



Certificate No. 03-002108/031813

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

**Marine Propulsion Engine Remote Control System
Cruise Command 785CE**

MANUFACTURER:

ZF Padova S.r.l.
Via Penghe, 48
35030 CASELLE DI SELVAZZANO (PD)
ITALY

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

**Croatian Register of Shipping: Rules for the classification of ships,
Part 9. – Machinery, Part 13. – Automation**

IACS UR E10

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2029-02-07**

Place and date: Split, 2025-02-07 Seal

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

Remote control system for engine throttles and gears from multiple stations (up to 4 stations).
Propulsion control system provides single lever control of Speed and Shift and consists of:

- Processor/Actuator 785CE
- Control Heads 400 ch, MC2000-2 ch, MC2000-4 ch, 450-1&2/460-1&2 ch
- Station Expander MC2000-4, 785CE Processor

APPLICATION / LIMITATIONS:

Pleasure crafts and smaller commercial vessels up to 90m in length with dual propulsion.
Approval also valid for ships to be granted with class notations: AUT 1, AUT 2 and AUT 3.

TYPE APPROVAL DOCUMENTATION:

- Cruise Command Manual MM14330 Rev H.7 01-13 and MM9000 & MM9110 for control heads type,
- Drawings 11432, by ZF Mathers, LLC, dated 08-12-01,
- ACME Testing Co. – Test Report 2001024, dated 27-02-2001,
- ACME Testing Co. – Test Report 2003045, dated 11-06-2003,
- Underwriters Laboratories Inc. – Environmental Test Report 0101-04A, dated 03-02-2002,
- ZF Marine Electronics, LLC – Qualitative Failure Analysis ENG-122 Ver.2.0, dated 06-06-06,
- ACME Testing Co. – Compass Safe Distance Testing Report 2004091, dated 19-08-2004,
- ZF Quality Technical Specifications – QTS 006, dated 21-03-14,
- INTEK – EMC Test Report TR 2023-0446-00 Rev.01, dated 2023-12-22.

MARKING OF PRODUCT:

In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, safe distance to magnetic compass, supply voltage, software version...).

CONDITIONS FOR CERTIFICATION:

Correct configuration and set up for each delivery to be tested during commissioning, after installation, under the supervision of a Society Surveyor.

All changes in the software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to CRS for evaluation and approval before being installed.

NOTE:

The control for propulsion engine, with single engine application, is acceptable in combination with an additional back-up approved means for independent operation.