



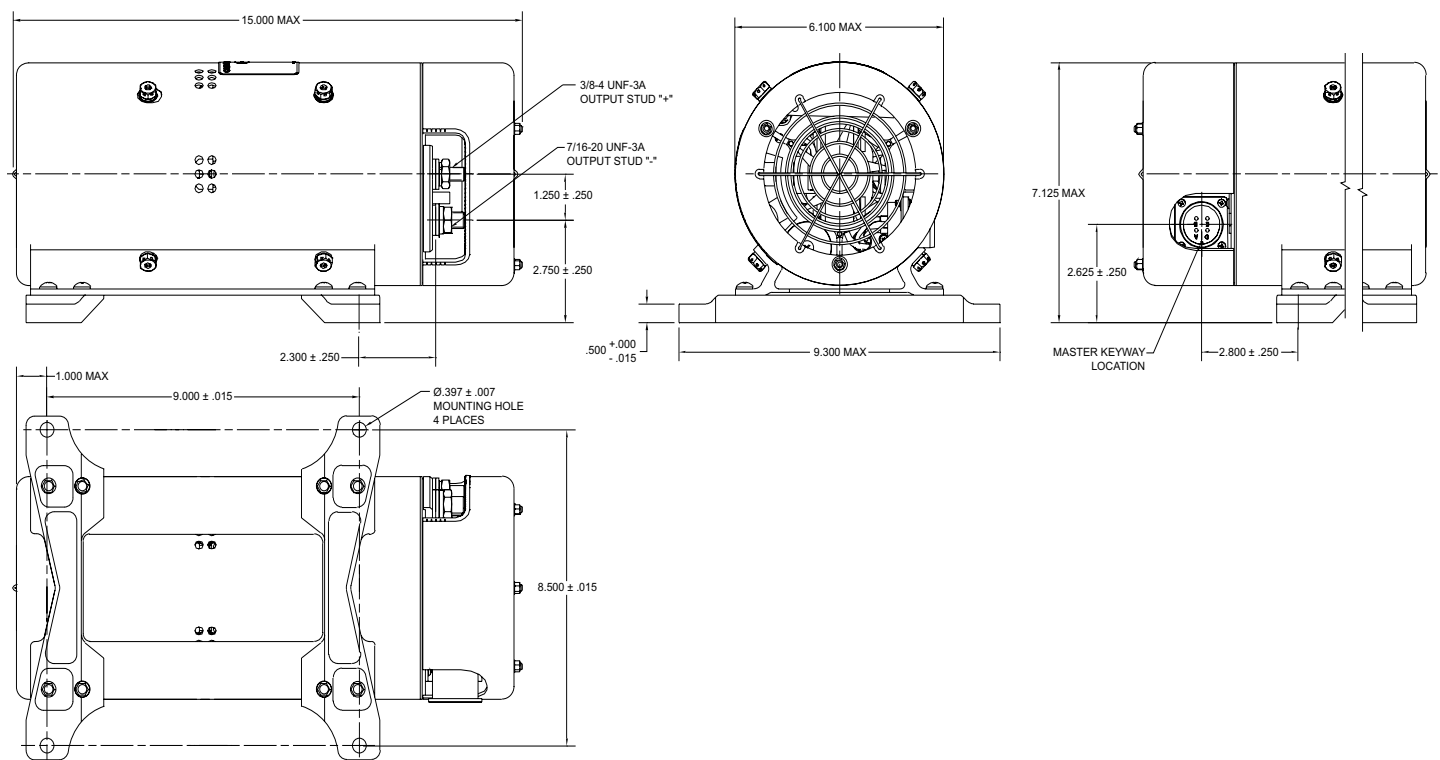
300 AMP PASSIVELY CONTROLLED TRANSFORMER-RECTIFIER MODEL 28VS300Y-35

The Model 28VS300Y-35 Passively Controlled Transformer-Rectifier Unit is a lightweight, highly reliable, static AC to DC converter designed for advanced avionics. The unit operates from a 115 / 200 volt, 400 hertz, 3 phase AC source, and provides 300 amperes of current continuously at a nominal 28 volts DC.

Champion's PCTRU provides higher power quality than a regulated TRU by delivering low ripple voltage, transient voltage surge suppression, high efficiency and the highest reliability without the added failures modes inherent to regulated TRUs. Champion model 28VS300Y-35 clamps high voltage transients to 40 volts max as compared to regulated TRUs and traditional TRUs which can allow high voltage transient up to 70 volts. This higher quality power eliminates faults, increases operational time and performance, reduces operational cost, and increases safety. Champion's PCTRU exceeds power quality requirements of industry standards.

SPECIFICATIONS

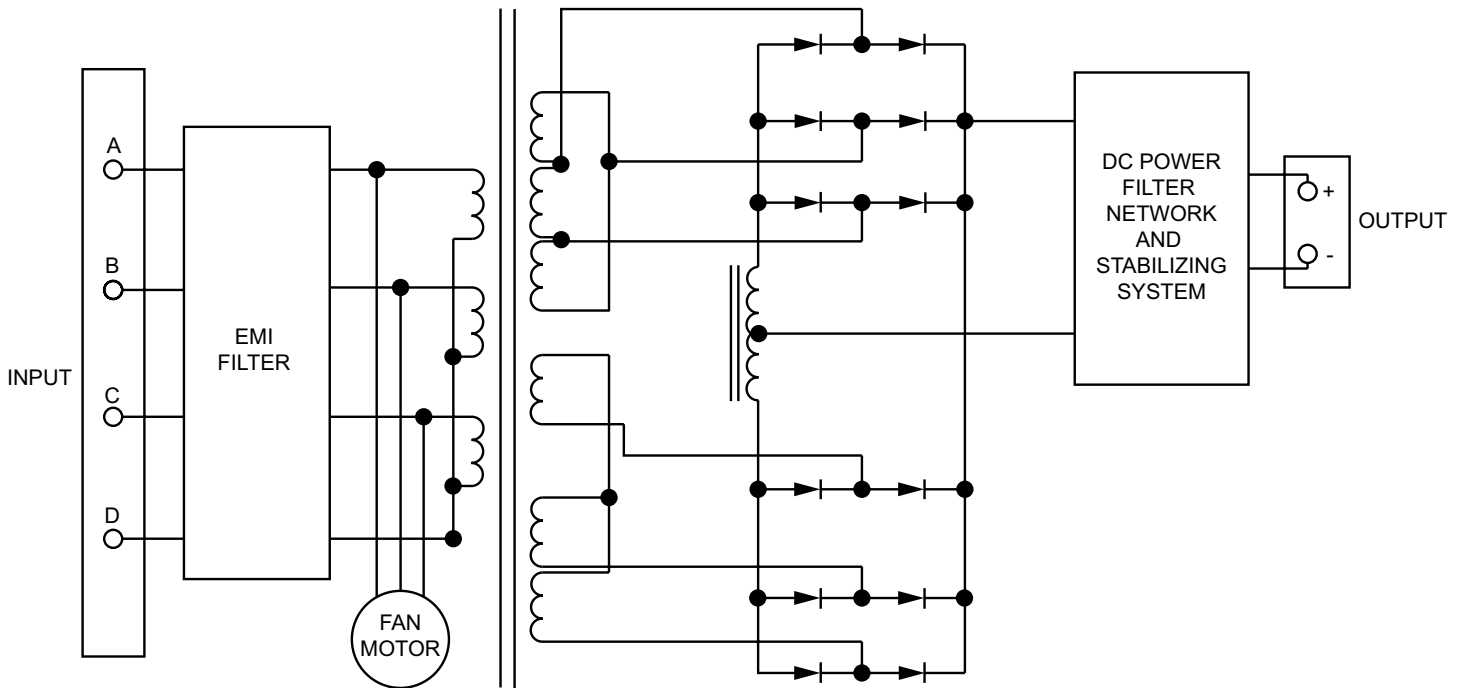
INPUT-AC		TVSS CLAMPING 40(Full Load) Volts (Max)
Voltage..... 115/200 Volts		COOLINGFan
Current-Full Load 27 Amperes		ALTITUDE25,000 Ft.
Frequency 380 to 420 Hertz		ALTITUDE TEMP. RATING Per Curve 2 MS33543 (ASG)
Phase 3 4 Wire		SIZE..... 15.00 L x 9.300 W x 7.125 H Inches
OUTPUT-DC		WEIGHT29Pounds
Voltage-Nominal..... 28 Volts		MOUNTING POSITION.....Any
Current..... 300 Amperes		TRANSFORMER
Ripple (Half Load) 0.4 (Max) Volts Pk-Pk		Primary.....Wye
(Full Load) 0.7 (Max) Volts Pk-Pk		Secondary.....Delta-Wye
Overload 200% One Minute		RECTIFIERSSchottky Diodes
DUTY CYCLEContinuous		ELECTRICAL CONNECTIONS
EFFICIENCY 85 Percent (Min)		Input..... MS3452W-20-4P Receptacle
POWER FACTOR 95 Percent (Min)		Output..... Terminal Studs



TECHNICAL NOTES

The Model 28VS300Y-35 is an exceptionally adaptable unit permitting flexibility in the choice of location of the mounting base in any of four quadrants around its circumference. Fan cooling allows the unit to be mounted in any position; input and output connection locations and mounting provisions may be varied to meet special requirements. This unit can employ an optional built-in-fault detector to indicate thermal overheating.

A unique Class-H delta-wye transformer, which is symmetrical electrically and magnetically, provides for cooler, less noisy operation. The housing and circular heat sinks are constructed of extruded aluminum for exceptional rigidity. This unit is qualified as M7115/4A per MIL-PRF-7115G. Transient Voltage Surge Suppression (TVSS) and a low impedance bypass circuit stabilize the output voltage for advanced electronics and Commercial Off The Shelf (COTS) utilization equipment. A high reliability cooling fan with a pressure cooling system insures uniform heat dissipation. Minimum unit volume and weight have been achieved by employing a rectifier heat sink and transformer of cylindrical configuration.



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