

# PU500

## 400-500 WATTS DC/DC INDUSTRIAL CONVERTER

### FEATURES

- 400W - 500W Industrial Converter
- Optimized input voltage ranges
- Input ranges from 18 to 300Vdc
- Single outputs from 24 to 60Vdc
- Reverse input voltage protection
- Fully encapsulated meets IP20
- Overvoltage Protection OVP
- Extra output with series diode
- Over/under voltage alarm with relay output
- Output voltage adjustable from front panel
- 19' Rack Mount or DIN Mount or Wall Mount



### SPECIFICATIONS

INPUT	
Input voltages	24Vdc: 18-32Vdc 48Vdc: 38-60Vdc 110Vdc: 88-150Vdc 220Vdc: 175-300Vdc
Reverse Input Protection	Inputs 24V, 48V, 72V with Parallel Diode Inputs 110V, 220V Thyristor
OUTPUT	
Output voltages	See Selection Table
Output current	See Selection Table
Source regulation	0.1%
Load regulation	0.2% (0 to 100% load)
Transient recovery	<3ms. 10 to 90% load step to within 3% of nominal output voltage
Output ripple	Typ 30mV (60kHz)
Input ripple	150:1 attenuation on Output (50-400Hz)
Temperature coefficient	0.02% per °C
Output adjustment	95%-110% with 15 Turn potentiometer
Current limit	105%, rectangular
Remote sense	Yes
Soft start	Yes
Startup time	1 Sec
Holdup time	2 - 25ms
OPERATING	
Efficiency	88%-91%
Design topology	Push-pull
Switching frequency	40kHz
Overvoltage protection	Yes, 115% of nominal voltage
Isolation	Input / Output: 24, 48, 72, 2kVdc Input / Output: 10, 220, 2.5kVac, 4kVdc Input / Case: 24, 48, 72, 2kVdc Input / Case: 110, 220, 2.5kVac, 4kVdc Output / Case: < 75Vdc output, 2kVdc Output / Case: > 75Vdc output, 2.5kVac, 4kVdc
ENVIRONMENTAL	
Operating Temperature	-25C to +55C (100% load) +55C to +70C (with derating)
Temperature coefficient	0.02%/C
Storage temperature	-40°C to 85°C.
Cooling	Convectonal cooling.

FEATURES	
Overvoltage protection OVP	The output voltage is limited to 15% over nominal output voltage by a extra regulated circuit
Voltage Sense	External output voltage sense used when the voltage regulation at the load is critical. The sense can compensate voltage drops up to 5% of the nominal voltage
Remote sense	External sense is used when the voltage regulation at the loa is critical. The sense can compensate voltage drops up to 5% of nominal voltage
Voltage Alarm	Over / Under voltage alarm built in relay changes state if converter output voltage is not with 90% to 115% of nominal output. User selects NO or NC relay function. The relay is rated 30V 0.5A
Inhibit input / Power down	This input allow remote start and shutdown of the converter by a signal voltage of 5 to 12V. Max 35mA
OPTIONAL FEATURES	
Series Diode	Use the series diode output when the output is connected in parallel with other power supplies to achived redundancy. The output current is derated with 10% on 24 to 48V outputs.
Conformally coating	For environment with high non condensing humidity, max 98% RH
Inrush current	Inrush current limit with NTC, reduces the inrush current during start up. The input vottage range will be affected. Only available on C & D inputs.
Mounting Options	See Technical Illustrations
STANDARDS	
Safety standards	IEC60950, Low Voltage Directive
C-Tick	AS/NZS CISPR11 Group 1, Class A
EMC	EN IEC 61000-6-3, Emission EN IEC 61000-6-2, Immunity EN IEC 61000-4-4, 4kV EN IEC 61000-4-5 level 2 & 3
MECHANICAL	
Dimensions	232 x 210 x 86mm
Weight	4.2kg
Mounting	See Technical Illustrations

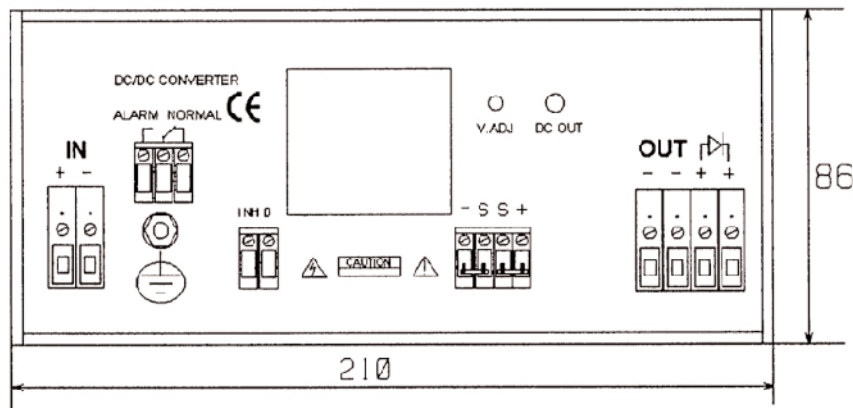
# PU500

400-500 WATTS DC/DC INDUSTRIAL CONVERTER

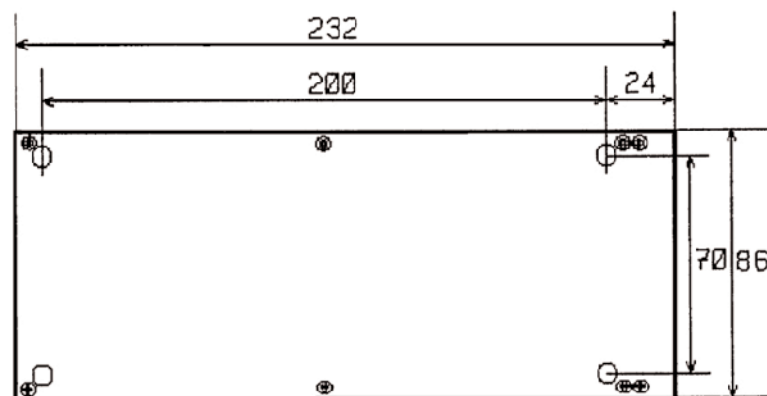
## SELECTION TABLE

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	POWER
PU500 24/24	18-32V	24V	16.7A	400W
PU500 24/28	18-32V	28V	14.3A	400W
PU500 24/36	18-32V	36V	11.2A	400W
PU500 24/48	18-32V	48V	8.4A	400W
PU500 24/60	18-32V	60V	6.7A	400W
PU500 48/24	38-60V	24V	20.9A	500W
PU500 48/28	38-60V	28V	17.9A	500W
PU500 48/36	38-60V	36V	13.9A	500W
PU500 48/48	38-60V	48V	10.5A	500W
PU500 48/60	38-60V	60V	8.4A	500W
PU500 110/24	88-150V	24V	20.9A	500W
PU500 110/28	88-150V	28V	17.9A	500W
PU500 110/36	88-150V	36V	13.9A	500W
PU500 110/48	88-150V	48V	10.5A	500W
PU500 110/60	88-150V	60V	8.4A	500W
PU500 220/24	175-300V	24V	20.9A	500W
PU500 220/28	175-300V	28V	17.9A	500W
PU500 220/36	175-300V	36V	13.9A	500W
PU500 220/48	175-300V	48V	10.5A	500W
PU500 220/60	175-300V	60V	8.4A	500W

## TECHNICAL ILLUSTRATIONS



FRONT PANEL

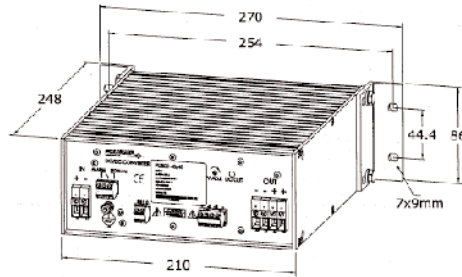


SIDE VIEW

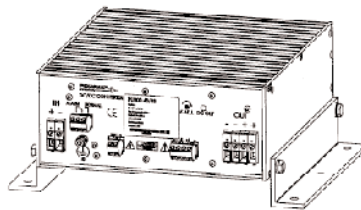
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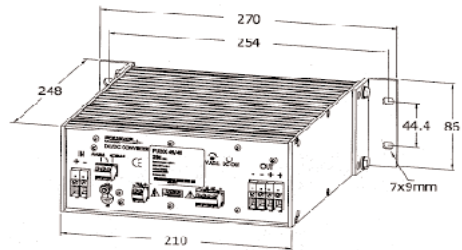
## MOUNTING OPTIONS



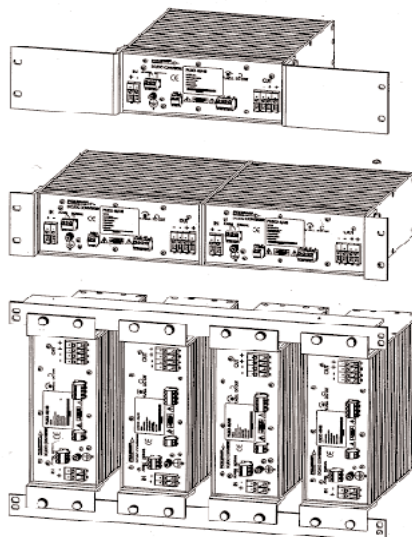
PU300/500 wallmounted. Brackets PL86-1 (standard)



PU300/500 wallmounted, L216-1 (optional)



PU300/500 wallmounted. Brackets PL85-1 (standard)



PU300/500 19" rack.

- 1) Brackets L86-3 (optional)
- 2) 19" rack mounting set (optional)
- 3) Standard brackets + L480-1 (optional)