



TYPE APPROVAL CERTIFICATE

N. ELE085917CS



This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

| | |
|--------------------------|--|
| <i>Description</i> | Temperature Sensors |
| <i>Type</i> | Thermocouple K and J type Thermoresistance PT100 type |
| <i>Applicant</i> | THERMO ENGINEERING S.r.l Via Giuseppina, 19 26030 Malagnino (CR) Italy |
| <i>Manufacturer</i> | THERMO ENGINEERING S.r.l Via Giuseppina, 19 26030 Malagnino (CR) Italy |
| <i>Testing Standards</i> | Rules for the Classification of Ships – Part C – Machinery, Systems and fire protection – Ch. 3 Sect. 6 , Tab. 1 / IEC 60751 / IEC 584 |

Issued in Genova on March 21, 2017

This certificate is valid until April 18, 2022

Valerio Bonanni

RINA Services S.p.A.

Valerio Bonanni



CERTIFICATE OF CONFORMITY & FINAL TEST

DOCUMENT N° **XXXX**

DATE: **XXXX**

Via Giuseppina,19 26030 Malagnino - CREMONA - ITALY

| | | | |
|--------------------------------------|--|---|--|
| CUSTOMER : XXXX | REFERENCES ORDER : XXXX | CUSTOMER REFERENCES : XXXX | THERMO ENGINEERING JOB : XXXX |
|--------------------------------------|--|---|--|

| | | | | | |
|--|---------------------------------------|--------------------------------------|------------------------------|---------------------------|--------------------------|
| MATERIAL TYPE : RTD PT100 CL.B L=789mm CABLE 2000mm WITH CONNECTOR | CUSTOMER CODE : XXXX | DRAWING : TES.07.04 | ITEM : XXXX | QTY XXXX | U.M. PZ |
|--|---------------------------------------|--------------------------------------|------------------------------|---------------------------|--------------------------|

REFERENCE NORMS & SPECIFY :

| | | | |
|--|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> EN 60751 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

STANDARD TEST

| | |
|--|---|
| TE.ST.01 <input checked="" type="checkbox"/> SEE, DIMENSIONAL & MARKING | TE.ST.03 <input checked="" type="checkbox"/> ELECTRICAL CONTINUITY |
| TE.ST.02 <input checked="" type="checkbox"/> ROOM TEMPERATURE INSULATION RESISTANCE | TE.ST.04 <input type="checkbox"/> POLARITY & CONNECTION DIAGRAM |

SPECIAL TEST

| | |
|--|--|
| TE.ST.01 <input type="checkbox"/> HOT TEMPERATURE INSULATION RESISTANCE | TE.ST.10 <input type="checkbox"/> DIELECTRIC |
| TE.ST.02 <input type="checkbox"/> CALIBRATION | TE.ST.11 <input type="checkbox"/> VIBRATION |
| TE.ST.03 <input type="checkbox"/> HIGROSCOPICITY | TE.ST.12 <input type="checkbox"/> HELIUM LEAK |
| TE.ST.04 <input type="checkbox"/> RESPONSAI TIME | TE.ST.13 <input type="checkbox"/> RADIOGRAFIC |
| TE.ST.05 <input type="checkbox"/> TRACTION | TE.ST.14 <input type="checkbox"/> SAND & DUST |
| TE.ST.06 <input type="checkbox"/> THERMAL SHOCK | TE.ST.15 <input type="checkbox"/> |
| TE.ST.07 <input type="checkbox"/> EXTERNAL PRESSURE | TE.ST.16 <input type="checkbox"/> |
| TE.ST.08 <input type="checkbox"/> DYE PENETRANT | TE.ST.17 <input type="checkbox"/> |
| TE.ST.09 <input type="checkbox"/> THERMAL CYCLING | OTHER <input type="checkbox"/> |

ATTACHEMENT DOCUMENT :

| N° | DOCUMENT N° | DESCRIPTION | N° | DOCUMENT N° | DESCRIPTION |
|----|-------------|-------------|----|-------------|-------------|
| 1 | | | 5 | | |
| 2 | | | 6 | | |
| 3 | | | 7 | | |
| 4 | | | 8 | | |

Thermo Engineering hereby certifies that items listed has been manufactured inspected and tested in accordance with ISO 9001:2008 specification and satisfied all the requirements. Every functional test and the final test gave positive result.

INSPECTOR : **QUALITY MANAGER :**

