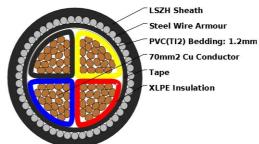


Technical Datasheet

Cable Code: CARMZC070004BK1>

Description: METSEC CU/XLPE/SWA/LSZH ARMOURED CABLE 4COREx70.00MM 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		XLPE	
	Cross sectional area		70	sq mm
	No. of Cores:		4	
	Core Colours:		Red, Yellow,	Blue, Black
	Nom. Thickness of Insulation	1.1	mm	
	Nom. Overall Diameter		37.09	mm
	Nom. Weight		4.24705	kg/m
Electrical	Rated Voltage (U ₀ /U)		600/1000	V
	Max. permissible operating voltage in AC systems (U_{m}) AC Test voltage over 5 minutes		1.2	kV
			3.5	kV
	Max. Conductor D.C Resistance	20°C	0.268	Ohms
	Max. Conductor A.C Resistance	@ 90°C	0.342	Ohms
	Min. Insulation Resistance	@ 90°C		MΩ.km
	Current Rating	Direct in Ground	228	Α
	Current Rating	In Duct	185	Α
	Current Rating	Installed in Free Air	228	Α
	Approx. Volt Drop		0.6	mV/A/m
	Inductive Reactance of Cable at 50Hz (approx.)		0.07414	Ω/km
	Mutual Reactance	0.23601	mH/km	
	Capacitance of Cable (approx.)			μF/km
	Short Circuit Current Rating for 1 second duration		10.01	kA
Thermal	Maximum conductor operating temperature:		90	°C
Laurent ambient temperature for fixed installation.			20	00

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

4200 N/mm²

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Mechanical Tensile load

Min. bending radii (BS 7671)

Chemical Resistance to oil: According to IEC 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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