

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                                |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 4 Core X 2.5 Sq.mm (LT XLPE cable)                                                                             |
| 1                                                                                     | Type of cable                                                     | 2XWY                                                                                                           |
| 2                                                                                     | Voltage Grade V                                                   | 1100                                                                                                           |
| 3                                                                                     | No of cores X size in sqmm                                        | 4 Core X 2.5 Sq.mm                                                                                             |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                                |
| a)                                                                                    | Material                                                          | Plain annealed Copper as per Class 2 of IS:8130/2013                                                           |
| b)                                                                                    | Max. d.c. resistance of conductor at 20° C (ohm/km)               | 7.41                                                                                                           |
| c)                                                                                    | Shape of the conductor                                            | Stranded Circular.                                                                                             |
| 5                                                                                     | <b>Insulation</b>                                                 |                                                                                                                |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-1)/88, Latest                                                                           |
| b)                                                                                    | Core Identification                                               | Red, Yellow, Blue & Black                                                                                      |
| 6                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                        |
| 7                                                                                     | <b>Armouring</b>                                                  |                                                                                                                |
| a)                                                                                    | Type & Material                                                   | Galvanised Steel round wire, conforming to IS: 3975                                                            |
| 8                                                                                     | <b>Outer Sheath</b>                                               |                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                        |
| b)                                                                                    | Colour of outer sheath.                                           | Black                                                                                                          |
| 9                                                                                     | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                           |
| 10                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                          |
| 11                                                                                    | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 0.36                                                                                                           |
| 12                                                                                    | <b>Continuous Current carrying capacities</b>                     |                                                                                                                |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 34                                                                                                             |
| (b)                                                                                   | In Air at 40°C (A)                                                | 30                                                                                                             |
| 13                                                                                    | Applicable Standard                                               | IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments               |
| 14                                                                                    | Embossing                                                         | MAKE, 1100 VOLTS GRADE XLPE                                                                                    |
| 15                                                                                    | Printing                                                          | YEAR, MAKE, 1100 VOLTS GRADE XLPE, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                                |

| TECHNICAL SPECIFICATION                                                                                                                                                         |                                                                    |                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| S.No                                                                                                                                                                            | Particulars                                                        | 6 Core X 2.5 sq mm ( instrumentation cable)                                                                          |
| 1                                                                                                                                                                               | Type of Cable                                                      | Overall Screened                                                                                                     |
| 2                                                                                                                                                                               | No of Elements X Size in mm <sup>2</sup>                           | 6C X 2.5                                                                                                             |
| 3                                                                                                                                                                               | Voltage Grade (V)                                                  | 300/500                                                                                                              |
| 4                                                                                                                                                                               | <b>Conductor</b>                                                   |                                                                                                                      |
| a)                                                                                                                                                                              | Material                                                           | Plain Stranded Copper (Class-2) as per IS: 8130/2013                                                                 |
| b)                                                                                                                                                                              | Maximum d.c. resistance of conductor at 20° C ( $\Omega$ /km)      | 7.41                                                                                                                 |
| c)                                                                                                                                                                              | Shape of conductor                                                 | Stranded Circular                                                                                                    |
| 5                                                                                                                                                                               | <b>Insulation</b>                                                  |                                                                                                                      |
| a)                                                                                                                                                                              | Material                                                           | PVC Type A as per IS:5831                                                                                            |
| b)                                                                                                                                                                              | Core identification                                                | All cores Grey with number printing on core                                                                          |
| 6                                                                                                                                                                               | <b>Collective Screen</b>                                           |                                                                                                                      |
| a)                                                                                                                                                                              | Material                                                           | Aluminium mylar tape                                                                                                 |
| b)                                                                                                                                                                              | Material of Drain Wire                                             | Flexible ATC                                                                                                         |
| 7                                                                                                                                                                               | <b>Inner sheath</b>                                                |                                                                                                                      |
| a)                                                                                                                                                                              | Material                                                           | Extruded PVC Type ST1 to IS: 5831, Latest                                                                            |
| 8                                                                                                                                                                               | <b>Armouring</b>                                                   |                                                                                                                      |
| a)                                                                                                                                                                              | Type & Material                                                    | Galvanised Steel round wire                                                                                          |
| 9                                                                                                                                                                               | <b>Outer sheath</b>                                                |                                                                                                                      |
| a)                                                                                                                                                                              | Material                                                           | Extruded FR-LSH PVC Type ST1 to IS: 5831, Latest                                                                     |
| b)                                                                                                                                                                              | colour of sheath                                                   | Blue                                                                                                                 |
| 10                                                                                                                                                                              | Maximum conductor temperature under normal operating conditions °C | 70                                                                                                                   |
| 11                                                                                                                                                                              | <b>Electrical Parameters</b>                                       |                                                                                                                      |
| a)                                                                                                                                                                              | Dielectric strength for 1 minute (H.V Test) kV                     | 2.0                                                                                                                  |
| 12                                                                                                                                                                              | Applicable Standard                                                | Generally as per IS 1554 Part I/88 & BSEN 50288-7                                                                    |
| 13                                                                                                                                                                              | Embossing                                                          | MAKE, 500 VOLTS GRADE FR-LSH                                                                                         |
| 14                                                                                                                                                                              | Printing                                                           | YEAR, MAKE, 500 VOLTS GRADE FR-LSH, CABLE SIZE, SCREENED with SEQUENTIAL LENGTH MARKING at every one meter interval. |
| 15                                                                                                                                                                              | <b>FR-LSH PROPERTIES</b>                                           |                                                                                                                      |
| a)                                                                                                                                                                              | Oxygen Index                                                       | Min. 29% as per ASTM D- 2863                                                                                         |
| b)                                                                                                                                                                              | Temperature Index                                                  | Min. 250 Deg.C as per ASTM D- 2863                                                                                   |
| c)                                                                                                                                                                              | Smoke Density Rating                                               | Max. 60% as per ASTM D- 2843                                                                                         |
| d)                                                                                                                                                                              | Acid Gas Generation                                                | Max. 20% as per IEC- 754- 1                                                                                          |
| e)                                                                                                                                                                              | Flammability Test                                                  | As per IEC:332-I                                                                                                     |
| Note:-The values given above are subject to tolerances as per the relevant standards.<br>Incase of any Typographical error /Discrepancy, relevent standards shall be prevailed. |                                                                    |                                                                                                                      |

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                              |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 7 Core X 6 Sq.mm (LT XLPE CABLE)                                                                             |
| 1                                                                                     | Type of cable                                                     | 2XFY                                                                                                         |
| 2                                                                                     | Voltage Grade V                                                   | 1100                                                                                                         |
| 3                                                                                     | No of cores X size in sqmm                                        | 7 Core X 6 Sq.mm                                                                                             |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                              |
| a)                                                                                    | Material                                                          | Plain annealed Copper as per Class 2 of IS:8130, latest                                                      |
| b)                                                                                    | Max. d.c. resistance of conductor at 20° C (ohm/km)               | 3.08                                                                                                         |
| c)                                                                                    | Shape of the conductor                                            | Stranded Circular                                                                                            |
| 5                                                                                     | <b>Insulation</b>                                                 |                                                                                                              |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-1)/88, Latest                                                                         |
| b)                                                                                    | Core Identification                                               | All cores Grey with number printing                                                                          |
| 6                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                              |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831                                                                         |
| 7                                                                                     | <b>Armouring</b>                                                  |                                                                                                              |
| a)                                                                                    | Type & Material                                                   | Galvanised Steel Flat strip                                                                                  |
| 8                                                                                     | <b>Outer Sheath</b>                                               |                                                                                                              |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                      |
| b)                                                                                    | Colour of outer sheath.                                           | Black                                                                                                        |
| 9                                                                                     | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                         |
| 10                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                        |
| 11                                                                                    | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 0.86                                                                                                         |
| 12                                                                                    | <b>Continuous Current carrying capacities</b>                     |                                                                                                              |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 44                                                                                                           |
| (b)                                                                                   | In Air at 40°C (A)                                                | 40                                                                                                           |
| 13                                                                                    | Applicable Standard                                               | IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments             |
| 14                                                                                    | Embossing                                                         | MAKE, 1100 VOLTS GRADE XLPE                                                                                  |
| 15                                                                                    | Printing                                                          | YEAR, MAKE, 1100 VOLTS GRADE XLPE CABLE SIZE CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                              |

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                               |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 8 Core X 2.5 Sq.mm ( LT XLPE CABLE)                                                                           |
| 1                                                                                     | Type of cable                                                     | 2XWY                                                                                                          |
| 2                                                                                     | Voltage Grade V                                                   | 1100                                                                                                          |
| 3                                                                                     | No of cores X size in sqmm                                        | 8 Core X 2.5 Sq.mm                                                                                            |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                               |
| a)                                                                                    | Material                                                          | Plain annealed Copper as per Class 2 of IS:8130/2013                                                          |
| b)                                                                                    | Max. d.c. resistance of conductor at 20° C (ohm/km)               | 7.41                                                                                                          |
| c)                                                                                    | Shape of the conductor                                            | stranded circular                                                                                             |
| 5                                                                                     | <b>Insulation</b>                                                 |                                                                                                               |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-1)/88, Latest                                                                          |
| b)                                                                                    | Core Identification                                               | All Cores Grey With Number Printing                                                                           |
| 6                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                               |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                       |
| 7                                                                                     | <b>Armouring</b>                                                  |                                                                                                               |
| a)                                                                                    | Material & type                                                   | Galvanised Steel round wire, conforming to IS: 3975                                                           |
| 8                                                                                     | <b>Outer Sheath</b>                                               |                                                                                                               |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                       |
| b)                                                                                    | Colour of outer sheath.                                           | Black                                                                                                         |
| 9                                                                                     | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                          |
| 10                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                         |
| 11                                                                                    | Short Circuit rating of conductor for the duration of 1sec (kA)   | 0.36                                                                                                          |
| 12                                                                                    | <b>Continuous Current carrying capacities</b>                     |                                                                                                               |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 23                                                                                                            |
| (b)                                                                                   | In Air at 40°C (A)                                                | 20                                                                                                            |
| 13                                                                                    | Applicable Standard                                               | IS 8130/2013,IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments               |
| 14                                                                                    | Embossing                                                         | MAKE, 1100 VOLTS GRADE XLPE                                                                                   |
| 15                                                                                    | Printing                                                          | YEAR, MAKE, 1100 VOLTS GRADE XLPE CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                               |

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                                |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 4 Core X 4 Sq.mm ( LT XLPE CABLE )                                                                             |
| 1                                                                                     | Type of cable                                                     | 2XWY                                                                                                           |
| 2                                                                                     | Voltage Grade V                                                   | 1100                                                                                                           |
| 3                                                                                     | No of cores X size in sqmm                                        | 4 Core X 4 Sq.mm                                                                                               |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                                |
| a)                                                                                    | Material                                                          | Plain annealed Copper as per Class 2 of IS:8130/2013                                                           |
| b)                                                                                    | Max. d.c. resistance of conductor at 20° C (ohm/km)               | 4.61                                                                                                           |
| c)                                                                                    | Shape of the conductor                                            | Stranded Circular.                                                                                             |
| 5                                                                                     | <b>Insulation</b>                                                 |                                                                                                                |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-1)/88, Latest                                                                           |
| b)                                                                                    | Core Identification                                               | Red, Yellow, Blue & Black                                                                                      |
| 6                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                        |
| 7                                                                                     | <b>Armouring</b>                                                  |                                                                                                                |
| a)                                                                                    | Type & Material                                                   | Galvanised Steel round wire, conforming to IS: 3975                                                            |
| 8                                                                                     | <b>Outer Sheath</b>                                               |                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 as per IS:5831/84                                                                        |
| b)                                                                                    | Colour of outer sheath.                                           | Black                                                                                                          |
| 9                                                                                     | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                           |
| 10                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                          |
| 11                                                                                    | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 0.57                                                                                                           |
| 12                                                                                    | <b>Continuous Current carrying capacities</b>                     |                                                                                                                |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 45                                                                                                             |
| (b)                                                                                   | In Air at 40°C (A)                                                | 41                                                                                                             |
| 13                                                                                    | Applicable Standard                                               | IS 8130/2013, IS 7098 Part I/88, IS 5831/84, IS 3975/1999 etc. with latest up to date amendments               |
| 14                                                                                    | Embossing                                                         | MAKE, 1100 VOLTS GRADE XLPE                                                                                    |
| 15                                                                                    | Printing                                                          | YEAR, MAKE, 1100 VOLTS GRADE XLPE, CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                                |

| TECHNICAL SPECIFICATION                                                                                                                                                         |                                                                    |                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| S.No                                                                                                                                                                            | Particulars                                                        | 3P X 2.5SQ.MM (Instrumentation cable)                                                                               |
| 1                                                                                                                                                                               | Type of Cable                                                      | Individual & Overall Screened                                                                                       |
| 2                                                                                                                                                                               | No of Elements X Size in mm <sup>2</sup>                           | 3P X 2.5                                                                                                            |
| 3                                                                                                                                                                               | Voltage Grade (V)                                                  | 300/500                                                                                                             |
| 4                                                                                                                                                                               | <b>Conductor</b>                                                   |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | Plain Stranded Copper Class-2 as per IS: 8130/2013                                                                  |
| b)                                                                                                                                                                              | Maximum d.c. resistance of conductor at 20° C (Ω/km)               | 7.56                                                                                                                |
| c)                                                                                                                                                                              | Shape of conductor                                                 | Stranded Circular                                                                                                   |
| 5                                                                                                                                                                               | <b>Insulation</b>                                                  |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | PVC Type A as per IS:5831                                                                                           |
| b)                                                                                                                                                                              | Pair identification                                                | White & Blue with number printing on any one core of pair (OR) White & Blue with numbered Polyester tape            |
| 6                                                                                                                                                                               | <b>Individual Screen</b>                                           |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | Aluminium mylar tape                                                                                                |
| b)                                                                                                                                                                              | Material of Drain Wire                                             | Flexible ATC                                                                                                        |
| 7                                                                                                                                                                               | <b>Collective Screen</b>                                           |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | Aluminium mylar tape                                                                                                |
| b)                                                                                                                                                                              | Material of Drain Wire                                             | Flexible ATC                                                                                                        |
| 8                                                                                                                                                                               | <b>Inner sheath</b>                                                |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | Extruded PVC Type ST1 to IS: 5831, Latest                                                                           |
| 9                                                                                                                                                                               | <b>Armouring</b>                                                   |                                                                                                                     |
| a)                                                                                                                                                                              | Type & Material                                                    | Galvanised Steel Round Wire                                                                                         |
| 10                                                                                                                                                                              | <b>Outer sheath</b>                                                |                                                                                                                     |
| a)                                                                                                                                                                              | Material                                                           | Extruded FR-LSH PVC Type ST1 to IS: 5831, Latest                                                                    |
| b)                                                                                                                                                                              | colour of sheath                                                   | Blue                                                                                                                |
| 11                                                                                                                                                                              | Maximum conductor temperature under normal operating conditions °C | 70                                                                                                                  |
| 12                                                                                                                                                                              | <b>Electrical Parameters</b>                                       |                                                                                                                     |
| a)                                                                                                                                                                              | Dielectric strength for 1 minute (H.V Test) kV                     | 2.0                                                                                                                 |
| 13                                                                                                                                                                              | Applicable Standard                                                | Generally as per IS 1554 Part I/88 & BSEN 50288-7                                                                   |
| 14                                                                                                                                                                              | Embossing                                                          | MAKE, 500 VOLTS GRADE FR-LSH                                                                                        |
| 15                                                                                                                                                                              | Printing                                                           | YEAR, MAKE, 500 VOLTS GRADE FR-LSH, CABLE SIZE, SCREENED with SEQUENTIAL LENGTH MARKING at EVERY ONE METER INTERVAL |
| 16                                                                                                                                                                              | <b>FR-LSH PROPERTIES</b>                                           |                                                                                                                     |
| a)                                                                                                                                                                              | Oxygen Index                                                       | Min. 29% as per ASTM D- 2863                                                                                        |
| b)                                                                                                                                                                              | Temperature Index                                                  | Min. 250 Deg.C as per ASTM D- 2863                                                                                  |
| c)                                                                                                                                                                              | Smoke Density Rating                                               | Max. 60% as per ASTM D- 2843                                                                                        |
| d)                                                                                                                                                                              | Acid Gas Generation                                                | Max. 20% as per IEC- 754- 1                                                                                         |
| e)                                                                                                                                                                              | Flammability Test                                                  | As per IEC:332-I                                                                                                    |
| Note:-The values given above are subject to tolerances as per the relevant standards.<br>Incase of any Typographical error /Discrepancy, relevent standards shall be prevailed. |                                                                    |                                                                                                                     |

| TECHNICAL SPECIFICATION                                                               |                                           |                                                                                 |
|---------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                               | DATA CABLE, ETHERNET CAT-6A , shielded, halogen free<br>with FR-PVC JACKET      |
| 1                                                                                     | Cable Type                                | CAT-6A, 8-position halogen-free, shielded, free cable end, on<br>free cable end |
| 2                                                                                     | Size                                      | 4P x 23 AWG                                                                     |
| 3                                                                                     | Speed                                     | 10Gbps                                                                          |
| 4                                                                                     | Applicable Standards                      | ANSI/TIA 568-C.2 Cat6A, ISO/IEC 11801 EA                                        |
| 5                                                                                     | Construction                              |                                                                                 |
| a)                                                                                    | Insulation                                | High Density polyethylene                                                       |
| b)                                                                                    | Central Separator                         | PE cross separator                                                              |
| c)                                                                                    | Shielding                                 | Al Mylar                                                                        |
| d)                                                                                    | Outer jacket                              | FR-PVC sheath Grey                                                              |
| e)                                                                                    | Braiding                                  | ATC Braiding                                                                    |
| f)                                                                                    | Rip cord                                  | Nylon Rip cord                                                                  |
| g)                                                                                    | Conductor                                 | 23 AWG solid copper                                                             |
| 6                                                                                     | Pairing                                   |                                                                                 |
| a)                                                                                    | White /Blue - Blue                        |                                                                                 |
| b)                                                                                    | White /Orange - Orange                    |                                                                                 |
| c)                                                                                    | White /Green - Green                      |                                                                                 |
| d)                                                                                    | White /Brown- Brown                       |                                                                                 |
| 7                                                                                     | Prominently Printing Marking on the Cable | MAKE, 4 PAIR X 23 AWG CAT -6A with date and year of<br>manufacturing            |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                           |                                                                                 |

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                                           |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 33/33 KV (UE) Single Core Cables                                                                                          |
| 1                                                                                     | Type of Cable                                                     | A2XFaY                                                                                                                    |
| 2                                                                                     | Voltage Grade kV                                                  | 33/33 KV (UE)                                                                                                             |
| 3                                                                                     | No of cores X size in sqmm                                        | 1 X 185                                                                                                                   |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                                           |
| a)                                                                                    | Material                                                          | H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest                                                                |
| b)                                                                                    | Maximum d.c. resistance of conductor at 20° C (ohm/km)            | 0.164                                                                                                                     |
| c)                                                                                    | Shape                                                             | Stranded Compacted Circular                                                                                               |
| 5                                                                                     | <b>Conductor Screening</b>                                        |                                                                                                                           |
| a)                                                                                    | Material                                                          | Extruded Semi-conducting Compound                                                                                         |
| 6                                                                                     | <b>Insulation</b>                                                 |                                                                                                                           |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-2)/2011                                                                                            |
| b)                                                                                    | Core identification                                               | Natural                                                                                                                   |
| 7                                                                                     | <b>Insulation Screening</b>                                       |                                                                                                                           |
| (i)                                                                                   | Non - Metallic                                                    |                                                                                                                           |
| a)                                                                                    | Material                                                          | Extruded Semi-conducting Compound                                                                                         |
| (ii)                                                                                  | Metallic                                                          |                                                                                                                           |
| a)                                                                                    | Material                                                          | Single Layer of Copper Tape                                                                                               |
| 8                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                                           |
| a)                                                                                    | Material                                                          | Extruded PVC Type ST2 to IS:5831, latest                                                                                  |
| 9                                                                                     | <b>Armouring</b>                                                  |                                                                                                                           |
| a)                                                                                    | Type & Material                                                   | Aluminium flat strip, conforming to IS: 7098-2                                                                            |
| 10                                                                                    | <b>Outer Sheath</b>                                               |                                                                                                                           |
| (i)                                                                                   | Material                                                          | Extruded PVC Type 'ST2' as per IS:5831, latest                                                                            |
| (iii)                                                                                 | Colour of sheath                                                  | Black                                                                                                                     |
| 11                                                                                    | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                                      |
| 12                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                                     |
| 13                                                                                    | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 17.30                                                                                                                     |
| 14                                                                                    | <b>Continuous Current carrying capacities :-</b>                  |                                                                                                                           |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 279                                                                                                                       |
| (b)                                                                                   | In Air at 40°C (A)                                                | 387                                                                                                                       |
| 15                                                                                    | Standard to which the cables confirm                              | Gen. IS 7098 Part 2/2011, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments                                |
| 16                                                                                    | Embossing                                                         | YEAR MAKE ELECTRIC 33/33 KV (UE) GRADE XLPE                                                                               |
| 17                                                                                    | Printing                                                          | YEAR MAKE ELECTRIC 33/33 KV (UE) GRADE XLPE , CABLE SIZE, CABLE TYPE WITH SEQUENTIAL MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                                           |

| TECHNICAL SPECIFICATION                                                               |                                                                   |                                                                                                                                |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| S.No                                                                                  | Particulars                                                       | 6.6/6.6 KV (UE) 3 Core Cable                                                                                                   |
| 1                                                                                     | Type of Cable                                                     | A2XFY                                                                                                                          |
| 2                                                                                     | Voltage Grade kV                                                  | 6.6/6.6 KV (UE)                                                                                                                |
| 3                                                                                     | No of cores X size in sqmm                                        | 3 X 300                                                                                                                        |
| 4                                                                                     | <b>Conductor</b>                                                  |                                                                                                                                |
| a)                                                                                    | Material                                                          | H4 Grade Aluminium as per Class 2 of IS: 8130/2013, latest                                                                     |
| b)                                                                                    | Maximum d.c. resistance of conductor at 20° C (ohm/km)            | 0.1                                                                                                                            |
| c)                                                                                    | Shape                                                             | Stranded Compacted Circular                                                                                                    |
| 5                                                                                     | <b>Conductor Screening</b>                                        |                                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded Semi-conducting Compound                                                                                              |
| 6                                                                                     | <b>Insulation</b>                                                 |                                                                                                                                |
| a)                                                                                    | Material                                                          | XLPE as per IS 7098(Pt-2)/2011                                                                                                 |
| b)                                                                                    | Core identification                                               | By Coloured strips (Red, Yellow, Blue)                                                                                         |
| 7                                                                                     | <b>Insulation Screening</b>                                       |                                                                                                                                |
| (i)                                                                                   | Non - Metallic                                                    |                                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded Semi-conducting Compound                                                                                              |
| (ii)                                                                                  | Metallic                                                          |                                                                                                                                |
| a)                                                                                    | Material                                                          | Single Layer of Copper Tape                                                                                                    |
| 8                                                                                     | <b>Inner Sheath</b>                                               |                                                                                                                                |
| a)                                                                                    | Material                                                          | Extruded PVC Type 'ST2' as per IS:5831, latest                                                                                 |
| 9                                                                                     | <b>Armouring</b>                                                  |                                                                                                                                |
| a)                                                                                    | Type & Material                                                   | Galvanised Steel flat strip, conforming to IS: 7098 PT-2                                                                       |
| 10                                                                                    | <b>Outer Sheath</b>                                               |                                                                                                                                |
| (i)                                                                                   | Material                                                          | Extruded PVC Type 'ST2' as per IS:5831, latest                                                                                 |
| (iii)                                                                                 | Colour of sheath                                                  | Black                                                                                                                          |
| 11                                                                                    | Maximum conductor temperature under normal operating conditions   | 90°C                                                                                                                           |
| 12                                                                                    | Maximum conductor temperature at the termination of short circuit | 250°C                                                                                                                          |
| 13                                                                                    | Short Circuit rating of conductor for the duration of 1 sec (kA)  | 28.20                                                                                                                          |
| 14                                                                                    | <b>Continuous Current carrying capacities :-</b>                  |                                                                                                                                |
| (a)                                                                                   | In Ground at 30°C (A)                                             | 354                                                                                                                            |
| (b)                                                                                   | In Air at 40°C (A)                                                | 441                                                                                                                            |
| 15                                                                                    | Standard to which the cables confirm                              | IS 7098 Part 2/2011, IS 8130, IS 5831, IS 3975 etc. with latest up to date amendments                                          |
| 16                                                                                    | Embossing                                                         | YEAR MAKE ELECTRIC 6.6/6.6 KV (UE) GRADE XLPE                                                                                  |
| 17                                                                                    | Printing                                                          | YEAR MAKE ELECTRIC 6.6/6.6 KV (UE) GRADE XLPE<br>CABLE SIZE CABLE TYPE WITH SEQUENTIAL<br>MARKING at every one meter interval. |
| Note:-The values given above are subject to tolerances as per the relevant standards. |                                                                   |                                                                                                                                |