

System Component, Electrical Insulation - Component

**E210549****EFI POLYMERS**

4600 HOLLY ST DENVER CO 80216

**System Component**  
 11T201-/7H002-, 11G203-/7H002-,  
 11T206-/7H021-, 11T206-/7H006-,  
 11G203-/7H013-, 11F296-/7H248-,  
 11T202-7H002-, 11G203-/7H015-,  
 11G203-/7H016-, 11F209-/7H202-,  
 11T206-/7H013-

**System Designation**  
 Octagon B2

**System Temp (Class)**  
 130(B)

report date: 2010-07-09

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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 B2

#### 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)

MW 28 and 130C Polyurethane (Polyamide)

MW 75 and 130C Polyurethane

MW 79 or 155C Polyurethane

MW 80 or 155C Polyurethane (Polyamide)

MW 82 or 180C Polyurethane

#### Ground & Interwinding Insulations

Designation (no.)	mils(mm)	comments
<b>E. I. Dupont de Nemours &amp; Co.</b>		
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
Mylar	5 (0.13)	
Zytel 101L	28 (0.71)	
Zytel 103HSL	28 (0.71)	
Zytel 70G13L	15 (0.38)	
Zytel 70G30HSL	15 (0.38)	
Zytel 70G33HS1L	15 (0.38)	
Zytel 70G33L	15 (0.38)	polyamide 66
Zytel FR50	28 (0.71)	polyamide 66

**Pucaro**

Triflexil M/VL-UE

Where the PET Film (Mylar) Layer is 0.005 inl. minimum thickness

**Lead Wires (optional)**

125 EPDM

125 XLPE - chemically crosslinked polyethylene

150 E/TFE - ethylene/tetrafluoroethylene

150 XLPE - 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 IG, IGI, GIG

CeQuin 500

CeQuin IF, IFI, FIF

Cequin 30F, 30F30, F30F

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 100

**Tapes (optional)**

Designation (no.)

comments

**3M (Minnesota Mining & Mfg Co)**

1	polyester film/epoxy resin composite
1170	acrylic adhesive, aluminum foil
1194	acrylic adhesive, copper foil
1267	acrylic adhesive, aluminum foil
1298	acrylic adhesive, polyester film
1312	polyester filament reinforced polyester film
1318	acrylic adhesive, polyester film
1339	acrylic adhesive, polyester film
1350	polyester film
27	thermosetting rubber adhesive, glass cloth
44	thermosetting rubber adhesive, web reinforced polyester film
46	thermosetting rubber adhesive, web reinforced polyester film
5	acrylic adhesive, polyester film
56	thermosetting rubber adhesive, polyester film
57	thermosetting rubber adhesive, polyester film
60	
79	acrylic adhesive, glass cloth
90	glass cloth
92	thermosetting silicone adhesive, polyimide film
MR-94B	
Super 10	polyester film/epoxy resin composite
Super 20	polyester film/epoxy resin composite

**Electro Tape Specialties Inc**

ETS-149-21  
ETS-95

**Ideal Tape Co Inc**

7017	thermosetting acrylic adhesive, polyester film glass filament
7177	thermosetting acrylic adhesive, polyimide film
720	thermosetting rubber adhesive, woven polyester cloth
7300	thermosetting silicone adhesive, glass cloth
750	thermosetting rubber adhesive, polyester film glass filament
7807	acrylic adhesive, polyester/glass

**Intertape Polymer Group (Tesa, Tuck, Spinnaker)**

4238	polyester film glass reinforced
4426-00	polyester film laminated to rope fiber
4426-04	polyester film laminated to rope fiber
4428	polyimide film
4616-00	glass cloth
51580	
51580-00	polyester film laminated to polyester nonwoven matte
51596	polyester film laminated to polyester nonwoven matte
51597	polyester film with glass filament coating

**Nitto Denko Corp**

188 UL	silicone adhesive, glass cloth
315	rubber adhesive, polyester film
3161-F	
31B	
380	
903	PTFE
<b>Permacel</b>	
P-21	thermosetting rubber adhesive, glass cloth
P-223	thermosetting silicone adhesive, polyimide film
P-224	thermosetting silicone adhesive, polyimide film
P-245	thermosetting rubber adhesive, polyester film/non-woven mat
P-248	thermosetting rubber adhesive, polyester film/paper
P-256	semi-cured rubber adhesive, polyester film
P-262	flame retardant thermosetting acrylic adhesive, aramid paper
P-277	thermosetting rubber adhesive, paper (creped kraft)
P-286	thermosetting acrylic adhesive, polyester film
P-422	
<b>Saint-Gobain Performance Plastics Corp.</b>	
G551	thermosetting rubber adhesive, glass cloth
G565	silicone adhesive, flame retardant fiberglass cloth
K250	silicone adhesive, polyimide film flame retardant
M54	thermosetting rubber adhesive, polyester film
M97	acrylic adhesive, printable polyester film

## Spacers and Wedges

(optional)

Designation (no.)	comments
<b>Glastic Corp.</b>	
FHT	
MTS rod	
SC-200	
TSF	polyester/glass
UTR	
UTS	
<b>Haysite</b>	
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
<b>Atkins &amp; Pearce Inc.</b>	
Ben Har 1151-FR-1	
Ben Har Acryl	
Ben Har Ex-Flex 1500	
Ben-Har 1151-FR	
Ben-Har 1151-XL-200	
Ben-Har 1151-XL-240	
Suflex Acrylflex F	
Suflex Flexicone 200	
Suflex Silicone Resin	
Suflex Silverflex T & D	
Suflex silicone rubber	
Suflex Acrylflex VPI	
<b>Hilec/Delfingen US-New York Inc</b>	
Hilec 310	
Hilec 410	
Hilec 540	
Hilec 710	
Turbo 117F	
<b>Varflex</b>	
Siflex	
Varglas A-397 Acrylic	
Varglas Non Fray Type HO	
Varglas Non-Fray Type HM	
Varglas Silicone Resin 500	
Varglas Silicone Rubber	
Varglas Silicone Rubber ES 4400	
Varglas Viton 231	

**Tie Cords (optional)**

Designation (no.)	comments
<b>Various Manufacturers</b>	
Untreated fiberglass	

**Potting  
Compounds**

Designation (no.)	comments
<b>EFI Polymers</b>	
11F209-/7H202-	- 5or 6 digit alphanumeric suffix indicating type and amount of filler and pigment
11F296-/7H248-	

11G203-/7H002-  
11G203-/7H013-  
11G203-/7H015-  
11G203-/7H016-  
11T201-/7H002-  
11T202-/7H002-  
11T206-/7H006-  
11T206-/7H013-  
11T206-/7H021-

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