

Electrical Insulation System Component

E210549

EFI POLYMERS

4600 HOLLY ST DENVER CO 80216

System Component	System Designation	System Temp (Class)
11T201-/7H002, 11G203-/7H002-, 11T206-/7H021-, 11T206-/7H006-, 11G203-/7H013-, 11F296-/7H248-, 11T202-7H002-, 11G203-/7H015-, 11G203-/7H016-, 11F209-/7H202-, 11T206-/7H013-	Octagon H2	180(H)

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Construction Details (Table I)

The use of this insulation system is limited to the combination of materials specified below. Where more than one item is designated under Insulation Function, they may be used together, unless otherwise indicated, or they may be used as alternates to one another. Functions designated "optional" are not necessarily required for every design. Insulation thicknesses and/or layers indicated below are minimum.

description: Octagon H2**Winding Wire**

- Recognized Component - Magnet wire (OBMW2), single build or greater, round or rectangular, copper or aluminum unless stated otherwise for the types listed below
 - Recognized Component - Single and Multi-Layer Insulated Winding Wire (OBJT2) listed below
 - Recognized Component - Appliance Wiring Material (AVLV2) listed below
 - Bare conductors wrapped or interleaved with a paper or film listed below need not be a Recognized Component
- (unless otherwise noted, winding wire types listed below may be used in combination within a single product)

ANSI Type	Temp(°C)	Basecoat	Topcoat
MW 35	or 200	polyester	polyamideimide
MW 36	or 200	Polyester	Polyamide-imide
MW 37	or 220	Polyester	Polyamide-imide
MW 38	or 220	Polyester	Polyamide-imide
MW 73	or 200	Polyester-amide-imide	Polyamide-imide
MW 74	or 200	Polyester-amide-imide	Polyamide-imide

click on an ANSI type to view a list of Recognized magnet wires

Ground & Interwinding Insulations

Designation (no.)	mils(mm)	comments
3M (Minnesota Mining & Mfg Co)		
92	3 (layers)	Recognized Component - Insulating Tape (OANZ2)
3M Innovative Paper Technologies		
TufQuin 110, 120, PC	7 (0.18)	
E. I. Dupont de Nemours & Co.		
Nomex® 410	5 (0.13)	aramid insulating paper
Nomex® 414	5 (0.13)	aramid insulating paper
Nomex® 416	5 (0.13)	aramid insulating paper
Nomex® 418	5 (0.13)	aramid insulating paper
Rynite 935	15 (0.38)	polyethylene terephthalate (PET)
Rynite FR515	15 (0.38)	polyethylene terephthalate (PET)
Rynite FR530	15 (0.38)	polyethylene terephthalate (PET)
Rynite FR530L	15 (0.38)	polyethylene terephthalate (PET)
Rynite FR945	15 (0.38)	polyethylene terephthalate (PET)
Pucaro		
Triflexil M/VL-UE		Where the Nomex layer(s) is 0.005 in. minimum thickness

Lead Wires (optional)

- 150 XLPE - chemically crosslinked polyethylene +
- 200 PTFE - polytetrafluoroethylene
- 200 SI - silicone rubber - with or without glass braid
- 200 TFE - tetrafluoroethylene - +

+ To be isolated from direct contact with windings (magnet wire) by any insulating material (tape, layer insulation, sleeving, etc.) listed in this table - unless specifically excluded from this requirement by a special note at the beginning of this table.

Minor Sheet Insulations (optional) layer, outer, wrap etc.

Designation (no.)	comments
3M Innovative Paper Technologies	
CeQuin 30F, 30F30, F30F	
CeQuin 500	
CeQuin IF, IFI, FIF	
CeQuin IG, IGI, GIG	
CeQuin X	
Dupont -Teijin Films	

Mylar
E. I. Dupont de Nemours & Co.
 Nomex 410
 Zytel 70G33L
Von Roll USA Inc. (Acme)
 Memco 100 DMD
 Pyrolam 100X

Tapes - Listed or Recognized Component

tapes are optional for this system

Designation	comments
3M COMPANY [E17385]	
1 (a)	
1170	
1194	
1298 (b)	
1312 (a)	
1318 clear (a)	
1318-1 (a)	
1318-2 (a)	
1339	
1350-1 (b)	
1350-2 (c)	
27 (a)	
44 (a)	
46	
5	
56 (a)	
57 (a)	
60	
79	
MR 94B (c)	
Super 10 (a)	
Super 20 (a)	
ELECTRO TAPE SPECIALTIES INC [E52363]	
ETS-149	
IDEAL TAPE CO INC [E82910]	
IT-7017 (b)	
IT-7177	
IT-720 (b)	
IT-7300	
IT-750 Natural (b)	
IT-7807 (b)	
INTERTAPE POLYMER GROUP [E20780]	
4428 (23)*	
4616-00 (51)*	
51580-00 (40)* (b)	
51596* (b)	
51597	
NITTO DENKO AUTOMOTIVE NEW JERSEY INC [E20392]	
P-224 AMB (formerly P-224)	
P-234	
P-245 (a) (P-245 BLK (a))	
P-248	
P-256	
P-262	
P-277	
P-286	
P-422	
NITTO DENKO CORP [E34833]	
188UL (188K, 188K-UL)	
3161-F	
354E	
360UL	
903	
SAINT-GOBAIN PERFORMANCE PLASTICS CORP [E51201]	
G565	
K103	
K250 (d)	
M54	
M97 (b)	

Non-Recognized Tapes

tapes are optional for this system

Designation	comments
3M (Minnesota Mining & Mfg Co)	
1276	
90	glass cloth
Electro Tape Specialties Inc	
ETS-95	

Nitto Denko Corp	
315	rubber adhesive, polyester film
31B	
380	
Nitto Permaceel	
P-21	thermosetting rubber adhesive, glass cloth
Saint-Gobain Performance Plastics Corp.	
G551	thermosetting rubber adhesive, glass cloth

Spacers and Wedges (optional)

Designation (no.)	comments
Glastic Corp.	
1412	
FHT	
MTS rod	
SG-200	
TSF	polyester/glass
UTR	
UTS	
Haysite	
EFM	flexible, glass reinforced thermosetting polyester
EHC	glass reinforced thermosetting polyester
ETS	NRMA GPO-1 130
H755	NRMA GPO-1 155
HST-II	glass reinforced thermosetting polyester
HTF	flexible, glass reinforced thermosetting polyester

Sleevings (optional)

Designation (no.)	comments
Atkins & Pearce Inc.	
Ben Har Acryl	
Ben Har Ex-Flex 1500	
Ben-Har 1151-FR	
Ben-Har 1151-XL-200	
Ben-Har 1151-XL-240	
Ben-Har 1151-XL-FR-1	
Suflex Acrylflex F	
Suflex Flexicone 200	
Suflex Silicone Resin	
Suflex silicone rubber	
Hilec/Delfingen US-New York Inc	
Hilec 310	
Hilec 410	
Hilec 540	
Hilec 710	
Turbo 117F	
Varflex	
Siflex	
Varglas A397 acrylic	
Varglas Non Fray Type HO	
Varglas Silicone Resin 500	
Varglas Silicone Rubber	
Varglas Silicone Rubber ES 4400	
Varglas Viton 231	

Potting Compounds

Designation (no.)	comments
EFI Polymers	
11F209-/7H202-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11F296-/7H248-	
11G203-/7H002-	
11G203-/7H013-	
11G203-/7H015-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11G203-/7H016-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11T201-/7H002	
11T202-7H002-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11T206-/7H006-	
11T206-/7H013-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11T206-/7H021-	