

NTS350 Series

350 Watts

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



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)

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

Safety

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



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 ¹	Regulation ²	Ripple P/P (PARD) ³
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

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)



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

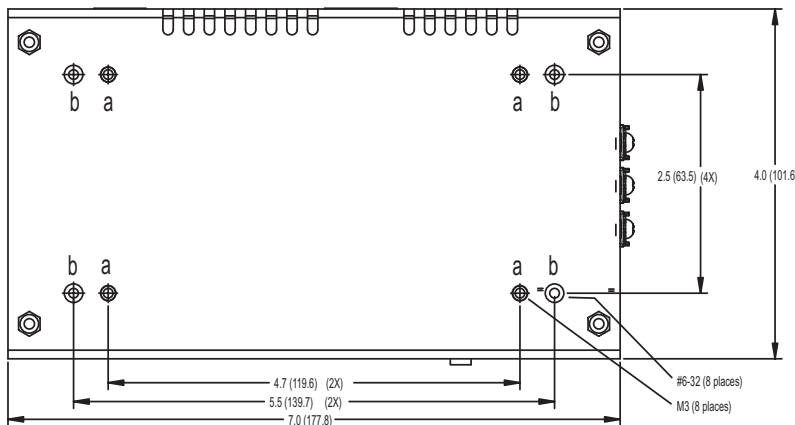
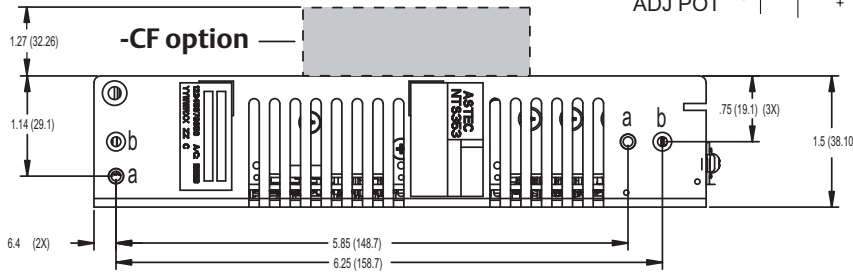
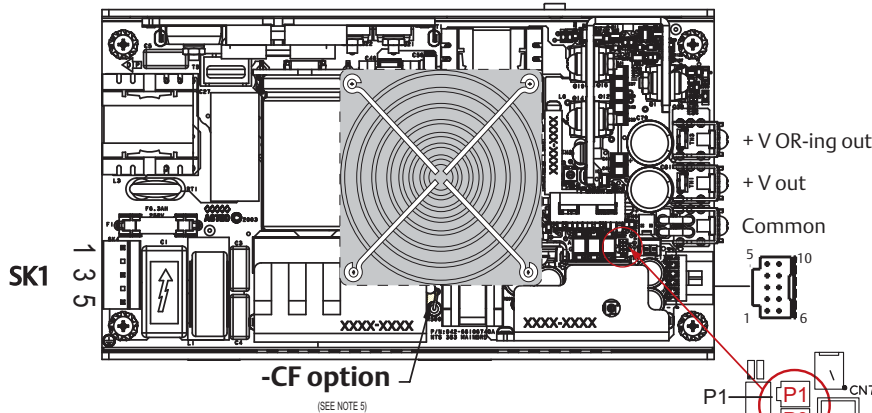
Astec Connector Kit #70-841-022 includes all of the above

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: 1 year
6. Weight: 2.5 lb. / 1.13 kg.

Adjustment Potentiometers

P1	+V1 Output adjust
P3	+5VSB adjust



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