American National Standard

Insulated High Temperature Hook-Up Wire; Types ET (250 Volts), E (600 Volts), and EE (1000 Volts)

Secretariat:

National Electrical Manufacturers Association

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FOREWORD

The standard publication was developed by the NEMA High Performance Wire and Cable Section to assure that Insulated High Temperature Hook-Up Wire of Types ET (250 Volts), E (600 Volts), and EE (1000 Volts) can be procured and they will meet requirements associated with high reliability commercial electrical and electronic equipment in which it is used. Compliance with provisions of this standards publication is strictly voluntary and any certification of compliance is left to the discretion of the buyer and seller.

This standards publication was designed as a non-government standard for replacement of MIL-W-16878 PTFE insulated wire slash sheets (/4, /5, /6, /20 through /27, /34, and /35).

The High Performance Wire and Cable Section approval of ANSI/NEMA HP 3 does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the section was composed of the following members:

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Section 1
GENERAL

1.1 SCOPE

This standards publication covers specific requirements for PTFE (polytetrafluoroethylene) insulated solid and stranded wire designed for the internal wiring of high reliability electrical and electronic equipment. This Standards Publication addresses 250 volt (Type ET), 600 volt (Type E) and 1000 volt (Type EE) wire and permits continuous conductor temperature ratings of -65°C to +200°C with silver-coated conductors and -65°C to +260°C with nickel-coated conductors. These types of hook-up wire are used when the following properties are called for:

- High temperature resistance
- Low temperature resistance
- Low dielectric constant
- Solder iron resistance
- Resistance to cleaning solutions or a variety of chemicals that may come in contact with either the wire or the equipment
- Good flexibility and flex life when stranded conductors are used

1.2 REFERENCED STANDARDS AND SPECIFICATIONS

The following publications are adopted in part, by reference in this publication, and are available from the organizations below.

American Society for Quality Control
611 E. Wisconsin Ave.
Milwaukee, WI  53202

ANSI/ASQC Z1.4  Sampling Procedures and Tables for Inspection by Attributes

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428

B 286  Copper Conductors for Use in Hook-up Wire for Electronic Equipment
B 298  Silver-Coated Soft or Annealed Copper Wire
B 3    Soft or Annealed Copper Wire
B 355  Nickel-Coated Soft or Annealed Copper Wire
B 452  Copper Clad Steel Wire for Electronic Applications
B 501  Silver-Coated Copper-Clad Steel Wire for Electronic Applications
B 559  Nickel-Coated Copper-Clad Steel Wire for Electronic Applications
B 624  High-Strength, High Conductivity Copper-Alloy Wire for Electronic Application