

SPECIFICATION**For****25KV-CC (0080)**

25kV

All Aluminium Spaced Aerial Cable

(25kV, Al/XLPE/XLPE)

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Rev.	Date	Description
0	05/10/2020	Issued specification

APP. _____

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CUSTOMER

Customer Document	Rev.
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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.

DESIGNATION : 25KV-CC (0080)

SPEC NO. TYSS 8510 S

PAGE No. 1 OF 4

REV No. 0

1. Scope

This specification covers 25000V aluminum conductor cross-linked polyethylene (XLPE) insulated cross-linked polyethylene (XLPE) sheath spaced aerial cable.

The cable shall be based on TIS 2341-2555 and MEA's specification No. 406 (07-2015).

2. Conductor

The conductor shall be compacted concentric stranded hard drawn aluminum conductor in accordance with TIS 293-2541, Table 1.

The direction of lay shall be right-hand (Z) in the outermost layers.

3. Conductor Shield

The conductor shield shall be a layer of extruded semi-conducting cross-linked polyethylene compound.

The average thickness of the conductor shield shall be not less than 0.3 mm.

The minimum thickness of the conductor shield shall be not less than 0.07 mm..

4. Insulation

The insulation shall be cross-linked polyethylene (XLPE) compound meet the requirements of TIS 2341-2555.

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

The minimum thickness shall not be less than 90% of the value in Table 1.

The thickness of the insulation shall not be included that of conductor shield.

5. Sheath

The sheath shall be filled carbon black cross-linked polyethylene (XLPE) compound with track resistance, meet the requirements of TIS 2341-2555.

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

The minimum thickness of the sheath shall not be less than 90% of the value in Table 1.

The color of the sheath shall be black.

DESIGNATION : 25KV-CC (0080)

SPEC NO. TYSS 8510 S

PAGE No. 2 OF 4

REV No. 0

6. Marking on Cable

The surface of sheath shall be marked legibly and durably in Thai language, at the interval of about 50 cm., as follow

“การไฟฟ้านครหลวง สายเคเบิลอากาศสำหรับใช้กับระบบ ก. เวกี ขนาด ข. ตร.มม. สัญญาเลขที่ ก : ง” โดยที่

ก. = 24 สำหรับเคเบิล 25 กิโลโวลต์

ข. = พื้นที่หน้าตัดของตัวนำระบบ

ค. = เลขที่สัญญาซื้อขายหรือว่าจ้าง

ง. = ชื่อผู้ผลิตหรือสัญลักษณ์

The cable length marking shall be made on the outer sheath trough whole length started from “0” with 1 meter increment

7. Test and Properties

The test and properties of cables shall be carried out in accordance with TIS 2341-2555, TIS 293-2541 and MEA's specification No. 406 (07-2015).

Routine Test

Maximum conductor resistance, Ohm/km specified in Table 1


AC test voltage for 5 minutes, kV..... 38

8. Packing

The cable shall be placed on non-returnable wooden reels.

The reels shall be covered with suitable covering to provide the cable with physical protection during transportation and during ordinary storage and handling operations.

Each reel shall be clearly marked as follows.

1. Designation "25KV-CC (0080)"
2. Size of cable
3. Cable length
4. Net and gross weight
5. Year of manufacture
6. Manufacturer's name and/or trade mark "  **YAZAKI** "
7. Rolling direction of reel and cable end position
8. Drum number

DESIGNATION : 25KV-CC (0080)**SPEC NO. TYSS 8510 S****PAGE No. 3 OF 4****REV No. 0****Table 1**

No. of core	Size (mm ²)	Conductor strands minimum (wire)	Conductor diameter (mm)	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall diameter (mm)	Conductor resistance at 20 °C maximum (Ohm/km)	Weight of cable approx. (kg/km)	Standard packing length (m)
1	35	6	6.6 - 7.5	3.18	3.18	19.9 - 21.5	0.868	400	500
1	70	12	9.3 - 10.2	3.18	3.18	23.0 - 25.0	0.443	550	500
1	120	15	12.5 - 13.5	3.18	3.18	26.5 - 28.7	0.253	750	500
1	185	30	15.5 - 16.8	3.18	3.18	29.4 - 31.7	0.164	1000	500

DESIGNATION : 25KV-CC (0080)

SPEC NO. TYSS 8510 S

PAGE No. 4 OF 4

REV No. 0

25kV All Aluminium Spaced Aerial Cable

(25KV-CC (0080))

