General Specifications - Model ABC30.0-XXD20Y

Input Voltage 208/240/480/600 delta connection (4 wire)

Ouput Voltage 208/120 wye (5 wire)

Frequency 60 Hz. only

Continuous Capacity 30 kVA

BTU/Hr. Output 3073

Efficiency ≥ 97% (at full load, unity power factor

Step Load Change $\pm 0.8\%$ (at unity power factor)

Noise Rejection With unit under power and the isolation transformer configured for a transformation

ratio of 1:1 and with an ANSI/IEEE C62.41, Category A pulse applied either normal mode or common mode at the input, the noise output voltage will be less than 10 volts normal mode and less than .5 volts (½ of one volt) common mode in all four quadrants

(CM-NM, NM-NM, CM-CM, NM-CM).

Surge Voltage Withstand Tested under power to ANSI/IEEE C62.41, Category A & B (formerly IEEE587-1980).

Power conditioner tested to withstand up to 6000 volts @ 3000 amp ringwave and unipo

lar impulse.

Construction Materials Transformer wires are copper and insulated with Class H materials. Windings are insu

lated with Nomex paper insulation before vacuum varnishing. Internal wiring is a mini mum of 200 degree C rated and sleeved with Class H materials. Grain oriented silicon iron cores are constructed using 14 mil. laminations interleaved one to one. Eddy currents are minimized and external magnetic fields are below 0.1 oersted (at 12 inches

distance in any direction). Unit is RoHS compliant.

Physical Dimensions H x W x D - inches (mm.) 35 x 22 x 39 (889 x 559 x 990)

Weight in lbs. (kg.) 820 (373)

Input Connection Requirements*

Input Voltage	Input Current (FLA)	Supply Breaker Rating @ Switchgear	AIC (Current Interrupt Capacity of Input Circuit Breaker)	Minimum Input Conductor Size (includes ground)	Input Lug Maximum Wire Size
208	84	110	25 kAMPS	3 AWG	2 AWG
240	72	90	25 kAMPS	4 AWG	2 AWG
480	36	45	25 kAMPS	8 AWG	2 AWG
600	29	40	25 kAMPS	8 AWG	2 AWG

^{*} Supply breaker ratings are determined by NEC guidelines limiting breaker loading to 80% of rated breaker capacity. Calculations for supply breaker recommended ratings are based on input full load amps multiplied by 1.25 and then selecting the next larger standard size breaker. Wire sizes shown in the input and output connection tables of this specification sheet are the minimum sizes allowed by electrical codes for each supply breaker rating and are taken from the 2002 National Electrical Code Article 310.16 table references for use in 90⁰ C installations.



Output Connection Requirements*

Output Voltage	Output Current (FLA)	Minimum Output Conductor Size (includes ground)	Output Lug Maximum Wire Size
208/120	84	4 AWG	2/0

Input Voltage Changes

This power conditioner is equipped with a fixed input circuit breaker. If changes are required to the input voltage setting of the power conditioner, it will be necessary to replace the fixed breaker and set input voltage taps appropriately per the following diagram. Please contact POWERVAR Technical Support to order a replacement breaker and for assistance in making any required changes.

VAC	Connect each phase		
208	H1 to H3-4, H2 to H1-4 and H3 to H2-4		
240	H1 to H3-3, H2 to H1-3 and H3 to H2-3		
480	H1 to H3-2, H2 to H1-2 and H3 to H2-2		
600	H1 to H3-1, H2 to H1-1 and H3 to H2-1		

H1, H2, H3 TO THE MAIN INPUT CIRCUIT BREAKER





