

**SPECIFICATION****For****MEA TYPE A (0080)  
(60227 IEC 01 THW)**

450/750V 70°C Copper Conductor

PVC Insulated Single Core

(450/750V, Cu/PVC)

BY



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Rev.	Date	Description
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APP.

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CUSTOMER

Customer Document	Rev.

**Remark:**

This document is based on the Customer Document for the structure and properties of electric wire and cable only. If there are different points, will be shown in deviation table.

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### **1. Scope**

This specification covers 450/750V copper conductor polyvinyl chloride (PVC) insulated single core.

Maximum conductor temperature shall be 70°C.

The cable shall be in accordance with TIS 11 Part 3-2553, Table 1 and MEA's specification No. S-011/2556.

### **2. Conductor**

The conductor shall be solid and non-compacted concentric stranded uncoated annealed copper conductor in accordance with TIS 2427-2552, Class 1 and Class 2.

The direction of lay shall be left-hand (S) lay in the outermost layer.

### **3. Insulation**

The insulation shall be polyvinyl chloride (PVC/C) compound meet the requirements of TIS 11 Part 3-2553.


The average thickness of the insulation shall be not less than that given in Table 1.

The minimum thickness shall not fall below the value in Table 1 by more than 10% plus 0.1 mm.

The color of the insulation shall be black.

### **4. Marking on Cable**

The marking items shall be marked with suitable means throughout the length of cable.

1. Manufacturer's name and/or trade mark "  YAZAKI..... : TYE"
2. Designation "MEA TYPE A 60227 IEC 01 THW "
3. Rated voltage "450/750V "
4. Insulation material "PVC"
5. Max. operating rated temperature at conductor "70°C"
6. Number of core and size of conductor
7. TIS logo and standard number
8. The purchase contract number
9. The continuous reel length marking (in figure) shall be made on the insulation at every 1 meter ( For size  $\geq 16 \text{ mm}^2$ )

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## **5. Test and Properties**


The test and properties of wire shall be carried out in accordance with TIS 11 Part 3-2553, TIS 2427-2552 and MEA's specification No. S-011/2556.

## **6. Packing**

The finished wire shall be placed on the non-returnable wooden reels.

The reels shall be lagged to provide the cable with physical protection during transportation and during ordinary storage and handling operation.

Each package shall be clearly marked as follows.

1. Rated voltage "450/750V "
2. Max. operating rated temperature at conductor "70°C"
3. Designation " MEA TYPE A (0080)  
(60227 IEC 01 THW) "
4. Number of core and size of conductor
5. Cable length
6. Net and gross weight
7. Month and year of manufacture
8. Rolling direction of reel
9. Manufacturer's name and/or trade mark "  **YAZAKI** "
10. Drum number

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**Table 1**

Size (mm <sup>2</sup> )	Conductor			Insulation thickness nominal (mm)	Overall diameter average (mm)		Conductor resistance at 20 °C maximum (Ohm/km)	Insulation resistance at 70 °C minimum (MOhm-km)	Weight approx. (kg/km)	Standard length (m)
	No. of wires (wires)	Type	Diameter approx. (mm)		Minimum	Maximum				
1.5	1	Solid	1.38	0.7	2.6	3.2	12.1	0.011	21	500
2.5	1	Solid	1.78	0.8	3.2	3.9	7.41	0.010	33	500
4 (st)	7	Non-Compacted	2.55	0.8	3.8	4.6	4.61	0.0077	55	500
6	7	Non-Compacted	3.12	0.8	4.3	5.2	3.08	0.0065	75	500
10	7	Non-Compacted	3.98	1.0	5.6	6.7	1.83	0.0065	120	500
16	7	Non-Compacted	5.10	1.0	6.4	7.8	1.15	0.0050	180	500
25	7	Non-Compacted	6.26	1.2	8.1	9.7	0.727	0.0050	280	500
35	19	Non-Compacted	7.65	1.2	9.0	10.9	0.524	0.0043	380	500
50	19	Non-Compacted	8.73	1.4	10.6	12.8	0.387	0.0043	500	500
70	19	Non-Compacted	9.90	1.4	12.1	14.6	0.268	0.0035	650	500
95	19	Non-Compacted	12.60	1.6	14.1	17.1	0.193	0.0035	1000	500
120	37	Non-Compacted	14.21	1.6	15.6	18.8	0.153	0.0032	1200	500
240	61	Non-Compacted	20.25	2.2	22.0	26.6	0.0754	0.0032	2500	500

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