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Electrical and Electronic PVC, PVC/Nylon, and PE/Nylon 105°C Hook-Up Wire, Types B, C, D, BN, CN, and DN (600, 1000, and 3000 V), and Types J and JN 75°C (600V)

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FOREWORD

This standard publication was developed by the NEMA High Performance Wire and Cable Section. It was developed to assure that these types of hook-up wire can be procured and that 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 the following MIL-W-16878 insulated wire slant sheets: /1 through /3, /10, /17 through /19, and /33.

This Standards Publication was developed by the High Performance Wire and Cable Section of NEMA. Section approval of the standard 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:

AFC Cable Systems, Inc. a part of Atkore International  New Bedford, MA
Apical Division, Kaneka Texas Corporation  Pasadena, TX
Belden  St. Louis, MO
Cable USA, Inc.  Naples, FL
Champlain Cable Corporation  Colchester, VT
Coleman Cable, Inc.  Waukegan, IL
Freeport-McMoRan Copper and Gold  Phoenix, AZ
General Cable  Highland Heights, KY
Harbour Industries LLC  Shelburne, VT
IWG High Performance Conductors  Inman, SC
Leoni Wire, Inc.  Chicopee, MA
Marmon Innovation and Technology Group  Seymour, CT
Prestolite Wire and Cable  Southfield, MI
Quirk Wire Company, Inc.  West Brookfield, MA
Radix Wire Company  Euclid, OH
RSCC Wire and Cable Group  East Granby, CT
Rubadue Wire Co., Inc.  Greeley, CO
Southwire Company  Carrolton, GA
TE Connectivity Ltd., a Tyco Electronics Corporation  Menlo Park, CA
The Monroe Cable Company, Inc.  Middletown, NY
The Okonite Company  Ramsey, NJ
Section 1
GENERAL

1.1 SCOPE

This standard publication covers specific requirements for PVC, PVC/polyamide, PE, and PE/polyamide insulated stranded wire, designed to the internal wiring of high reliability electrical and electronic equipment. This standards publication addresses 600 volt (Type B, BN, J, and JN), 1000 volt (Type C and CN) and 3000 volt (Type D and DN) wire and permits continuous operating temperature ratings of -55ºC up to 105ºC (types B, C, D, BN, CN, and DN) or 75ºC (types J and JN) with either tin or silver coated conductors.

1.2 REFERENCE STANDARDS AND SPECIFICATIONS

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 (ASTM)
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

B 286-07 Copper Conductors for Use in Hook-Up Wire for Electronics
B 298-07 Silver Coated Soft or Annealed Copper Wire
B 3-01 Soft or Annealed Copper Wire
D 3032-98 Methods of Testing Hook-Up Wire Insulation
B 33-04 Tinned Soft or Annealed Copper Wire

DODISS-Customer Service
Bldg. 4D
700 Robbins Ave.
Philadelphia, PA 19111-5094

MIL-STD-2223 Test Methods for Insulated Electronic Wire

Electronics Industries Association
2500 Wilson Blvd.
Arlington, VA 22201

EIA-359-A-85 EIA Standard Colors for Color Identification and Coding