

## NTS350 Series

350 Watts

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



Rev. 11.24.08  
NTS350 Series  
1 of 3



### 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)

### Safety

- TUV 60950
- UL 0950
- CSA 60950
- NEMKO 60950
- AUSTEL 60950
- CB Certificate and report
- CE Mark (LVD)

## Electrical Specifications

Input	
Input range	85 - 264 VAC (wide range)
Frequency	47-440 Hz
Inrush current	38A max., cold start @ 25°C
Efficiency	85% typical at full load
EMI filter	FCC Class B conducted and radiated; CISPR22 Class B conducted and radiated; EN55022 Class B conducted and radiated; VDE0878PT3 Class B conducted and radiated.
Safety ground leakage current	<0.5mA @ 50/60 Hz, 264 VAC input
Output	
Maximum power	200W for convection; 350W with 30CFM forced air
Adjustment range	±5%
Standby output	5V @ 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	20-35% 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.

## Environmental Specifications

Operating temperature:	0° to 50°C ambient derate each output as 2.5% per degree from 50° to 70°C.
Storage temperature:	-40°C to +85°C
Electromagnetic susceptibility:	designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 90% RH
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
MTBF demonstrated	1M hours at full load and 25°C ambient conditions

## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
NTS353	12V	0A	16.6A	29.2A	33A	±2%	120mV
NTS355	24V	0A	8.3A	14.6A	16.5A	±2%	240mV
NTS358	48V	0A	4.2A	7.3A	8.2A	±2%	480mV
NTS359	54V	0A	3.7A	6.5A	7.4A	±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 (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

## Pin Assignments

### Connector

<b>SK1</b>	PIN 1	Line
	PIN 3	Neutral
	PIN 5	Ground
<b>SK5</b>	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)



### Mating Connectors

**SK1 AC input** Molex 09-50-8051 (USA)  
Molex 09-91-0500 (UK)  
PINS: 08-52-0113

**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: 2 year
6. Weight: 2.5 lb. / 1.13 kg.

### Adjustment Potentiometers

P1	+V1 Output adjust
P3	+5VSB adjust

**Americas**

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698

**Europe (UK)**

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 211  
Facsimile: +44 (0) 1384 843 355

**Asia (HK)**

14/F, Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Telephone: +852 2176 3333  
Facsimile: +852 2176 3888

For global contact, visit:

[www.powerconversion.com](http://www.powerconversion.com)  
[techsupport.embeddedpower@emerson.com](mailto:techsupport.embeddedpower@emerson.com)

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