (2014)

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.



Job Id: **344.1-007580-1**
Certificate No: **MEDB00003DF**

According to Article 10 of the Council Directive (MED):

- Wheel mark to be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- Wheel mark to be affixed at the end of the production phase.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE