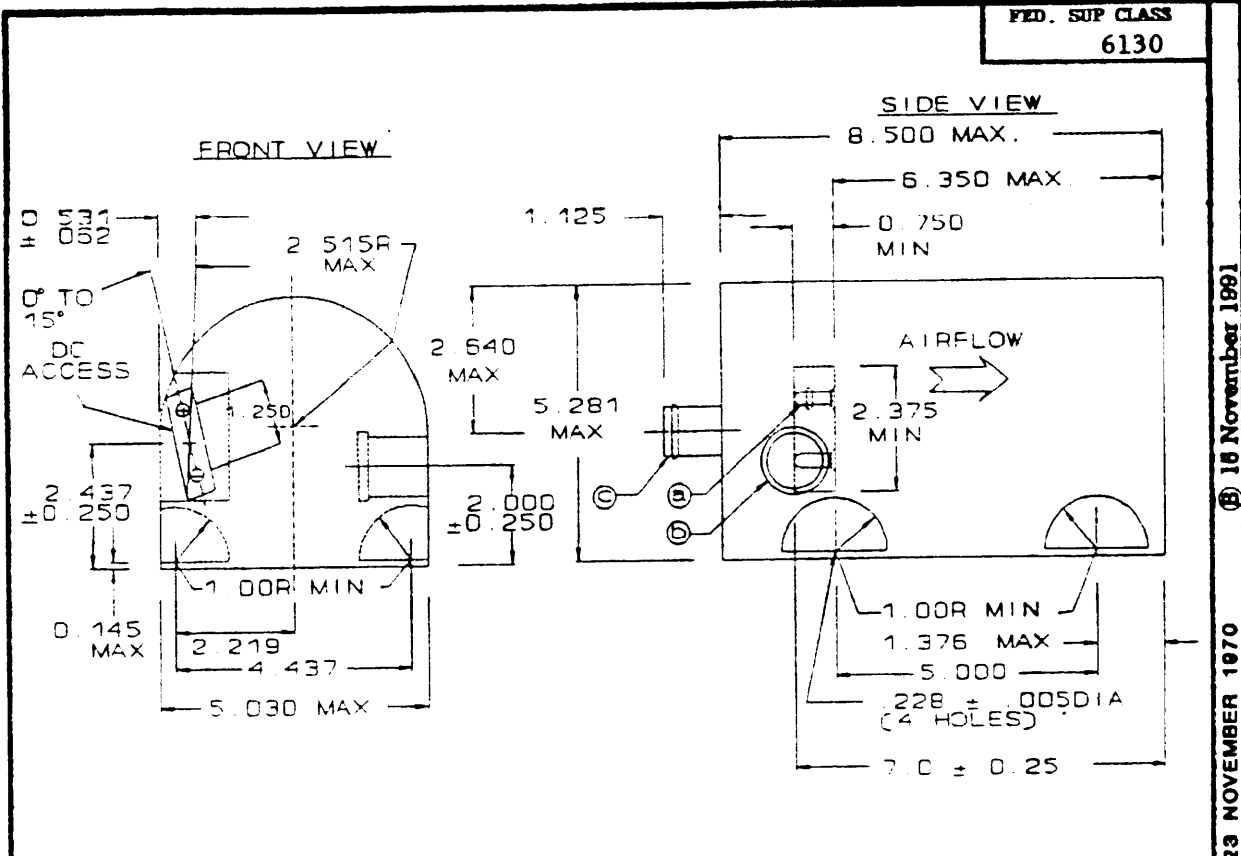


FED. SUP CLASS  
6130

USER ACTIVITIES

REVIEWER ACTIVITIES

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- Ⓐ 1/4 - 28 UNF-3A TERMINAL STUDS - 9/16 INCH (MIN.) TO SHOULDER (2 REQ'D).
- Ⓑ RECEPTACLE TO FIT PLUG MS3106R-18-4S OR MS3459W-18-4S.
- Ⓒ TUBING END MS33660-16.

|             |
|-------------|
| MS PART NO. |
| MS3370-1    |

APPROVED 20 NOVEMBER 1962 REVISED 23 NOVEMBER 1970 16 NOVEMBER 1991

|  |                           |   |                   |
|--|---------------------------|---|-------------------|
| P.A.<br>NAVY-AS                          | INTERNATIONAL<br>INTEREST | TITLE<br>CONVERTER, 100 AMPERE<br>CLASS C, NONREGULATED<br>AIRCRAFT, BLAST COOLED | MILITARY STANDARD |
| Other Cust<br>ARMY<br>AIR FORCE          |                           |   | MS3370            |
| Procurement Specifications<br>MIL-C-7115 | SUPERSEDES:               |   | SHEET 1 OF 5      |

FED. SUP CLASS  
6130

USER ACTIVITIES:

AC INPUT:

Voltage Range 112.5-117.5 Volts  
Frequency Range 380-420 Hertz

DC OUTPUT:

Voltage See Figure 3  
Maximum Load Current 100 Amperes  
Minimum Load Current 1.0 Amperes  
Weight (lbs) 9.0 (Max)

REVIEWER ACTIVITIES:

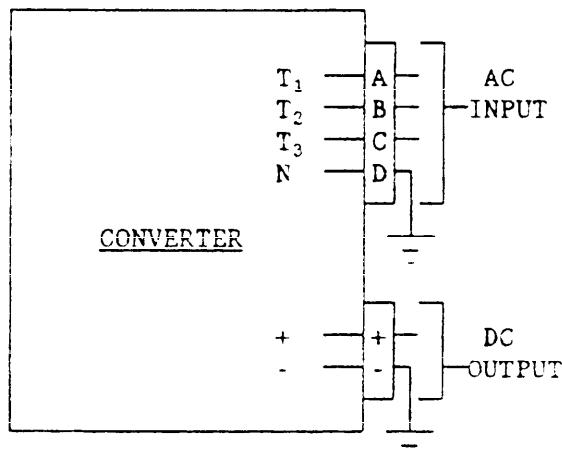


Figure 1. CONNECTION DIAGRAM

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18 November 1991

23 NOVEMBER 1970

REVISED

APPROVED 20 NOVEMBER 1962

|  |                           |   |                   |
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| Procurement Specifications<br>MIL-C-7115 | SUPERSEDES:               |   | SHEET 2 OF 5      |

REQUIREMENTS:

The converter shall meet the requirements of MIL-C-7115 as modified below: (paragraph numbers refer to MIL-C-7115).

3.4.1.3.3 Color. Delete "color number 17875 (white)" of first sentence and add "color number 37038 (black)."

3.6.2.6 Cooling. The unit shall be cooled by blast air entering the unit at the terminal end and having the following characteristics:

(a) Cooling air temperature may vary between -54°C to 49°C during ground operation and then vary linearly from 27°C at sea level to 0°C at 65,000 feet during flight operation.

(b) Amount of cooling air shall not exceed that shown in figure 2 of this Military Standard.

(c) The converter shall be able to operate continuously at +45°C at sea level with no cooling air and 35 percent rated load.

Loss of Cooling Air. The unit shall not be damaged at the loss of cooling air for a period of 2 minutes while delivering full rated load.

3.7.1.2.3 Output starting voltage. Add to second sentence: "except for the first 5 milliseconds from the onset of the transient, when a maximum voltage of 45 volts shall be allowed."

3.7.1.4.2 Type II, nonregulated converters. Add: "except the conducted emission requirements of CE03, MIL-STD-461 shall be relaxed 15 db and 25 db respectively, for the output positive and negative leads from 150 KHz to 1.0 MHz."

3.7.1.5 Acoustical Noise. Not applicable.

3.7.1.6 Pressure drop (blast cooled converters only). Add:  
(a) Pressure drop in the unit shall not exceed 2.0 inches of water at a flow rate of 1.0 pound per minute under normal sea level conditions.

(b) Relative humidity of the cooling air may vary between 0 and 100 percent and each pound of air may contain up to 38 grains of water.

3.7.2.2 Acceleration. Not applicable.

3.7.2.9 Explosive atmosphere. Not applicable.

4.7.2.2.2 Voltage Regulation at maximum temperature-altitude conditions. Add: "Maximum ambient temperature is +71°C."

USER ACTIVITIES

REVIEWER ACTIVITIES

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| Procurement Specifications<br>MIL-C-7115 | SUPERSEDES:               |   | SHEET 3 OF 5      |

4.7.2.2.3 Voltage regulation at minimum temperature-altitude conditions. Delete "-30°C" and replace with "-55°C".

4.7.2.15 Acoustical Noise. Not applicable.

4.7.2.18 Acceleration. Not applicable.

4.7.2.25 Explosive atmosphere. Not applicable.

NOTES:

1. Dimensions are in inches. Tolerance is  $\pm 0.015$  unless otherwise specified.

2. The complete requirements for procuring the converter described herein shall consist of this document and the latest issue of MIL-C-7115.

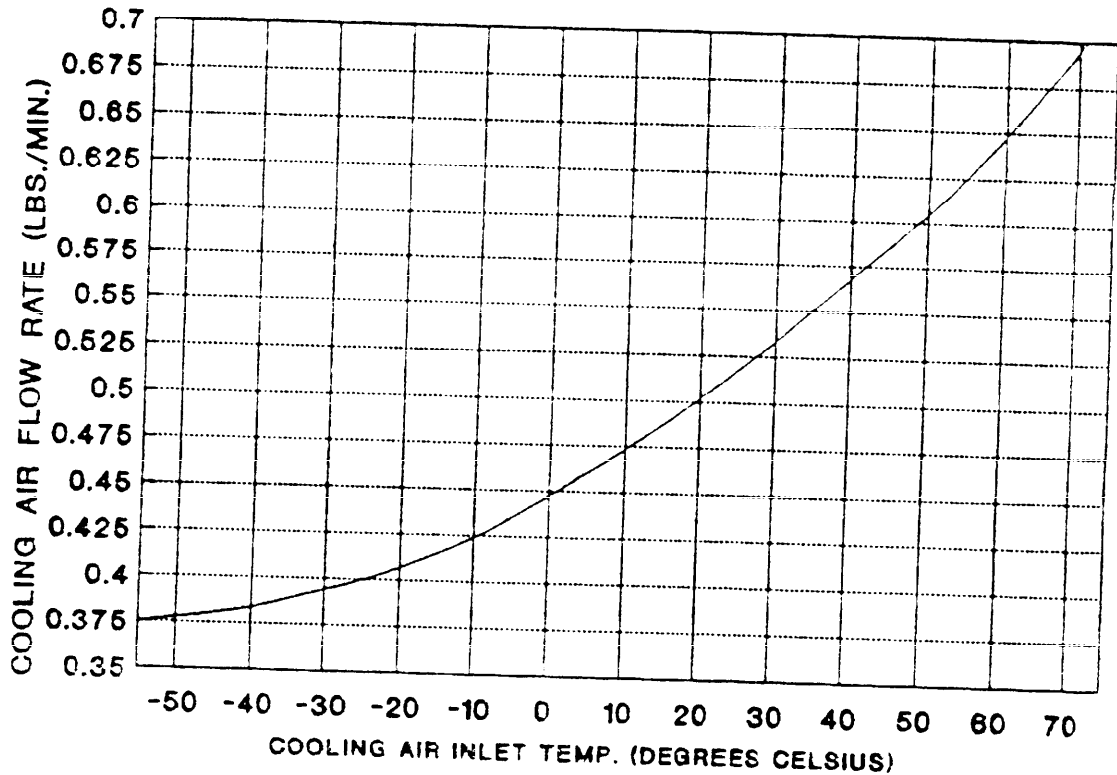


Figure 2. Cooling Air Flow Rate vs Temperature

USFR ACTIVITIES

REVIEWER ACTIVITIES

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⑤ 18 November 1991

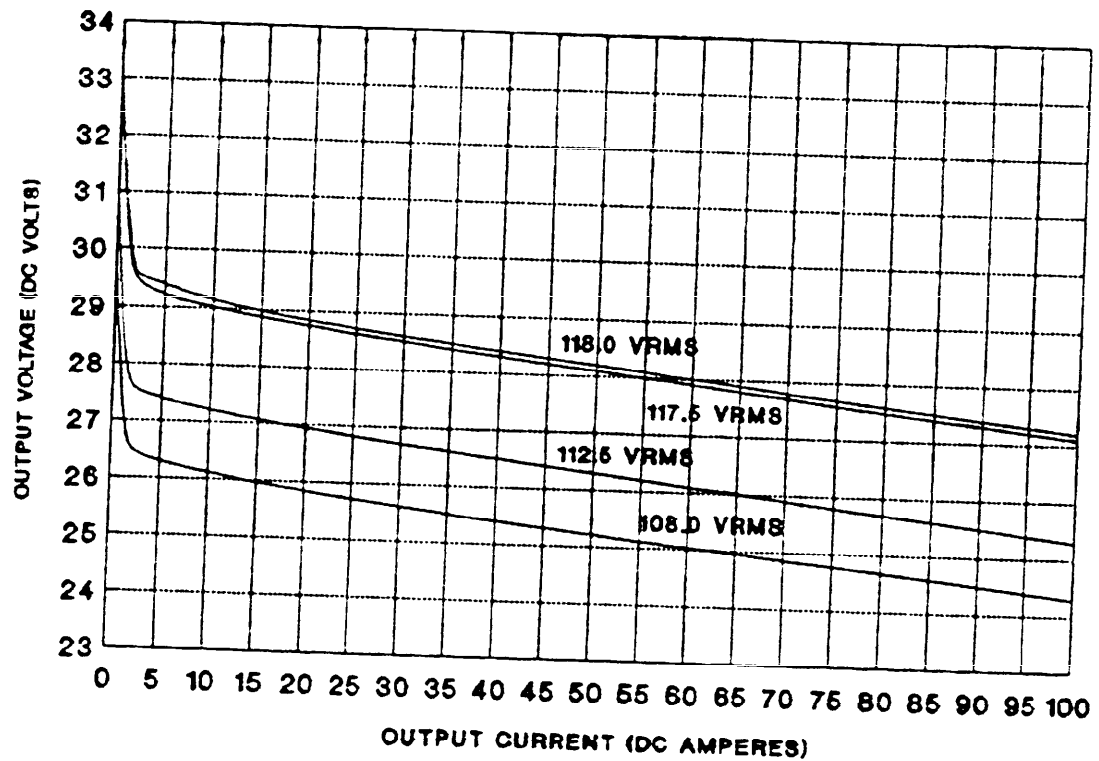
④ 23 NOVEMBER 1970

REVISED

APPROVED 20 NOVEMBER 1962

|  |                           |   |                   |
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USER ACTIVITIES



REVIEWED ACTIVITIES

| INPUT  |         | 108.0 VRMS | 112.5 VRMS | 117.5 VRMS | 118.0 VRMS |
|--------|---------|------------|------------|------------|------------|
| OUTPUT | AMPS DC | MIN VDC    | MIN VDC    | MAX VDC    | MAX VDC    |
|        | *0.0    | 29.7       | 30.9       | 33.1       | 33.2       |
|        | 1.0     | 27.3       | 28.4       | 30.5       | 30.6       |
|        | 2.0     | 26.5       | 27.6       | 29.5       | 29.6       |
|        | 5.0     | 26.3       | 27.4       | 29.3       | 29.4       |
|        | 10.0    | 26.1       | 27.2       | 29.0       | 29.1       |
|        | 25.0    | 25.7       | 26.8       | 28.6       | 28.7       |
|        | 50.0    | 25.2       | 26.3       | 28.1       | 28.2       |
|        | 75.0    | 24.8       | 25.8       | 27.6       | 27.7       |
|        | 100.0   | 24.3       | 25.3       | 27.1       | 27.2       |

Figure 3. OUTPUT VOLTAGE LIMITS

\* ZERO LOAD READINGS FOR INFORMATION ONLY

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|  |                           |   |                   |
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| Procurement Specifications<br>MIL-C-7115 | SUPERSEDES:               |   | SHEET 5 OF 5      |

DD FORM 672 (COORDINATED)  
1 MAY 73

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 20 NOVEMBER 1962  
REVISED 23 NOVEMBER 1970  
15 NOVEMBER 1991