POWER

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

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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

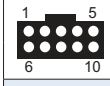
Operating temperature:	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C.
Storage temperature:	-40 °C to +85 °C
Electromagnetic susceptibility:	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 90% RH
Vibration:	Three 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
5. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

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

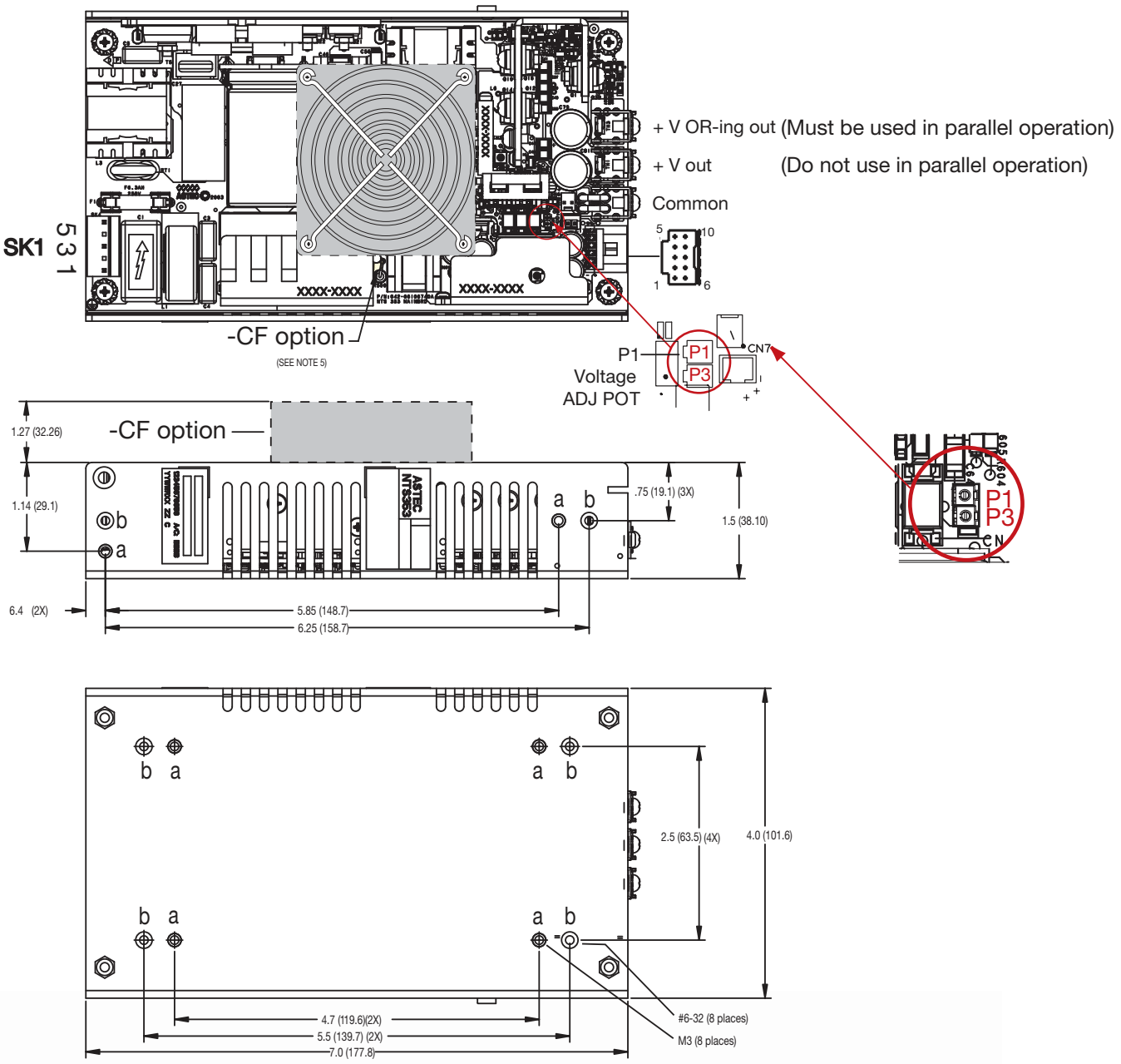
P1	+V1 Output adjust
P3	+5VSB adjust

Mating Connectors

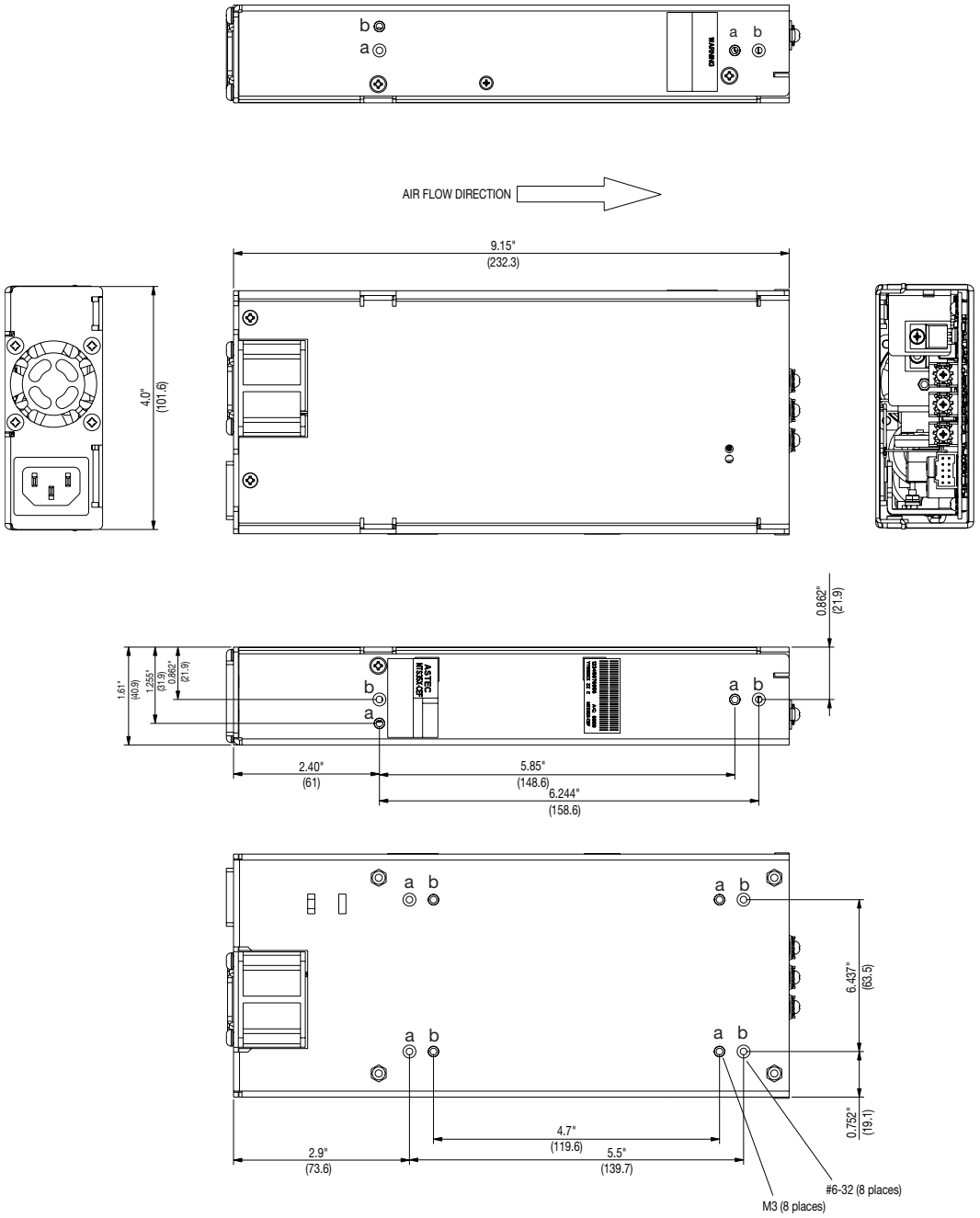
SK1 AC input	Molex 09-50-8051 (USA)
	Molex 09-91-0500 (UK)
	PINS:08-52-0113
SK2,3,4	Molex BB-124-08
SK5 Control signals	Molex 90142-0010
	PINS: 90119-2110
Or	Amp: 87977-3
	PINS: 87309-8
Artesyn Embedded Power Connector Kit #70-841-022 includes all of the above	

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



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