1. **EC-TYPE EXAMINATION CERTIFICATE**

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

3. Reference: **VTT 07 ATEX 056X**

4. Equipment: **Junction box**

Certified type: **LJB2-78-83, LJB3-78-83 or LJB22-78-83**

5. Manufactured by: **Labkotec Oy**

6. Address: **Myllyhaantie 6**
FI-33960 Pirkkala
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-09966-07.

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

EN 60079-0 (2006)
EN 60079-11 (2007)
EN 60079-26 (2007)

VTT
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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. This certificate does not cover these.

12. The marking of the equipment or protective system shall include the following:

II 1 G Ex ia IIB/IIC T5/T6 Ga
T6: T_{amb} = -40 ... + 60 °C
T5: T_{amb} = -40 ... + 85 °C

Espoo, 07.01.2008

VTT Technical Research Centre of Finland

Risto Sulonen
Senior research scientist

Martti Siirola
Research scientist

13. # Schedule

14. **EC-TYPE EXAMINATION CERTIFICATE VTT 07 ATEX 056X**

15. Description of Equipment

The junctions box type LJB2-78-83, LJB3-78-83 or LJB22-78-83 are meant to connecting exi-probes to the fixed intrinsically safe circuit. The junction box are equipped with 4 x 2,5 mm^2 mantle terminals and earthing facilities. The connecting boxes LJB2 and LJB22 have two gable entries (PG16) with gable glands. The connecting box LJB3 has three gable entries (PG16). In the boxes LJB2 and LJB3 gable glands are made of metal and are these boxes fill the requirement for IIC apparatus. The box type LJB22 the gable glands are made of plastics and box is IIB classified. The enclosure of the junction box is of aluminium. The box shall be grounded or connected to equipotential bonding.

Electrical data

The maximum voltage of the box is U_m = 90 V and the nominal current is I_N = 3 A.

Documents:

Junction box LJB2-78-83, Assembly and main dimensions, Drawing nr. XK16075Ds, 25.6.2007
Junction box LJB2-78-83, Part list, Drawing nr. XC16075Es, 25.6.2007
Junction box LJB3-78-83, Assembly and main dimensions, Drawing nr. XK15115Bs, 25.6.2007
Junction box LJB3-78-83, Part list, Drawing nr. XK15115Cs, 25.6.2007
Junction box LJB22-78-83, Assembly and main dimensions, Drawing nr. XK15359_s, 11.9.2007
Junction box LJB22-78-83, Part list, Drawing nr. XC15359_s, 13.8.2007
Assembly layout, LJB2, LJB3, LJB22, Drawing nr. XK15360_s, 17.12.2007
Marking label LJB2, LJB3, LJB22, Drawing nr. XK15365_e, 25.6.2007

16. Report No. VTT-S-09966-07

17. Special conditions for safe use:

1. The allowed ambient temperature range is -40°C ... +60°C for temperature class T6 and -40°C ... +85°C for temperature class T5.

2. There is ignition hazard if the enclosure is subjected to the impact or friction.

3. The gas group for junction box type LJB22 is IIB and the gas group for junction box type LJB2 or LJB3 is IIC.

18. Essential Health and Safety Requirements

Met by compliance with the standards referred in point 9.

Espoo, 07.01.2008

VTT Technical Research Centre of Finland

Risto Sulonen
Senior research scientist

Martti Siirola
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