

TYPE APPROVAL CERTIFICATE

Certificate No.

: SEL25457-AE001

Initial Approval: 20th April, 2016

Product

: Explosion-Proof Pressure and Temperature Transmitter

Manufacturer

: Duon System Co., Ltd.

298-29, Gongdan-ro, Gunpo-si, Gyeonggi-do, Korea

Type APT3100, APT3200

Product Description: Smart pressure transmitter Smart temperature transmitter Type ATT2100

Power supply: DC 24 V
Output: DC 4 20 mA, Digital communication of base of HART protocol
Explosion-Proof construction: Ex d IIC T6

" See Appendix 1 "

- Approval Condition: 1. This approval is granted on the basis of the approved drawing and test reports.
 - 2. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
 - 3. Individual product certification is not required.

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 19th April, 2021 Issued at Busan, Korea on 20th April, 2016

REGISTER OF SHIPPING

General Manager of Marine & Ocean Equipment Team

Note: 1 The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2 : The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.

Appendix 1

Product Description and/or Approval Condition

Certificate No: SEL25457-AE001 Date of Issue: 20th April, 2016

Product Description(cont.)

- Range

| Model | Code | Range | Type |
|---------|--|---|-----------------------|
| APT3100 | D2 D3 D4 D5 D6 D7 D8 | -1.5 ~ 1.5 kPa -7.5 ~ 7.5 kPa -37.3 ~ 37.3 kPa -186.5 ~ 196.5 kPa -690 ~ 690 kPa -2,068 ~ 2,068 kPa -6,895 ~ 6,895 kPa | Differential |
| | H3 H4 H5 H6 H7 | -7.5 ~ 7.5 kPa -37.3 ~ 37.3 kPa -100 ~ 186.5 kPa -690 ~ 690 kPa -2,068 ~ 2,068 kPa | High Line Pressure |
| | G2 G3 G4 G5 G6 G7 G8 G9 G0 | -1.5 ~ 1.5 kPa -7.5 ~ 7.5 kPa -37.3 ~ 37.3 kPa -100 ~ 186.5 kPa -100 ~ 690 kPa -100 ~ 2,068 kPa -100 ~ 6,895 kPa -100 ~ 20,680 kPa -100 ~ 20,680 kPa -100 ~ 41,317 kPa | Guage |
| APT3200 | G3 G4 G5 G6 G7 | -100 ~ 150 kPa -100 ~ 1,500 kPa 0 ~ 5,000 kPa 0 ~ 2,500 kPa 0 ~ 60,000 kPa | Guage |
| | A4 A5 A6 | 0 ~ 200 kPa 0 ~ 1,000 kPa 0 ~ 2,000 kPa | Absolute |
| ATT2100 | | 200 [~] 650 °C | RTD |
| | | -200 ~ 1,820 °C | TC |

^{*} RTD : Register Temperature Detector, TC : Thermo Couple

Documentation:

- Drawings : MD-ASS-3100-HM rev 1, MD-ASS-3100-SM rev 1, MD-ASS-3100-HPSM rev 1, MD-COM-3X00-IMW rev 0, 3200-ASS-100 rev 1, MD-COM-3X00-IMW rev 0, 2100-ASS-100 rev 1, MD-COM-2100-IMW rev 0

- Test reports : 10-\$430-6(2010.4.15), PLS11116(2011.2.14), 10-\$430-3(2010.5.29) 10-1571-262-1(2010.12.30), 10-1571-244-2(2010.11.30), 11-\$420-001-1(2011.1.25) 11-\$420-001-2(2011, 1.25), 11-\$420-001-3(2011, 1.25) issued by KTL

- Ex-proof certificate: KEMAO7ATEX0103X, KEMAO9ATEX0188X issued by KEMA Quality B.V

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