

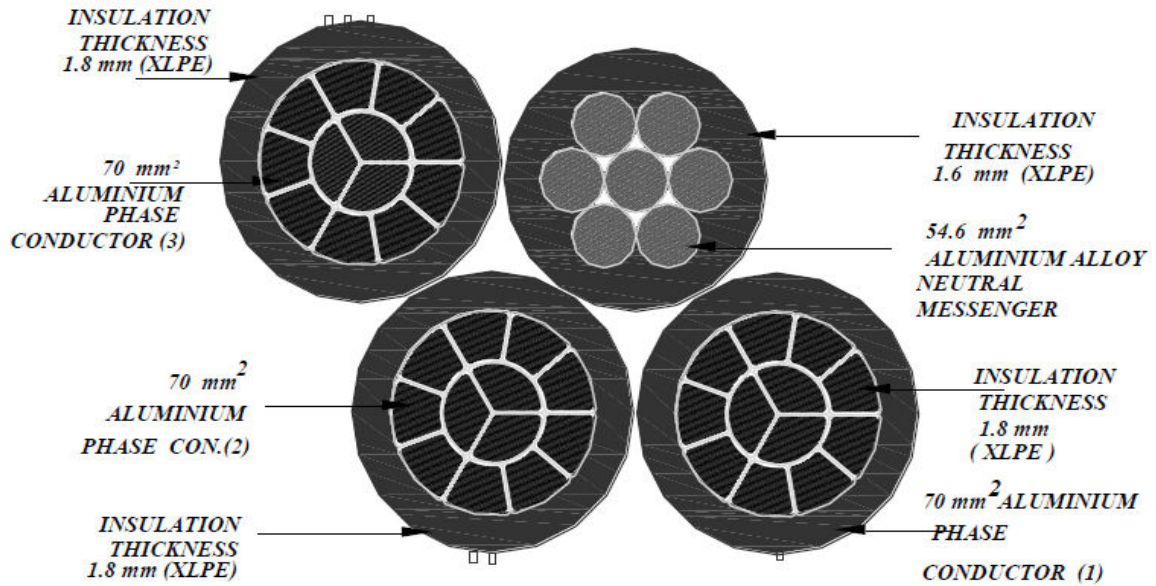
# Allied Export

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### 3 x 70 + 1 x 54.6mm<sup>2</sup> Aerial Bundled Conductors

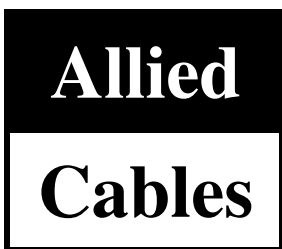
|    |  |     |   |                                     |                 |
|----|--|-----|---|-------------------------------------|-----------------|
| 1  | Applicable Standards                               |     | → | NFC 33-209, IEC502, IEC1089, IEC228 |                 |
| 2  | Number of Strands in                               |     |   |                                     |                 |
|    | i. Phase Conductors                                |     | → | 12                                  |                 |
|    | ii. Neutral Messenger                              |     | → | 7                                   |                 |
| 3  | Nominal Cross Sectional Area of                    |     |   |                                     |                 |
|    | i. Phase Conductors                                |     | → | 70                                  | mm              |
|    | ii. Neutral Messenger                              |     | → | 54.6                                | mm              |
| 4  | Maximum Linear Resistance of Conductor at 20°C for |     |   |                                     |                 |
|    | i. Phase Conductors                                |     | → | 0.443                               | Ω/km            |
|    | ii. Neutral Messenger                              |     | → | 0.630                               | Ω/km            |
| 5  | Minimum Breaking Strength of                       |     |   |                                     |                 |
|    | i. Phase Conductors                                |     | → | 840                                 | daN             |
|    | ii. Neutral Messenger                              |     | → | 1660                                | daN             |
| 6  | Nominal Diameter of Strands of                     |     |   |                                     |                 |
|    | i. Phase Conductors                                |     | → | 2.74                                | mm              |
|    | ii. Neutral Messenger                              |     | → | 3.15                                | mm              |
| 7  | Diameter of Bare Conductors                        |     |   |                                     |                 |
|    | i. Phase Conductors                                | Max | → | 10.02                               | mm              |
|    |  | Min | → | 9.7                                 | mm              |
|    | ii. Neutral Messenger                              | Max | → | 9.6                                 | mm              |
|    |  | Min | → | 9.2                                 |                 |
| 8  | Thickness of Insulating Sheath                     |     |   |                                     |                 |
|    | i. Phase Conductors                                | Avg | → | 1.8                                 | mm <sup>2</sup> |
|    |  | Min | → | 1.52                                | mm              |
|    | ii. Neutral Messenger                              | Avg | → | 1.6                                 | mm              |
|    |  | Min | → | 1.34                                | mm              |
|    |  |     |   |                                     | At 1 point      |
| 9  | Insulated Cable Outside Diameter                   |     |   |                                     |                 |
|    | i. Phase Conductors                                | Max | → | 14.2                                | mm              |
|    |  | Min | → | 13.3                                | mm              |
|    | ii. Neutral Messenger                              | Max | → | 13.0                                | mm              |
|    |  | Min | → | 12.3                                | mm              |
| 10 | Co-Efficient Of Linear Expansion                   |     |   |                                     |                 |
|    | i. AL Conductors                                   |     | → | 23 x 10 <sup>-6</sup>               | per °C          |
|    | ii. AL Alloy Conductors                            |     | → | 23 x 10 <sup>-6</sup>               | per °C          |
| 11 | Modules Of Elasticity                              |     |   |                                     |                 |
|    | i. Aluminium Conductor                             |     | → | 56000                               | Mpa             |
|    | ii. Aluminium Alloy Conductor                      |     | → | 62000                               | Mpa             |

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All dimensions are in mm



|   |          |   |              |
|---|----------|---|--------------|
| <b>Allied Cables Ltd</b>  |          | Allied Works, Liverpool Road,<br>Warrington, Cheshire WA5 1AP |              |
| <b>3 x 70mm AL/XLPE + 54.6mm<sup>2</sup> AL ALLOY/XLPE<br/>Aerial Bundled Cable</b> |          |   |              |
| <b>Item Code: T - 21sub</b>   |          |   |              |
| Checked: Eng.Ex   |          | Approved: EE (TSD)  |              |
| Date:   | 13.02.18 | Scale:  | not to scale |