

INCH POUND

MIL-V-24761(SH)
AMENDMENT 1
29 May 1995

MILITARY SPECIFICATION

VENTILATING SETS, PORTABLE DAMAGE CONTROL

This amendment forms a part of MIL-V-24761, dated 17 June 1991, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 13

3.6.3.4.6, delete and substitute:

3.6.3.4.6 Alternating current motors. Alternating current motors shall not have excessive horsepower, but shall have sufficient torque to start the fans at a motor terminal voltage of 75 volts. The motor shall drive the fan continuously at a motor terminal voltage of 104 volts when the fan is operating at its rated design point as specified in 3.6.2.1. Alternating current motors shall conform to MIL-M-17059 as augmented by the following requirements:

Design:	Split phase
Voltage:	115 Vac, 60Hz, single phase
Service:	Navy Service A
Horsepower:	As required by fan
Rated speed:	As required by fan
Frame:	As required by fan
Mounting:	Face
Duty:	Continuous, air over cooling
Enclosure:	Explosion-proof, group D (See 3.6.3.4.2)
Insulation:	Class B or F (see 3.6.3.4.6.2)
Bearings:	Ball (see 3.6.3.4.5)
Ambient temperature:	65 degrees Celsius
Maximum temperature rise:	55 degrees Celsius
Synchronous rated speed:	3600 revolutions per minute (r/min)
Thermal protection:	UL 547 (see 3.6.3.4.4)
Maximum safelocked rotor time:	90 seconds

AMSC N/A

FSC 4140

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-V-24761(SH)
AMENDMENT 1

PAGE 14

3.6.3.4.6.2, delete and substitute:

3.6.3.4.6.2 Insulation system. Alternating current motors shall be provided with an insulation system in accordance with MIL-M-17059.

3.6.3.4.7, delete and substitute:

3.6.3.4.7 Direct current motors. Direct current motors shall not have excessive horsepower, but shall have sufficient torque to start the fans at a motor terminal voltage of 75 volts with acceptable commutation. Intermittent sparking is acceptable. Sparking shall not occur on more than one quarter of the brushes. Small yellow or white points of light shall not be displayed on more than one fourth of the total edge of the brushes. This level may be determined by visual examination. The motor shall drive the fan continuously at a motor terminal voltage of 104 volts when the fan is operating at its rated design point as specified in 3.6.2.1. They shall conform to MIL-M-17556, as required, augmented by the following requirements:

Design:	Shunt type winding
Voltage:	115 Vdc
Service:	Navy Service A
Horsepower:	As required by fan
Rated speed:	As required by fan
Frame:	As required by fan
Mounting:	Face
Duty:	Continuous, air over cooling
Enclosure:	Explosion-proof, group D (See 3.6.3.4.2)
Insulation:	class B or F (see 3.6.3.4.6.2)
Bearings:	Ball (see 3.6.3.4.5)
Ambient temperature:	65 degrees Celsius
Maximum temperature rise:	55 degrees Celsius
Thermal protection:	UL 547 (see 3.6.3.4.4)
Maximum safelocked rotor time:	90 seconds
Number of poles:	Four or more
Materials restriction:	Silicone materials shall not be used
Construction:	Non-magnetic

MIL-V-24761(SH)
AMENDMENT 1

PAGE 24

4.7.2.5.1, delete and substitute:

4.7.2.5.1 Insulation system (class 0-1/2 fans). Alternating current motors shall be tested for conformance to dielectric strength, insulation resistance, and insulation system suitability in accordance with MIL-M-17059 for conformance to 3.6.3.4.6.2.

Preparing Activity:
Navy-SH
(Project No. 4140-N152)