

PU300-PU500

216-500 WATTS DC/DC SINGLE

Features

- Over/under voltage alarm
- Convection cooled
- High efficiency
- Overvoltage and over current protection
- Operating temperature range -25°C to 55°C
- Reverse input voltage protection
- Extra output with series diode



Specification

INPUT

Input ranges	PU300: 10–30V (A), 20–60V (B), 50–150V (C), 90–270VDC (D) PU500: 18–32V(24), 38–60V (48), 88–150V (110), 175–300VDC (220)
Reverse input voltage protection	Parallel diode, Code (A) (B) (24) (48) Series diode, Code (C) (D) (110) (220)

OUTPUT

Output voltages	See table
Min. output adjustment range with 15 turn potentiometer	95%–110%
Typ. output ripple (80kHz) V pk-pk	15mV
Source regulation	0.1%
Load regulation (0–100% load) master	0.2%
Temperature coefficient	0.02% per °C
Current limit, rectangular	105%
Remote sense	Yes
Transient recovery time for 10% to 90%	<3mS. Load step to within 3% of nominal output voltage
Soft start	Yes
Startup time, type	1 sec
Holdup time	2–25mS. Contact Powerbox

OPERATING

Efficiency	PU300: 77%–88%, PU500: 88%–91%
Design topology	Push-pull
Switching frequency	40kHz

ISOLATION TESTABLE LEVELS

Input/output: Input code	
(A)(B)(24)(48)	2KVdc
(C)(D)(110)(220)	4KVdc
Input/case: Input code	
(A)(B)(24)(48)	2KVdc
(C)(D)(110)(220)	4KVdc
Output/Case All Outputs	2kVDC

ENVIRONMENTAL

Operating Temperature	Range at 100% load: -25°C to +55°C
Conduction Cooling	With derating: -25°C to +70°C
Storage Temperature Range	-40°C to +85°C

STANDARDS AND APPROVALS

Safety standards	IEC950, EN60950, CE LVD 73/23/EEC
C-Tick	AS/NZS CISPR11 Group 1, Class A
EMC standards	EN/IEC 61000-6-2, EN/IEC 61000-4-2, EN/IEC 61000-4-3, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6
EMI standards	EN/IEC 61000-6-3 EN55011/EN55022 Level B

MECHANICAL

Dimensions (HxWxD)	86x210x232mm
Weight	4.2kg
Mounting brackets	Please consult Powerbox for mounting options

PU300-PU500

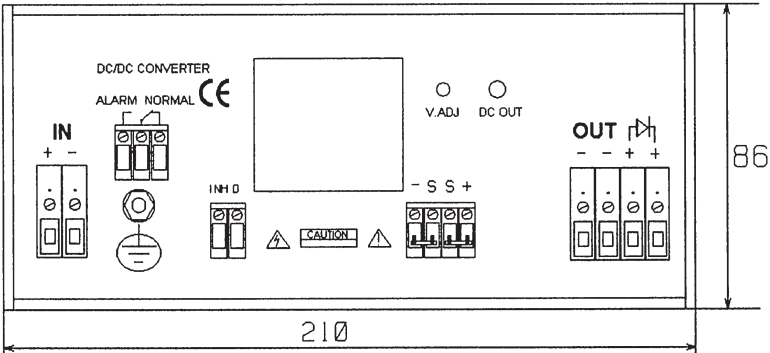
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Selection Table

MODEL NUMBER	INPUT	OUTPUT	OUTPUT POWER	MODEL NUMBER	INPUT	OUTPUT	OUTPUT POWER	MODEL NUMBER	INPUT	OUTPUT	OUTPUT POWER
PU300A12	10-30V	12V 18A	216W	PU300C13.8	50-150V	13.8V 21.8A	300W	PU500 24/36	18-32V	36V 11.2A	400W
PU300A13.8	10-30V	13.8V 16A	220W	PU300C15	50-150V	15V 20A	300W	PU500 24/48	18-32V	48V 8.4A	400W
PU300A15	10-30V	15V 16A	240W	PU300C24	50-150V	24V 12.5A	300W	PU500 24/60	18-32V	60V 6.7A	400W
PU300A24	10-30V	24V 10A	240W	PU300C28	50-150V	28V 10.8A	300W	PU500 48/24	38-60V	24V 20.9A	500W
PU300A28	10-30V	28V 8.58A	240W	PU300C36	50-150V	36V 8.34A	300W	PU500 48/28	38-60V	28V 17.9A	500W
PU300A36	10-30V	36V 6.67A	240W	PU300C48	50-150V	48V 6.25A	300W	PU500 48/36	38-60V	36V 13.9A	500W
PU300A48	10-30V	48V 5A	240W	PU300C60	50-150V	60V 5A	300W	PU500 48/48	38-60V	48V 10.5A	500W
PU300A60	10-30V	60V 4A	240W	PU300D12	90-270V	12V 25A	300W	PU500 48/60	38-60V	60V 8.4A	500W
PU300B12	20-60V	12V 25A	300W	PU300D13.8	90-270V	13.8V 21.8A	300W	PU500 110/24	88-150V	24V 20.9A	500W
PU300B13.8	20-60V	13.8V 21.8A	300W	PU300D15	90-270V	15V 20A	300W	PU500 110/28	88-150V	28V 17.9A	500W
PU300B15	20-60V	15V 20A	300W	PU300D24	90-270V	24V 12.5A	300W	PU500 110/36	88-150V	36V 13.9A	500W
PU300B24	20-60V	24V 12.5A	300W	PU300D28	90-270V	28V 10.8A	300W	PU500 110/48	88-150V	48V 10.5A	500W
PU300B28	20-60V	28V 10.8A	300W	PU300D36	90-270V	36V 8.34A	300W	PU500 110/60	88-150V	60V 8.4A	500W
PU300B36	20-60V	36V 8.34A	300W	PU300D48	90-270V	48V 6.25A	300W	PU500 220/24	175-300V	24V 20.9A	500W
PU300B48	20-60V	48V 6.25A	300W	PU300D60	90-270V	60V 5A	300W	PU500 220/28	175-300V	28V 17.9A	500W
PU300B60	20-60V	60V 5A	300W	PU500 24/24	18-32V	24V 16.7A	400W	PU500 220/36	175-300V	36V 13.9A	500W
PU300C12	50-150V	12V 25A	300W	PU500 24/28	18-32V	28V 14.3A	400W	PU500 220/48	175-300V	48V 10.5A	500W
								PU500 220/60	175-300V	60V 8.4A	500W

Technical Illustrations

PU300-PU500 - FRONT PANEL



Side View

