

# AC-DC Converter

**POWER  
SOLVE**

## PGE25, 35, 50, 75, 100, 150 Series 25-150W Enclosed Power Supply Single Output

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### Features

- Green Design, no-load power consumption <0.5W
- Universal AC Input / Full Range
- Short Circuit / Overvoltage / Overload Protections
- Cooling by Free Air Convection
- High Efficiency, Long Life and High Reliability
- Operating Temperature range -20°C to +70°C
- Power On LED Indicator
- 100% full load burn-in test



### Electrical Specification

Input Voltage	88-264Vac full range / 125-373VDC (PGE150: 88-132 / 176-264Vac selected by switch / 248-373VDC)
Input Frequency	47 - 63Hz
AC Input Current (typ.)	PGE25: 0.70A @ 115Vac / 0.35A @ 230Vac PGE35: 0.80A @ 115Vac / 0.40A @ 230Vac PGE50: 1.3A @ 115Vac / 0.65A @ 230Vac PGE75: 2.0A @ 115Vac / 1.0A @ 230Vac PGE100: 2.5A @ 115Vac / 1.40A @ 230Vac PGE150: 3.0A @ 115Vac / 1.30A @ 230Vac
Inrush Current	PGE25: 30A @ 230Vac cold start PGE35: 32A @ 230Vac cold start PGE50: 36A @ 230Vac cold start PGE75, PGE100, PGE150: 40A @ 230Vac cold start
Leakage Current	<2mA @ 240Vac
Output Voltage	See Table
Output Current	See Table
Overload Protection	110-180% of rated output power. Hiccup mode, recovers automatically when fault is removed
Overvoltage Protection	115-140% rated output voltage. Output latches off
Operating Temperature Range	-20°C to +70°C (with derating)
Operating Humidity	20-90% RH non-condensing
Storage Temperature Range	-40°C to +85°C
Temperature Coefficient	±0.03%/°C (0-50°C)
Vibration	10-500Hz, 5G 10 min./1 cycle, for 60 mins, along X,Y & Z axis
Safety Standards	UL60950-1, TUV EN60950-1 approved
Green Energy	CEC Single Voltage External AC-DC & AC-AC power supplies eligibility criteria (version 1.1)
Withstand Voltage	I/P-O/P: 3KVac, I/P-FG: 1.5KVac, O/P-FG: 0.5KVac all for 1 min.
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC
EMI Conduction & Radiation	EN55022: 1998+A1 : 2000+A2 : 2003 Class B
Harmonic Current	EN61000-3-2: 2000+A2 : 2005 Class A, EN61000-3-3 : 1995+A1 : 2001
EMS Immunity	EN61204-3 : 2000, EN50204 : 1998+A1 : 2001+A2 : 2003 light industry level, criteria A
Cooling	Free Air Convection
Dimensions	PGE25: 79(L) x 51(W) x 28(H) mm PGE35, PGE50: 99(L) x 82(W) x 35(H) mm PGE75, PGE100: 129(L) x 98(W) x 38(H) mm PGE150: 179(L) x 98(W) x 38(H) mm
Weight	PGE25: 0.18Kg PGE35, PGE50: 0.28Kg PGE75, PGE100: 0.45Kg PGE150: 0.56Kg

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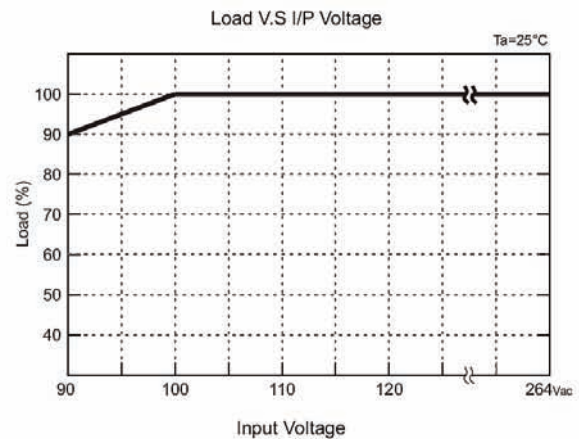
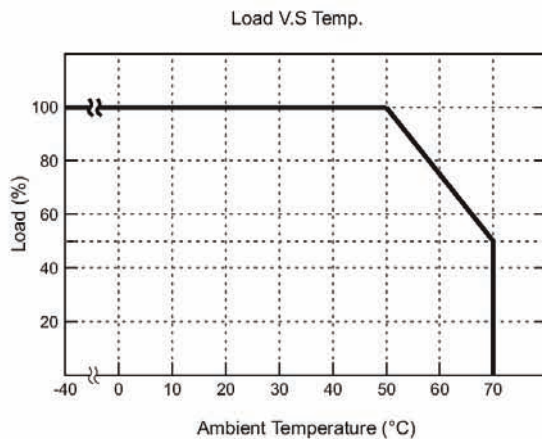


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## Output Voltage and Current Ratings

MODEL	OUTPUT VOLTAGE		MAX OUTPUT CURRENT	VOLTAGE TOLERANCE	RIPPLE & NOISE	LINE REG.	LOAD REG.	POWER Max.	EFF.
	Preset	Range							
PGE25-3V3	3.3V	±10%	6A	±3%	80mV	±0.5%	±2%	19.8W	74%
PGE25-05	5V	±10%	5A	±2%	80mV	±0.5%	±1%	25W	83%
PGE25-12	12V	±10%	2.1A	±1%	120mV	±0.5%	±0.5%	25.2W	85%
PGE25-15	15V	±10%	1.7A	±1%	120mV	±0.5%	±0.5%	25.5W	86%
PGE25-24	24V	±10%	1.1A	±1%	120mV	±0.5%	±0.5%	26.4W	87%
PGE25-48	48V	±10%	0.57A	±1%	200mV	±0.5%	±0.5%	27.3W	88%
PGE35-3V3	3.3V	±10%	7A	±3%	80mV	±0.5%	±2%	23.1W	79%
PGE35-05	5V	±10%	7A	±2%	80mV	±0.5%	±1%	35W	84%
PGE35-12	12V	±10%	3A	±1%	120mV	±0.5%	±0.5%	36W	89%
PGE35-15	15V	±10%	2.4A	±1%	120mV	±0.5%	±0.5%	36W	89%
PGE35-24	24V	±10%	1.5A	±1%	120mV	±0.5%	±0.5%	36W	88%
PGE35-48	48V	±10%	0.8A	±1%	200mV	±0.5%	±0.5%	38.4W	90%
PGE50-3V3	3.3V	±10%	10A	±3%	80mV	±0.5%	±2%	33W	78%
PGE50-05	5V	±10%	10A	±2%	80mV	±0.5%	±1%	50W	83%
PGE50-12	12V	±10%	4.2A	±1%	120mV	±0.5%	±0.5%	50.4W	88%
PGE50-15	15V	±10%	3.4A	±1%	120mV	±0.5%	±0.5%	51W	89%
PGE50-24	24V	±10%	2.2A	±1%	120mV	±0.5%	±0.5%	52.8W	90%
PGE50-48	48V	±10%	1.1A	±1%	200mV	±0.5%	±0.5%	52.8W	90%
PGE75-3V3	3.3V	±10%	15A	±3%	80mV	±0.5%	±2%	49.5W	73%
PGE75-05	5V	±10%	15A	±2%	80mV	±0.5%	±1%	75W	81%
PGE75-12	12V	±10%	6.25A	±1%	120mV	±0.5%	±0.5%	75W	87%
PGE75-15	15V	±10%	5A	±1%	120mV	±0.5%	±0.5%	75W	87%
PGE75-24	24V	±10%	3.2A	±1%	120mV	±0.5%	±0.5%	76.8W	88%
PGE75-48	48V	±10%	1.6A	±1%	200mV	±0.5%	±0.5%	76.8W	90%
PGE100-3V3	3.3V	±10%	20A	±3%	80mV	±0.5%	±2%	66W	70%
PGE100-05	5V	±10%	16A	±2%	80mV	±0.5%	±1%	80W	80%
PGE100-12	12V	±10%	8.5A	±1%	120mV	±0.5%	±0.5%	102W	86%
PGE100-15	15V	±10%	7A	±1%	120mV	±0.5%	±0.5%	105W	88%
PGE100-24	24V	±10%	4.5A	±1%	120mV	±0.5%	±0.5%	108W	88%
PGE100-48	48V	±10%	2.3A	±1%	200mV	±0.5%	±0.5%	110W	89%
PGE150-3V3	3.3V	±10%	30A	±3%	80mV	±0.5%	±2%	99W	70%
PGE150-05	5V	±10%	26A	±2%	80mV	±0.5%	±1%	130W	83%
PGE150-12	12V	±10%	12.5A	±1%	120mV	±0.5%	±0.5%	150W	85%
PGE150-15	15V	±10%	10A	±1%	120mV	±0.5%	±0.5%	150W	87%
PGE150-24	24V	±10%	6.5A	±1%	120mV	±0.5%	±0.5%	156W	87%
PGE150-48	48V	±10%	3.3A	±1%	200mV	±0.5%	±0.5%	158.4W	89%

## Derating Curves (all models)



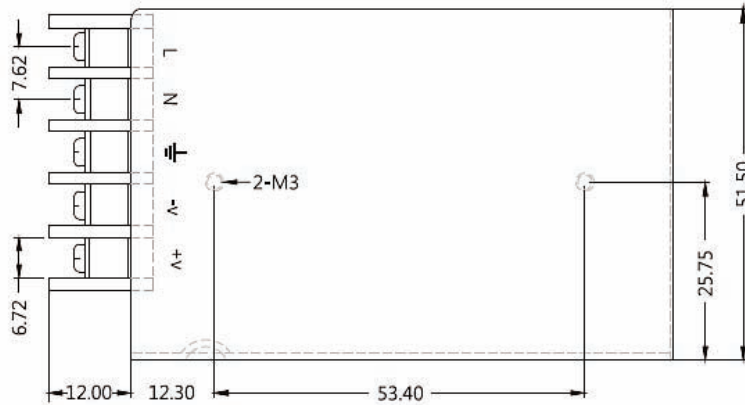
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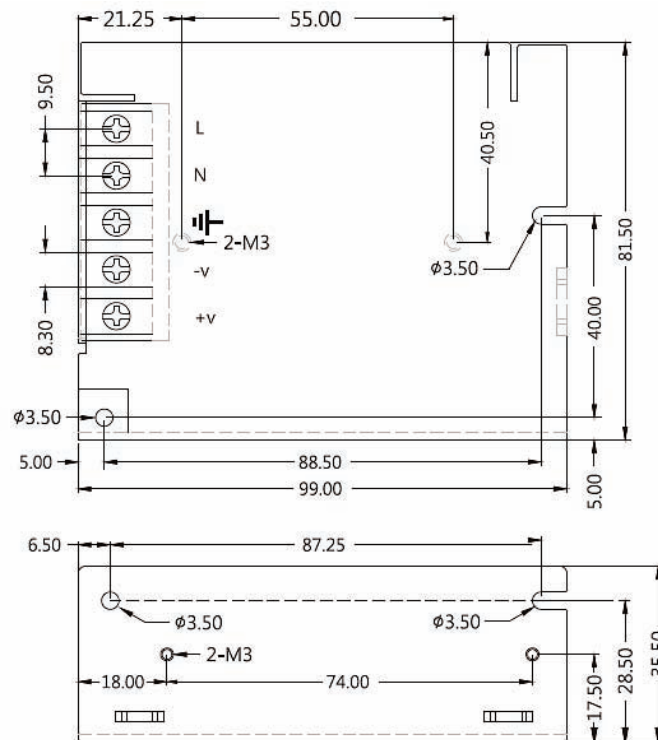
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## Mechanical & Connection Details

PGE25 models (dimensions in mm)



PGE35 & PGE50 models (dimensions in mm)



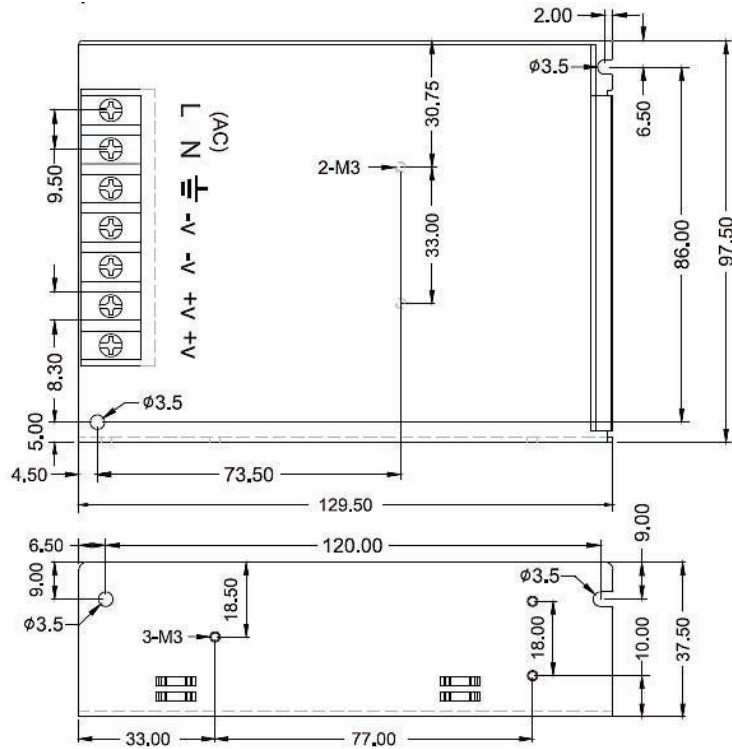
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## Mechanical & Connection Details (cont.)

PGE75 & PGE100 models (dimensions in mm)



PGE150 models (dimensions in mm)

