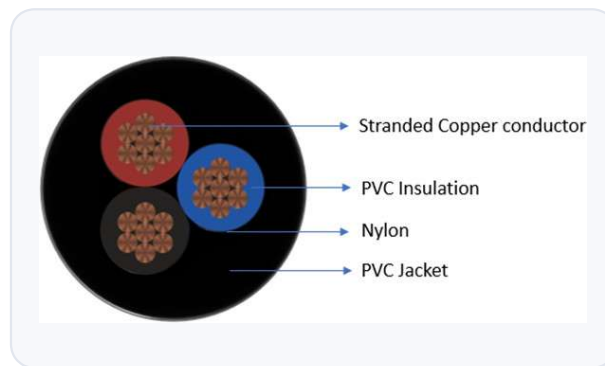


MULTICORE TRAY CABLE · STRANDED CLASS B COPPER · PVC/NYLON THHN/THWN-2 · SUNLIGHT RESISTANT PVC JACKET

INDOCABLES CU TYPE TC/TC-ER THHN/THWN-2 16 AWG TRAY CABLE INDUSTRIAL CABLE, 600 V AC



Images not to scale. Follow table for dimensions

APPLICATION

INDOCABLES Copper Type TC/TC-ER* THHN/THWN-2 tray cable is recommended to use in commercial as well as industrial application as control, lighting and branch circuit. It is suitable to install in cable tray; also in open air, raceway, channel, conduit and duct. Also it is permitted for exposed run use as per NEC for 3 or more conductors. It is suitable for Class 1 Div. 2 industrial hazardous location as per NEC. Further, it may be installed in direct burial or sunlight exposed area and in wet or dry location or in area exposed to chemical or oil.

CONSTRUCTION

- 01 **Conductor:** Stranded Class B annealed plain copper conductor as per ASTM B3 & ASTM B8
- 02 **Insulation:** Insulated with a flame retardant PVC/Nylon, Type THHN/THWN-2 as per UL 83
- 03 **Jacket:** Lead free, Flame retardant, Sunlight resistant PVC jacket, rated 90°C wet and dry, over the complete assembly. Colour : Black

CHARACTERISTICS

VOLTAGE RATING	600 V
OPERATION TEMPERATURE	-25°C to 90°C
CORE IDENTIFICATION	As per ICEA E2 colour coding
BENDING RADIUS	12 x Overall Diameter

STANDARD FOLLOWS

ASTM B3	ASTM B8
UL 83	UL 1277
UL 1581	UL 1685
IEEE 1202	CSA C22.2 No. 230

OUTSTANDING FEATURES


HEAT RESISTANT

SUNLIGHT RESISTANT

CHEMICAL RESISTANT

FLAME RETARDANT

COMPLIANCE

Conductor resistance test	ASTM B8
Vertical tray flame test	UL 1685
FT4 Test (For 1/0 AWG and above)	UL 1685, IEEE 1202
Oil resistant test (PR I)	UL 1277


ROHS & REACH

ACCREDITATIONS & APPROVAL



ISI



ISO 9001



Make in India

CM/L 6200267409

TABLE 1 DIMENSIONAL CHARACTERISTICS

PRODUCT CODE	NO. OF CORE	CONDUCTOR SIZE AWG or kcmil	JACKET THICKNESS mils	NOMINAL OVERALL DIAMETER mils	APPROXIMATE WEIGHT PER 1000 FT lbs.
IC-CT-2F-00131-CU-PVC-TCER-0600-UL1277	**2 Flat	16	0.045	0.185 X 0.281	42
IC-CT-02-00131-CU-PVC-TCER-0600-UL1277	2	16	0.045	0.281	52
IC-CT-03-00131-CU-PVC-TCER-0600-UL1277	3	16	0.045	0.296	63
IC-CT-04-00131-CU-PVC-TCER-0600-UL1277	4	16	0.045	0.321	77
IC-CT-05-00131-CU-PVC-TCER-0600-UL1277	5	16	0.045	0.352	88
IC-CT-06-00131-CU-PVC-TCER-0600-UL1277	6	16	0.045	0.380	104
IC-CT-07-00131-CU-PVC-TCER-0600-UL1277	7	16	0.045	0.380	110
IC-CT-09-00131-CU-PVC-TCER-0600-UL1277	9	16	0.045	0.457	139
IC-CT-10-00131-CU-PVC-TCER-0600-UL1277	10	16	0.045	0.476	152
IC-CT-12-00131-CU-PVC-TCER-0600-UL1277	12	16	0.045	0.491	175
IC-CT-15-00131-CU-PVC-TCER-0600-UL1277	15	16	0.06	0.572	233
IC-CT-16-00131-CU-PVC-TCER-0600-UL1277	16	16	0.06	0.572	244
IC-CT-19-00131-CU-PVC-TCER-0600-UL1277	19	16	0.06	0.601	278
IC-CT-20-00131-CU-PVC-TCER-0600-UL1277	20	16	0.06	0.632	293
IC-CT-25-00131-CU-PVC-TCER-0600-UL1277	25	16	0.06	0.696	355
IC-CT-30-00131-CU-PVC-TCER-0600-UL1277	30	16	0.06	0.735	414
IC-CT-37-00131-CU-PVC-TCER-0600-UL1277	37	16	0.06	0.792	501
IC-CT-50-00131-CU-PVC-TCER-0600-UL1277	50	16	0.08	0.961	696

#Above values are approximate and subject to standard manufacturing tolerance

*ER rating is applied for 3 or more conductors

**Flat construction

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, 00131 the 16 AWG conductor expressed as sq.mm × 100 (1.31 sq.mm), CU the plain annealed copper, PVC the thermoplastic insulation, TCER the Type TC-ER designation, 0600 the 600 V grade and UL1277 the tray-cable standard. The Item Master register holds no Type TC-ER item: all 18 codes on this sheet are derived from the code structure and are pending entry. Also pending on tab 5: the 16 AWG size, the core codes 2F, 09, 15, 20, 25 and 50, the designation TCER, the voltage grade 0600 and the standard UL1277. Sheath options FR and UV are already in the register and can be appended if sheath attributes are to be carried in the code.



TABLE 2 ELECTRICAL CHARACTERISTICS

CONDUCTOR SIZE AWG	*ALLOWABLE AMPACITY AT 90°C Amp .	MAXIMUM DC RESISTANCE AT 20°C Ω/km
16	18	13.7

*Allowable ampacities shown are for general use as specified by the NEC 2011 Edition Section 310.16.

90°C – Relevant for TBS, SA, SIS, FEP, FEPB, MI, RHH, RHW-2,THHN, THHW, THW-2,THWN-2, USE-2, XHH,XHHW, XHHW-2, and ZW-2 copper wires

NOTES

Section 310.15(B) shall be referenced for ampacity correction factors where the ambient temperature is other than 30°C (86°F). Section 310.15(C)(1) shall be referenced for more than three current-carrying conductors.

Section 310.16 shall be referenced for conditions of use.

FLAGGED — reproduced as written from the source sheet, confirm before release: the Jacket thickness and Nominal overall diameter columns of Table 1 are headed “mils” but carry inch values (0.045 in = 45 mils, 0.281 in = 281 mils); the 6 core and 7 core rows both give 0.380 overall diameter, and the 15 core and 16 core rows both give 0.572; the FT4 test in Compliance is qualified “For 1/0 AWG and above” on a sheet that lists 16 AWG only, so the qualifier applies to no size shown; the title and application text carry the TC/TC-ER asterisk while the ER rating is stated to apply only for 3 or more conductors, so the 2 core and 2 core flat rows are Type TC only; the ampacity cites the NEC 2011 Edition; and the ISI mark with CM/L number is the company's BIS licence, which does not certify this product against UL 1277 or CSA C22.2 No. 230. 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. No RoHS or REACH mark is printed — no control-cable source sheet claims either. 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.