



Certificate of Compliance

Certificate: 70212082

Master Contract: 158887

Project: 70212082

Date Issued: 2019-02-25

Issued to: Phoenix Contact GmbH & Co. KG
Flachsmarktstrasse 8
Blomberg, Nordrhein-Westfalen D-32825
GERMANY

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: Jean-Philippe Laplante
Jean-Philippe Laplante

PRODUCTS

CLASS - C225206 - PROCESS CONTROL EQUIPMENT

CLASS - C225286 - PROCESS CONTROL EQUIPMENT-Certified to US Standards

Component-type Built-in DIN Rail DC/DC Converter, Models: QUINT4-PS/24DC/24DC/10/SC & QUINT4-PS/24DC/24DC/10/PT; Input rated: 24Vdc, 13.8A; Output rated: 24 to 29.5Vdc, 10A@24Vdc – 8.13A@29.5Vdc up to 60°C with derating 2.5% of nominal output power of 240W per Kelvin from 60°C to 70°C: 7.5A@24Vdc – 6.1A@29.5Vdc. The product was evaluated in boost mode of 300W with output of 12.5A@24Vdc to 10.17A@29.5Vdc at max temperature of 40°C

Notes:

1. The above model is Equipment Pollution Degree 2, Installation Category II for a maximum transient of 2500V
2. The unit has been evaluated as a component where the acceptability of the combination with the end use product shall be re-evaluated.
3. Mode of operation: Continuous
4. Environmental Conditions: Extended: -25°C to 70°C with derating from 60°C to 70°C at nominal power of 240W / -25°C to 40°C in boost mode 300W, 5000 m max, less than 95% RH non-condensing.
5. This product was not evaluated to be used on hazardous location.
6. The unit is DC/DC converter with SELV input and metal housing that could be connected to PE – (end product consideration)



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APPLICABLE REQUIREMENTS

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| CAN/CSA-C22.2 No. 61010-1-12 | - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements |
| CAN/CSA-C22.2 No. 61010-2-201:14 | - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 2-201: Particular requirements for control equipment |
| UL Std. No. 61010-1 (3 rd Edition) | - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements |
| UL Std. No. 61010-2-201: 2018 | - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 2-201: Particular requirements for control equipment |

CONDITIONS OF ACCEPTABILITY

1. End product should provide double or reinforced insulation between primary circuit and input of the power supply (EUT). Input voltage is rated SELV. Rated output power is 240 W and boost output power is 300 W.
2. The unit provides no disconnecting device. Disconnect device must be provided in the final installation.
3. Safety Instructions: Built in unit for a specific end product; manual/safety instructions are end product considerations. In addition there are some safety instructions in the manual.
4. The input and output terminals and connectors are suitable for factory and field wiring.
5. The power supply is rated: not classified (DC/DC converter with SELV input and metal housing that could be connected to PE - end product consideration).
6. The transformers TR4000 and TR9000 provide reinforced insulation. Transformer T4200 provide functional insulation. TR9000 transformer is built up to fulfil the requirement of insulation class B. TR4000 and T4200 transformers are built up to fulfil the requirement of insulation class F. All provide in addition an UR (OBJY2) insulation system. (Refer also to List of safety critical components).
7. The equipment has been evaluated for use in a Pollution Degree 2 and a maximum altitude of 5000m.
8. A suitable Electrical and Fire enclosure shall be provided in the end equipment.
9. The product was evaluated for a maximum ambient of 60 °C (without derating for nominal output power: 240 W) and 70 °C (with derating 2,5 % of nominal output power per Kelvin from 60 °C: 7,5 A@24 Vdc; 6,1 A@29,5 Vdc). Additionally the product was evaluated for maximum ambient of 40 °C at boost mode (300 W; 12,5 A@24 Vdc; 10,17 A@29,5 Vdc). Derating due to output voltage regulation (29,5 Vdc) was considered per manufacturer's specifications. The rated output power shall not be exceeded. The temperature test was performed in a heating chamber, without forced air cooling.