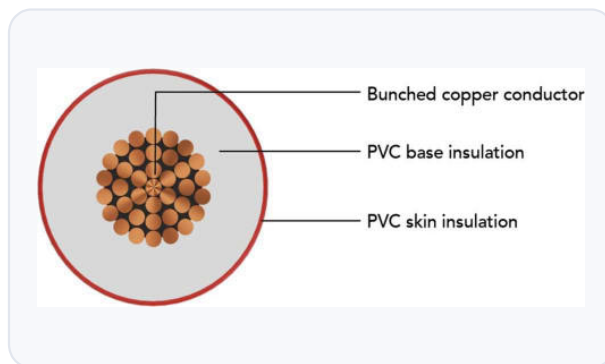


SINGLE CORE · NON-SHEATHED · THERMOPLASTIC INSULATED · CLASS 5 COPPER · BS 6231

INDOCABLES TYPE DK BS 6231 SWITCH GEAR AND CONTROL GEAR WIRING CABLE, 600/1000 V AC



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES Type DK BS 6231 single core non-sheathed thermoplastic insulated cable is suitable for wiring of switch, control, metering, relay & instrument panels of power switchgear and for such purpose as internal connections in rectifier equipment and its motor starters and controllers.

CONSTRUCTION

- 01 **Conductor:** Plain annealed copper conductor as per BS EN/IEC 60228, class 5
- 02 **Insulation:** Insulated with Polyvinyl Chloride to EN 50363-3

CORE IDENTIFICATION

- Black
- Blue
- Brown
- Grey
- Orange
- Pink
- Red
- Turquoise
- Violet
- White
- Green
- Yellow

CHARACTERISTICS

VOLTAGE RATING	600/1000 V
OPERATION TEMPERATURE	Fixed: -15°C to 90° C Max.: 105°C with reduced lifetime
BENDING RADIUS	Fixed installation - 8 x Overall Diameter
TEST VOLTAGE	3500V AC at (20±5) °C

STANDARD FOLLOWS

BS EN/IEC 60228	BS EN 50363-3
BS 6231	IEC 60332-1-2

OUTSTANDING FEATURES


FLAME PROPAGATION

FLEXIBLE

HIGH INSULATION RESISTANCE

COMPLIANCE

Conductor resistance test	BS EN/IEC 60228
Insulation resistance	BS 6231
Flammability test	BS EN/IEC 60332-1-2

ACCREDITATIONS & APPROVAL



ISI



ISO 9001



Make in India

CM/L 6200267409



TABLE 1 WEIGHT & DIMENSION DATA

PRODUCT CODE	NOMINAL CROSS SECTIONAL AREA mm ²	INSULATION THICKNESS mm	OVERALL DIAMETER (APPROX.) mm	WEIGHT (APPROX.) kg/km
IC-CT-01-00050-CU-PVC-DK-0660-BS6231	0.5	0.8	2.63	11
IC-CT-01-00075-CU-PVC-DK-0660-BS6231	0.75	0.8	2.8	14
IC-CT-01-00100-CU-PVC-DK-0660-BS6231	1	0.8	2.97	18
IC-CT-01-00150-CU-PVC-DK-0660-BS6231	1.5	0.8	3.27	23
IC-CT-01-00250-CU-PVC-DK-0660-BS6231	2.5	0.8	3.7	33
IC-CT-01-00400-CU-PVC-DK-0660-BS6231	4	0.8	4.3	50
IC-CT-01-00600-CU-PVC-DK-0660-BS6231	6	0.8	4.8	69
IC-CT-01-01000-CU-PVC-DK-0660-BS6231	10	1	6.33	117
IC-CT-01-01600-CU-PVC-DK-0660-BS6231	16	1	7.6	174
IC-CT-01-02500-CU-PVC-DK-0660-BS6231	25	1.2	9.57	269
IC-CT-01-03500-CU-PVC-DK-0660-BS6231	35	1.2	10.73	368
IC-CT-01-05000-CU-PVC-DK-0660-BS6231	50	1.4	12.93	525
IC-CT-01-07000-CU-PVC-DK-0660-BS6231	70	1.4	14.77	720
IC-CT-01-09500-CU-PVC-DK-0660-BS6231	95	1.6	16.67	973
IC-CT-01-12000-CU-PVC-DK-0660-BS6231	120	1.6	18.4	1212
IC-CT-01-15000-CU-PVC-DK-0660-BS6231	150	1.8	20.57	1491
IC-CT-01-18500-CU-PVC-DK-0660-BS6231	185	2	22.67	1872
IC-CT-01-24000-CU-PVC-DK-0660-BS6231	240	2.2	25.53	2394

The above data is approximate & subject to manufacturing tolerance.

Product codes follow the Indo Cables product-code structure: IC – LINE – CORES – SIZE – CONDUCTOR – INSULATION – DESIGNATION – VOLTAGE – STANDARD – OPTION. CT denotes the control-cable line, 01 a single core, PVC the thermoplastic insulation, DK the BS 6231 Type DK designation and 0660 the 600/1000 V grade. The Item Master register holds no BS 6231 item: all 18 codes on this sheet are derived from the code structure and are pending entry, and the designation DK and the standard BS6231 both need adding to the reference tables on tab 5.

TABLE 2 ELECTRICAL CHARACTERISTICS

Current carrying capacity and maximum DC conductor resistance.



NOMINAL CROSS SECTIONAL AREA mm ²	REFERENCE METHOD A enclosed in conduit in thermally insulating wall etc.		REFERENCE METHOD B enclosed in conduit on a wall or in trunking etc.		REFERENCE METHOD C clipped direct · spaced by one cable diameter		REFERENCE METHOD G in free air · spaced by one cable diameter		MAXIMUM DC CONDUCTOR RESISTANCE AT 20°C Ω/km
	2 cables, single- phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single- phase a.c. or d.c.	3 or 4 cables, three-phase a.c.	2 cables, single- phase a.c. or d.c.	3 or 4 cables, three-phase a.c. — trefoil	2 cables, single- phase a.c. or d.c. or 3 cables three-phase a.c. flat — horizontal	Vertical	
	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	
1	16	14	19	17	22	20	—	—	19.5
1.5	21	19	26	22	28	26	—	—	13.3
2.5	29	26	34	31	37	34	—	—	7.98
4	38	34	47	41	51	45	—	—	4.95
6	50	44	59	54	65	59	—	—	3.3
10	68	59	83	73	90	82	—	—	1.91
16	90	80	111	98	121	110	—	—	1.21
25	120	107	150	132	162	147	206	182	0.78
35	148	132	185	163	199	182	255	227	0.554
50	178	160	224	198	258	237	311	279	0.386
70	226	203	286	251	331	303	399	359	0.272
95	273	245	346	304	401	369	486	440	0.206
120	315	282	400	353	468	429	566	513	0.161
150	359	322	444	387	539	493	653	596	0.129
185	409	366	508	434	617	566	748	685	0.106
240	479	430	597	510	729	667	884	813	0.0801

AMBIENT TEMPERATURE
30°C

CONDUCTOR OPERATING
TEMPERATURE
105°C

REFERENCE
Table 4E1A of BS 7671:2018

TABLE 3 DE-RATING FACTOR

De-rating factor for various ambient temperature

AIR TEMPERATURE	35°C to 55 °C	60°C	65°C	70°C	75°C
DE-RATING FACTOR	1	0.96	0.83	0.67	0.47

FLAGGED FOR CONFIRMATION

- 01 Nothing on this sheet is in the register. The Item Master carries no item on BS6231, and the designation DK is not in the DESIGNATION block on tab 5 REF TABLES. All 18 codes are built from the code structure and need Item Master rows.

- 02 The source sheet carries the same code series as the Type CK sheet — CTC1C...PCPVFPBS6231 — so the source codes do not distinguish Type DK from Type CK. The codes here carry the DK designation to keep the two ranges apart. The source codes also break their own padding rule: 0.5, 0.75, 1.5 and 2.5 mm² hold a decimal point while 1, 4, 6 and 10 mm² are zero-padded to three digits.
- 03 Table 1 lists 0.5 and 0.75 mm² but the electrical table gives no current rating and no DC resistance for either size.
- 04 Reference method G is blank — shown as — for every size from 1 to 16 mm². Reproduced as written.
- 05 The stated conductor operating temperature is 105 °C, but the current ratings are cited to Table 4E1A of BS 7671:2018, the 90°C thermosetting table. Characteristics gives the fixed range as -15°C to 90°C, with 105°C only at reduced lifetime. Reproduced as written.
- 06 Construction lists one insulation layer, Polyvinyl Chloride to EN 50363-3, while the cross-section labels two — a PVC base insulation and a PVC skin insulation. Both are reproduced as supplied.
- 07 Operation temperature reads Fixed: -15°C to 90° C in the source, with the degree sign detached from the second value. Standard follows lists the flammability standard as IEC 60332-1-2 while Compliance lists it as BS EN/IEC 60332-1-2.
- 08 BS 6231 is not an Indian Standard, so no BIS licence covers this product. The ISI mark is printed as instructed and the licence line shows CM/L 6200267409, the company number carried on the sheet series. Confirm the correct licence, or hide the line from Tweaks.
- 09 The ISO 9001 mark is a 52 × 53 px crop from a supplied screenshot and prints well below the resolution a 300 dpi sheet needs; supply a vector or print-resolution file. No RoHS or REACH mark is printed: no control-cable source sheet claims either, so the marks would be an unsupported compliance claim. Confirm whether the range is RoHS and REACH certified and supply those logo files if it is. The Make in India mark is a 76 × 39 px crop from a supplied screenshot and prints at roughly a quarter of the resolution a 300 dpi sheet needs; supply a print-resolution file or hold the mark off the sheet. The reference header shows a lockup carrying the tagline EVERY CONNECTION MATTERS. No supplied logo file contains it and the design system has no confirmed tagline, so the header prints the stacked lockup alone; supply that lockup, or confirm the tagline, to set it.