

Correction Factors for Direct Solar Radiation

Colour Code	Correction Factor	
	Solar Radiation	
	1000 W/m ² (Coastal)	1250 W/m ² (Highveld)
1,5 - 10	0,70	0,62
16 - 35	0,68	0,57
50 - 95	0,65	0,53
120 - 185	0,62	0,49
240 - 400	0,59	0,44

Short Circuit Ratings for PVC Insulated Cables

$$I_{sc} = \frac{K \times A}{\sqrt{t}} \text{ Amps}$$

where I_{sc} = Short circuit rating in amps
 K = A constant combining temperature limits and properties of conductor materials
 A = Area of conductor
 t = Duration of short circuit in seconds

Values of conductor / temperature constant K

Insulation Material	Conductor Material	Operating Temp °C	Short Circuit Temp °C	K Factor
PVC	Copper	70	160	115
PVC	Aluminium	70	160	76

Bending Radii

PVC Insulated Cables 1000V	
Multi and Single Core 16 - 50 mm ²	8 x d
70 mm ² and greater	10 x d

FLAMOSAFE RANGE OF FIRE PERFORMANCE OF ELECTRIC CABLES

FR (Flame Retardant) Red and Orange Stripe cables are designed to reduce the spread of fire along a cable tray or duct. However, when these cables burn, they give off large quantities of toxic gases and smoke. **(FYRGARD®)**



LHFR (Low Halogen) Blue Stripe cables has specially formulated PVC that reduces the emission of hydrochloric acid during burning of the cables. **(LOHAL®)**



NHLSFR (Non Halogen) White Stripe cables are designed to reduce flame propagation and smoke in those instances where a fire may develop. By replacing the standard PVC with XLPE insulation and EVA bedding and outer sheath, no HCl gases will be liberated during the burning of the cables. **(LOTOX®)**

