

EATS 09-12 (11kV Belted) PICAS Cables

CABLE CHARACTERISTICS



r-12D
Bending radius



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CABLE DESCRIPTION

1.CONDUCTOR

Compacted sector shaped stranded aluminium conductor complying with BS6360 Class 2.

2. CONDUCTOR SCREEN

Semi-conducting carbon paper tapes.

3.INSULATION

Layers of paper tapes applied helically and mass impregnated with non-draining insulating compound (MIND). An additional belt of insulating paper-tapes is applied over the laid up cores. Core identification: Outer core papers printed with white numbers 1, 2 and 3.

4 & 5.LAYING UP

Three cores laid up with paper fillers and bound with belt insulating papers.

6.INSULATION SCREEN

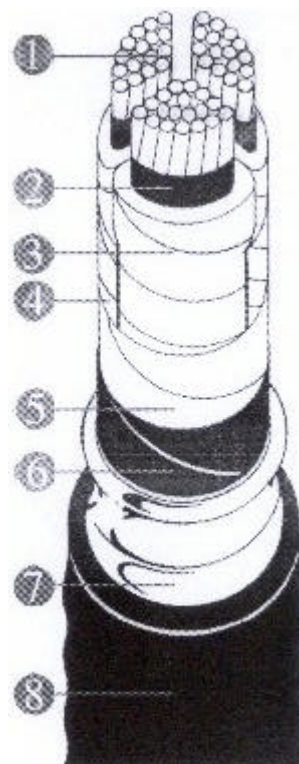
Semi-conducting carbon paper tapes applied over the belt insulation.

7.ALUMINIUM SHEATH

Extruded corrugated aluminium sheath with bitumen coating.

8.CABLE SERVING

Extruded red polyvinyl chloride (PVC) is supplied as standard.



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Constructional Data

| Nominal cross-sectional area mm ² | Minimum thickness of insulation | | Approximate thickness of aluminium sheath mm | Minimum average thickness of oversheath mm | Approximate overall diameter mm |
|---|---------------------------------|------------------------------------|---|---|------------------------------------|
| | Between Conductors mm | Between conductor and sheath mm | | | |
| 95 | 5.6 | 3.4 | 1.2 | 2.5 | 49.2 |
| 185 | 5.6 | 3.4 | 1.6 | 2.8 | 60.7 |
| 300 | 5.6 | 3.4 | 2.0 | 3.2 | 72.5 |

Insulation Data

| Nominal cross-sectional area mm ² | Approximate cable weight Kg/m | Minimum bending radius mm | Nominal internal diameter of ducts mm |
|---|----------------------------------|------------------------------|--|
| 95 | 3.4 | 600 | 100 |
| 185 | 5.2 | 750 | 100 |
| 300 | 7.5 | 900 | 125 |

Electrical Data

| Nominal cross-sectional area mm ² | Maximum DC resistance of conductors at 20°C Ohms/km | Maximum AC resistance of conductors at 65°C Ohms/km | Approximate reactance at 50 Hz Ohms/km | Approximate Capacitance µF/km |
|---|--|--|---|----------------------------------|
| 95 | 0.320 | 0.379 | 0.087 | 0.450 |
| 185 | 0.164 | 0.195 | 0.080 | 0.580 |
| 300 | 0.100 | 0.120 | 0.077 | 0.710 |

Ratings

| Nominal cross-sectional area mm ² | Current Ratings | | |
|---|-------------------------------|--------------------------|---------------------|
| | Laid Direct in ground Amps | Drawn into ducts Amps | Laid in air Amps |
| 95 | 185 | 160 | 180 |
| 185 | 270 | 230 | 270 |
| 300 | 355 | 305 | 370 |

Current Rating Conditions:

| | |
|----------------------------|-----------|
| Ground Temperature | 15°C |
| Ambient temperature (air) | 25°C |
| Depth of burial | 0.8m |
| Thermal resistance of soil | 1.2°C m/W |



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Formerly Pirelli Cables