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

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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*