

P LEO & CO LTD

4TH FL, UNIT 20-21 GOLDFIELD INDUSTRIAL CENTRE FO TAN, 1 SUI WO RD SHATIN N T HK

System Component	System Designation	System Temp (Class)
1A025, 1A570, 1A605, 1C822, 1G006, 1G130 (o), 1G155, 1G180, 1G200, 1H130, 1H818 (m), 1H850 Black (q), 1H850 Natural (o), 1H860 (f), 1H866 (g), 1H86A (o), 1H86R (g), 1K063, 1K063CR, 1K7170, 1K7171A, 1K7172, 1K7177, 1K7178, 1N008, 1N012, 1N155, 1P130, 1P133 (f), 1P135 (c), 1P316 (a), 1P350 (e), 1P656 (d), 1P700 (b), 1P756 (h), 1P801, 1P802, 1P802 (k), 1P808, 1P830, 1P833xx (n), 1P9FR, 1PEN2, 1PEN3, 1PN2R, 1PN2R, 1PN3R, 1PN3R, 1PN820 (o), 1PN828 (o), 1TF05, 1TF07	F88	155(F)

report date: 1999-06-30

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Authorization Letter Required for Adoption of this System

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.

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 79	or 155	Polyurethane	
MW 80	or 155	Polyurethane	Polyamide
MW 82	or 180	Polyurethane	
MW 83	or 180	Polyurethane	Polyamide

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

Furukawa

TEX-F 4.72 mils (0.12 mm) triple insulated

Rubadue Wire Co. Inc.

FEP wire 4.06 mils (0.1 mm) double or triple layer insulated

TCA3 3.62 mils (0.09 mm) double or triple layer insulated

Tefzel wire 3.62 mils (0.09 mm) double or triple layer insulated

Totoku Electric

TIW-3 3.86 mils (0.1 mm) triple insulated

TIW-E 3.86 mils (0.1 mm) triple insulated

Ground & Interwinding Insulations - Recognized Component

Any Recognized Component Plastic (QMFZ2), polyethylene terephthalate film (PET) 5 mils (0.13 mm) - various manufacturers

Designation	mils(mm) comments
3M Japan Limited [E59505]	
SUPER 10-T	2 [layers]
SUPER 10-W	2 [layers]
DUPONT TEIJIN FILMS U S L P [E93687]	
KALADEX Kaladex 1030	1 (0.03)
E I DUPONT DE NEMOURS & CO INC [E34739]	
Nomex® 410	5 [layers]
E I DUPONT DE NEMOURS & CO INC [E39505]	
Kapton® 100CR, 100CRC	1 (0.03)
Kapton® 100H, 100HN, 100HN-S, 100H-ZT, 100HN-ZT, 100FPC-ZT, 100TAB-ZT, 100PST, 100HA, 100TN, 100V, 100VN, 100FPC, 100FPC-A, 100HPP-ST	1 (0.03)
P LEO & CO LTD [E126174]	
1H860 (f)	3 [layers]
1H866 (g)	1 [layers]
1H86R (g)	1 [layers]

1K7170	1 [layers]
1K7177	1 [layers]
1K7178	1 [layers]
1N012	2 [layers]
1P133 (f)	3 [layers]
1P135 (c)	3 [layers]
1P756 (h)	5 [layers]
1P801	5 [layers]
1P802	5 [layers]
1PEN2	1 [layers]
1PEN3	1 [layers]
1PN2R	1 [layers]
1PN3R	1 [layers]
SUMITOMO BAKELITE CO LTD [E41429]	
Sumikon AM-3200	11.8 (0.3)
Sumikon PM-9630	11.8 (0.3)
Sumikon PM-9720	11.8 (0.3)
Sumikon PM-9750	11.8 (0.3)
Sumikon PM-9820	11.8 (0.3)
Sumikon PM-9830	11.8 (0.3)
Sumikon PM-9850	11.8 (0.3)
TEIJIN DUPONT FILMS JAPAN LTD [E206562]	
Teonex Film Q(I)(m), NQ(I)(m), K(I)(m)	1 (0.03)

Non-Recognized Ground & Interwinding Insulations

Designation	mils(mm)	comments
P. Leo 1H130	3 [layers]	

Cores, Tubes, Bobbins (optional) for mechanical support only

Designation (no.)	comments
Cosmo Link	
PTFE-L	
PTFE-T	
Furukawa Electric	
PI-Tube	
Great Holding Industrial Co., Ltd.	
TFL	
TFS	
TFT	
Hitachi Cable Ltd	
Verafit V2	
Kurabe Industrial	
SE-1	
SE-2	
Nikkan	
E-651U-1	
E-651U-2	
S-693-600	
S-693F-1	
Nissei Electric	
RSU-1	
RSU-2	
P. Leo & Co. (B C) Ltd.	
2R-SG	

2T-TFL
 2T-TFS
 2T-TFT
Sumitomo Electical Fine Polymer
 Sumitube F2 (Z)
Zeus Industrial Products Inc.
 TFE-LW-150
 TFE-SW-600
 TFE-TW-300

Tapes - Listed or Recognized Component

tapes are optional for this system

Designation	comments
3M Japan Limited [E59505]	
2245	(optional)
CU-35C	(optional)
SUPER 10-T	
SUPER 10-W	
P LEO & CO LTD [E126174]	
1A025	
1A570	
1C822	
1G006	
1G130 (o)	
1G155	
1G180	
1G200	
1H818 (m)	
1H850 Black (q)	
1H850 Natural (o)	
1H860 (f)	
1H86A (o)	
1H86R (g)	
1K063	
1K063CR	
1K7170	
1K7171A	
1K7178	
1N008	
1N012	
1N155	
1P133 (f)	
1P135 (c)	
1P316 (a)	
1P350 (e)	
1P656 (d)	
1P700 (b)	
1P756 (h)	
1P801	
1P802	
1P802 (k)	
1P833xx (n)	
1PEN2	
1PEN3	
1PN820 (o)	
1PN828 (o)	
1TF05	
TERAOKA SEISAKUSHO CO LTD [E56086]	
831S	(optional)

Non-Recognized Tapes

tapes are optional for this system

Designation	comments
P Leo & Co (B C) Ltd	

1A605	
1K7172	silicone adhesive, polyimide film
1P130	acrylic adhesive, polyester film
1P808	polyester film
1P830	acrylic adhesive, polyester film
1P9FR	
1PEN5	
1PN2R	
1PN3R	
1TF07	

Tie Cords (optional)

Designation (no.)	comments
Teijin	
BHT-44T	

Varnishes - Recognized Component

varnishes are optional for this system

Designation	comments
ELANTAS ELECTRICAL INSULATION ELANTAS PDG INC [E75225]	
434 Air Dry	Air Dry
468-2 (d), 468-2FC (d), 468-2-7-xxF (d), 468-2-7FC-xxF (d)	May be followed by a two three alphanumeric suffix indicating percent of insert fill and/or color.
711-F-2106	
87V-456, 77X-010, 77X-010F	
V1380, V1380FC, V1380FC Black, 80381FC	
V1630, V1630FS, V1630FS50, V1630FS Black, 80361, 80361FC	
Y-210, Y-210BLK, Y-210 BLACK, Y-210 Grey, Y-210PS	
Thermodur, EB 920	
HITACHI CHEMICAL CO LTD [E72979]	
WA-238A	
WF-285	
WP-2952, WP-2952F-5, WP-2952F-11, WP-2952F-5(FC)	
WP-2952F-2G, WP-2952F-2G(Y), WP-2952F-2G(YL),	
WP-2952F-2G (YS), WP-2952F-2G(FC), WP-2952F-2G(H),	
WP-2952F-2G(K)	
JOHN C DOLPH CO [E317427]	
AC-43, EB-43-HG, EB-43-FB, AC-43-66, EG-43/698-D,	
EG-43/759-D, ER-43/368-D	
BC-346A, BC-346-A, BC-346B, BC-346-E, BB-348,	
BB-346-HF, BC-346HF, BG-346A, BB-346-A, BB-346/A,	
BC-370	
KYOCERA CHEMICAL CORP [E83702]	
TVB2024 (b)	
TVB2180T*(a)	
MEIDEN CHEMICAL CO LTD [E202574]	
754 XL	Cannot be used with TEX-F
880	

Potting Compounds (optional)

Designation (no.)	comments
GE Toshiba Silicone	
TSE3331	
TSE3331K	

Miscellaneous Minor Insulations (optional)

Designation (no.)	comments
Chang Chun	
PBT-4130	Coil cover
E. I. Dupont de Nemours & Co.	

FR530	Coil cover Rynite, coil cover
Zytel 103HSL	
Kolon	
KP212V0	Coil cover
Mitsubishi	
3010N	Coil cover coil cover
5010N6	coil cover
Teijin	
CH7030	Coil cover coil cover
CN7000	Coil cover coil cover
CRN7000	Coil cover coil cover
CRN7030	Coil cover coil cover
Toray Industries	
1494	PBT coil cover
