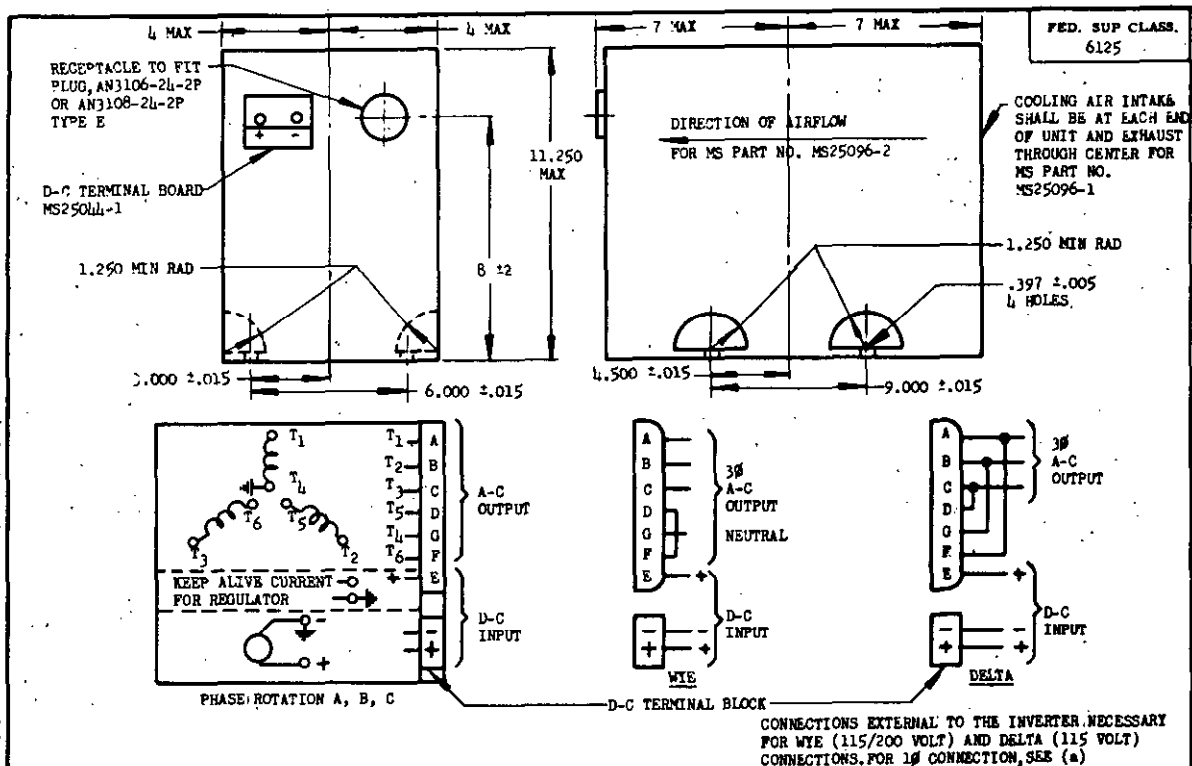


NOTICE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or in any way extending the time for filing a patent or for any other purpose.



| MS PART NO. | COOLING AIRFLOW |
|-------------|-----------------|
| MS25096-1 | DUPLEX |
| MS25096-2 | SIMPLEX |

| | | |
|---|---------|------|
| INPUT: VOLTS, DC | 3Ø | 1Ø |
| OUTPUT: VOLTS, AC | 28 | 28 |
| FREQUENCY, CPS | 115/200 | 115 |
| VA TO 50,000 FEET ALTITUDE | 400 | 400 |
| VA TO 65,000 FEET ALTITUDE | 1500 | 1500 |
| PF MIN LAG, PERCENT | 750 | 750 |
| PF MIN LEAD, PERCENT | 90 | 90 |
| MIN OUTPUT VOLTAGE AT 200 PERCENT RATED CURRENT | 95 | 95 |
| MIN EFFICIENCY: PERCENT AT RATED LOAD, SEA LEVEL, AND 25° ±15°C | 50/85 | 50 |
| WEIGHT, POUNDS, MAX | 50 | 45 |
| | 45 | 45 |

FOR ANY COMBINATION OF CONDITIONS LISTED BELOW, THE OUTPUT VOLTAGE AND FREQUENCY SHALL REMAIN WITHIN THE INDICATED LIMITS.

| CONDITIONS | LIMITS | |
|--|--------------|----------------|
| | VOLTAGE | FREQUENCY, CPS |
| INPUT VOLTAGE VARIED BETWEEN 26 AND 29 VOLTS | LOW 110/192 | LOW 390 |
| LOAD VARIED FROM 0 TO FULL LOAD | HIGH 120/208 | HIGH 410 |
| AMBIENT TEMPERATURE-ALTITUDE VARIED WITHIN THE RANGE ESTABLISHED BY CURVE 1 OF MS33543, EXCEPT THAT THE AMBIENT TEMPERATURE FOR THIS UNIT SHALL NEVER EXCEED 85°C. THE UNIT SHALL DELIVER RATED OUTPUT TO 50,000 FEET AND 50 PERCENT MIN RATED POWER TO 65,000 FEET. | | |
| LOAD POWER FACTOR VARIED FROM .90 LAG TO .95 LEAD. | | |

- (a) THIS INVERTER DESIGN SHALL BE SUCH THAT IT MAY BE LOADED EITHER 3Ø OR 1Ø BUT NOT SIMULTANEOUSLY. WHEN USED AS A SINGLE-PHASE INVERTER, THE UNIT SHALL BE CONNECTED IN DELTA AND THE LOAD CONNECTED TO THE TERMINALS A(T₁) AND B(T₂). WHEN USED 3Ø, THE LOADS PER PHASE SHALL NOT DIFFER BY MORE THAN 10 PERCENT OF THE INVERTER RATING.

DIMENSIONS IN INCHES.

THE AIRCRAFT MANUFACTURER SHALL ALLOW CLEARANCE FOR THE MAXIMUM DIMENSIONS SHOWN ON THIS DRAWING FOR INSTALLATION.

THE WEIGHT AND DIMENSIONS SHOWN ON THIS DRAWING SHALL INCLUDE THE WEIGHT AND DIMENSIONS OF ALL AUXILIARY APPARATUS NECESSARY TO MAKE THE UNIT CONFORM TO THE PROCUREMENT SPECIFICATION.

THE MS DESIGNATION SHALL NOT BE SHOWN ON INVERTERS UNTIL APPROVAL HAS BEEN RECEIVED FROM THE QUALIFYING ACTIVITY AND THE INVERTER FULLY MEETS THE REQUIREMENTS OF THE SPECIFICATION AND DRAWING.

A MEANS OF ADJUSTING THE VOLTAGE SHALL BE ON THE CONNECTOR END AND ABOVE THE HORIZONTAL CENTERLINE OF THE INVERTER. PERMISSION OF THE PROCURING ACTIVITY SHALL BE OBTAINED FOR APPLICATION OF THIS UNIT OUTSIDE OF THE SPECIFIED LIMITS.

TWO PLACARDED PIN JACKS SHALL BE PROVIDED ON THE CONNECTOR END AND ABOVE THE HORIZONTAL CENTERLINE OF THE INVERTER BETWEEN WHICH THE VOLTAGE BETWEEN A(T₁) AND B(T₂) CAN BE MEASURED. THE PIN JACKS SHALL ACCEPT A PROD PIN .078 ±.002 INCHES IN DIAMETER.

FOR NAVY APPLICATION, INVERTERS WITH EITHER SIMPLEX OR DUPLEX COOLING AIRFLOW CONFIGURATION ARE ELECTRICALLY AND MECHANICALLY INTERCHANGEABLE WITH EACH OTHER.

THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

CANCELED AFTER 10 FEBRUARY 1965. USE MS17404. INTERCHANGEABILITY RELATIONSHIP: MS17404 PARTS CANNOT ALWAYS REPLACE THE CANCELED MS25096 PARTS IDENTIFIED BY THE SAME DASH NUMBERS. THE CANCELED MS25096 PARTS CANNOT REPLACE THE MS17404 PARTS.

| | | | |
|---|----------------------------------|--|----------------|
| CUSTODIANS Navy - WP USAF - 82 | OTHER INT. A - N - AF - | MILITARY STANDARD | MS25096 |
| | | INVERTER, 1,500 VA, 3/1 PHASE, CLASS B | (ASG) |
| PROCUREMENT SPECIFICATION MIL-I-7032 | SUPERSEDES: | SHEET 1 | OF 1 |