



# TECHNICAL DATA SHEET

1C X 35.0 Sq. mm. XLPE Insulated & UV Stabilized HR PVC Sheathed (105 Deg. C.), Photovoltaic Cable (Solar Cable) with Multistrand Flexible Tinned Copper conductor (Class-5) for working voltage up to including 1.5 KV DC.

SR. NO.	DESCRIPTION	UNIT	1C X 35.0 SQ.MM.
1.	MAKE		KWC
2.	STANDARD APPLICABLE		
3.	RATED VOLTAGE	VOLT	1.5 KV DC
4.	SUITABLE FOR EARTHED UNEARTHED SYSTEM		
	<b>CONSTRUCTIONAL DETAILS</b>		
5.	CONDUCTOR		MULTISTRAND FLEXIBLE TINNED COPPER (CLASS - 5). EC GRADE
6.	NUMBERS OF WIRES AND DIAMETER	NOS./MM	490 X 0.285 (+/- 0.005 mm)
7.	SHAPE SECTOR OF CONDUCTOR		CIRCULAR
8.	<b>INSULATION</b>		
	A) COMPOSITION OF INSULATION		XLPE INSULATION
	B) NOMINAL THICKNESS OF XLPE INSULATION	MM	0.90
	C) APPROX DIAMETER OF INSULATION CORE	MM	9.50
	D) COLOUR SCHEME FOR IDENTIFICATION		<b>RED AND BLACK</b>
9.	<b>OUTER SHEATH</b>		
	A) MATERIAL		UV STABILIZED HR PVC (105 DEG. C.)
	B) THICKNESS OF THE OUTER SHEATH (NOM.)	MM	1.10
	C) OUTER SHEATH COLOUR		RED OR BLACK
	D) APPROX OVERALL DIA. OF CABLE (+/- 1.0 MM)	MM	12.00



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SR. NO.	DESCRIPTION	UNIT	1C X 35.0 SQ.MM.
10.	<b>ELECTRICAL CHARACTERISTICS</b>		KWC
	A.) MAX. D.C. RESISTANCE AT 20 DEG.C	OHM/KM MAX.	0.565
	B.) MAX. PERMITTED DC VOLATAGE	KV	1.8 KV (CONDUCTOR / CONDUCTOR , NON EARTHED SYSTEM, CIRCUIT NOT UNDER LAOD.)
	C.) MAX. PERMITTED AC VOLTAGE	KV	0.7 / 1.2 KV AC
	D.) WORKING VOLTAGE	V	1000 V DC
11.	<b>THERMAL CHARACTERISTICS</b>		
	A.) MAX. TEMPERATURE AT CONDUCTOR	DEG.C.	90
	B.) SHORT CIRCUIT TEMPERATURE	DEG.C.	250
12.	<b>CURRENT CARRYING CAPACITY @ 40°C</b>		
	A.) SINGLE CABLE IN AIR	AMP	173
	B.) SINGLE CABLE ON SURFACE	AMP	164
	C.) 2 ADJACENT CABLES ON SURFACE	AMP	138
13.	<b>GENERAL</b>		
	STANDARD LENGTH OF CABLE (SUBJECT TO A MANUFACTURE OF /- 5%)	METER	500 / 1000 MTR DRUM

## Note : Computer generated documents no signature is required.

As per international practice which is also adopted by Bureau of Indian Standards. The diameter of the conductor shown above in nominal. The Size of the conductor is determined by its resistance. The construction of the conductor is as per market convention and should be treated as a guideline only it may vary within the limits of IS : 8130-1984.