AEROSPACE STANDARD

AS25481™	REV. B

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Superseding AS25481A

Cable Assemblies, Electrical Power, for Portable Ground Support Test Equipment

RATIONALE

During the recent AGE 3 meeting it was determined that this standard was handed down from a Mil-Spec in the past and is not being maintained. Move to Stabilize by the committee was approved.

STABILIZED NOTICE

This document has been declared “STABILIZED” by SAE AGE-3 Aircraft Ground Support Equipment Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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NOTICE

The initial SAE publication of this document was taken directly from U.S. Military Standard MS2548C. This SAE Standard retains the same part numbers established by the original military document.

Any requirements associated with Qualified Products Lists (QPLs) may continue to be mandatory for DoD contracts. requirements relating to QPLs have not been adopted by the SAE for this standard and are not part of this SAE document.

1. SCOPE

This document defines cables that are used to provide electrical power for U.S. Department of Defense avionics support and test equipment.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AS31061 Connector, Plug, Electric, Straight, Solder Contacts, AN Type

AS31071 Connector, Plug, Electric, Quick Disconnect

AS34361 Connector, Plug, Electric, Solder Contact, Utility

AS35071 Connector, Plug, Electric, Solder Contact, Quick Disconnect, Utility

AS50151 Connectors, Electrical, Circular Threaded, AN Type, General Specification For

2.2 U.S. Government Publications

Copies of these documents are available online at http://quicksearch.dla.mil.

A-A-55812 Cable Assembly, (Type I), Electronic Test Equipment, (2 Poles, 3 Wires, 125 Volts, 13 Amperes, 50 or 60 Hertz), Grounding Plug Connector

MIL-DTL-3432 Cables, (Power and Special Purpose) and Wire, Electrical (300 and 600 Volts)

MIL-DTL-3885 Cable Assemblies and Cord Assemblies, Electrical

MIL-DTL-18307 Nomenclature and Identification for Aeronautical Systems

W-C-596/13 Connector, Plug, Electrical, General Purpose, Hospital Grade, Grounding, 2 Pole, 3 Wire, 15 Amperes, 125 Volts, 50/60 Hertz

W-C-596/14 Connector, Cable Outlet, Electrical, General Purpose, Hospital Grade, Cable Connecting, Grounding, 2 Pole, 3 Wire, 15 Amperes, 125 Volts, 50/60 Hertz

3. GENERAL DESCRIPTION

3.1 MS2548-1 Cable, 115 VAC, 60 Hz

The -1 cable has 3 x 16 AWG conductors, 96 inches (244 cm) long with a Hospital grade power plug per W-C-596/13 on one end and an AS31061 circular connector on the other. The -1 cable is not to be used for new design, use the -2. The -1 cable supersedes CX-3277/U designated cable.

3.2 MS2548-2 Cable, 115 VAC, 60 Hz

The -2 cable has 3 x 16 AWG conductors, 96 inches (244 cm) long with a Hospital grade molded power plug per A-A-55812 on one end and an AS31061 circular connector on the other.

3.3 MS2548-3 Cable, 115 VAC, 1 Phase, 400 Hz

The -3 cable has 3 x 16 AWG conductors, 96 inches (244 cm) long, with an AS35071 circular connector on one end, and an AS34361 circular connector on the other.

3.4 MS2548-4 Cable, 115/200 VAC, 3 Phase, 400 Hz

The -4 cable has 5 x 16 AWG conductors, 96 inches (244 cm) long, with an AS35071 circular connector on one end, and an AS34361 circular connector on the other.

3.5 MS2548-5 Cable, 28 VDC

The -5 cable has 2 x 14 AWG conductors, 96 inches (244 cm) long, with an AS31071, or commercial equivalent, circular connector on one end, and an AS31061 circular connector on the other.

3.6 MS2548-6 Cable, 60 Hz to 400 Hz

The -6 cable has 3 x 16 AWG conductors, 8 inches (20.5 cm) long, with an AS35071 circular connector on one end, and a W-C-596/14 Hospital grade power receptacle on the other. This cable is used with the -1 or -2 cables to allow dual frequency equipment to be powered by a 115 VAC, 400 Hz power source.

4. DETAIL REQUIREMENTS

4.1 Cable

Cable shall be in accordance with MIL-DTL-3432. Table 1 provides the Part Numbers for cable for each dash number.

4.2 Connectors and Clamps

Table 1 provides the Part Numbers for the connectors for each dash number. Cable clamps shall be used where applicable.

4.3 Wiring

Table 1 provides the wiring connections for each dash number.

4.4 Length

The -1 through -5 cables shall be 96 inches ± 2 inches long (244 cm ± 5 cm). The -6 cable shall be 8 inches ± 1 inch long (20.5 cm ± 2.5 cm). Metric values are provided for reference only.

4.5 Marking

Identification marking and bands shall be in accordance with MIL-DTL-18307.

4.6 Procurement Specification

All materials and processes not specifically addressed in this document shall be in accordance with procurement specification MIL-DTL-3885, unless otherwise specified by the procuring activity.

5. NOTES

5.1 Revision Indicator

A change bar (l) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document, including technical revisions. Change bars and (R) are not used in original publications, nor in documents that contain editorial changes only.