

NTS350 Series

350 Watts

Data Sheet

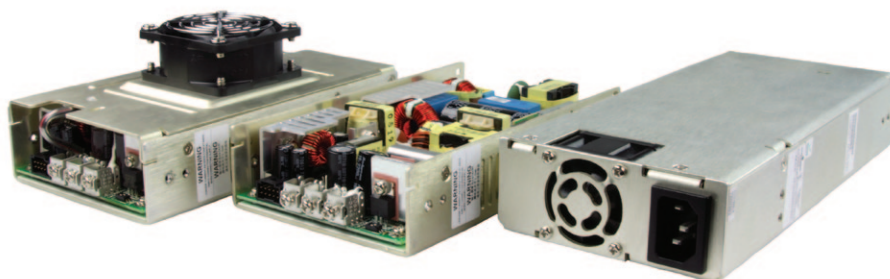
Total Power: 200 - 350 Watts
Input Voltage: 85 - 264 Vac
 120 - 300 Vdc
of Outputs: Single

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% of 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
	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

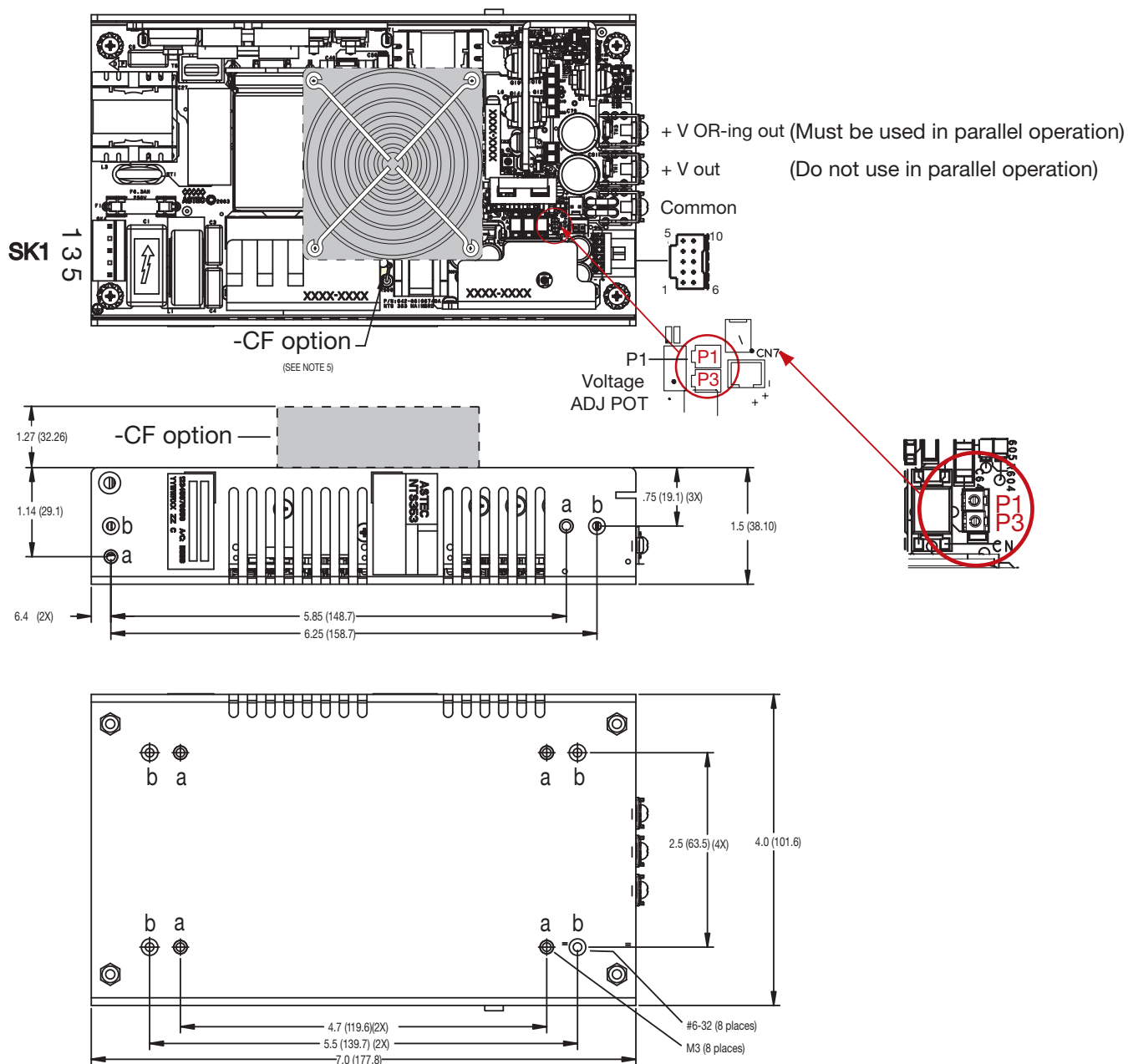
P1	+V1 Output adjust
P3	+5VSB adjust

Mating Connectors

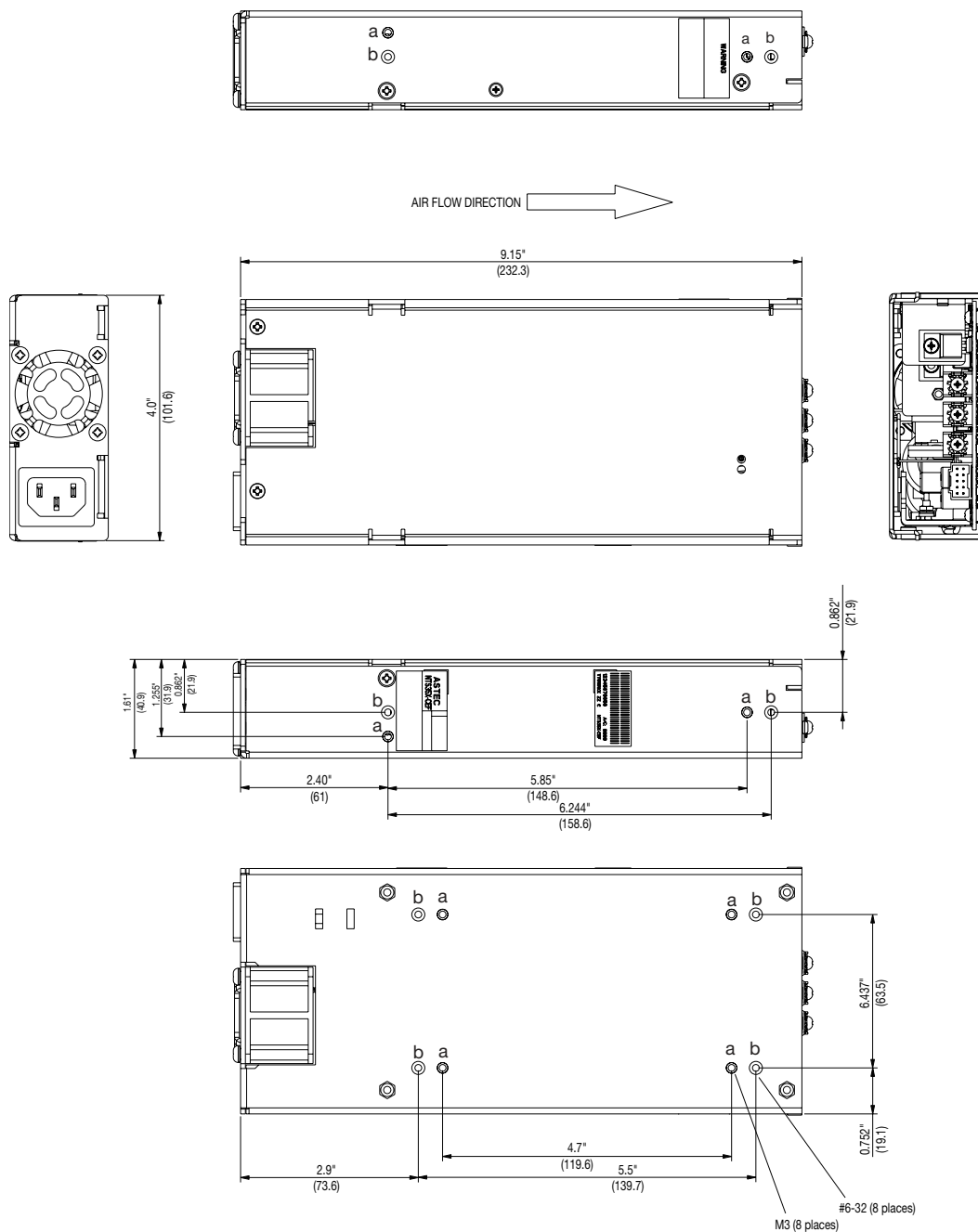
SK1 AC input	Molex 09-50-8051 (USA)
	Molex 09-91-0500 (UK)
	PINS:08-52-0113
SK2,3,4	Molex BB-124-08
SK5 Control signals	Molex 90142-0010
	PINS: 90119-2110
Or	Amp: 87977-3
	PINS: 87309-8
Artesyn Embedded Technologies Connector Kit #70-841-022 includes all of the above	

- 1.Specifications subject to change without
- 2.All dimensions in inches (mm), tolerance is ± 0.2".
- 3.Specifications are at factory settings
- 4.Mounting maximum insertion depth is 0.12".
- 5.Warranty: 2 year
- 6.Weight: NTS35X 1.65 lbs/750g. NTS35X-CF 2 lbs/909g. NTS35X-CEF 2.25 lbs/1022g.

Mechanical Drawing



Mechanical Drawing - CEF option



WORLDWIDE OFFICES

Americas

2900 S.Diablo Way
Tempe, AZ 85282
USA
+1 888 412 7832

Europe (UK)

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

Asia (HK)

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

ARTESYN
EMBEDDED TECHNOLOGIES

www.artesyn.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Artesyn Embedded Technologies assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners.
© 2014 Artesyn Embedded Technologies, Inc.

For more information: www.artesyn.com/power
For support: productsupport.ep@artesyn.com

NTS350 DS Rev. 12.18.14