

NTS350 Series

350 Watts

Total Power: 200 - 350 Watts
Input Voltage: 85 - 264 Vac
120 - 300 Vdc
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
- 5 V standby
- 12 V fan output
- Overvoltage protection
- Overload protection
- Thermal overload protection
- DC power good
- Built in OR-ing diode / FET
- Optional fan cover (-CF suffix)
- Optional end fan cover (-CEF suffix)

Safety

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

Electrical Specifications

Input	
Input range:	85 - 264 Vac (wide range)
Frequency:	47 - 440 Hz (47- 63 Hz for -CEF versions)
Inrush current:	38 A 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:	< 0.5 mA @ 50/60 Hz, 264 Vac input
Output	
Maximum power:	200 W for convection; 350 W with 30CFM forced air
Adjustment range:	± 5%
Standby output:	5 V @ 2 A regulated, ± 5%
Fan output:	12 V @ 1 A, -5 %, +7%, 0.5 A 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 ¹	Regulation ²	Ripple P/P (PARD) ³
NTS353	12 V	0 A	16.6 A	29.2 A	33 A	± 2%	120 mV
NTS355	24 V	0 A	8.3 A	14.6 A	16.5 A	± 2%	240 mV
NTS358	48 V	0 A	4.2 A	7.3 A	8.2 A	± 2%	480 mV
NTS359	54 V	0 A	3.7 A	6.5 A	7.4 A	± 2%	540 mV

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.
4. CF suffix added to the model number indicates cover with top fan. -CEF suffix added to the model number indicates cover with end mounted fan cover and AC inlet

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

Emerson Network Power Connector Kit #70-841-022 includes all of the above

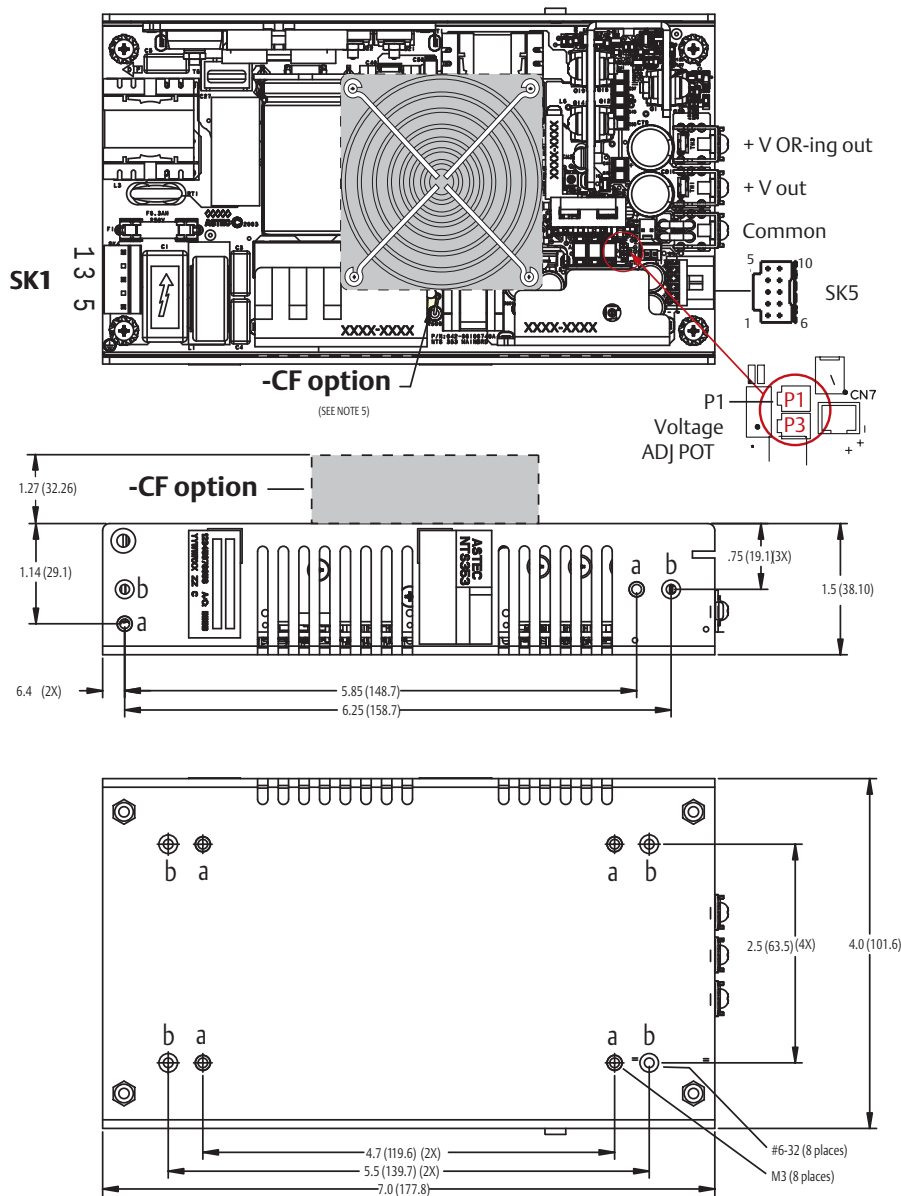
Notes:

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.

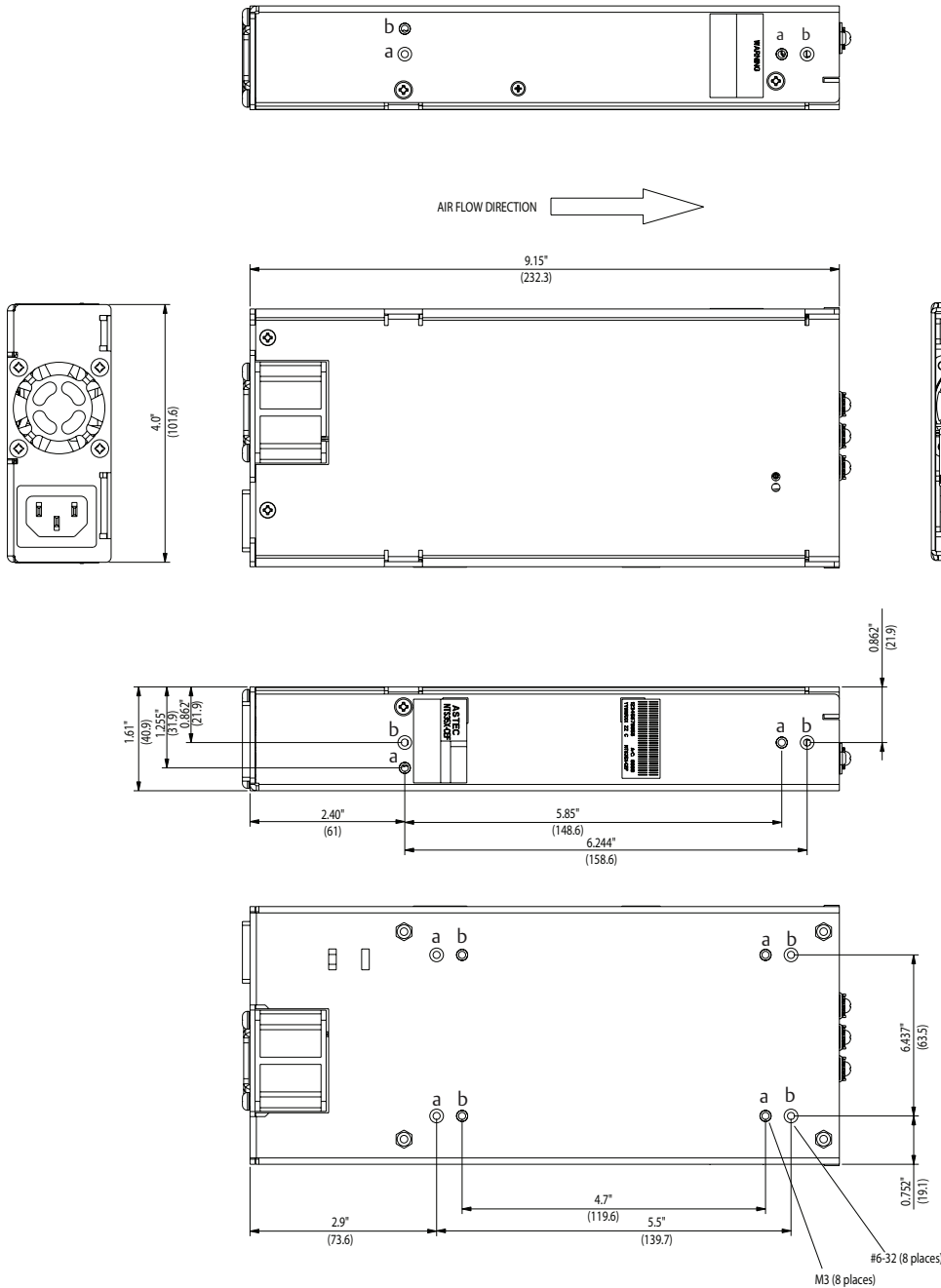
Adjustment Potentiometers

P1	+V1 Output adjust
P3	+5VSB adjust

Mechanical Drawing



Mechanical Drawing - CEF option



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