

SPECIFICATION

FOR


UL RECOGNIZED HEAT-RESISTANT LEAD FREE PVC INSULATED GROUND STRAP WIRES

[P/N ; UL1683 LF]

Quantity

Your Ref. No.

Our Ref. No.

Signed by 

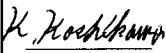

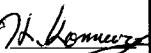
Hiroshi Komuro

Manager

Electric Wires & Cables Production Center
Engineering Dept.

Hitachi Cable, Ltd.

Issue and revision record

| Rev. No. | Issue date | Item | Prepared by | Reviewed by | Approved by |
|----------|--------------|---------------|---|--|---|
| - | Jul. 7, 2003 | Initial issue |  K.Koshikawa |  K.Chigira |  H.Kemuro |
| | | | | | |

1. Scope

This specification covers UL recognized heat-resistant lead free PVC insulated ground strap wires used for internal wiring of electronic equipments.

[UL style 1683 / 80°C, 30V]

USE : Internal Wiring of Computers and Electronic Equipment.

2. Applicable standards

(1)UL 758

3. Construction and materials

3.1 Conductor

- (1) Material ; Flat braided conductor(tinned annealed copper)
- (2) AWG size; 3/0 ~ 10AWG
- (3) Standard ; JCS(Japanese Cable manufacturer's Standard) No.1236
- (4) Stranding ; shown in the Table 1
- (5) Diameter ; shown in the Table 1

3.2 Insulation

- (1)Material ; Heat-resistant lead free PVC
- (2)Thickness ; Minimum at any point ; 0.89mm(35mils)
- (3)Diameter ; Shown in the Table 1

3.3 Standard colors

Gray or Black

4. Properties

- (1)Rating temperature : 80°C
- (2)Rating voltage : 30V
- (3)Conductor resistance : Shown in the Table 1
- (4)Insulation resistance* : Min. 1000MΩ-km at 20°C
- (5)Dielectric strength* : Withstand A.C. 1500V for 1 min.
- (6)Flammability : VW-1

* The spark test may be substituted in a production line.

5. Marking

The completed wires shall be printed following marking format on the surface throughout entire length by regular interval.

Ex. for 3/0AWG

☞ AWM E41447 STYLE 1683 LF 3/0AWG(100SQ.mm) VW-1 HITACHI

or

☞ AWM E41447 STYLE 1683 LF 3/0AWG(100SQ.mm) VW-1 HITACHI-T

[Note ; Marking format subject to change without notice]

6. Packing

6.1 Packing

(1) Unit length ; Shown in the Table 1
(2) Package style ; Shown in the Table 1

6.2 Marking on the tag

Each coil or plastic spool shall be tagged to show the following information with UL stamp.

- | | |
|----------------------|--------------------------|
| 1) UL style | 8) Rating temperature |
| 2) Conductor size | 9) Rating voltage |
| 3) No. of conductors | 10) Date of manufacture |
| 4) Color | 11) Insulation thickness |
| 5) Lot No. | 12) Use |
| 6) Length | 13) Name of manufacturer |
| 7) File No. | |

7. Recognized data

(1)UL file No. : E41447

Table 1

| Conductor | | | Insulation | | | Conductor resistance (at 20°C) (ohm/km) | Approx. mass (kg/km) | Unit length (m) | Packing |
|------------|-----------------------|---------------|----------------|--------------|------------------|---|-------------------------|--------------------|---------|
| AWG size | Stranding (No./mm) | Diam. (mm) | Thick. (mm) | Diam. (m) | Max.Diam (mm) | | | | |
| 10(5.5SQ) | 490 / 0.12 | 1.5 × 12 | 1.0 | 3.5 × 14 | 6.0 × 16 | 4.21 | 100 | 50 | Coil |
| 9(8SQ) | 716 / 0.12 | 1.5 × 15 | 1.0 | 3.5 × 17 | 6.0 × 19 | 2.89 | 140 | 50 | Coil |
| 6(14SQ) | 1248 / 0.12 | 2.0 × 20 | 1.0 | 4.0 × 22 | 6.0 × 24 | 1.66 | 215 | 50 | Coil |
| 4(22SQ) | 1944 / 0.12 | 2.5 × 25 | 1.0 | 4.5 × 27 | 7.0 × 29 | 1.06 | 315 | 50 | Coil |
| 3(30SQ) | 2664 / 0.12 | 2.7 × 30 | 1.0 | 4.7 × 32 | 7.0 × 34 | 0.775 | 415 | 50 | Coil |
| 2(38SQ) | 3344 / 0.12 | 3.2 × 35 | 1.0 | 5.2 × 37 | 7.5 × 39 | 0.617 | 515 | 50 | Coil |
| 1(50SQ) | 4400 / 0.12 | 3.8 × 28 | 1.0 | 5.8 × 30 | 8.5 × 32 | 0.469 | 655 | 50 | Drum |
| 1/0(60SQ) | 5250 / 0.12 | 6.0 × 30 | 1.0 | 8.0 × 32 | 9.5 × 34 | 0.394 | 725 | 50 | Drum |
| 2/0(80SQ) | 7072 / 0.12 | 5.0 × 36 | 1.0 | 7.0 × 38 | 10 × 40 | 0.292 | 975 | 50 | Drum |
| 3/0(100SQ) | (4400 / 0.12) × 2 | 7.6 × 28 | 1.0 | 9.6 × 30 | 12 × 32 | 0.230 | 1200 | 50 | Drum |

Fig.

