

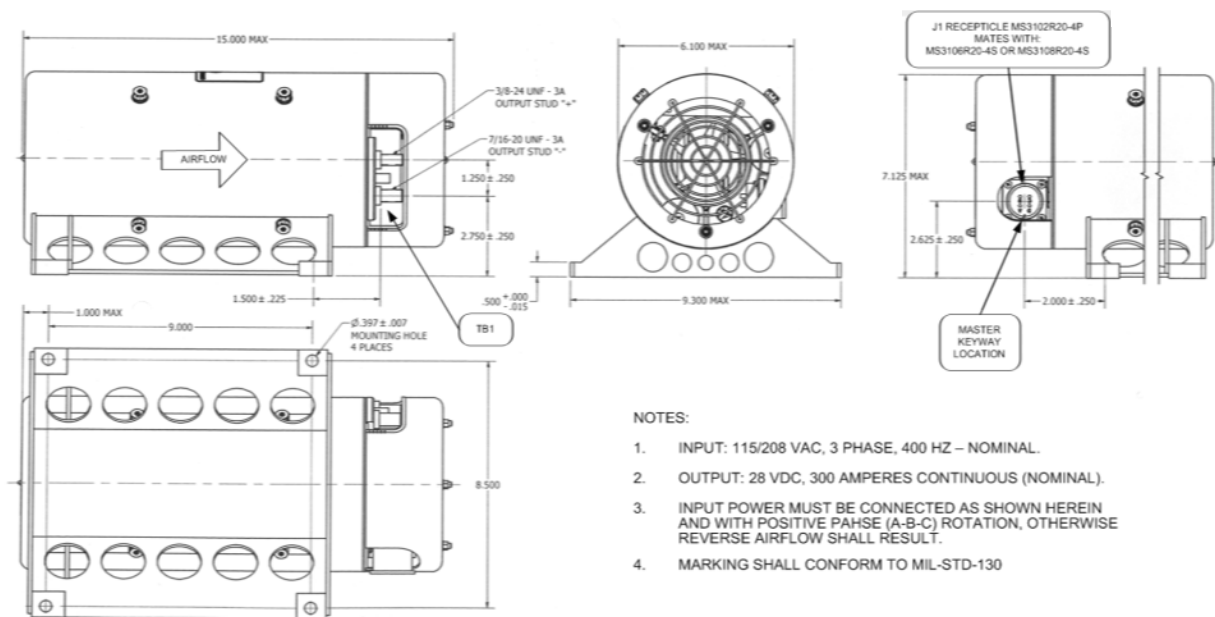
INCH-POUND
 MIL-PRF-7115/4(AS)
 11 July 2012

PERFORMANCE SPECIFICATION SHEET

CONVERTER, AIRCRAFT
300 AMPERE, TYPE II, CLASS A, FAN COOLED

This specification is approved for use by the Department of the Navy and is available for use by all Departments and Agencies of the Department of Defense.

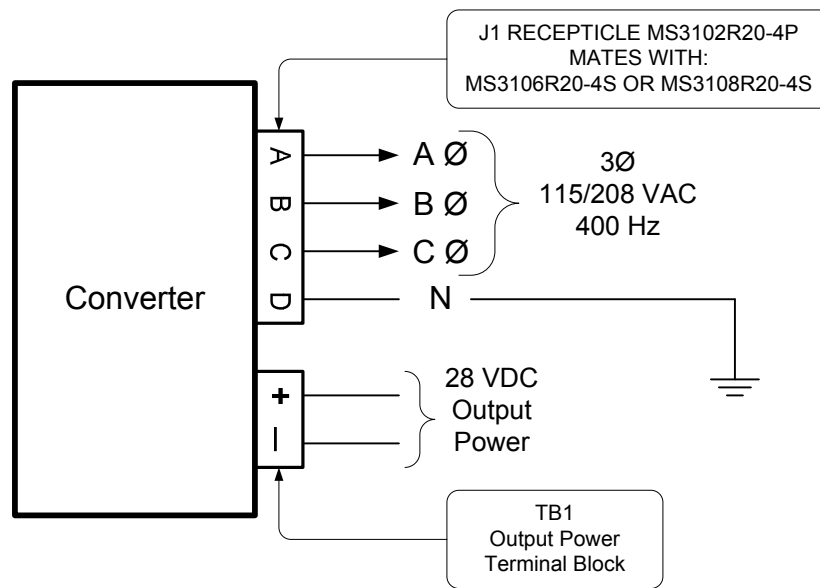
The requirements for the product described herein shall consist of this specification sheet and MIL-PRF-7115.



Weight: 28.0 pounds maximum

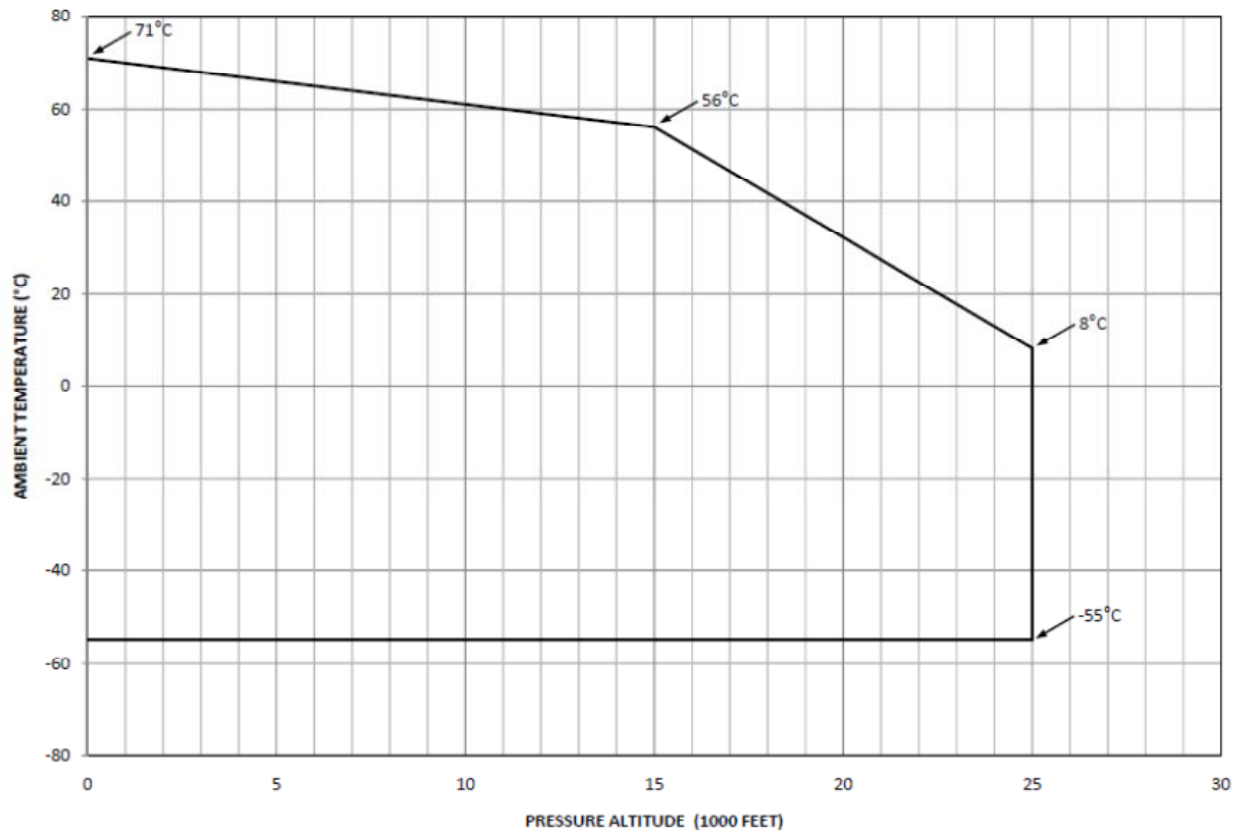
FIGURE 1. Dimensions and configuration for P/N M7115/04.

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FIGURE 2. Connection diagram.TABLE I. Converter characteristics.

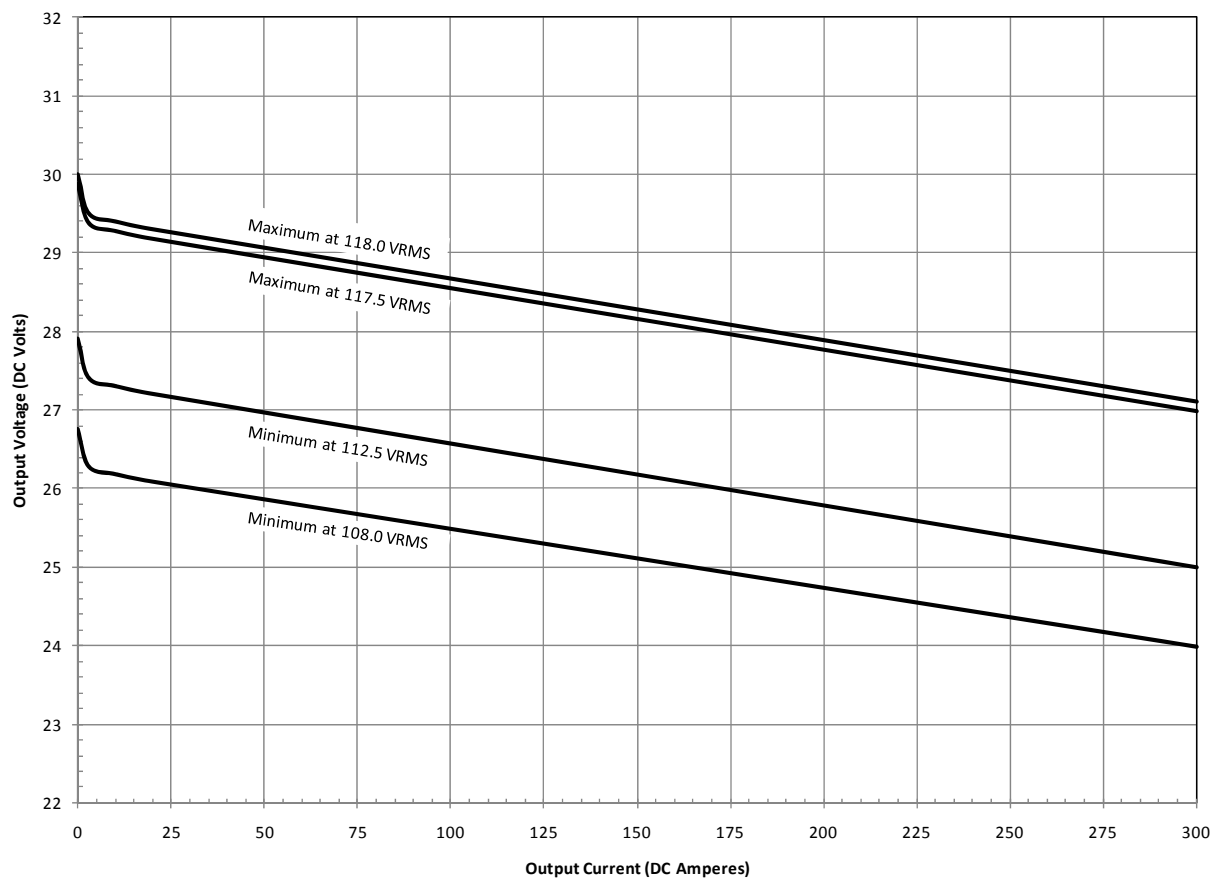
<u>AC Input:</u>	
Voltage Range	112.5 - 117.5
Input Current, per phase	27 Amperes (@300 A output)
Frequency Range	380 - 420 Hertz
<u>DC Output:</u>	
Voltage	28 Volts (Nominal)
Maximum Continuous Load Current	300 Amperes

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FIGURE 3. Temperature-altitude ambient environment.TABLE II. Acoustical noise sound levels.

Octave Band HZ	Sound Pressure Level dB (Ref -0.0002 Microbar)
31	91
63	92
125	93
250	94
500	90
1000	87
2000	87
4000	77

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Input (VRMS)	108.0	112.5	117.5	118.0
Output (Amps DC)	Minimum VDC	Rated VDC	Maximum VDC	Maximum VDC
0	26.8	27.9	29.9	30.0
3	26.3	27.4	29.4	29.5
10	26.2	27.3	29.3	29.4
20	26.1	27.2	29.2	29.3
50	25.7	26.8	28.8	28.9
100	25.2	26.3	28.3	28.4
150	25.0	26.1	28.1	28.2
200	24.7	25.7	27.7	27.8
250	24.5	25.5	27.5	27.6
300	24.0	25.0	27.0	27.1

FIGURE 4. Output voltage limits.

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GENERAL NOTES

This converter shall conform to:

- (1) the dimensions and configurations specified on Figure 1 of this specification sheet.
- (2) the connection diagram specified on Figure 2 of this specification sheet.
- (3) the converter characteristics specified in Table I of this specification sheet.
- (4) the performance requirements specified on Figure 3 of this specification sheet.
- (5) the output voltage limits specified on Figure 4 of this specification sheet.

REQUIREMENTS

The converter shall meet the requirements of MIL-PRF-7115, except as modified below (paragraph number refers to MIL-PRF-7115). (Reference MIL-PRF-7115 paragraph 3.1.)

1.2.1 Classification. The converter will be classified as a Type II non-regulated converter designed for a nominal 28VDC output.

1.2.2 Converter class. Delete and add: The converter will be classified as a class A with internal cooling fan and conform to the ambient temperature-altitude requirements of Figure 3.

3.4.2.1.1.1 Terminals block design. Add as first sentence: Output stud, as shown in Figure 1 of this specification sheet, are to be of different stud sizes to preclude the inadvertent reverse polarity connection of the TRU during aircraft installation.

3.4.3.6 Operation position. Delete and add: The converter shall operate in any position consistent with the mounting holes shown on Figure 1.

3.4.3.7 Size and weight. Delete and add: The dimensions and weight of the converter shall be as shown as on Figure 1 of this specification sheet.

3.5.1.5 Acoustical noise. Delete and add: Sound pressure levels of the converter shall not exceed those listed in Table 2 of this specification sheet.

3.5.1.2.1 Steady state output voltage. Add as first sentence: The output voltage shall remain within the limits of Figure 4 of this specification sheet.

3.5.1.2.1.1c Peak to Peak ripple voltage. Delete and add: The ripple voltage shall not exceed 0.40 volt (peak-peak) from zero to 100 percent load current.

3.5.2.1 Temperature-altitude. Delete and add: "The converter shall meet all performance requirements specified herein throughout the temperature-altitude range of Figure 3 of this specification sheet."

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3.6 Reliability. Add as second sentence: Analysis to be done in accordance with 6.4.4 of MIL-PRF-7115 and results shall be provided to qualifying activity.

3.7.4 Airflow. Add as third sentence: The direction of airflow shall be as shown on Figure 1 of this specification sheet and depicted by an arrow that is visible on the converter exterior.

Custodian:
Navy - AS

Preparing activity:
Navy - AS
(Project 6130-2012-001)

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