A3486

3-phase 220/400 Vac. 48 Vdc (2 ch x 2 kW/1 ch x 4 kW) Converter

3U, 19" Eurorack	Positive	2
Package	Polarity	No. of Channels

The A3486 is a 3-phase 220/400 Vac to 48 Vdc converter in a 3U 19” Euro Rack, 50 cm deep, for integrating 48 V power-supply management into the EASY system. It provides two 2 kW channels, or one tracked 4 kW output, with remotely programmable 48 V ± 10% dynamics and up to 40 A programmable output current per channel. Overcurrent protection with programmable trip time, over/undervoltage monitoring, local or remote inhibit, and ripple below 100 mV rms are included. It is designed for LHC hostile areas.

Overview

Product Highlights

- 3U 19” Euro Rack, 50 cm deep
- 48V ± 10% output dynamics (remotely programmable)
- Overcurrent protection (programmable trip time)
- Voltage ripple smaller than 100 mV rms
- Vertical “bottom-to-top” forced air cooling
- Dual 2 kW or Single 4 kW 48V output
- 40 A maximum programmable output current (per channel)
- Overcurrent, Undervoltage and Overvoltage status remotely available
- Local or remote inhibit function
- EASY-class magnetic field and radiation tolerance

Product Description

The CAEN **Mod. A3486** is a two channel 400 Vac - 48 Vdc converter, which allows to integrate into the EASY channels control also the management of the 48 V Power Supplies. Each channel provides a 2 kW output (referred to earth) and can be tracked in order to obtain one 4 kW output. This module is designed to work as main converter in LHC hostile areas, thus completing the EASY system. Features include local or remote control, overload protection and local or remote inhibit function. The module front panel houses LEDs and channels monitor signals. The channel outputs are provided through Anderson Power single pin connectors.

Mod. A3486S, with power supply and link connection on the front panel, is also available.

AT A GLANCE

Package	**3U, 19" Eurorack**
Polarity	**Positive**
No. of Channels	**2**
AC input	**3-phase 400 V / 50 Hz**
Output Voltage	**44 ÷ 52 V**
Max Output Power	**4000 W**

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Technical Specifications

Packaging	• 19″-wide, 3U-high Euro-mechanics rack • Depth: 50 cm
Output Polarity	Positive; common floating ground DC insulation vs. Earth >4K Ω; max Vcm (common mode) : ±10 V
AC input	3-phase 220/400 V 50/400 Hz
DC input	2A @ 48V
Output Voltage	44 ÷ 52 V adjustable via software
Max. Output Power	4 kW
Voltage Ripple	<100 mVpp measured on 10Hz to 20MHz bandwidth
Voltage Monitor vs. Output Voltage Accuracy	max. ±0.5%
Voltage Set vs. Output Voltage Accuracy	max. ±0.5%
Current Monitor vs. Output Current Accuracy:	± 1A ± 2% of reading
Current Set vs. Output Current Accuracy	± 1A ± 2% of setting

Test Set Up

- Cable: length = 2m; ⌀= 10mm (for both output and return)
- Test Load: 250÷2000 W (nominal)
- Load capacitance: 100µF electrolytic // 100nF ceramic *(// to the load)*

Ordering Information

ORDERING CODE	DESCRIPTION
WA3486LSXAAA	A3486LS – 3-phase 220Vac – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – Frontal Acc
WA3486LXAAAA	A3486L – 3-phase 220Vac – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – APP Conn.
WA3486SXAAAA	A3486S – 3-phase 400 Vac – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – Frontal Acc
WA3486USXAAA	A3486US – 3-phase 220 Vac USA standard – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – Frontal Acc
WA3486UXAAAA	A3486U – 3-phase 220 Vac USA standard – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – APP Conn.
WA3486XAAAAA	A3486 – 3-phase 400 Vac – 48 Vdc(2 ch x 2 kW/1 ch x 4 kW) Converter – APP Conn.

1. Ordering codes and descriptions are reproduced from the product record. Availability is confirmed at order entry.

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