

# PD SERIES

# 85~110W DC/DC CONVERTERS Single Output



H35×W70×L158 (mm)

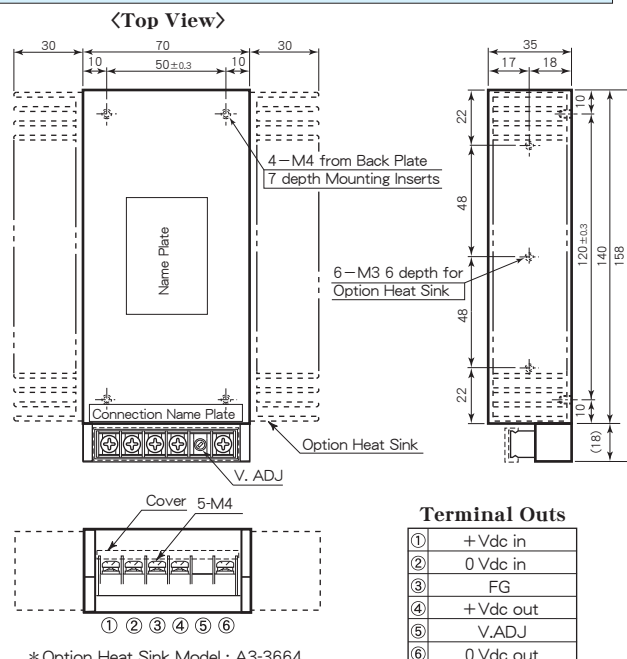
## Features

- Wide Input Voltage Range
- High Efficiency 83%~90%
- Input-Output Isolation (AC2000V)
- Low Output Ripple and Noise
- Long Life by mounting on Chassis or Using Heat Sink
- Input Low Voltage Protection
- Input Over Voltage Protection
- Output Over Voltage Protection 120%~140% Operation
- Operating Ambient Temp. -25°C~+71°C
- Max. Case Temperature +85°C
- Conformity to RoHS Directive
- 広範囲な入力電圧範囲
- 高効率 83%~90%
- 入出力間絶縁 (AC2000V)
- 出力リップルノイズが小さい
- シャーシや放熱板への取付により長寿命化
- 入力低電圧保護回路内蔵
- 入力過電圧保護回路内蔵
- 出力過電圧保護回路内蔵 120%~140%動作
- 動作周囲温度 -25°C~+71°C
- 最大ケース温度 +85°C
- RoHS 指令対応

## General Characteristics

- Input Voltage, Range (at Ta:25°C, Full Load, Nominal Vin) DC12, 24, 48, 96V (See Table 1)
- Output Voltage, Current See Table 1
- Output Voltage Adjustment ±5%
- Efficiency See Table 1
- Line Regulation 0.1% max. (at Vin Range)
- Load Regulation 1% max. (0~100% Load)
- Output Ripple (0.1% Vout+50mV)p-p max.
- Output Noise (0.5% Vout+50mV)p-p max.
- Short Circuit Protection Built-in, Auto-restart (See Fig 2)
- Output Over Voltage Protection Built-in, Shut-down (120%~140% Vout)
- Temperature Coefficient 0.02%/°C max.
- Operating Ambient Temp. -25°C~+71°C (See Fig 1)
- Max. Case Temp. +85°C
- Storage Temp. -40°C~+85°C
- Isolation Voltage AC2000V one minute (Input-Output-Case)
- Isolation Impedance 100MΩ min. (at DC1000V) (Input-Output-Case)
- Weight Main Body : 800g max.  
Pair Heat Sinks : 250g max.
- Humidity 20~95% RH
- Shock 490m/s<sup>2</sup> (11msec 3directions)
- Vibration 10~55Hz 98m/s<sup>2</sup> (30minutes 3directions)
- Surface Structure Aluminum Case
- MTBF 120,000H (Ta:25°C, 80%Load, Nominal Vin)
- Warranty 5 years

## Terminal Outs & Dimensions (±0.5mm)



\* Option Heat Sink Model : A3-3664

## Selection Guide

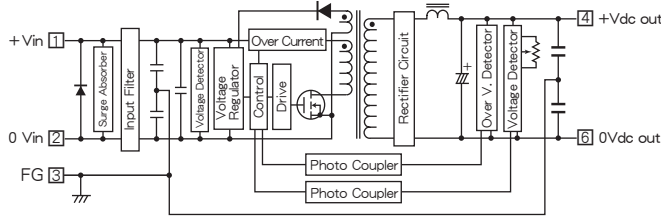
Table 1

Model Number	Input Volt. (Range) (V. DC)	Output Voltage (V. DC)	Output Current (A)	Efficiency (typ.) (%)
PD12 - 3.3S 26A	12 (6~18) at 50% Load	3.3	26	83
PD12 - 5S 20A		5	20	85
PD12 - 12S8.3A		12	8.3	85
PD12 - 13.8S7.3A		13.8	7.3	85
PD12 - 15S 7A		15	7	85
PD12 - 24S4.5A		24	4.5	86
PD12 - 48S2.3A		48	2.3	88
PD12 - 100S1.1A		100	1.1	90
PD12 - 140S0.8A		140	0.8	90
PD12 - 200S0.55A		200	0.55	90
PD12 - 300S0.36A		300	0.36	90
PD24 - 3.3S 26A		24 (14~40) at 50% Load	3.3	26
PD24 - 5S 20A	5		20	85
PD24 - 12S8.3A	12		8.3	86
PD24 - 13.8S7.3A	13.8		7.3	86
PD24 - 15S 7A	15		7	86
PD24 - 24S4.5A	24		4.5	88
PD24 - 48S2.3A	48		2.3	89
PD24 - 100S1.1A	100		1.1	90
PD24 - 140S0.8A	140		0.8	90
PD24 - 200S0.55A	200		0.55	90
PD24 - 300S0.36A	300		0.36	90
PD48 - 3.3S 26A	48 (28~80) at 50% Load		3.3	26
PD48 - 5S 20A		5	20	85
PD48 - 12S8.3A		12	8.3	85
PD48 - 13.8S7.3A		13.8	7.3	86
PD48 - 15S 7A		15	7	86
PD48 - 24S4.5A		24	4.5	88
PD48 - 48S2.3A		48	2.3	89
PD48 - 100S1.1A		100	1.1	90
PD48 - 140S0.8A		140	0.8	90
PD48 - 200S0.55A		200	0.55	90
PD48 - 300S0.36A		300	0.36	90
PD96 - 3.3S 26A		96 (56~160) at 50% Load	3.3	26
PD96 - 5S 20A	5		20	87
PD96 - 12S8.3A	12		8.3	85
PD96 - 13.8S7.3A	13.8		7.3	86
PD96 - 15S 7A	15		7	86
PD96 - 24S4.5A	24		4.5	88
PD96 - 48S2.3A	48		2.3	89
PD96 - 100S1.1A	100		1.1	90
PD96 - 140S0.8A	140		0.8	90
PD96 - 200S0.55A	200		0.55	90
PD96 - 300S0.36A	300		0.36	90

\* 上記仕様以外にも対応可能ですので お問い合わせ下さい。  
Please consult with us about other specification.

# PD SERIES DATA SHEET

## Block Diagram



## Characteristic Curves

Fig 1 Derating Curve

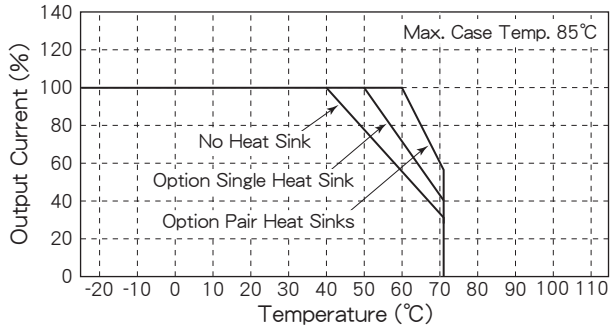


Fig 2 Short Circuit Operating Area

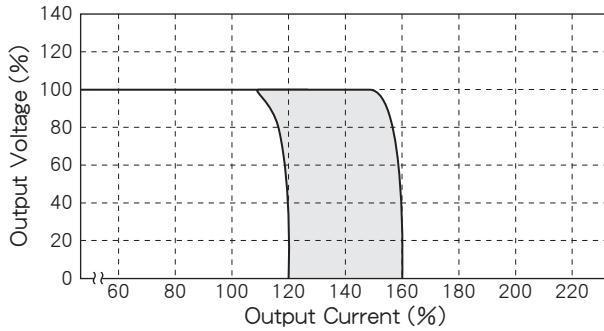


Fig 3 Temperature Characteristic on Case Surface

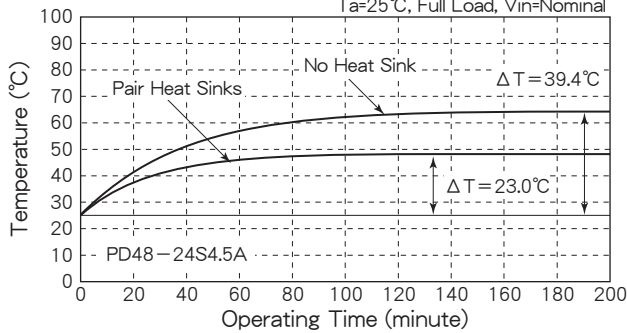


Fig 4 Efficiency vs. Output Current (Vin=12V)

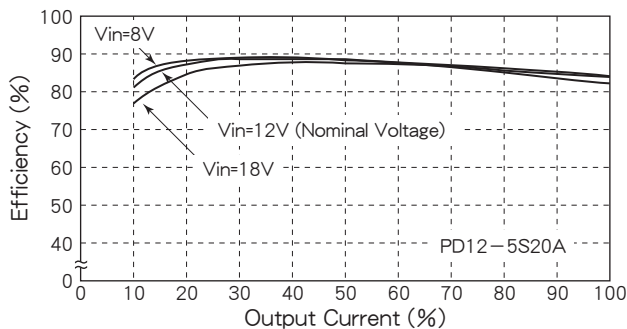


Fig 5 Efficiency vs. Output Current (Vin=12V)

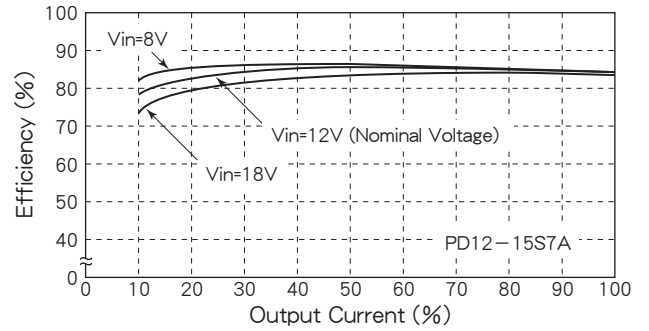


Fig 6 Efficiency vs. Output Current (Vin=24V)

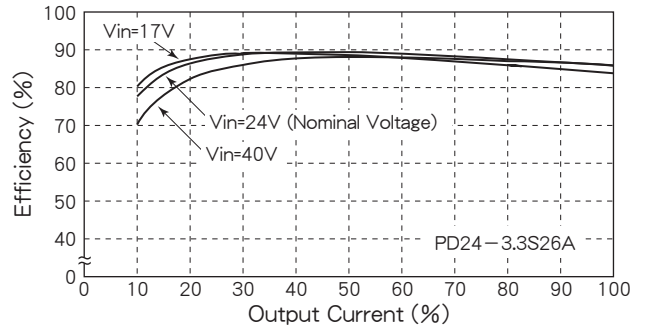


Fig 7 Efficiency vs. Output Current (Vin=24V)

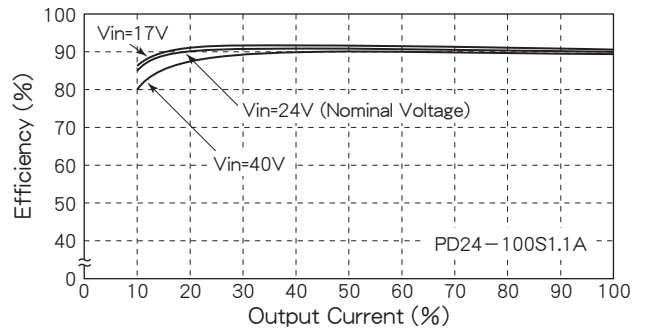


Fig 8 Efficiency vs. Output Current (Vin=48V)

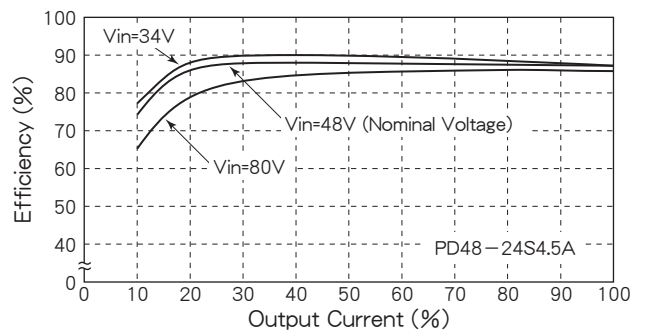


Fig 9 Efficiency vs. Output Current (Vin=96V)

