# TRI-RATED



- 1. Flexible Plain annealed copper wire conductor to BS 6360 (class 5)
- 2. Plasticised PVC insulation specially formulated to combine excellent

electrical performance with robust mechanical properties, yet still complying with UL, CSA

# **Temperature Range**

Recognised by UL and CSA as heatresisting with a maximum conductor operating temperature of 105°C \*

# **Maximum Working Voltage**

UL, CSA 600V r.m.s. BS 6231 (Uo/U) 600/1000V r.m.s.

#### **Oil Resistance**

Is recognised by UL and CSA as resistant to oil at temperatures up to  $60^{\circ}\text{C}$ 

# Minimum Ambient Temperature

-20°C after installation and only when cable is in a fixed position

#### **Spread of Flame**

VW-1, FT-1, EN 50265

#### **APPLICABLE STANDARDS**

1. Underwriters Laboratory Listed.

Conforms to Subject 758 Appliance Wiring Material for Styles 1015, 1028, 1283 and 1284 as applicable. UL File No E28423

- 2. Canadian Standards Association approved. Complies with standard C22.2, No. 127, Type TEW. CSA File No. LL55192
- British Standards. Manufactured to BS 6231 type CK

\* BS 6231 specifies a maximum conductor operating temperature of 90°C for continuous use. Under certain conditions these cables can be operated at up to 105°C. See 'Annex A' of BS 6231 for full details.



# Specification Information (Physical Data)

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Nominal Cross-	Class of Conductor	Approx AWG	Nominal Conductor	Nominal Diameter	Approx. Net	UL Style No					
Sectional			Diameter	of Cable	Weight						
Area											
mm <sup>2</sup>			mm	mm	kg / km						
0.50	5	22	0.93	2.7	12	1015					
0.75	5	20	1.14	2.9	15	1015					
1.00	5	18	1.32	3.1	18	1015					
1.50	5	16	1.60	3.4	23	1015					
2.50	5	14	2.00	3.8	34	1015					
4.00	5	12	2.60	4.4	50	1015					
6.00	5	10	3.30	5.1	71	1015					
10.00	5	8	4.20	6.8	123	1028					
16.00	5	6	5.70	9.2*	209	1283					
25.00	5	4	7.10	10.6	296	1286					
35.00	5	2	8.50	12.0	400	1283					
50.00	5	1	10.30	14.7*	582	1284					
70.00	5	2/0	12.40	16.8*	796	1284					
95.00	5	3/0	14.50	18.9	1025	1284					
120.00	5	4/0	16.00	20.4	1282	1284					

# **Specification Information (Electrical Data)**

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Conductor	Maximum	Maximum							
Cross-Sectional	Conductor	Current							
Area	Resistance	Rating							
mm <sup>2</sup>	Ω/	A							
0.50	39.000	11.5							
0.75	26.000	16.0							
1.00	19.500	19.0							
1.50	13.300	24.0							
2.50	7.980	32.0							
4.00	4.950	43.0							
6.00	3.300	56.0							
10.00	1.910	79.0							
16.00	1.210	105.0							
25.00	0.780	141.0							
35.00	0.554	178.0							
50.00	0.386	217.0							
70.00	0.272	276.0							
95.00	0.206	337.0							
120.00	0.161	400.0							

The current ratings tabulated above are based on single cables in free air, a maximum conductor temperature of 90°C and an ambient temperature of 30°C. The volts drop tabulated above are for single cables only. For circuits of single phase 50Hz a.c. or two wire d.c. the figures shown should be multiplied by 2 and for three phase 50Hz a.c. multiplied by 1.732

**Note:** The temperature rise in a conductor due to current flow should be limited to  $40^{\circ}C$ 

#### **Rating Factors**

Ambient Temp (°C)	30	35	40	45	50	55	60	65	70
Factor (close protection)	1.00	0.97	0.94	0.91	0.87	0.84	0.80	0.76	0.71
Factor (fuses to BS 3036)	1.00	0.97	0.94	0.91	0.87	0.84	0.80	0.76	0.72

#### **Rating Factors for Grouped Cables**

Where a number of cable are grouped together and touching, the current rating must be de-rated according to the number of loaded cables as follows:

Number of Loaded Cables	2	3	4	5	6	8	10
Factor	0.80	0.70	0.65	0.60	0.56	0.50	0.46