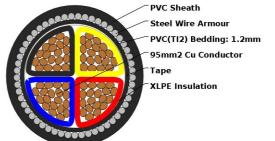


## **Technical Datasheet**

Cable Code: CARMXC095004BK1> Description: METSEC CU/XLPE/SWA/PVC ARMOURED CABLE 4COREx95.00MM BLACK (SECTOR) - Loose Reference: 6944X Standard: BS 6724



## Main Application:

Armoured power cables are available with both copper and aluminium conductors as required. The armour provides additional protection where mechanical stress has the potential to cause damage to the cable, such as direct burial, outdoors or underground. The armour also enables the cable to withstand higher pulling loads. It should be noted, however, that the armour provides no protection for climatic conditions.

Parameters:							
Physical	Conductor				Copper		
	Insulation Cross sectional area No. of Cores: Core Colours: Nom. Thickness of Insulation Nom. Overall Diameter Nom. Weight				XLPE		
					95 sq mm		
					4		
					Red, Yellow, Blue, Black		
					1.1	mm	
					40.94	mm	
					5.32398	kg/m	
Electrical	Rated Voltage (U <sub>0</sub> /U)				600/1000	V	
	Max. permissible operating voltage in AC systems $(U_m)$				1.2	kV	
	AC Test voltage over 5 minutes				3.5	kV	
	Max. Conductor D.C Res	sistance	20°C		0.193	Ohms	
	Max. Conductor A.C Res	sistance	@ 90°C		0.246	Ohms	
	Min. Insulation Resistan	ce	@ 90°C			MΩ.km	
	Current Rating		Direct in Ground		271	A	
	Current Rating		In Duct		224	А	
	Current Rating		Installed in Free Air	r	277	А	
	Approx. Volt Drop				0.5	mV/A/m	
	Inductive Reactance of Cable at 50Hz (approx.) Mutual Reactance Capacitance of Cable (approx.) Short Circuit Current Rating for 1 second duration				0.07239	•	
					0.23043	mH/km	
						μF/km	
					13.585	kA	
Thermal	Maximum conductor operating temperature: Lowest ambient temperature for fixed installation:				90	°C	
					-30	°C	
	Lowest installation temp	t installation temperature:			5 °C		
	Maximum short-circuit conductor temperature:				250	°C	
Mechanical	Tensile load				5700 N/mm <sup>2</sup>		
	Min. bending radii (BS 7671)				8 * d		
Chemical	Resistance to oil: According to IEC Standard						
enemicai	Weather resistance:	According					

## **BASIC ASSUMPTION FOR CURRENT RATINGS & RATING FACTORS**

The current ratings of cables as indicated in various tables have been calculated on certain assumed conditions. In actual practice these conditions may be different. Therefore to determine the actual current ratings as per installation conditions, the tabulated ratings shall be multiplied with appropriate factors

i. Maximum permissible temperature: 90°C for XLPE insulation, 70°C for general purpose PVC, 85°C for HR PVC

- ii. Ground/Duct temperature: 35°C
- iii. Ambient temperature: 40°C
- iv. Thermal resistivity of soil: 1.2°C m/W
- v. Thermal resistivity of Dielectric 650°C cm/W for PVC, 350°C cm/W for XLPE
- vi. Cables are installed in a single circuit
- vii. Depth of laying: 500mm

Despite every reasonable effort having been made to ensure the accuracy of the technical information contained in this datasheet:

I. THE COMPANY MAKES NO WARRANTY OR REPRESENTATION WHATSOEVER AS TO THE SUITABILITY OF THE PRODUCT FOR ANY PARTICULAR PURPOSE. THE ONUS IS ENTIRELY ON THE PURCHASER OF THE PRODUCT TO ENSURE THAT THE PRODUCT IS SUITABLE FOR ITS INTENDED PURPOSE;

ii. DUE TO MATERIAL AND MANUFACTURING TOLERANCES, TEST RESULTS AND / OR LENGTH OF PRODUCT CAN VARY PER INDIVIDUAL PRODUCT. ACCORDINGLY, ALL TECHNICAL DATA SHOWN IN THIS DATASHEET IS GIVEN FOR GUIDANCE PURPOSES ONLY. THE COMPANY DOES NOT WARRANT THAT THE PRODUCT WILL MATCH THE TEST RESULTS EXACTLY AND THE COMPANY ACCEPTS NO LIABILITY SHOULD THE PRODUCT NOT MATCH THE STATED FIGURES.

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Due to continuous product development and improvements, specifications set out in this Catalogue are subject to change without notice.