

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Batteryless Telephone System**with type designation(s)
SCM sistemas AU-MAG

Issued to

SCM SISTEMAS, S.L
Gijón, Spainis found to comply with
DNV GL rules for classification – Ships**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-10-18**This Certificate is valid until **2023-10-14**.DNV GL local station: **Bilbao**for **DNV GL**Approval Engineer: **Frederik Tore Elter**

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.



Product description

SCM Sistemas Sound Powered Telephone (Batteryless), Type: AU-MAG, consisting of:

Type Designation:	Description:	Location:
AU-MAG	Telephone	Protected
AU-MAG-A	Telephone with amplifier	Protected
AU-ACM	Headphones with microphone	Protected
AU-ACM-A	Headset with microphone and amplifier	Protected
AU-CJ-MAG	Telephone + watertight box	Protected
LD-98	Beacon alarm	Protected
T-198	High intensity bell	Protected

Application/Limitation

- SCM Sistemas Sound Powered Telephone (Batteryless), Type: AU-MAG is to be installed in accordance with manufacturers documentation.
- Components are to be installed with at least 5 meters separation from ships steering magnetic compass, in accordance to IEC 60945, clause 4.5.3.

Type Approval documentation

DNV GL No.:	Title:	Document No.:
17	Datsheet: Auxiliary Elements Type SCM-T - MODEL: T-198 (High intensity bell)	HD-3-1-13.4.1
16	Datsheet: Alarm Type SCM-LD - MODEL: LD-98 (Beacon alarm)	HD-3-1-13.4.1
12	Electrical test report AU-MAG	28859RSE.001
11	Datasheet AU-MAG-A (Telephone with amplifier)	HD-3-1-13.2.1
10	Datasheet AU-MAG	HD-3-1-13.2.2
9	Datasheet AU-CJ-MAG (Telephone + watertight box)	HD-3-1-13.2.4
8	Datasheet AU-ACM-A MODEL: AU-ACM-A	HD-3-1-13.2.3
7	Datasheet AU-ACM (Headphones with microphone)	HD-3-1-13.2.5
6	Report EMC- SELFPOWERED TELEPHONE SYSTEM MODEL AU-MAG.	28859REM.001
5	Report EMC- SELFPOWERED TELEPHONE SYSTEM MODEL AU-MAG.	28859REA001
4	Report EMC- SELFPOWERED TELEPHONE SYSTEM MODEL AU-MAG.	28859IEM.001

Tests carried out

- Environmental testing: IEC 60945 (2002)

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.



Job Id: **262.1-029476-1**
Certificate No: **TAA0000222**

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.