**SPEC 83043** Stock #: TBA

# Triplex 600 Volt RHH/RHW-2 or USE-2 AlumaFlex® Underground **Service Entrance**



Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Conductors are stranded, compressed Triple E per ASTM 800 and 801
- 2. Insulation: Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 or USE-2
- 3. **Neutral:** Cross Linked Polyethylene (XLPE) with three Yellow Extruded Stripes (YES)

### **APPLICATIONS AND FEATURES:**

Conductors are stranded, compressed aluminum Triple E AA8000 (8176-H24), insulated with cross-linked polyethylene Type RHH/RHW-2 or USE-2. Neutrals are identified by three yellow extruded stripes. Cables with "YES" neutrals have sequential footage markers. Conductors are durably surface printed for identification. Two-phase conductors and one neutral conductor are cabled together to produce the triplex cable configuration. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

#### SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- ICEA S-105-692 Standard For 600 Volt Single Layer Thermoset Insulated Utility Underground Distribution Cables







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## **Table 1 – Weights and Measurements**

| tock<br>ımber | Code<br>Word | Phase<br>Cond.<br>Size | Phase<br>Strand | Dia. Over<br>Phase<br>Conductor | Phase Insul.<br>Thickness | Dia. Over<br>Phase<br>Insulation | Neutral<br>Cond.<br>Size | Neutral<br>Strand | Neutral<br>Insul.<br>Thickness | Dia. Over<br>Neutral<br>Insulation | Approx.<br>OD | Approx.<br>Weight |
|---------------|--------------|------------------------|-----------------|---------------------------------|---------------------------|----------------------------------|--------------------------|-------------------|--------------------------------|------------------------------------|---------------|-------------------|
|               |              | AWG/<br>Kcmil          | No.             | inch                            | mil                       | inch                             | AWG/<br>Kcmil            | No.               | mil                            | inch                               | inch          | lb/1000ft         |
| ГВА           | Hollins      | 3/0                    | 17              | 0.456                           | 80                        | 0.603                            | 1/0                      | 9                 | 80                             | 0.512                              | 1.302         | 581               |

All dimensions are nominal and subject to normal manufacturing tolerances

# **Table 2 – Electrical and Engineering Data**

| Code<br>Word | Phase<br>Cond. Size | Min Bending<br>Radius | Max Pull<br>Tension | DC Resistance<br>@ 25°C | AC Resistance<br>@ 75°C | Inductive<br>Reactance @<br>60Hz | GMR   | Allowable<br>Ampacity in Duct<br>90°C | Allowable Ampacity<br>Directly Buried 90°C |
|--------------|---------------------|-----------------------|---------------------|-------------------------|-------------------------|----------------------------------|-------|---------------------------------------|--|
|              | AWG/<br>Kcmil       | inch                  | lb                  | Ω/1000ft                | Ω/1000ft                | Ω/1000ft                         | ft    | Amp                                   | Amp  |
| Hollins      | 3/0                 | 6.5                   | 3020                | 0.105                   | 0.126                   | 0.042                            | 0.014 | 175                                   | 175  |

#### Notes:

- 1. Inductive reactance assumes cables are cradled in conduit, and the neutral is carrying no current.
- 2. Conductors assumed to be reverse lay stranded, compressed construction.
- 3. Phase spacing assumes cables are touching.
- 4. Resistances shown are for the phase conductors only.
- 5. Ampacities based upon 2023 NEC Table 310.16 Ampacities of Insulated Conductors with Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried)





<sup>^</sup> HI-SCORE: Medium Density Polyethylene Insulation