

**SPECIFICATIONS FOR OCTAGONAL
STEEL POLES (SPECIAL POLES)**

Issue Date: 07/07/2019

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20-SDMS-01 REV.03.1

20-SDMS-01
Rev.03.1

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(SPECIAL POLES)**

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1 Scope

This sub-revision of the specification 20-SDMS-01 Rev.03 specifies the drawing details of additional new octagonal steel poles (special poles) for use with medium-voltage single-circuit and double-circuit overhead line sections with long-spans, valley and wadi crossings, and highlands with the use of special pole structures. It shall always be read in conjunction with 20-SDMS-01 Rev.03 and the latest revision of 01-SDMS-01.

All the drawings and information in this sub-revision of the specification 20-SDMS-01 Rev.03 shall remain active unless a consolidated revision 20-SDMS-01 Rev.04 is officially published.

2 Drawings



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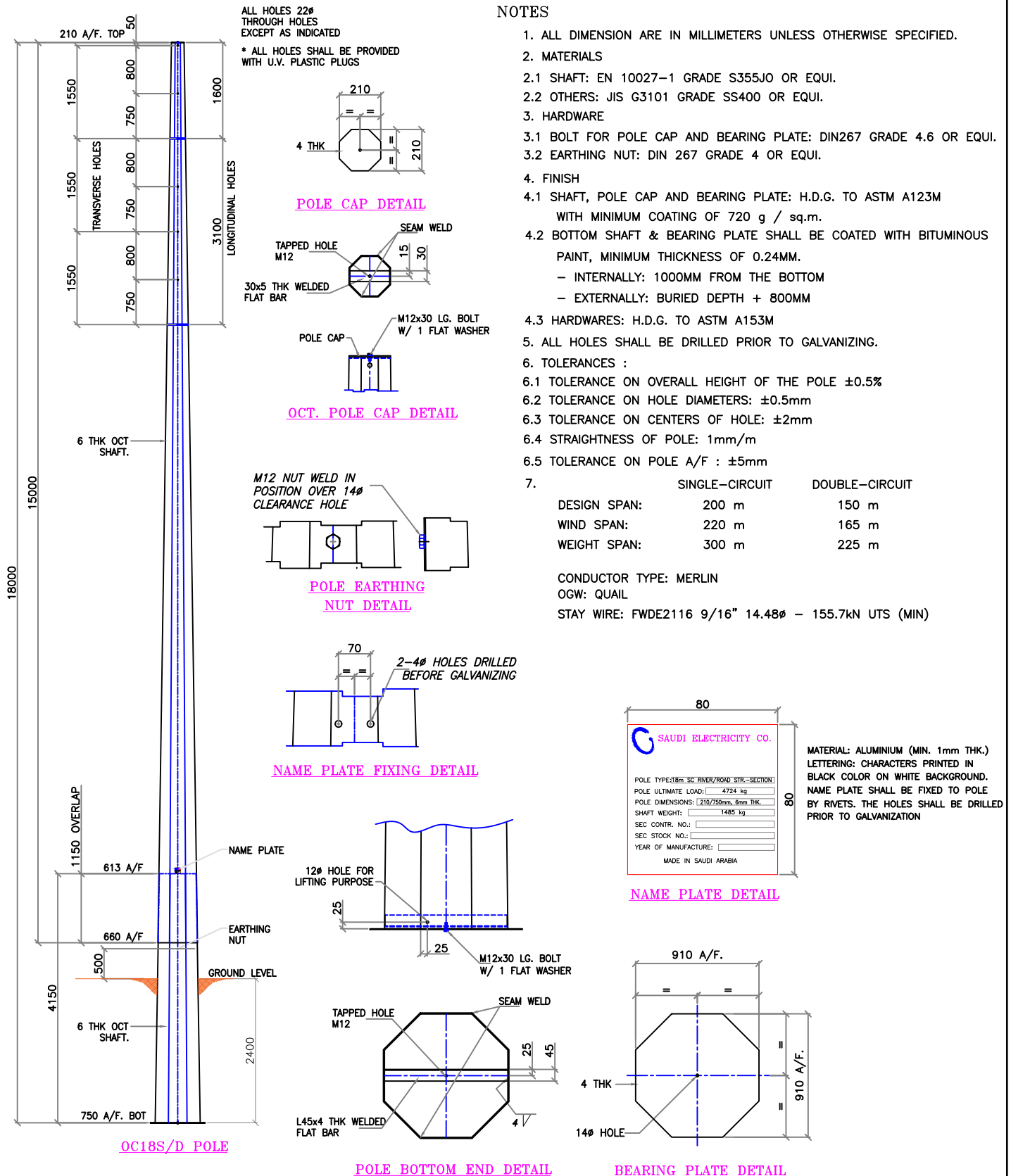


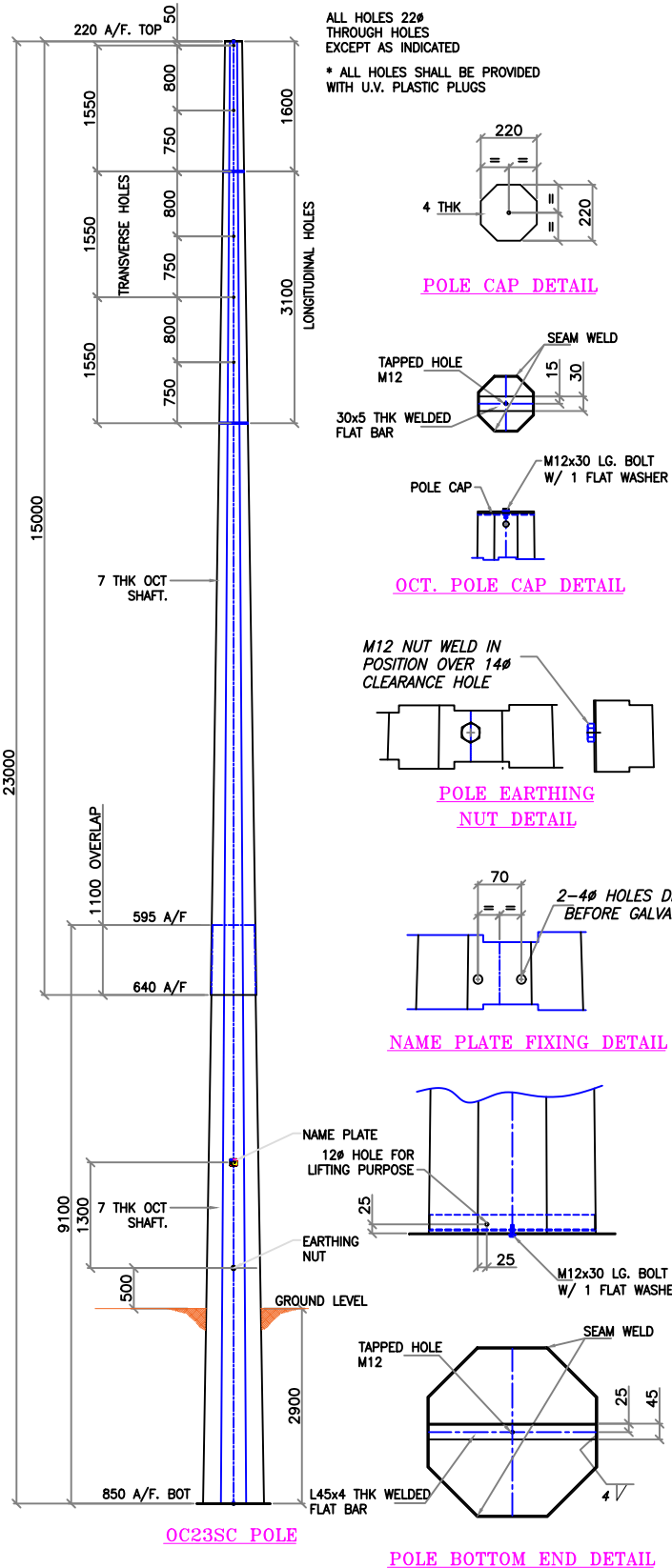
FIGURE 10: OC18S/D - 18M OCTAGONAL STEEL POLE FOR MEDIUM-VOLTAGE SINGLE & DOUBLE CIRCUIT STRUCTURES



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NOTES

1. ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
 2. MATERIALS
 - 2.1 SHAFT: EN 10027-1 GRADE S355JO OR EQUI.
 - 2.2 OTHERS: JIS G3101 GRADE SS400 OR EQUI.
 3. HARDWARE
 - 3.1 BOLT FOR POLE CAP AND BEARING PLATE: DIN267 GRADE 4.6 OR EQUI.
 - 3.2 EARTHING NUT: DIN 267 GRADE 4 OR EQUI.
 4. FINISH
 - 4.1 SHAFT, POLE CAP AND BEARING PLATE: H.D.G. TO ASTM A123M WITH MINIMUM COATING OF 720 g / sq.m.
 - 4.2 BOTTOM SHAFT & BEARING PLATE SHALL BE COATED WITH BITUMINOUS PAINT, MINIMUM THICKNESS OF 0.24MM.
 - INTERNALLY: 1000MM FROM THE BOTTOM
 - EXTERNALLY: BURIED DEPTH + 800MM
 - 4.3 HARDWARES: H.D.G. TO ASTM A153M
 5. ALL HOLES SHALL BE DRILLED PRIOR TO GALVANIZING.
 6. TOLERANCES :
 - 6.1 TOLERANCE ON OVERALL HEIGHT OF THE POLE ±0.5%
 - 6.2 TOLERANCE ON HOLE DIAMETERS: ±0.5mm
 - 6.3 TOLERANCE ON CENTERS OF HOLE: ±2mm
 - 6.4 STRAIGHTNESS OF POLE: 1mm/m
 - 6.5 TOLERANCE ON POLE A/F : ±5mm
 7.

	SINGLE-CIRCUIT	DOUBLE-CIRCUIT
DESIGN SPAN:	250 m	200 m
WIND SPAN:	275 m	220 m
WEIGHT SPAN:	375 m	300 m
- CONDUCTOR TYPE: MERLIN
 OGW: QUAIL
 STAY WIRE: FWDE2116 9/16" 14.48Ø - 155.7kN UTS (MIN)

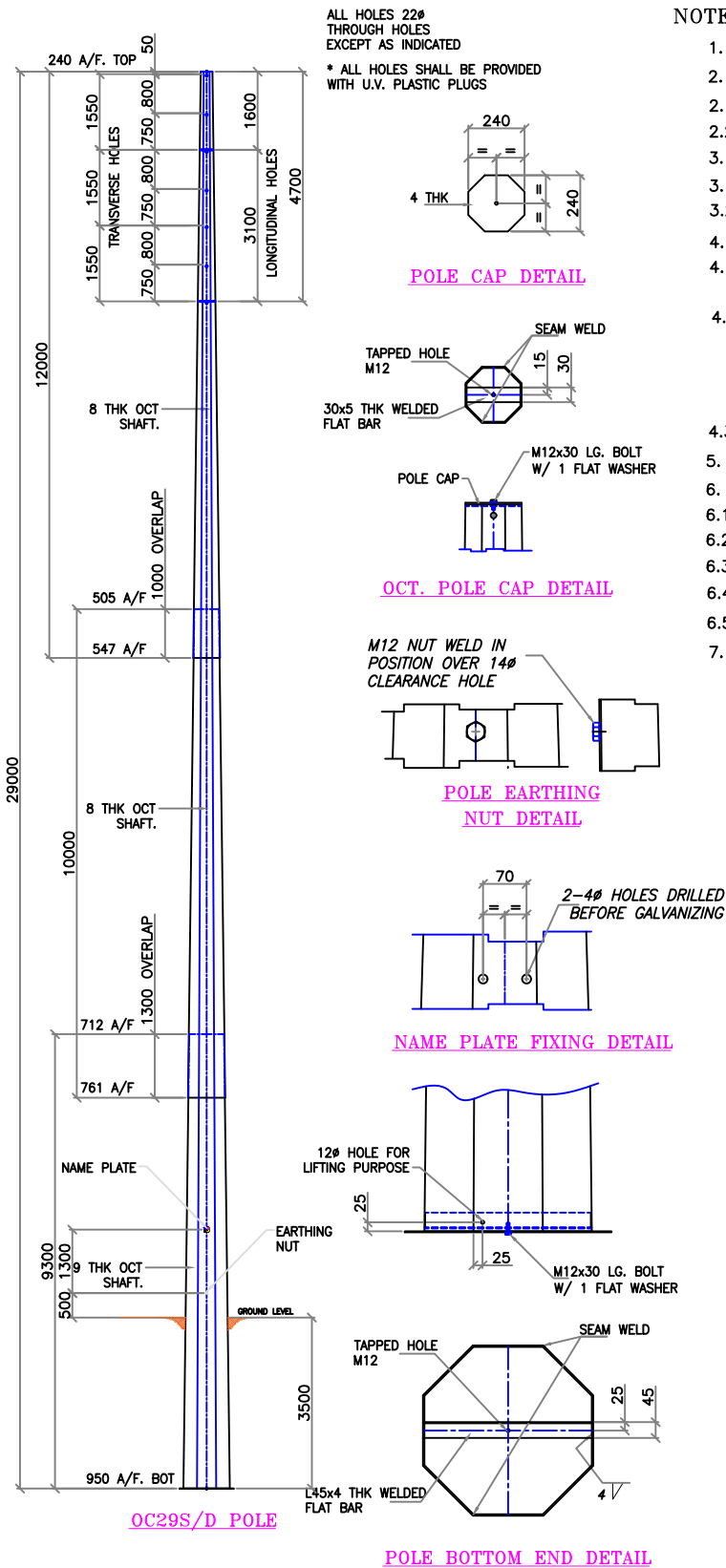
FIGURE 11: OC23S/D - 23M OCTAGONAL STEEL POLE FOR MEDIUM-VOLTAGE SINGLE & DOUBLE CIRCUIT STRUCTURES



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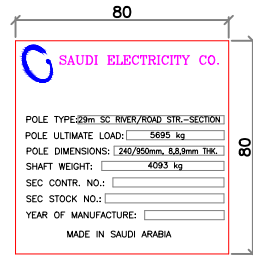
Dated: 2019-07



NOTES

- ALL DIMENSION ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
- MATERIALS
 - SHAFT: EN 10027-1 GRADE S355JO OR EQUI.
 - OTHERS: JIS G3101 GRADE SS400 OR EQUI.
- HARDWARE
 - BOLT FOR POLE CAP AND BEARING PLATE: DIN267 GRADE 4.6 OR EQUI.
 - EARTHING NUT: DIN 267 GRADE 4 OR EQUI.
- FINISH
 - SHAFT, POLE CAP AND BEARING PLATE: H.D.G. TO ASTM A123M WITH MINIMUM COATING OF 720 g / sq.m.
 - BOTTOM SHAFT & BEARING PLATE SHALL BE COATED WITH BITUMINOUS PAINT, MINIMUM THICKNESS OF 0.24MM.
 - INTERNALLY: 1000MM FROM THE BOTTOM
 - EXTERNALLY: BURIED DEPTH + 800MM
- HARDWARES: H.D.G. TO ASTM A153M
- TOLERANCES :
 - TOLERANCE ON OVERALL HEIGHT OF THE POLE ±0.5%
 - TOLERANCE ON HOLE DIAMETERS: ±0.5mm
 - TOLERANCE ON CENTERS OF HOLE: ±2mm
 - STRAIGHTNESS OF POLE: 1mm/m
 - TOLERANCE ON POLE A/F : ±5mm
- | | SINGLE-CIRCUIT | DOUBLE-CIRCUIT |
|--------------|----------------|----------------|
| DESIGN SPAN: | 300 m | 250 m |
| WIND SPAN: | 330 m | 275 m |
| WEIGHT SPAN: | 450 m | 375 m |

CONDUCTOR TYPE: MERLIN
OGW: QUAIL
STAY WIRE: FWDE2116 9/16" 14.48# - 155.7kN UTS (MIN)



MATERIAL: ALUMINIUM (MIN. 1mm THK.)
LETTERING: CHARACTERS PRINTED IN BLACK COLOR ON WHITE BACKGROUND.
NAME PLATE SHALL BE FIXED TO POLE BY RIVETS. THE HOLES SHALL BE DRILLED PRIOR TO GALVANIZATION

FIGURE 12: OC29S/D - 29M OCTAGONAL STEEL POLE FOR MEDIUM-VOLTAGE SINGLE & DOUBLE CIRCUIT STRUCTURES