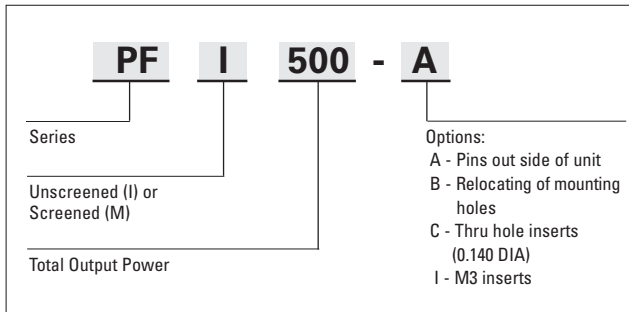


PF500 Active power factor correction and harmonic attenuation module

85 – 265 Vin, 500 watts



HOW TO ORDER



FEATURES

- Meets Harmonic Requirements of MIL - STD - 1399
- Meets CE01 and CE101 of MIL - STD - 461 without Companion Filter
- Meets EMI Requirements of MIL - STD - 461 with PFF500 Companion Filter
- Meets all requirements of MIL - STD - 704E
- Non-latching Over Temperature Protection
- Non-latching Output Overvoltage Protection
- Isolated Input AC Good TTL Signal (Open collector)
- Isolated Output DC Good TTL Signal (Open collector)
- Full 500 Watts of output power from 85 VAC to 265 VAC and up to 100°C baseplate temperature
- Utilizes non isolated boost topology
- Environmental Screening available

INPUT CHARACTERISTICS

	Min.	Typ.	Max.	Units
Input Voltage (Single Phase)	85		265	VAC
Input Frequency Range	47		440	Hz
Inrush Current				
@115 Vrms			15	A
@240 Vrms			25	A
Power factor at Full Load				
115V _{in} / 60Hz	0.98	0.99		
115V _{in} / 400Hz	0.94	0.96		
230V _{in} / 50Hz	0.97	0.99		
Efficiency at Full Load				
115V _{in} / 60Hz	92	93		%
115V _{in} / 400Hz	91	92		%
230V _{in} / 50Hz	94	95		%

OUTPUT CHARACTERISTICS

	Min.	Typ.	Max.	Units
Nominal No Load Voltage Setting	385		390	V
Output Power (Full Load)			500	W
Load Regulation (No Load - Full Load)			2.2	% V _{out}
Line Regulation (Low Line - High Line)			1	% V _{out}
Ripple P - P (60 Hz/115 VAC input)			3.5	% V _{out}
Overvoltage Protection	405	410	425	V
Transient Response: 25 - 75 - 25% or 50 - 100 - 50% step load				
Overshoot / Undershoot		±6.3		% V _{out}
Recovery time (to 2% of V _{out})			200	mS
Temperature Drift	0.01	0.02		%/°C
Output (Holdup) Capacitance		Not Included		
		(specs are based on 495µF)		
Holdup Time - Application specific (@P _{out} =500W, V _{out} 380 to 200V)		52		mS

All specifications are typical @+25°C with nominal input voltage under full output load conditions and holdup capacitance of 495µF, unless otherwise noted. Specifications subject to change without notice.

PF500 Active power factor corrector & harmonic attenuator module

TEMPERATURE CHARACTERISTICS

	Min.	Typ.	Max.	Units
Operating	-40		+100	° C
Storage - Ambient	-55		+105	° C
Over Temperature Shutdown		+105	+115	° C
Hysteresis		10		° C
Thermal Resistance Case- Ambient		4.5		° C/W

M- GRADE - ENVIRONMENTAL SCREENING

Stabilization Bake	+105°C for 24 hours similar to MIL -STD -883, M1008.2, Condition B
Temperature Cycling	10 cycles at -55°C to +105°C (transition period 5°C / minute) similar to MIL -STD -883, M1010, Condition B
Burn in	160 hours @ 85°C minimum
Final Testing	Full ATP

I- GRADE - ENVIRONMENTAL SCREENING

Burn in	16 hours @ 50°C minimum
Final Testing	Full ATP

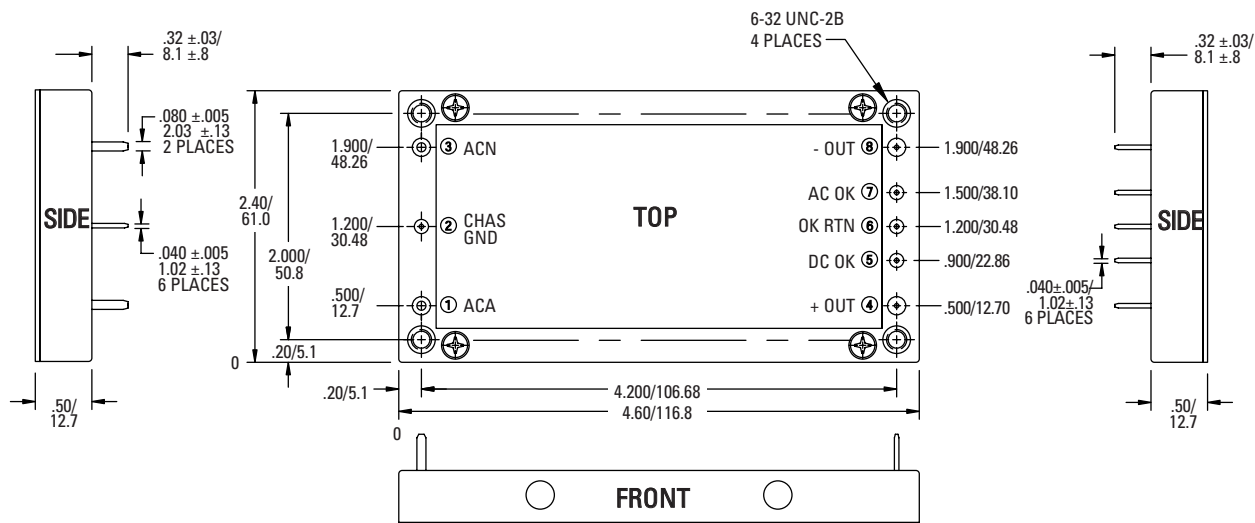
ISOLATION CHARACTERISTICS

	Min.	Units
Isolation:		
Input/Output to Base	1000	VAC
Insulation resistance @ 500 VDC	100	MOhm

MECHANICAL CHARACTERISTICS

Weight (Max.)	9.4	oz.
	265	grams
Size	4.6 x 2.4 x 0.5	inch
	116.8 x 61 x 12.7	mm
Volume	5.5	inch ³
	90.2	cm ³
Material:		
Lid and Case	Steel	
Baseplate	Aluminum	
Finish:		
Lid and Case	Nickel Plating	
Baseplate	None	
Mounting:		
Standard	6-32 THD Inserts	
Option - I	Metric M3 - 0.5 Inserts	

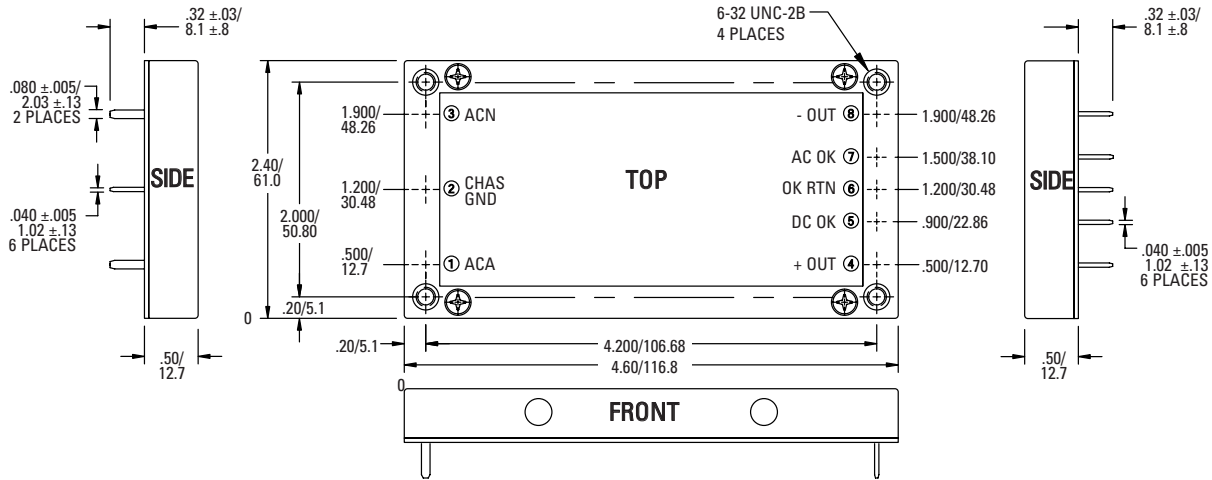
CASE DRAWINGS - PF500 STANDARD



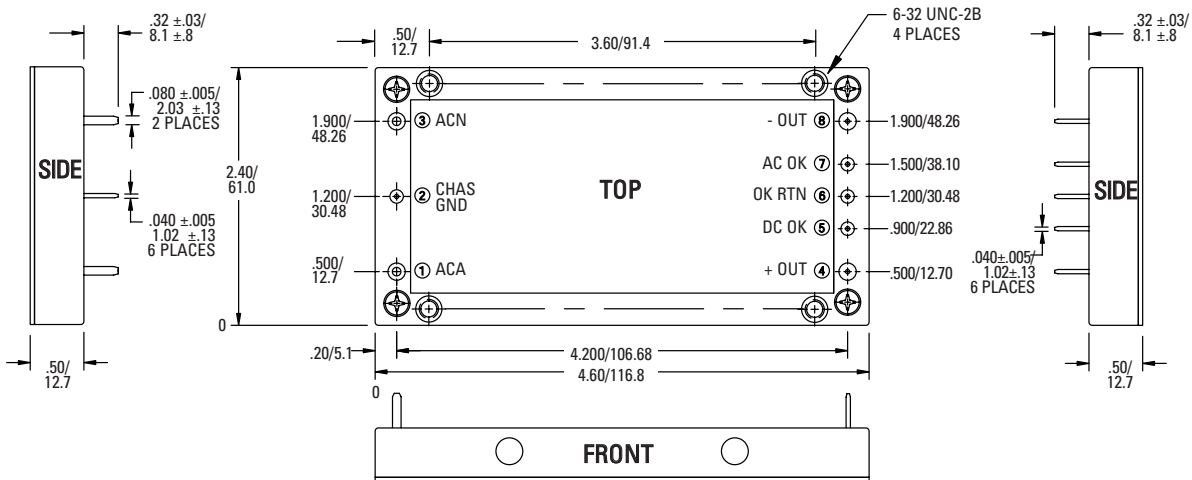
Tolerances: inches - x.xx = ±0.03 mm - x.x = ±0.8
x.xxx = ±0.015 x.xx = ±0.40

All specifications are typical @+25°C with nominal input voltage under full output load conditions and holdup capacitance of 495µF, unless otherwise noted. Specifications subject to change without notice.

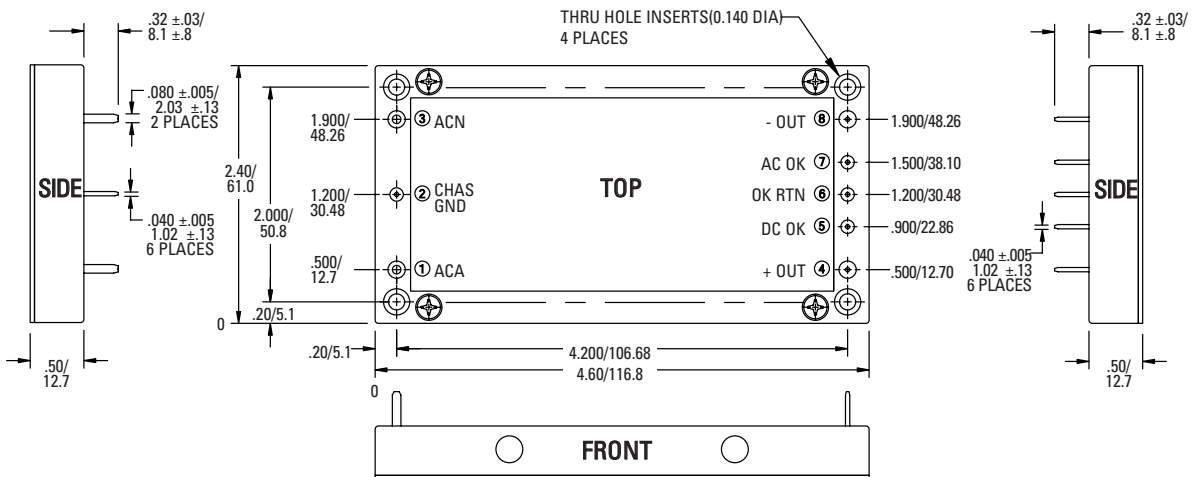
CASE DRAWINGS - PF500 OPTION -A; PINS OUT BASEPLATE OF UNIT



CASE DRAWINGS - PF500 OPTION -B; RELOCATING OF MOUNTING HOLES



CASE DRAWINGS - PF500 OPTION -C; THRU HOLE INSERTS(0.140 DIA)



All specifications are typical @+25°C with nominal input voltage under full output load conditions and holdup capacitance of 495µF, unless otherwise noted. Specifications subject to change without notice.

For additional information, call 310.542.8561
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