

1. **EC-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in
Potentially explosive atmospheres
Directive 94/9/EC**

3. Reference: **VTT 08 ATEX 066**

4. Equipment: **Portable luminaire**

Certified types: **CentaurSlam Hornet 1x18W,
CentaurSlam Hornet 1x36W,
CentaurSlam Hornet 2x36W and
CentaurSlam Hornet Linear 2x36W**

5. Manufactured by: **Centaurea Oy**

6. Address: **Kipinätie 1
FI-60510 Hyllykallio
Finland**

7. This equipment or protective system and any acceptable variations thereto is specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.

8. VTT, notified body number 0537, in accordance with Article 9 of the Council Directive 94/9/EC of March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. VTT-S-08016-08

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**IEC 60079-0 (2007)
EN 60079-7 (2007)
EN 60079-18 (2004)
EN 61241-1 (2004)**

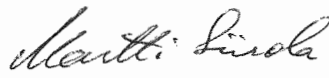


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10. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
11. This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
12. The marking of the equipment or protective system shall include the following:

**II 2 GD****Ex e mb IIB T3 Gb****Ex t IIIC T90 °C Db****IP 66****-40 °C ≤ T_{amb} ≤ +40 °C or -20 °C ≤ T_{amb} ≤ +40 °C**

Espoo, 24.9.2008

VTT, Technical Research Centre of Finland

Martti Siirola
Research scientistRisto Sulonen
Senior research scientist

13. **Schedule**14. **EC-TYPE EXAMINATION CERTIFICATE VTT 08 ATEX 066**

15. Description of Equipment

Rated values

Power	18W, 36W, 2x36W
Voltage	12 V, 24 V, 42 V, 110 V and 230 V AC /DC
Frequency	0 Hz, 50 Hz or 60 Hz

Construction

Portable luminaire with fluorescent lamps supplied by electronic ballasts. Electronic ballasts and lamp caps are moulded with silicone rubber. The whole assembly, lamps, ballast and battery, together with connecting devices for supply cable has been built into the enclosure made of polycarbonate tube with shock absorbing plastic endplates. The luminaire is fitted with permanently connected cable H07RN-F or cable suitable for heavy industrial use. As an option the luminaire can have a through wiring or Ex ed-certified socket and plug. With the socket the allowed ambient temperature range is $-20\text{ °C} \leq T_{\text{amb}} \leq +40\text{ °C}$ or that marked on the socket but not wider than $-40\text{ °C} \leq T_{\text{amb}} \leq +40\text{ °C}$.

Degree of protection

- without Ex-socket:	IP 66
- with Ex-socket:	as marked on the used Ex-certified socket but not higher than IP 66

Drawings and documents: Technical file CSH18-36 W version 1.0

16. Report No. VTT-S-08016-08

17. Special conditions for safe use

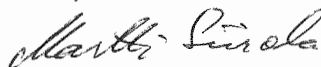
None

18. Essential Health and Safety Requirements

Met by the compliance with the standards: IEC 60079-0 (2007), EN 60079-7 (2007), EN 60079-11 (2007), EN 60079-18 (2004), EN 61241-1 (2004)

Espoo, 24.9.2008

VTT, Technical Research Centre of Finland



Martti Siirola
Research scientist



Risto Sulonen
Senior Research scientist

**SUPPLEMENT 2 TO EC-TYPE EXAMINATION CERTIFICATE
VTT 08 ATEX 066**

Requested by:

Centaurea Oy, FINLAND

Apparatus:

Portable luminaire,

Certified types : **CentaurSlam Hornet 1x18W,
CentaurSlam Hornet 1x36W,
CentaurSlam Hornet 2x36W
CentaurSlam Hornet Linear 1x18W and
CentaurSlam Hornet Linear 2x36W**

Scope of the certificates

Except versions with built-in socket the certified equipment fulfil the requirements for the category 1 D equipment in the standard EN 61241-1 (2004) and can be marked as



**II 1 D
Ex t IIC T 150 °C Da
IP 66**

Special conditions for safe use

The equipment shall be used only so that over 5 mm dust layers cannot form on it.

This restriction shall be indicated on the equipment with a warning text.

Espoo, 25.8.2009

VTT, Technical Research Centre of Finland



Pertti Kokkonen
Research engineer



Risto Sulonen
Senior research scientist