

# 350 Watts NTS350 Series

Total Power: 200-350 Watts  
 Input Voltage: 85-264 VAC  
 120-300 VDC  
 # of Outputs: Single



## Electrical Specs

### Input

Input range	85-264 VAC; 120-300 VDC
Frequency	47-440 Hz
Inrush current	38 A max., cold start @ 25°C
Efficiency	85% typical at full load
EMI filter	FCC Class B conducted and radiated CISPR 22 Class B conducted and radiated EN55022 Class B conducted and radiated VDE 0878 PT3 Class B conducted and radiated.
Power factor	0.99 typical
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 VAC input

### Output

Maximum power	200W convection; 350 W with 30 CFM forced air
Adjustment range	±5%
Standby output	5 V @ 2A regulated, ±5%
Fan output	12 V @ 1A, -5 %, +7%, 0.5A for -CF version
Hold-up time	20 ms @ 350 W load, 115 VAC nominal line at factory voltage setting
Overload protection	Short circuit protection on all outputs. Case overload protected @ 115-130% above peak rating
Overvoltage protection	20% to 35% above nominal output

### Logic Control

Power failure	TTL logic signal goes high 100-500 msec after main output. It goes low at least 4 msec before loss of regulation
Remote on/off	Requires an external contact closure to inhibit outputs
DC OK	TTL logic goes high after the output is in regulation. It goes low when there is loss of regulation.
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

## Special Features

- Active power factor correction
- IEC EN6100-3-2 compliance
- Remote sense
- Power fail and remote inhibit
- Single wire current sharing
- Built-in EMI filter
- Low output ripple
- 5V standby
- 12V fan output
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- Built in OR-ing diode / FET
- Optional fan cover (-CF suffix)

## Environmental

Operating temperature: 0° to 50°C ambient  
 derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet EN61000-4, -2, -4, -5, -11 Level 3

Humidity: Operating; non-condensing  
 10% to 90%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances  
 2 G peak 8 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF demonstrated: >1M hours at full load and 25°C ambient conditions

## Safety

TUV	60950
UL	60950
CSA	60950
NEMKO	60950
AUSTEL	60950
CB	Certificate and report
CE	Mark (LVD)



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## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load1	Regulation2	Ripple P/P (PARD)3
NTS353	12V	0 A	16.6 A	29.2 A	33 A	±2%	120 mV
NTS358	48V	0A	4.2A	7.3A	8.2	±2%	480mV
NTS359	54V	0A	3.7A	6.5A	7.4	±2%	540mV

1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 μF in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.

## Pin Assignments

**Connector**

**SK1** PIN 1 Line  
 PIN 3 Neutral  
 PIN 5 Ground

**SK5** PIN 1 V1 swp  
 PIN 2 - Remote Sense  
 PIN 3 + Remote Sense  
 PIN 4 5VSB (standby)  
 PIN 5 5VSB return  
 PIN 6 +12V  
 PIN 7 Common  
 PIN 8 Inhibit  
 PIN 9 DC power good (DC OK)  
 PIN 10 Power Fail (POK)

**Adjustment Potentiometers**

**P1** +V1 Output adjust  
**P3** +5VSB adjust

**Mating Connectors**

**SK1 AC input** Molex 09-50-8051 (USA)  
 Molex 09-91-0500 (UK)  
 PINS:08-58-0111

**SK2,3,4** Molex BB-124-08

**SK5 Control signals** Molex 90142-0010  
 PINS: 90119-2110 or  
 Amp: 87977-3  
 PINS: 87309-8

Astec Connector Kit #70-841-022 includes all of the above

**Notes:**

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. Specifications are at factory settings
4. Mounting maximum insertion depth is 0.12".
5. Warranty: 1 year
6. Weight: 2.5 lb. / 1.13 kg.

