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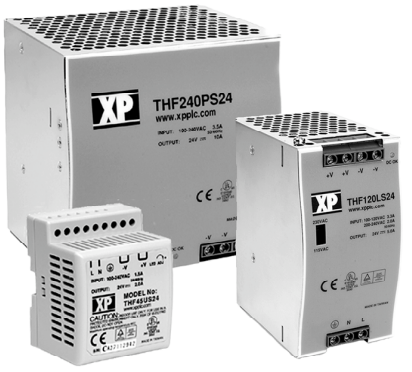
Expert team | Trust guarantee | 100% satisfaction

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Find the *XP Power THF75US12* at our website: *Click HERE*

45-480 Watts

THF Series



- Wide Adjustment Range
- Rugged for Industrial Use
- High Efficiency
- Overvoltage Protection
- Overcurrent Protection
- Overtemperature Protection
- Lightweight Design

Specification

Input

Input Voltage	• 90-264 VAC except: 90-132/176-264 VAC switch-selectable (THF120 and THF480LSxx models) and 180-264 VAC (THF480PS models)
Input Frequency	• 47-63 Hz
Input Current	• 0.5 A at 230 VAC 45 W models, 0.8 A at 230 VAC 75 W models, 1.4 A at 230 VAC 120 W models, 1.8 A at 230 VAC 240 W models, 4.0 A at 230 VAC 480 W models
Inrush Current	• 60 A max
Power Factor	• All units EN61000-3-2 compliant, ≥0.95 THF240, ≥0.70 THF480
Earth Leakage Current	• <1.0 mA max 45 and 75 W models, <3.5 mA max 120, 240 & 480 W models at 240 VAC

Output

Output Voltage	• See tables
Output Voltage Trim	• ±10%
Initial Set Accuracy	• ±2% max
Start Up Delay	• 800 ms max 45 and 240 W models, 1000 ms 75 W models, 500 ms 120 W models, 1200 ms 480 W models
Start Up Rise Time	• 60 ms max 45 & 75 W models, 70 ms max 120 W models, 40 ms max 240 W & 480 W models
Hold Up Time	• 50 ms at 230 VAC 45 & 75 W models, 30 ms at 230 VAC 120 W models, 20 ms at 230 VAC max 240 W models, 16 ms at 230 VAC max 480 W models
Line Regulation	• ±1.0% max 45 W models, ±0.5% 75, 120, 240 & 480 W models
Load Regulation	• ±0.5% max, ±1% max 45 W models
Ripple & Noise	• See tables
Overvoltage Protection	• 115-135%
Overload Protection	• 105-150%, constant current with auto recovery
Temperature Coefficient	• 0.03% /°C

General

Efficiency	• 72-89% (see tables)
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Switching Frequency	• 100 kHz typical 45 & 240 W models 70 kHz typical 480 W models 50 kHz typical 75 & 120 W models

Environmental

Operating Temperature	• See derating curves
Operating Humidity	• 90% RH, non-condensing
Storage Temperature	• -20 °C to +85 °C
Vibration	• 2 G, 10 Hz to 500 kHz, 10 min/cycle for 60 minutes each axis

EMC & Safety

Emissions	• EN55022/55011, Class B conducted and radiated, EN61000-3-2, 3
Voltage Flicker	• EN61000-3-3
ESD Immunity	• EN61000-4-2, level 3 air, Perf Criteria B
Radiated Immunity	• EN61000-4-3, 10 V/m, Perf Criteria B
EFT/Burst	• EN61000-4-4, level 3, Perf Criteria B
Surge	• EN61000-4-5, level 3, Perf Criteria B
Conducted Immunity	• EN61000-4-6, 10 V rms, Perf Criteria B
Safety Approvals	• EN60950, UL508, (UL60950 on 120, 240 & 480 W models)

Models and Ratings

Maximum Output Power	Output Voltage Nominal	Output Voltage Adjustment	Output Current Maximum	Ripple and Noise[1]	Efficiency	Model Number
25 W	5.0 V	4.75-5.50 V	5.0 A	100 mV	72%	THF45US05
42 W	12.0 V	10.80-12.20 V	3.5 A	200 mV	77%	THF45US12
42 W	15.0 V	13.50-16.50 V	2.8 A	240 mV	77%	THF45US15
48 W	24.0 V	21.60-26.40 V	2.0 A	480 mV	80%	THF45US24

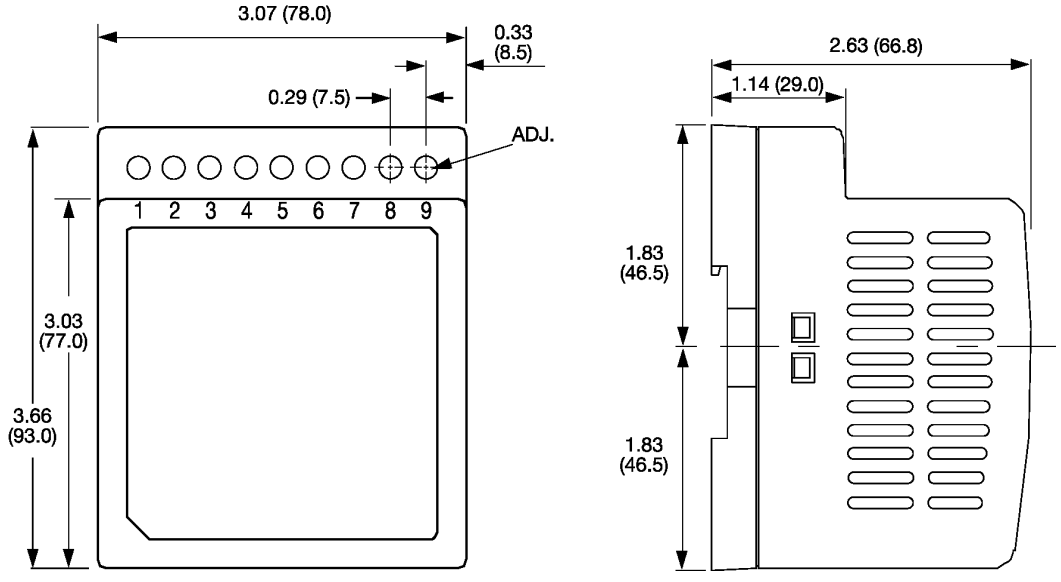
Notes

1. Measured at 20 MHz bandwidth using a 12" twisted pair terminated with a 0.1 µF/47 µF capacitor.

Mechanical Details

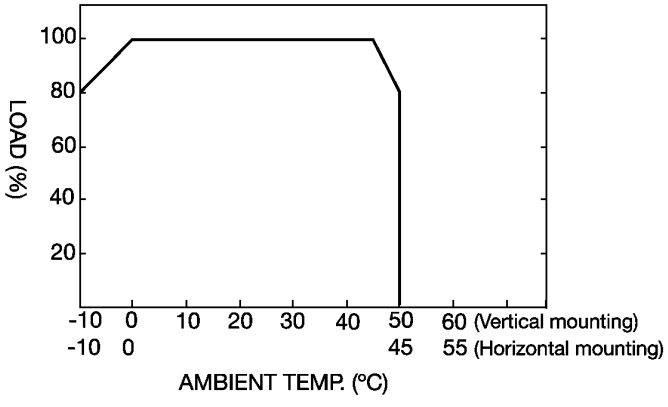
THF45 MODELS

PINOUT	
Pin	Function
1	AC Input
2	AC Input
3	Earth
4	DC Output -V
5	DC Output -V
6	DC Output +V
7	DC Output +V
8	LED
9	+V Adj



Weight 0.40 kg

Derating Curve



NB: The THF45 will operate at full load from 85-264 VAC input.

Models and Ratings

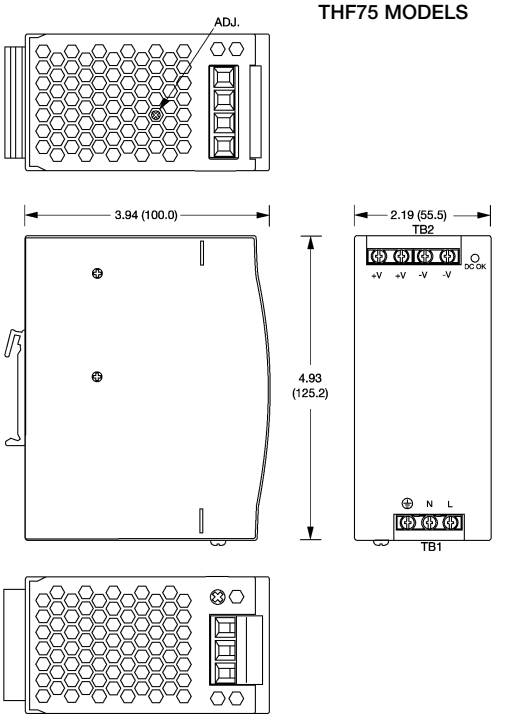
Maximum Output Power	Output Voltage Nominal	Output Voltage Adjustment	Output Current Maximum	Ripple and Noise[1]	Efficiency	Model Number
76 W	12.0 V	12.00-14.00 V	6.3 A	100 mV	76%	THF75US12
77 W	24.0 V	24.00-27.00 V	3.2 A	150 mV	80%	THF75US24
77 W	48.0 V	48.00-53.00 V	1.6 A	240 mV	81%	THF75US48
120 W	12.0 V	12.00-14.00 V	10.0 A	80 mV	80%	THF120LS12
120 W	24.0 V	24.00-28.00 V	5.0 A	80 mV	84%	THF120LS24
120 W	48.0 V	48.00-53.00 V	2.5 A	100 mV	85%	THF120LS48

Notes

1. Measured at 20 MHz bandwidth using a 12" twisted pair terminated with a 0.1 µF/47 µF capacitor.

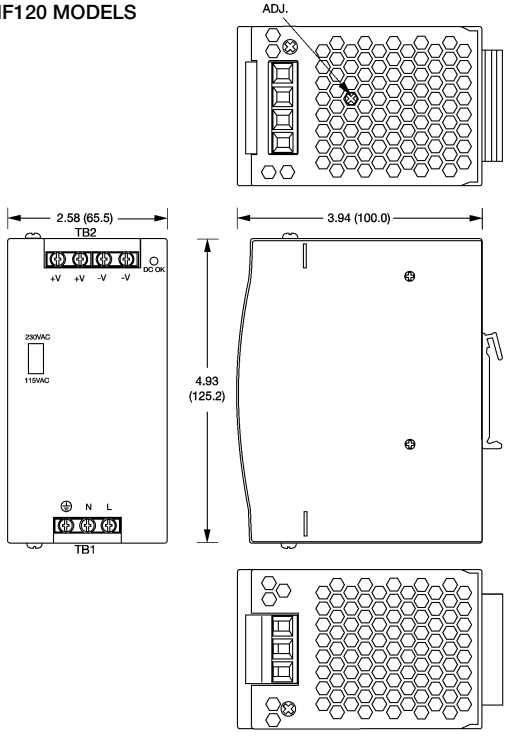
Mechanical Details

THF75 MODELS



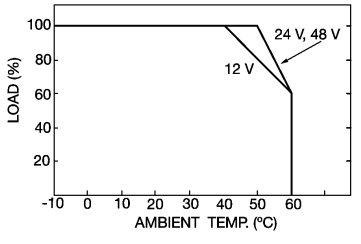
Weight:
THF75 0.55 kg
THF120 0.65 kg

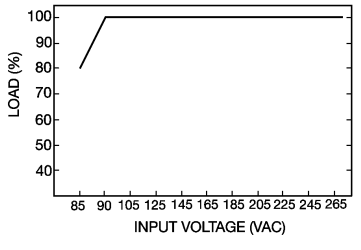
THF120 MODELS



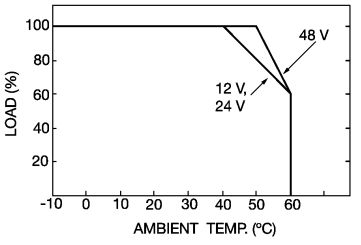
Derating Curves

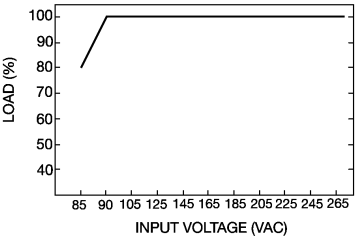
THF75 MODELS





THF120 MODELS





Models and Ratings

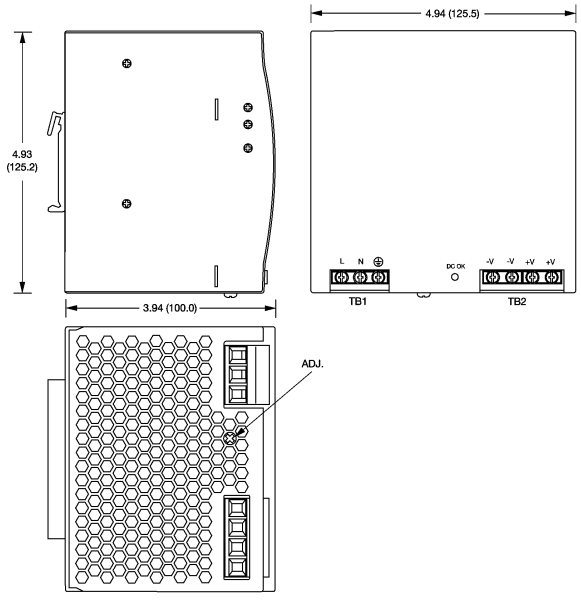
Maximum Output Power	Output Voltage Nominal	Output Voltage Adjustment	Output Current Maximum	Ripple and Noise[1]	Efficiency	Model Number
240 W	24.0 V	24.00-28.00 V	10.0 A	80 mV	84%	THF240PS24
240 W	48.0 V	48.00-53.00 V	5.0 A	150 mV	85%	THF240PS48
480 W	24.0 V	24.00-28.00 V	20.0 A	240 mV	89%	THF480LS24
480 W	48.0 V	48.00-53.00 V	10.0 A	480 mV	89%	THF480LS48
480 W	24.0 V	24.00-28.00 V	20.0 A	240 mV	89%	THF480PS24
480 W	48.0 V	48.00-53.00 V	10.0 A	480 mV	89%	THF480PS48

Notes

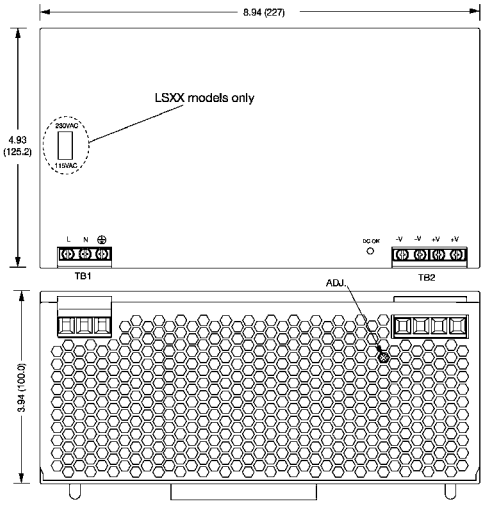
1. Measured at 20 MHz bandwidth using a 12" twisted pair terminated with a 0.1 µF/47 µF capacitor.

Mechanical Details

THF240 MODELS

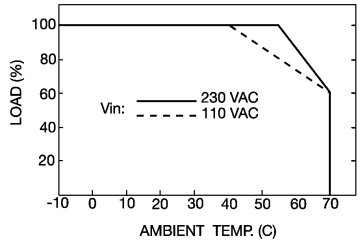


THF480 MODELS

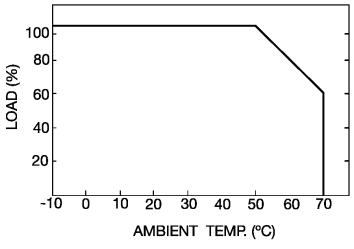


Derating Curves

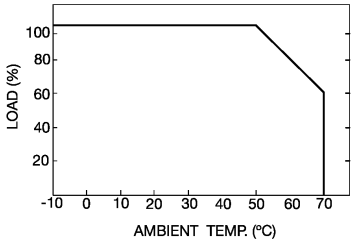
THF240 MODELS

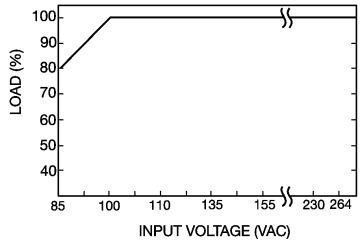


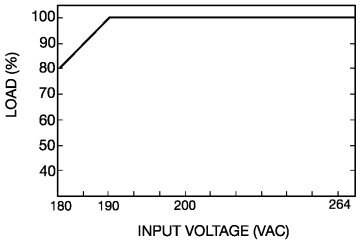
THF480PSXX MODELS

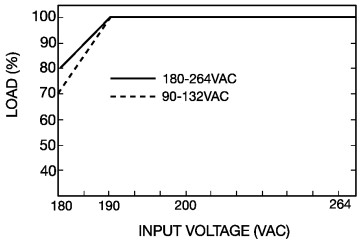


THF480LSXX MODELS









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