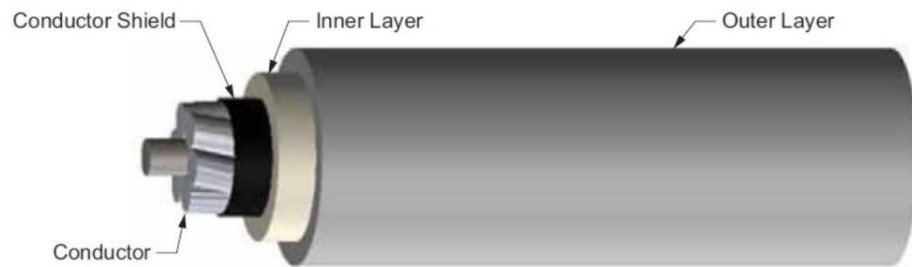


# Covered Conductor Data Sheet

Covered Conductor for 17kV and 35kV



- Conductor:
  - Aluminum Conductor Steel-Reinforced (ACSR) or
  - Hard Drawn Copper (HDCU)
- Conductor Shield: Semiconducting Thermoset Polymer
- Inner Layer: Crosslinked Low Density Polyethylene (XL-LDPE)
- Outer Layer: Crosslinked High Density Polyethylene (XL-HDPE)
  - Track Resistant
  - Abrasion Resistant

## Temperature Rating:

Normal Operating Temperature: 90°C

Emergency Operating Temperature: 130°C

Short Circuit Temperature: 250°C

## 17kV Covered Conductor

ACSR

Conductor Size (AWG)	Conductor Type (Stranding)	Weight (lb/ft)	Conductor Diameter (in)	Conductor Shield Thickness (in)	Inner Layer Thickness (in)	Outer Layer Thickness (in)	Max Nominal Overall Diameter (in)	Maximum Rated Strength (lb.)	Ampacity per Conductor <sup>1</sup> (Amps)
1/0	ACSR (6x1)	0.289	0.398	0.015 - 0.025	0.075	0.075	0.748	4,160	271
336.4	ACSR (18x1)	0.584	0.684	0.015 - 0.025	0.075	0.075	1.034	8,246	550
336.6	ACSR (30/7)	0.750	0.741	0.015 - 0.025	0.075	0.075	1.091	16,435	561
653.9	ACSR (18x3)	0.998	0.953	0.020 - 0.025	0.080	0.080	1.323	14,060	835

<sup>1</sup> Covered Conductor Cable Normal Operating Rating Criteria:

Ambient Temperature = 40°C

Conductor Temperature = 90°C

Load Factor = 100%

Wind Speed = 4 ft/sec

Coefficient of Emissivity = 0.5

Coefficient of Absorption = 0.5

Latitude = 34°

Elevation of Conductor above Sea Level = 0 ft

Atmosphere = Clear

Local Sun Time = 1:00 pm

## Copper

Conductor Size (AWG)	Conductor Type (Stranding)	Weight (lbs./ft)	Conductor Diameter (in)	Conductor Shield Thickness (in)	Inner Layer Thickness (in)	Outer Layer Thickness (in)	Max Nominal Overall Diameter (in)	Maximum Rated Strength (lb.)	Ampacity per Conductor <sup>2</sup> (Amps)
#2	HDCU (7)	0.324	0.292	0.015 - 0.025	0.075	0.075	0.642	2,898	240
2/0	HDCU (7)	0.569	0.414	0.015 - 0.025	0.075	0.075	0.764	5,634	367
4/0	HDCU (7)	0.845	0.522	0.015 - 0.025	0.075	0.075	0.872	8,702	488

<sup>2</sup> Covered Conductor Cable Normal Operating Rating Criteria:

Ambient Temperature = 40°C

Conductor Temperature = 85°C

Load Factor = 100%

Wind Speed = 4 ft/sec

Coefficient of Emissivity = 0.5

Coefficient of Absorption = 0.5

Latitude = 34°

Elevation of Conductor above Sea Level = 0 ft

Atmosphere = Clear

Local Sun Time = 1:00 pm

## 35kV Covered Conductor

### ACSR

Conductor Size (AWG)	Conductor Type (Stranding)	Weight (lb/ft)	Conductor Diameter (in)	Conductor Shield Thickness (in)	Inner Layer Thickness (in)	Outer Layer Thickness (in)	Max Nominal Overall Diameter (in)	Maximum Rated Strength (lb.)	Ampacity per Conductor <sup>1</sup> (Amps)
1/0	ACSR (6x1)	0.460	0.398	0.015 - 0.025	0.175	0.125	1.048	4,160	255
336.4	ACSR (18x1)	0.850	0.684	0.015 - 0.025	0.175	0.125	1.334	8,246	518
336.4	ACSR (30x7)	0.981	0.741	0.015 - 0.025	0.175	0.125	1.391	16,435	529
653.9	ACSR (18x3)	1.242	0.953	0.020 - 0.025	0.175	0.125	1.602	14,060	784

<sup>1</sup> Covered Conductor Cable Normal Operating Rating Criteria:

Ambient Temperature = 40°C

Conductor Temperature = 90°C

Load Factor = 100%

Wind Speed = 4 ft/sec

Coefficient of Emissivity = 0.5

Coefficient of Absorption = 0.5

Latitude = 34°

Elevation of Conductor above Sea Level = 0 ft

Atmosphere = Clear

Local Sun Time = 1:00 pm

## Specifications

Must be manufactured to the latest editions of the following standards:

- ASTM B8
- ASTM B232
- ICEA S-121-733