



# APAR Industries Limited

Doc. No.:

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Rev. No.:

01

## Cable Solutions

Rev. Date:

27-03-2024

### Guaranteed Technical Particulars / Technical Data Sheet

#### 6.35/11 KV ALUMINIUM XLPE POWER CABLE (ARMOURED)

CUSTOMER : M/s  
REF NO. : E-MAIL DATED  
CRM NO. :  
REV NO. : 00 DATED

Sr. No	PARTICULARS	UNIT	3C X 185 Sq.mm	
1	NAME OF THE MANUFACTURER		APAR INDUSTRIES LIMITED	
2	APPLICABLE STANDARD		IS : 7098 (PART-2) 2011	
3	VOLTAGE GRADE	KV	6.35/11	
4	PERMISSIBLE VOLTAGE VARIATION	%	± 10	
5	PERMISSIBLE FREQUENCY VARIATION	%	± 5	
6	COMBINED VOLTAGE & FREQUENCY VARIATION	%	± 10	
7	TYPE OF CABLE		A2XCEFY	
8	NO./NOM. CROSS SECTIONAL AREA OF CONDUCTOR	Nos. X Sq.mm	3C X 185	
9	CONDUCTOR MATERIAL & SHAPE		H2/H4 GRADE ALUMINIUM - STRANDED CIRCULAR COMPACTED CLASS-2 (AS PER IS : 8130 - 2013)	
10	NO. OF STRANDS/DIA. OF STRANDS (BEFORE STRANDING)	No./mm	34 / 2.73	
11	CONDUCTOR WEIGHT (MINIMUM)	Kg/Km	1413	
12	CONDUCTOR SCREEN EXTRUDED SEMI-CONDUCTING COMPOUND (MIN. THICKNESS)	mm	0.3	
13	XLPE INSULATION THICKNESS (NOM./MIN.)	mm	3.6 / 3.14	
14	INSULATION SCREEN EXTRUDED SEMI-CONDUCTING COMPOUND-NON METALLIC (MIN. THICKNESS)	mm	0.3	
15	INSULATION SCREEN COPPER TAPE - METALLIC (NOM. THICKNESS)	mm	0.03	
16	CORE IDENTIFICATION		BY RED, YELLOW & BLUE COLOURED POLYESTER STRIPS APPLIED LONGITUDINALLY UNDER METALLIC SCREEN	
17	INNER SHEATH - BLACK EXTRUDED PVC (MIN. THICKNESS)	mm	0.7	
18	ARMOUR - GALVANISED STEEL FLAT STRIP (NOM. DIMENSION)	mm	4 X 0.8 ± 10%	
19	NO. OF ARMOUR STRIPS (MINIMUM)	Nos.	37	
20	COVERAGE OF ARMOURING (MINIMUM)	%	90	
21	OUTER SHEATH - BLACK PVC TYPE ST-2 IS:5831-84 (MIN. THICKNESS)	mm	2.36	
22	APPROX. OVERALL DIA. OF CABLE	mm	63.5	
23	APPROX. OVERALL WEIGHT OF CABLE	Kg/Km	5160	
24	PACKING	a.) Std. Packing length	Mtrs	500 ± 5%
		b) Type of Drum		WOODEN DRUM
25	NON STANDARD LENGTH		NON - STANDARD LENGTH NOT LESS THAN 100 MTRS. UP TO 5% OF ORDER QTY.	
26	ORDER QUANTITY TOLERANCE		±2%	
27	MAX. CONDUCTOR TEMPERATURE AT RATED CURRENT	°C	90	
28	MAX. CONDUCTOR TEMP. AT THE END OF SHORT CIRCUIT	°C	250	
29	MAX. D.C RESISTANCE OF CONDUCTOR AT 20°C	Ohm/Km	0.164	
30	MAX. A.C. RESISTANCE OF CONDUCTOR AT 90°C	Ohm/Km	0.212	
31	APPROX. REACTANCE AT 50 Hz	Ohm/Km	0.089	

Sr. No	PARTICULARS	UNIT	3C X 185 Sq.mm
32	APPROX. CAPACITANCE	$\mu\text{F}/\text{Km}$	0.38
33	CONTINUOUS CURRENT CARRYING CAPACITY	a) In Air (at 40°C)	330
		b) In Ground (at 30°C)	273
		c) In Duct (at 30°C)	240
34	SHORT CIRCUIT RATING OF CONDUCTOR (DURATION 1 SEC.)	KA	17.46
35	MIN. SAFE BENDING RADIUS OF CABLE	mm	15 TIMES O.D.
36	SAFE PULLING FORCE (WHEN PULLED BY PULLING EYE)	N/Sq.mm	30
37	EMBOSSING / PRINTING		APAR-UNICAB INDIA '6.35/11 KV' XLPE CABLE 'CABLE SIZE' IS: 7098 Part2, ISI LOGO CM/L NO. 'YEAR OF MFG'
38	SEQUENTIAL LENGTH MARKING		SEQUENTIAL LENGTH MARKING SHALL BE PROVIDED ON OUTER SHEATH AT EVERY METER BY HOT FOIL INDENTING/PRINTING

NOTE : 1. > The particulars given above are nominal & are subject to normal manufacturing tolerances.

2. > The current rating given above are based on standard conditions of installation - cables laid singly, thermal resistivity of soil 150°C Cm/W & depth of laying 900 mm.

3. > All the drums shall be packed by PP sheet over the outermost cable layer

