

### LASER POWER & INFRA PVT LTD

Works: AT/P.O.: NH-6, Polypark, Dhulagori, Howrah, West Bengal, INDIA-711302.

ISO 9001: 2015 Certified Company

**DESIGN SHEET** 

Item Description : 3CX10 SQ.MM-ARM CABLE - WIRE

Reference Specification No. : IRS: S 63/2014 Revision 4

Manufacturer Clearance Number

Customer : RDSO

PO No.

Project :

General Cable Type : Armoured
Order Quantity in Meters : 1000

Quantity Tolerance (%) : + 4 %,- 2 %
Voltage Grade : 1100V

Conductor

Conductor size (sq.mm) : 10

Conductor Material : Annealed Bare Copper Reference Specification No. : IRS : S 63 / 2014 Revision 4

Conductor Type : Multistrand

Dia of each Strands (in mm) : 1.400 Number of Strands : 7

Conductor Dia (in mm) : 4.200 to 4.300

Insulation

Insulation Material : Extruded PVC TYPE A
Reference Specification No. : IRS: S 63 / 2014 Revision 4

Insulation Thickness Min. (in mm) : 1.00
Insulation Thickness Max. (in mm) : 1.10

Insulation Colour : Red, Yellow & Blue

Insulation Core Dia Min. (in mm) : 6.20 to 6.40

Tape OverLaidup

Laidup of Core (Final Layer in RHS) : 3

Laidup Cable Dia (Approx) (in mm) ±1.00 mm : 13.9

Tape Wraping Type Over Laidup : Helical

Tape Material Over Laidup : Ployster Tape

Tape Thickness Over Laidup (in mm) : 0.025/30

Tape Overlap % Over Laidup : 25

Tape Overlap % Over Laidup : 25
Dia Over Tape Over laidup (in mm) ± 1.00 mm : 14

**Inner Sheath** 

Inner Sheath Type : Tubing

Inner Sheath Material : Extruded PVC ST1

Reference Specification No. : IRS : S 63 / 2014 Revision 4

Inner Sheath Colour : GREY

Inner Sheath Thickness Min. & Max. (in mm) : 1.00 to 1.10

Dia Over Inner Sheath (in mm) : 16.00 to 16.20

Rip Cord : Provided

Prepared By :- Santosh Singh Approved By :-

Page 1 of 2



# LASER POWER & INFRA PVT LTD

Works: AT/P.O.: NH-6, Polypark, Dhulagori, Howrah, West Bengal, INDIA-711302.

ISO 9001: 2015 Certified Company

### **DESIGN SHEET**

Item Description : 3CX10 SQ.MM-ARM CABLE - WIRE

Reference Specification No. : IRS: S 63 / 2014 Revision 4

Manufacturer Clearance Number :

**Armouring (Double Strip Tape)** 

Armour Material : GALVANISED STEEL

Armour Material Ref Std : AS PER IS - 3975

Armour Wire Type : G.I. Wire

Armour Size (in mm) : 1.6 Armour Number of G.I. Wire / Strip / Tape :  $28 \pm 2$ 

Diameter Over Armour (in mm) : 19.20 to 19.40

**Outer Sheath** 

Outer Sheath Type : Tubing

Outer Sheath Material : Extruded PVC ST1

Reference Specification No. : IRS: S 63 / 2014 Revision 4

Outer Sheath Colour : BLACK
Outer Sheath Thickness (in mm) : 2.00 to 2.10

Dia. Over Outer Sheath (in mm) : 23.20 to 23.60

**Hot Embossing** 

LASERPOWER IRS: S 63/2014 Revision 4/Month and Year/Drum Number/3CX10 SQ.MM-ARM CABLE - WIRE

## **Ink Jet Printing Text**

Sequential Length Marking [SLM \*0000]

Note:- Every drum should be clearly marked 0000 at bottom end.

#### **Electrical Parameters**

Conductor Resistance (Ohms/Km) at 20 Deg.C (Max) : 11.67 Ins Res (Min)M.Ohms/Km @ Room Temp : 100

HV Test-Core to Core : 4KV for 5 Minutes
HV Test-Core to Armour : 4KV for 5 Minutes
Spark Test for Insulation : 6KV at 3000Hz

Prepared By :- Santosh Singh

Approved By :-

Page 2 of 2