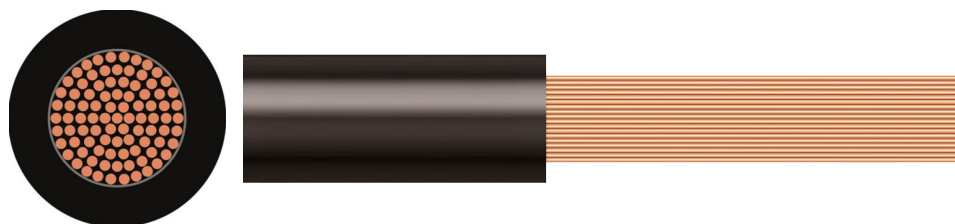


TRI RATED BS6231 FLEXIBLE PVC CABLE



Tri-rated cables, also known as panel wiring cables, are widely used for fixed internal wiring in instrument panels and switchgear due to their high temperature and flame retardant properties. These cables feature flexible plain annealed copper conductors and a circular high-temperature PVC outer sheath, making them ideal for applications in motor starters, power switchgear, and instrumentation panels. Additionally, they are commonly employed as internal connectors in rectifier equipment and controllers.

CONDUCTOR	Plain Copper
STRANDING	Class 5
INSULATION	PVC
OUTERSHEATH COLOUR	Black, White, Blue, Grey, Violet, Orange, Red, Green/Yellow, Brown, Pink, Yellow, Green
RATED VOLTAGE	0.6/1kV
CORE IDENTIFICATION	1 Core
MINIMUM BENDING RADIUS	Overall Bending Radius 6x
OPERATING TEMPERATURE	105°C
STANDARDS	UL/CSA & BS6231

SPECIFICATION DATA

Where cables are to be grouped, the following factors should be applied

No. of cables in grou	2	3	4	5	6	7	8
Re-Rating Factor	0.80	0.70	0.65	0.60	0.56	0.53	0.50

DE-RATING FACTORS

De-Rating Factor for Ambient Temperature 60°C Thermoplastic or Thermosetting Insulated Cords

Air Temperature	45°C	50°C	55°C	60°C	65°C	70°C	75°C
De-Rating Factor	1	0.97	0.90	0.82	0.73	0.63	0.52

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Voltage Drop

Nominal Cross Sectional Area mm2	Current Rating (Peak) Amps	Voltage Drop mV/A/m
0.5	11	46
0.75	14	31
1	17	22
1.5	21	15
2.5	30	9.1
4	41	5.7
6	53	3.8
10	75	2.2
16	100	14
25	136	0.89
35	167	0.64
50	204	0.45
70	259	0.32
95	321	0.24
120	374	0.19
150	429	0.16
185	496	0.13
240	595	0.1

CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi Core Cables

Nomial Cross Sectional Area mm2	Maximum Diameter of Wires on Conductor mm	Maximum Resistace of Conductor at 20°C ohms/km Plain Wires
0.5	0.21	39
0.75	0.21	26
1	0.21	19.5
1.5	0.26	13.3
2.5	0.26	7.98
4	0.31	4.95
6	0.31	3.3
10	0.41	1.91
16	0.41	1.21
25	0.41	0.78

35	0.41	0.554
50	0.41	0.386
70	0.51	0.272
95	0.51	0.206
120	0.51	0.161
150	0.51	0.129
185	0.51	0.106
240	0.51	0.0801

COLOUR CODES

Colour	Black	Green	Blue	Light Blue	Dark Blue	Grey	Green/Yellow	Orange	Red	Pink	Yellow	Violet	Brown	White
Code	BK	GN	BL	LTBL	DKBL	GR	GY	OR	RD	PK	YW	VI	BR	WH

DIMENSIONS

BATT Part No	Cores	Nominal cross sectional area of conductor	Approximate	Nominal thickness off insulation	Approx overall diameter	Weight
38003	1	0.5	21	0.8	2.6	12
38013	1	0.75	19	0.8	2.8	15
38031	1	1	18	0.8	3	18
38052	1	1.5	16	0.8	3.3	23
38081	1	2.5	14	0.8	3.8	34
38102	1	4	12	0.8	4.3	50
38124	1	6	10	0.8	4.9	71
38141	1	10	8	1	6.3	123
38160	1	16	6	1	9	207
38176	1	25	4	1.2	10.4	303
38189	1	35	2	1.2	11.9	412
38194	1	50	1	1.4	14.7	607
38198	1	70	2	1.4	16.8	837
38205	1	95	3	1.6	18.8	1080
38207	1	120	4	1.6	20.4	1280
38000	1	150	250 mcm	1.8	20.2	1415
38178	1	185	350 mcm	2	26	1940
38183	1	240	450 mcm	2.2	29.5	2550
38199	1	300			32.7	3140
38121	1	400			36	4051

The information in this datasheet is for guidance only and subject to change without liability. Images provided are representations; actual cable dimensions may vary due to manufacturing tolerances.

www.battcables.com | 01322 441165

©2024 Batt Cables Limited

