



INTRODUCTION:

Ducab flexible panel wires made as per BS 6231 Type CK are intended for use in the wiring of switch, control, metering, relay and instrumentation panels of power switchgear. It is also used for such purposes as internal connections in rectifier equipment and its motor starters and controllers. They are intended for use at AC voltage not exceeding 600 V to earth and DC voltage not exceeding 1000 V to earth. When installed in equipment they are suitable for wiring circuits for which the prescribed AC test voltage does not exceed 4 kV R.M.S. for 1 minute.

Salient features of Ducab panel wires are as mentioned below.

Standard:	BS 6231, Type CK
Conductor:	Plain annealed circular class 5 flexible copper conductor as per BS EN 60228. Tinned conductor can be offered for special requests.
Insulation:	Heat Resistant PVC type T13 as per BS EN 50363-3, suitable for continuous operating temperature of 90°C. Special PVC for 105°C operating temperature is also available upon request.
Voltage rating :	600/1000 V
Temperature range:	-15°C to 90°C operating temperature Cable installation temperature shall be above 0°C
Flame test:	BS EN / IEC 60332-1
Minimum Bending radius:	3 x O.D. for cable diameter up to 10 mm, 4 x O.D. for cable diameter above 10 mm up to 25 mm and 6 x O.D. for cable diameter greater than 25 mm
Colours:	Green/Yellow (bi-colour combination), Red, Black, Blue, Brown, Grey, Orange, Pink, Turquoise, Violet and White



TECHNICAL DATA:

Conductor Size	Nominal Insulation thickness	Approx. Cable diameter	Approx. cable weight	DC resistance @ 20°C	Current rating* (1 phase)
(sqmm)	(mm)	(mm)	(kg/km)	(ohm/km)	(Amp)
1 x 0.5	0.8	2.7	11	39	11.5
1 x 0.75	0.8	2.9	14	26	16
1 x 1	0.8	3.1	17	19.5	19
1 x 1.5	0.8	3.4	22	13.3	24
1 x 2.5	0.8	3.9	33	7.98	32
1 x 4	0.8	4.4	47	4.95	43
1 x 6	0.8	4.9	66	3.30	56
1 x 10	1.0	6.3	111	1.91	79
1 x 16	1.0	7.4	169	1.21	105
1 x 25	1.2	9.0	264	0.780	141
1 x 35	1.2	10.4	350	0.554	178
1 x 50	1.4	12.3	491	0.386	217
1 x 70	1.4	14.0	688	0.272	276
1 x 95	1.6	16.0	931	0.206	337
1 x 120	1.6	17.7	1154	0.161	400
1 x 150	1.8	19.8	1421	0.129	457
1 x 185	2.0	21.8	1779	0.106	526
1 x 240	2.2	24.8	2346	0.0801	634

*: Current rating at 30°C ambient temperature

DERATING FACTORS FOR CHANGE IN AMBIENT TEMPERATURE:

Ambient temperature	25°C	30°C	35°C	40°C	45°C	50°C
Factor	1.02	1.00	0.96	0.91	0.87	0.82

