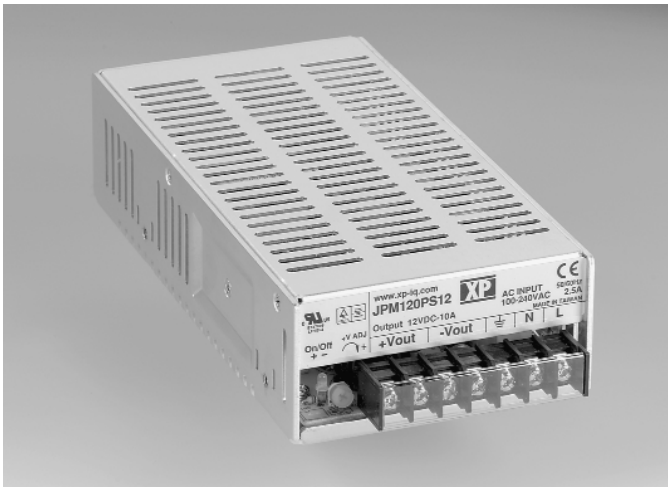
AC-DC Chassis Mount

80-160 Watts
JPM Series

THE XPERTS IN POWER



- Low Cost
- High Reliability
- Power Factor Corrected
- Suitable for Charging Applications
- Low Ripple Noise
- 125% Rating at 230 VAC
- Remote On/Off Optional

Specification

Input

Input Voltage	•	*85-264 VAC (120-370 VDC)*
Input Frequency	•	*47-63 Hz*
Input Current	•	*0.7 A max JPM80, 1.1 A max JPM120 1.4 A max JPM160 at 230 V*
Inrush Current	•	*40 A at 230 VAC cold start*
Power Factor	•	*0.96/0.98 at 230/115 VAC*
Earth Leakage Current	•	*<2 mA at 230 VAC*

Output

Output Voltage	•	*See Tables*
Start Up Delay	•	*600 ms max*
Start Up Rise Time	•	*30 ms max*
Hold Up Time	•	*25 ms min*
Initial Set Accuracy	•	*±2%*
Line Regulation	•	*±0.5%*
Load Regulation	•	*See Tables*
Ripple & Noise	•	*See Tables*
Output Voltage Trim	•	*+10%, -5%*
Overload Protection	•	*105-150% (constant current), auto recovery*
Overvoltage Protection	•	*110-135%, recycle mains to reset*
Overtemperature Protection	•	*Shutdown at 95 °C ±5 °C (measured internally) with auto recovery, only on JPM120 & JPM160*
Temperature Coefficient	•	*±0.05%/°C*
Remote ON/OFF	•	*4-10 VDC ON, <0.8 VDC OFF, optional add suffix 'R' to model number*

General

Efficiency	•	*See Tables*
Isolation Voltage	•	*3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VAC Output to Ground*
MTBF	•	*>183,000 hours MIL-HDBK-217F*
Dimensions	•	*179 x 99 x 45 mm JPM80 199 x 99 x 50 mm JPM120 & JPM160*
Weight	•	*600 g JPM80, 700g JPM120, 760 g JPM160*

Environmental

Operating Temp	•	*-10 °C to +60 °C, See Derating Curves*
Storage Temp	•	*-20 °C to +85 °C*
Cooling	•	*JPM80 & JPM120 convection cooled, JPM160 includes internal fan*
Humidity	•	*20-90% RH non-condensing*
Vibration	•	*10-500 Hz 2 G 10 min/cycle for 60 min each axis*

EMC & Safety

Safety Approvals	•	*UL1950, TÜV, EN60950, CE Marked LVD, CSA22.2 No. 234*
EMC	•	*CISPR22 (EN55022) Class B, ENV50204, EN61000-3-2, 3*
ESD Susceptibility	•	*EN61000-4-2 Level 3 Perf Criteria A*
Radiated Susceptibility	•	*EN61000-4-3 3 V/m Perf Criteria A*
EFT/Burst	•	*EN61000-4-4 Level 2 Perf Criteria A*
Surge	•	*EN61000-4-5 Level 3 Perf Criteria A*
Conducted Suceptibility	•	*EN61000-4-6 Level 2 Perf Criteria A*
Magnetic Field	•	*EN61000-4-8 3 A/m Perf Criteria A*
Keyed Carrier	•	*ENV50204 3 V/m Perf Criteria A*

OUTPUT VOLTAGE & CURRENT RATINGS - 80 WATT MODELS — JPM

Output Power[1]	Output Voltage	Output Current	Ripple & Noise (Pk-Pk)	Load Regulation	Efficiency	Model Number
53 W	3.3 V	16.0 A	100 mV	±1.0%	70%	JPM80PS03*
80 W	5.0 V	16.0 A	100 mV	±1.0%	76%	JPM80PS05*
80 W	7.5 V	10.7 A	100 mV	±1.0%	78%	JPM80PS07*
80 W	12.0 V	6.8 A	100 mV	±0.5%	80%	JPM80PS12*
80 W	13.5 V	6.0 A	100 mV	±0.5%	82%	JPM80PS13*
80 W	15.0 V	5.3 A	100 mV	±0.5%	83%	JPM80PS15*
80 W	24.0 V	3.4 A	150 mV	±0.5%	84%	JPM80PS24*
80 W	27.0 V	3.0 A	150 mV	±0.5%	85%	JPM80PS27*
80 W	48.0 V	1.7 A	250 mV	±0.5%	85%	JPM80PS48*

Notes

1. *Max output increases to 125% of rated power when input voltage is between 180 VAC to 264 VAC - See Derating Curve.*
2. *For 3.3 V to 7.5 V output units, max output derates to 80% when input voltage is below 115 VAC.*
3. *Mounting vertically increases max ambient temperature as shown by derating curve below.*

* *Also available from Farnell InOne, see pages 350 & 351.*

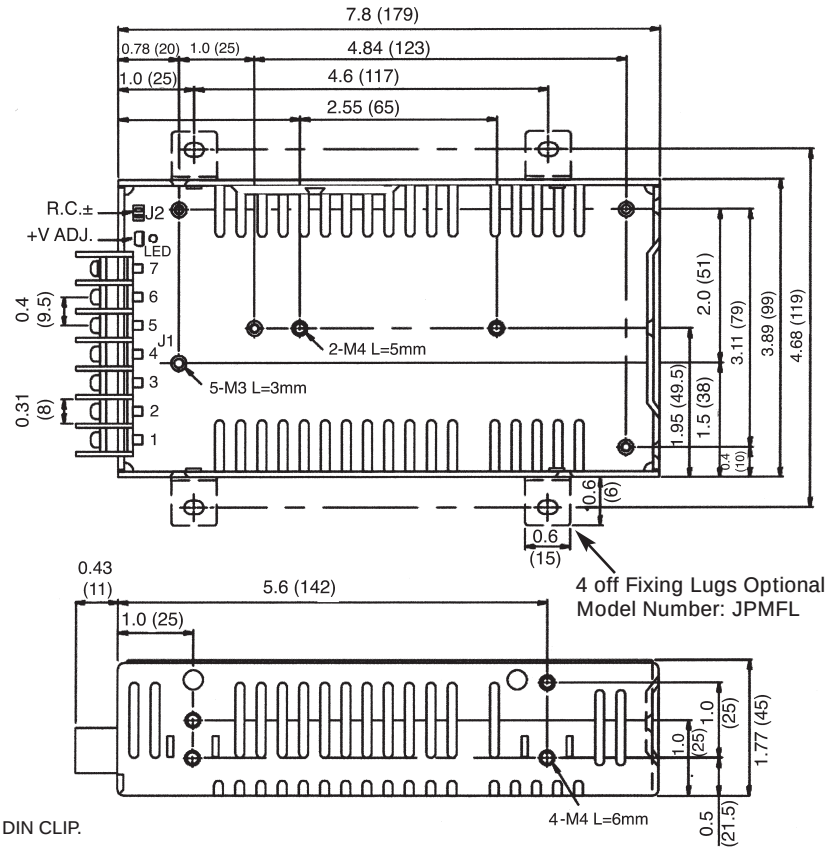
Mechanical Details - 80 Watt Models

J1	
Pin	Function
1	AC Input
2	AC Input
3	FG ⏚
4	DC Output -V
5	DC Output -V
6	DC Output +V
7	DC Output +V

NOTE: 9.5 mm pitch M4 barrier strip.

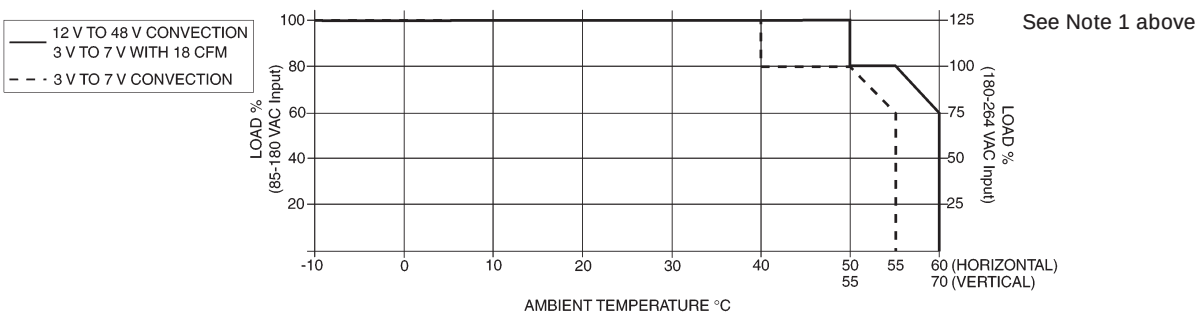
Optional J2	
Pin	Function
1	Remote Control +
2	Remote Control -

NOTE: Molex Type 22-23-2021 compatible.



To attach the power supply to a DIN rail, order 2 off DIN CLIP.

Derating Curve - 80 Watt Model



See Note 1 above

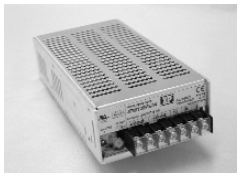
OUTPUT VOLTAGE & CURRENT RATINGS - 120 WATT MODELS JPM

Output Power[1]	Output Voltage	Output Current	Ripple & Noise (Pk-Pk)	Load Regulation	Efficiency	Model Number
79 W	3.3 V	24.0 A	100 mV	±1.0%	67%	JPM120PS03*
120 W	5.0 V	24.0 A	100 mV	±1.0%	75%	JPM120PS05*
120 W	7.5 V	16.0 A	100 mV	±1.0%	79%	JPM120PS07*
120 W	12.0 V	10.0 A	100 mV	±0.5%	80%	JPM120PS12*
120 W	13.5 V	8.9 A	100 mV	±0.5%	80%	JPM120PS13*
120 W	15.0 V	8.0 A	100 mV	±0.5%	81%	JPM120PS15*
120 W	24.0 V	5.0 A	150 mV	±0.5%	83%	JPM120PS24*
120 W	27.0 V	4.4 A	150 mV	±0.5%	84%	JPM120PS27*
120 W	48.0 V	2.5 A	250 mV	±0.5 %	84%	JPM120PS48*

Notes

1. *Max output increases to 125% of rated power when input voltage is between 180 VAC to 264 VAC - See Derating Curve.*
2. *Mounting vertically increases max ambient temperature as shown by derating curve below.*
* *Also available from Farnell InOne, see pages 350 & 351.*

Mechanical Details - 120 Watt Models



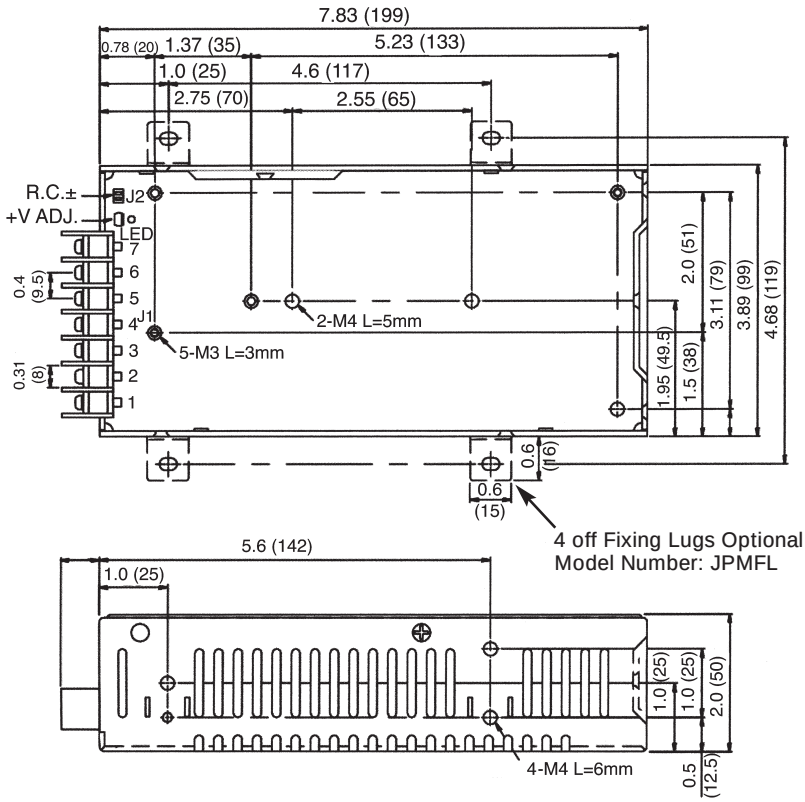
J1	
Pin	Function
1	AC Input
2	AC Input
3	FG ⏚
4	DC Output -V
5	DC Output -V
6	DC Output +V
7	DC Output +V

NOTE: 9.5 mm pitch M4 barrier strip.

Optional J2	
Pin	Function
1	Remote Control +
2	Remote Control -

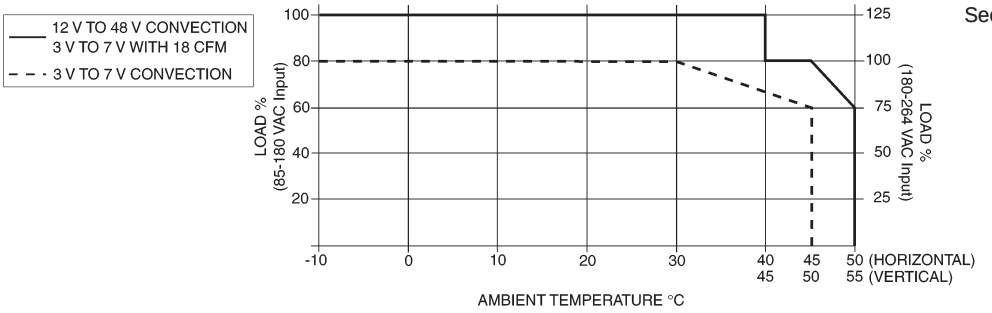
NOTE: Molex Type 22-23-2021 compatible.

Dimensions in mm
Weight: 700 g



To attach the power supply to a DIN rail, order 2 off DIN CLIP.

Derating Curve - 120 Watt Models



See Note 1 above

OUTPUT VOLTAGE & CURRENT RATINGS - 160 WATT MODELS JPM

Output Power[1]	Output Voltage	Output Current	Ripple & Noise (Pk-Pk)	Load Regulation	Efficiency	Model Number
105 W	3.3 V	32.0 A	100 mV	±1.0%	65%	JPM160PS03*
160 W	5.0 V	32.0 A	100 mV	±1.0%	71%	JPM160PS05*
160 W	7.5 V	21.0 A	100 mV	±1.0%	77%	JPM160PS07*
160 W	12.0 V	13.4 A	100 mV	±0.5%	79%	JPM160PS12*
160 W	13.5 V	11.8 A	100 mV	±0.5%	81%	JPM160PS13*
160 W	15.0 V	10.6 A	100 mV	±0.5%	81%	JPM160PS15*
160 W	24.0 V	6.7 A	150 mV	±0.5%	83%	JPM160PS24*
160 W	27.0 V	6.0 A	150 mV	±0.5%	83%	JPM160PS27*
160 W	48.0 V	3.3 A	250 mV	±0.5%	84%	JPM160PS48*

Notes

1. *Max output increases to 125% of rated power when input voltage is between 180 VAC to 264 VAC and ambient temperature is less than 50 °C.*
* *Also available from Farnell InOne, see pages 350 & 351.*

Mechanical Details - 160 Watt Models

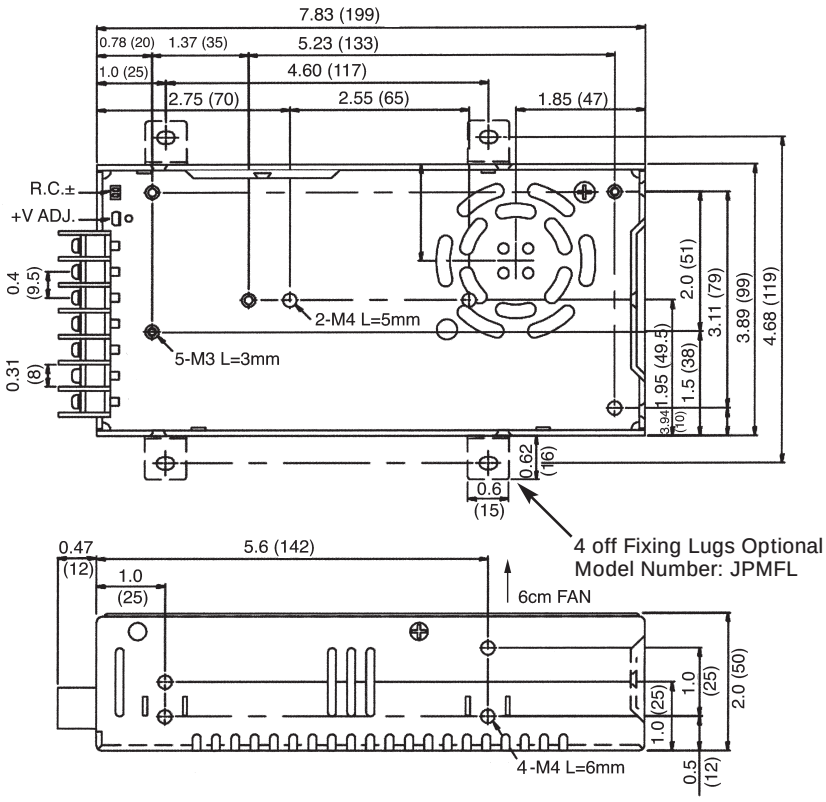
J1	
Pin	Function
1	AC Input
2	AC Input
3	FG ⏚
4	DC Output -V
5	DC Output -V
6	DC Output +V
7	DC Output +V

NOTE: 9.5 mm pitch M4 barrier strip.

Optional J2	
Pin	Function
1	Remote Control +
2	Remote Control -

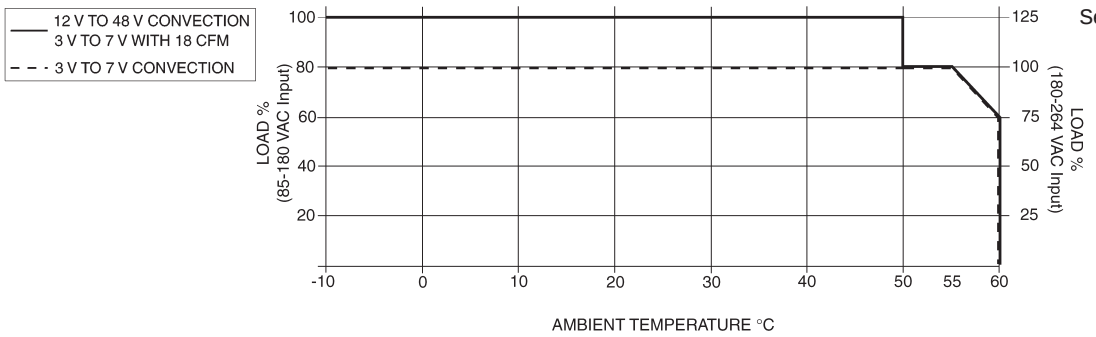
NOTE: Molex Type 22-23-2021 compatible.

Dimensions in mm
Weight: 800 g



To attach the power supply to a DIN rail, order 2 off DIN CLIP.

Derating Curve - 160 Watt Models



See Note 1 above