



# Certificate of Compliance

**Certificate:** 70004585

**Master Contract:** 177805

**Project:** 70004585

**Date Issued:** September 3<sup>rd</sup> 2015

**Issued to:** ABTECH Ltd.  
199 Newhall Road  
Lower Don Valley  
Sheffield, South Yorkshire S9 2QJ  
United Kingdom

**Attention:** Steve Hartley

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only*



**Issued by:**

  
James May

**CLASS 3218 06 - INDUSTRIAL CONTROL EQUIPMENT - Miscellaneous Apparatus - For Hazardous Locations**

**Ex e IIC T(see below) or Ex e IIC T(see below)°C**

**Ex tb IIIC T(see below)°C**

**Class III, Div 1; Class II, Div 1, Groups E, F, and G**

**Type 4X**

Note: Ex tb and Class II/III marking only applies when the enclosure is mounted with the largest face in a vertical position.

HVJB-7 is limited to 11KV AC/DC and the following:

Ambient temperature range	Maximum dissipated power (W)	Temperature class	Temperature marking for dust
-20°C to +40°C	259	T4	T70°C
-50°C to +55°C	129.5	T4	T70°C
-50°C to +55°C	259	T150°C	T110°C



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HVJB-8 is limited to 11KV AC/DC and the following:

Ambient temperature range	Maximum dissipated power (W)	Temperature class	Temperature marking for dust
-20°C to +40°C	346	T4	T70°C
-50°C to +55°C	173	T4	T70°C
-50°C to +55°C	346	T150°C	T110°C

NKJB-7 is limited to 11KV AC/DC and the following:

Ambient temperature range	Maximum dissipated power (W)	Temperature class	Temperature marking for dust
-20°C to +40°C	259	T4	T70°C
-50°C to +55°C	259	T150°C	T110°C

NKJB-8 is limited to 11KV AC/DC and the following:

Ambient temperature range	Maximum dissipated power (W)	Temperature class	Temperature marking for dust
-20°C to +40°C	346	T4	T70°C
-50°C to +55°C	346	T150°C	T110°C

### **CONDITIONS OF ACCEPTABILITY**

- i. The maximum dissipated power for the Junction Boxes shall be limited to:

Type	Ambient temperature range	Maximum dissipated power (W)	Temperature class	Temperature marking for dust
HVJB-7	-20°C to +40°C	259	T4	T70°C
	-50°C to +55°C	129.5	T4	T70°C
	-50°C to +55°C	259	T150°C	T110°C
HVJB-8	-20°C to +40°C	346	T4	T70°C
	-50°C to +55°C	173	T4	T70°C
	-50°C to +55°C	346	T150°C	T110°C
NKJB-7	-20°C to +40°C	259	T4	T70°C
	-50°C to +55°C	259	T150°C	T110°C
NKJB-8	-20°C to +40°C	346	T4	T70°C
	-50°C to +55°C	346	T150°C	T110°C



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- ii. When the HVJB Junction Box is fitted with BPG Junction Boxes as approved by CSA 1547965 (LR 98979-12), the total dissipated power and current shall not exceed the values in the table below:

Type	Maximum Power Dissipation - Main Terminals and Wiring		
	4-Way power (W)	3-Way power (W)	2-Way power (W)
HVJB-7	Not permitted	248	172
HVJB-8	335	259.5	173

Note 1: If the HVJB-8 is fitted with a BPG terminal box the maximum permitted current is reduced from 980A to 949A

Note 2: BPG Junction boxes shall not be fitted to HVJB junction boxes marked T150°C for gas.

- iii. Junction Box that are marked with the ambient temperature range -50°C to +55°C shall only be constructed using an empty SX enclosure with a minimum depth of 300 mm, without windows and fitted with silicone gaskets.
- iv. Main conductors shall be equal to or larger than No. 14 AWG, flame-retardant type SIS or equivalent and with a temperature rating not less than 90C.
- v. Before clamping all engaging surfaces shall be clean and either not plated, tinned, silver plated or equivalent.
- vi. This certification does not cover any additional coatings, cable, crimps, terminals (covered under any other certification).

#### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 94/91M	- Special Purpose Enclosures
CAN/CSA-C22.2 No. 60079-0:11	- Explosive Atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No. 60079-7:12	- Explosive Atmospheres – Part 7: Equipment protection by increased safety "e"
CAN/CSA-C22.2 No. 60079-31:12	- Explosive atmospheres — Part 31: Equipment dust ignition protection by enclosure "t"
CAN/CSA-C22.2 No. 31-14	- Switchgear assemblies (Reference only)



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### **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.
- Manufacturer's name: "ABTECH", or CSA Master Contract Number "177805", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- The CSA Mark, as shown on the Certificate of Conformity.
- Enclosure ratings: As specified in the PRODUCTS section, above.
- Hazardous Location designation: As specified in the PRODUCTS section, above (may be abbreviated).
- Method of Protection markings (*as applicable*)
- Manufacturing date in MMY format, or serial number, traceable to year and month of manufacture.
- Maximum Power Dissipation: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Temperature code: As specified in the PRODUCTS section, above.
- The following warnings 'WARNING: ISOLATE ELSEWHERE BEFORE OPENING' 'CABLE ENTRY POINT CAN REACH 30°C ABOVE AMBIENT'