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## MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER PRIMARY INSULATION SYSTEM MATERIALS LIST

Conventions: Consecutive numerical designations refer to a specific material and location. An additional alphabetical designation refers to multiple uses of a material at a specific location. Only those materials designated serve a dielectric barrier function. Other materials, though similar in nature, serve a structural function.

1. Bobbin is 30% glass filled Nylon 6/6, U.L. rated 94HB and manufactured by Plastron as #0736-02-01.
2. Primary winding: 1060 turns # 27 awg, single coat Polyurethane/Nylon insulation, U.L. listed 130deg C magnet wire. Manufacturer generic.
3. Crossover: .450"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".
4. Cap tape: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
5. Primary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
6. Primary coil wires: as in #2. (A,B)
7. Thermal fuse: H125 127 deg C fail open radial lead device. VDE approval:13710-4510-1002 (VDE0631) & 13710-4510-1004 (VDE0821). Manufactured by Tamura Kaken Co., Ltd., 16-2, Sayamagahara, Irumi-shi, Saitma 358, Japan.
8. Primary leads: 18guage 1/32 PVC coated lead wire UL listed 1015, 105deg C. Manufacturer generic.

9. Supplemental primary lead insulation: Provided by Suflex Acryflex, 9 gauge, grade A, acrylic coated, woven fiberglass sleeving. Material is UL rated at 4000 volts min. dielectric strength at class 155C operating temperatures, UL file # E66526.

10. Lead cap: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".

11. Lead cap: 1.0"x .007 Nomex 410 length 1 1/4". U.L. rated 155deg C. Manufactured by DuPont Chemical Corp.

12. Fuse lead cap: 1/2"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacelcorp.as #P-256 tape slit to width tolerance + .050 -.015".

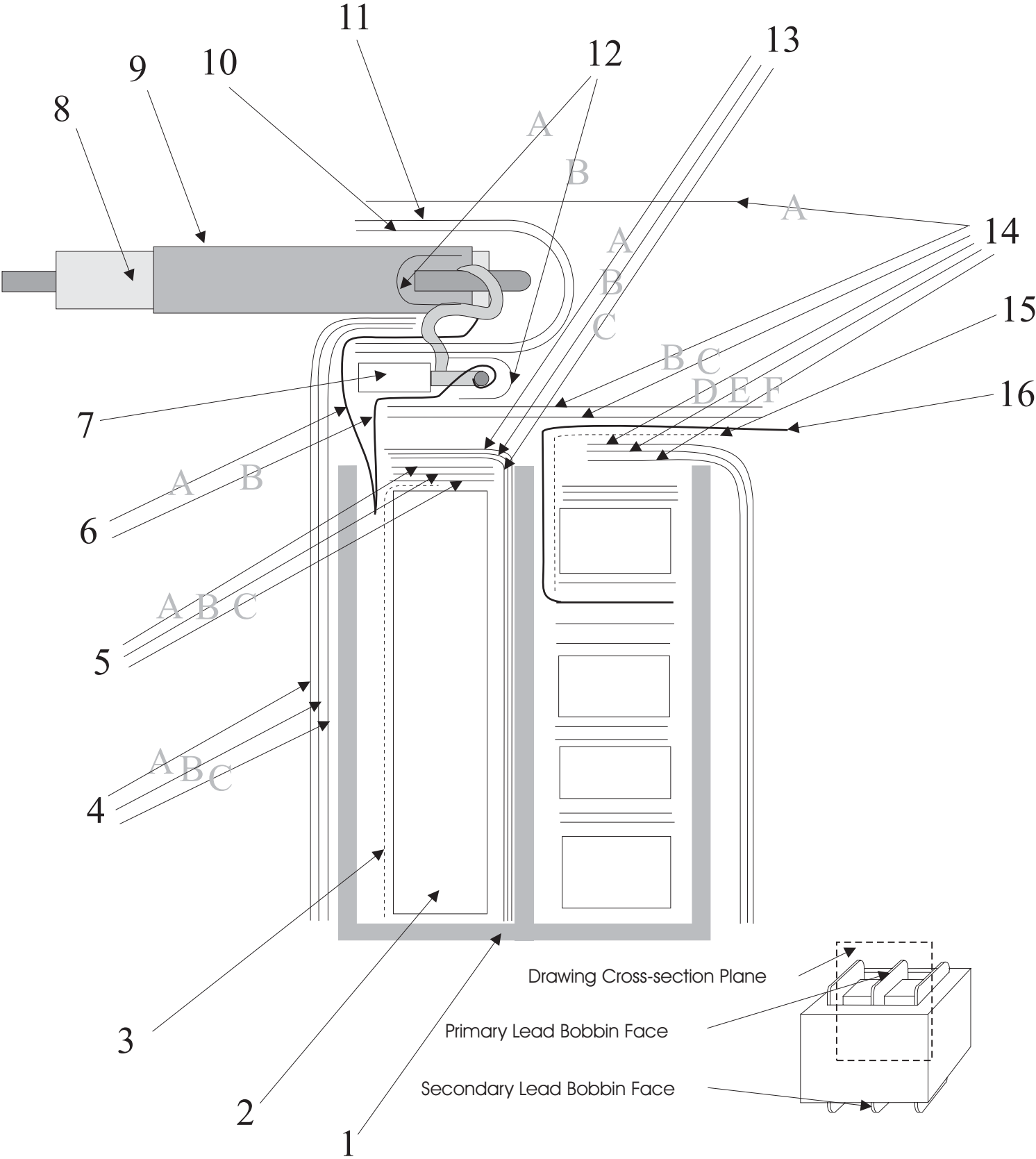
13. Flange insulation: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)

14. Secondary cap: 1.5"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A) and 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".(B,C,D)

15. Shield wire crossover: .450"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".

16. Shield wire: #20 AWG Bare tinned copper.

MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER  
PRIMARY INSULATION SYSTEM DIAGRAM



## MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER SECONDARY INSULATION SYSTEM MATERIALS LIST

1. Bobbin is 30% glass filled Nylon 6/6, U.L. rated 94HB and manufactured by Plastron as #0736-02-01.
2. Primary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
3. Secondary leads: 22guage 1/64 PVC coated lead wire UL listed 1007, 105deg C. Manufacturer generic.
4. Lead under cap: 1"x .005 Nomex 410 length 1 1/4". U.L. rated 155deg C. Manufactured by DuPont Chemical Corp.
5. Flange insulation: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
6. Flange insulation: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
7. Secondary cap: 1.5"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A) and 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".(B,C,D)
8. All secondary coil wires.
9. Crossover: .450"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B)
- 10 Secondary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C,)
11. Secondary winding: 260 turns # 29 awg, single coat Polyurethane/Nylon insulation, U.L. listed 130deg C magnet wire. Manufacturer generic.

12. Secondary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015".

13. Secondary supplemental insulation shield: .600"x.010"x 6.8" bare copper with grounded lead of #20 AWG Bare tinned copper.

14. Secondary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B)

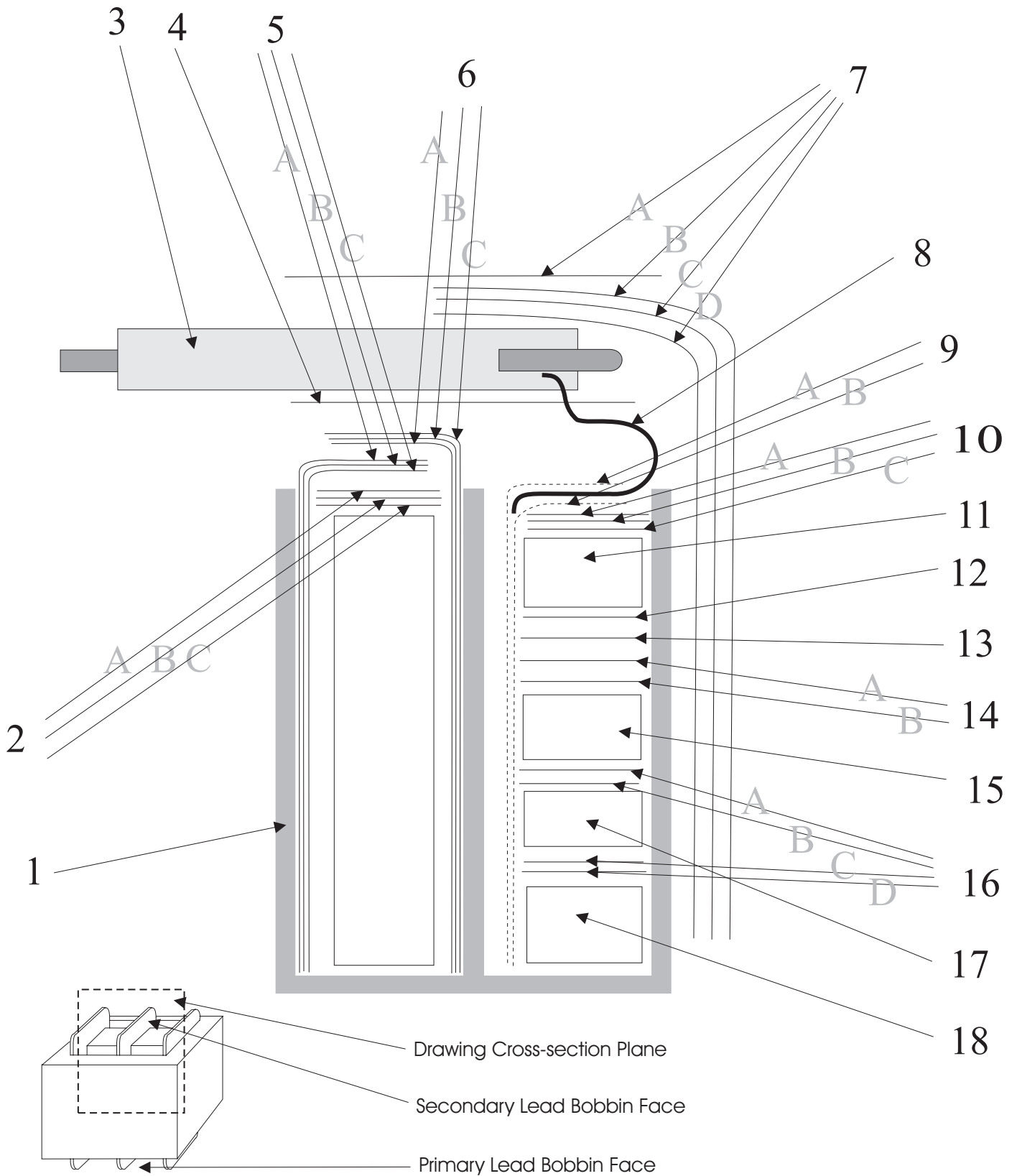
15. Secondary winding: 60 turns # 28 awg, single coat Polyurethane/Nylon insulation, U.L. listed 130deg C magnet wire. Manufacturer generic.

16. Secondary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C,D)

17. Secondary winding: 43 turns # 29 awg, single coat Polyurethane/Nylon insulation, U.L. listed 130deg C magnet wire, wound as a bifilarwinding of 43 total turns. Manufacturer generic.

18. Secondary winding: 96 turns # 23 awg, single coat Polyurethane/Nylon insulation, U.L. listed 130deg C magnet wire, wound as a bifilar, center tapped winding of 192 total turns Manufacturer generic.

# MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER SECONDARY INSULATION SYSTEM DIAGRAM



## MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER PRIMARY AND SECONDARY TO CORE INSULATION SYSTEM MATERIALS LIST

1. Primary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
2. Flange insulation: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
3. Flange insulation: 1.0"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
4. Secondary coil wrap: .750"x .003 U.L. listed polyester/terephthalate (Mylar) tape, 1.5mils thick with 1.5mils of adhesive. Manufactured by 3M corp. as #56 tape and Permacel corp. as #P-256 tape slit to width tolerance + .050 -.015". (A,B,C)
5. Bobbin is 30% glass filled Nylon 6/6, U.L. rated 94HB and manufactured by Plastron as #0736-02-01.

Laminations are 1.0" center leg x 1.100" minimum stack with two, full length, keeper laminations. Material is 24guage, M19 grade, non grain oriented, electrical grade, sheet steel laminations. Manufacturer generic.

Varnish: Dolph AC-43 polyester resin

MACKIE DESIGNS 600-057-01 EUROPEAN TRANSFORMER  
PRIMARY AND SECONDARY TO CORE INSULATION  
SYSTEM DIAGRAM

