**DIVISION 28 ELECTRONIC SAFETY AND SECURITY**

**SECTION 28 20 00 ELECTRONIC SURVEILLANCE**

**SECTION 28 23 00 VIDEO SURVEILLANCE**

**SECTION 28 23 29 VIDEO SURVEILLANCE REMOTE DEVICES AND SENSORS**

**1 General**

**1.1 General requirements**

A) The components and materials used for the construction of the products are standard type, they are manufactured and available also as spare parts, as long as the products remain on the market.

B) All products and versions will be severely tested and validated by the internal laboratories of the manufacturer before being released on the market.

C) All products released on the market by the manufacturer are designed for 24x7x365 constant use.

D) For all products a Technical Support service is available for free via phone and e-mail.

**1.2 Quality**

A) The manufacturer has to repair or replace without charge any products in which construction and/or material defects are found for the stated warranty period, starting from the delivery date of the material.

B) The specified devices must be manufactured in Italy following the standards of EN ISO 9001: 2008 certification.

**1.3 Environmental sustainability**

A) All products must comply with RoHS-6/6 according to the specifications 2011/65/EU, 2005/717/EC, 2006/122/EC and REACH according to the specifications EC 1907/2006.

**1.4 Certifications**

A) All products must have the following certifications:

1. ATEX (EN 60079-0:2009, EN 60079-1:2007, EN 60079-31:2009)

a. Ex II 2G Ex d IIC T6 Gb

b. Ex II 2D Ex t IIIC T85 °C Db IP66

2. CE 0044: notify number from competent body

3. EAC EX

a. Ex d IIC T6 Gb

b. Ex tb IIIC T85 Db IP66

**2 Products**

**2.1 Ex-proof P&T for thermal cameras**

A) The system includes a housing and a P&T motor designed for the horizontal and vertical movement for outdoor installations.

B) Equipped with a germanium window designed for applications with thermal cameras.

C) The germanium composition, with its exceptional characteristics, allows the transmission from 7.5 up to 14μm IR with the best optical quality.

D) The distinctive feature of the device is the absence of external cables in rotation, either for the P&T control, camera and lens. This solution simplifies the P&T unit installation and maintenance.

E) A supplied pre-wired multi-core cable comes out from the base of the P&T through a cable gland.

F) The system is standard equipped with preset, housing heater and auto-pan function; optional sunshield.

G) The P&T unit is constructed from strong Anticorodal aluminium die-cast alloy of AISi7Mg EN – AB 42000.

H) The Ex-proof P&T unit for thermal camera features the following specifications:

1. General:

a. Solid Anticorodal aluminium construction

b. Bicomponent polyurethane coating with orange peel effect, color RAL7032

c. Germanium window

d. Horizontal rotation 360° with 6°/s speed

e. Vertical rotation -90°/+90° with 2.4°/s speed

f. Integrated housing

g. IP66

h. Housing heater and preset

i. Optional housing sunshield

j. A pre-wired multi-core armoured cable, 7.5m long, is included with the unit and comes out from the base of the P&T through a cable gland

2. Mechanical features:

a. Horizontal rotation from 0° to 360°

b. Vertical rotation -90° to +90°

c. Pan speed (fixed): 6°/s

d. Tilt speed (fixed): 2.4°/s

e. Horizontal Torque: 2.5kgm

f. Vertical torque: 6kgm

g. Adjustable horizontal limit switch (only for the Autopan function)

h. 1x Ex d 3/4” NPT IP66 ATEX cable gland for armoured cable at the base of the P&T

i. Pre-wired multipolar armoured cable 7.5m (24ft) length, diameter 20.8mm (0.8in): 25 poles 0.5mm, 4 poles 1mm, 2 RG175 of 75Ohm

j. Internal usable area: 100x100x280mm (4x4x11in)

k. Unit weight: 56.5kg (125lb)

l. Germanium window:

1. Dimensions (ø): 155mm - 6in (external), 114mm - 4.5in (internal)

2. Thickness: 12mm

3. External scratch-resistant treatment: Hard Carbon Coating (DLC)

4. Internal antireflection treatment

5. Spectral range 7.5µm ÷ 14µm

3. Electrical features:

a. Power supply: 24Vac, 50/60Hz

b. Horizontal / vertical motor consumption: 50W max

c. Standard vertical and horizontal preset potentiometers

d. Heater: Ton 10°C±4°C, Toff 25°C±3°C

1. IN 24Vac, consumption 20W max

e. Devices to install inside the housing:

1. Camera equipped with lens with max total power of 20W

2. Power supply max 24Vac (only for analog camera)

3. Useful volume for camera / lens: 2800cm ³

4. Minimum distance between the walls of the housing and the camera/lens: 12mm

4. Environmental features:

a. Indoor / Outdoor

b. Operating temperature with heater: -20°C / +50°C (-4°F / 122°F)

5. Optional Accessories:

a. Sunshield 650mm for EXPTC series (EXPTS000)

6. Brackets and Adapters:

a. Bracket for EXPT series in RAL7032 (EXPTWB000)

I) Available models:

1) EXPTC010G: P&T 24Vac with integrated housing for thermal camera, equipped with Ø114mm germanium front window, RAL7032, 7.5m (25ft) pre-installed multipolar cable, preset, autopan and housing heater 24Vac. Sunshield not included. ATEX Ex II 2G Ex d IIC T6 Gb Ex II 2D Ex t IIIC T85°C Db IP66. GOST-R 1 Ex d IIC T6 Gb Ex tb IIIC T85°C Db IP66