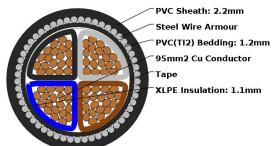


Technical Datasheet

Cable Code: CARMXC095004BK3>

Description: METSEC CU/XLPE/SWA/PVC ARMOURED CABLE 4COREx95.00MM BLACK (BS STD/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.

Electrical

Parameters:		
Physical	Conductor	Copper
	Insulation	XLPE
	Cross sectional area	95 sq mm
	No. of Cores:	4
	Core Colours:	Brown, Black, Grey, Blue
	Nom. Thickness of Insulation	1.1 mm
	Nom. Overall Diameter	40.94 mm
	Nom. Weight	5.32398 kg/m
	_	

Rated Voltage (U ₀ /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 Resistance	20°C	0.193 Ohms
Max. Conductor A.C Resistance	@ 90°C	0.246 Ohms
Min. Insulation Resistance	@ 90°C	MΩ.km
Current Rating	Direct in Ground	271 A
Current Rating	In Duct	224 A
Current Rating	Installed in Free Air	277 A
Approx. Volt Drop		0.5 mV/A/n

Inductive Reactance of Cable at 50Hz (approx.)	0.07239 Ω/km
Mutual Reactance	0.23043 mH/km
Capacitance of Cable (approx.)	μF/km
Short Circuit Current Rating for 1 second duration	13.585 kA

Thermal	Maximum conductor operating temperature:	90 °C
	Lowest ambient temperature for fixed installation:	-30 °C
	Lowest installation temperature:	5 °C
	Maximum short-circuit conductor temperature:	250 °C

Mechanical	Tensile load	5700 N/mm²
	Min. bending radii (BS 7671)	8 * d

Chemical	Resistance to oil:	According to IFC Standard

Weather resistance:

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: $35^{\circ}C$
- 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

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