








SHIELDED TRAY CONTROL CABLE

UL 1277 TC-ER

20 orderable sizes

STANDARD UL 1277 TC-ER	VOLTAGE CLASS 600 V	TEMPERATURE CLASS 90 °C dry / 75 °C wet guide
CONDUCTOR Fine stranded bare copper conductor	INSULATION / JACKET Oil and sunlight resistant PVC tray jacket	

Construction

- 1  **Conductor (per core)** – Fine stranded bare copper conductor · 30 × Ø0.24 mm · IEC 60228 cl.5
- 2  **Core insulation** – PVC nylon insulation
- 3  **Filler** – PP filler
- 4  **Shield** – Braid shield (C)
- 5  **Sheath** – Oil and sunlight resistant PVC tray jacket

Size selection — all available cross-sections

Cable reference	Tray cable duty	Circuit type	Core / pair design	Conductor size	Voltage class	Max DC resistance at 20 °C	OD guide
TC-ER shielded 600 V Shielded power and control tray Shielded control 3 core 18 AWG / 0.82 mm ²	Shielded power and control tray	Shielded control	3 core	18 AWG / 0.82 mm ²	600 V	22.6 Ω/km	13.2 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 3 core 16 AWG / 1.31 mm ²	Shielded power and control tray	Shielded control	3 core	16 AWG / 1.31 mm ²	600 V	14.1 Ω/km	13.6 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 3 core 14 AWG / 2.08 mm ²	Shielded power and control tray	Shielded control	3 core	14 AWG / 2.08 mm ²	600 V	8.89 Ω/km	14.1 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 3 core 12 AWG / 3.31 mm ²	Shielded power and control tray	Shielded control	3 core	12 AWG / 3.31 mm ²	600 V	5.59 Ω/km	14.7 mm

Cable reference	Tray cable duty	Circuit type	Core / pair design	Conductor size	Voltage class	Max DC resistance at 20 °C	OD guide
control 3 core 12 AWG / 3.31 mm ²							
TC-ER shielded 600 V Shielded power and control tray Shielded control 4 core 18 AWG / 0.82 mm ²	Shielded power and control tray	Shielded control	4 core	18 AWG / 0.82 mm ²	600 V	22.6 Ω/km	13.6 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 4 core 16 AWG / 1.31 mm ²	Shielded power and control tray	Shielded control	4 core	16 AWG / 1.31 mm ²	600 V	14.1 Ω/km	14.0 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 4 core 14 AWG / 2.08 mm ²	Shielded power and control tray	Shielded control	4 core	14 AWG / 2.08 mm ²	600 V	8.89 Ω/km	14.6 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 4 core 12 AWG / 3.31 mm ²	Shielded power and control tray	Shielded control	4 core	12 AWG / 3.31 mm ²	600 V	5.59 Ω/km	15.2 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 5 core 18 AWG / 0.82 mm ²	Shielded power and control tray	Shielded control	5 core	18 AWG / 0.82 mm ²	600 V	22.6 Ω/km	14.1 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 5 core 16 AWG / 1.31 mm ²	Shielded power and control tray	Shielded control	5 core	16 AWG / 1.31 mm ²	600 V	14.1 Ω/km	14.5 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 5 core 14 AWG / 2.08 mm ²	Shielded power and control tray	Shielded control	5 core	14 AWG / 2.08 mm ²	600 V	8.89 Ω/km	15.0 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 5 core 12 AWG / 3.31 mm ²	Shielded power and control tray	Shielded control	5 core	12 AWG / 3.31 mm ²	600 V	5.59 Ω/km	15.6 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 7 core 18 AWG / 0.82 mm ²	Shielded power and control tray	Shielded control	7 core	18 AWG / 0.82 mm ²	600 V	22.6 Ω/km	14.8 mm
TC-ER shielded 600 V Shielded power and	Shielded power and	Shielded control	7 core	16 AWG / 1.31 mm ²	600 V	14.1 Ω/km	15.2 mm

Cable reference	Tray cable duty	Circuit type	Core / pair design	Conductor size	Voltage class	Max DC resistance at 20 °C	OD guide
control tray Shielded control 7 core 16 AWG / 1.31 mm ²	control tray						
TC-ER shielded 600 V Shielded power and control tray Shielded control 7 core 14 AWG / 2.08 mm ²	Shielded power and control tray	Shielded control	7 core	14 AWG / 2.08 mm ²	600 V	8.89 Ω/km	15.7 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 7 core 12 AWG / 3.31 mm ²	Shielded power and control tray	Shielded control	7 core	12 AWG / 3.31 mm ²	600 V	5.59 Ω/km	16.3 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 12 core 18 AWG / 0.82 mm ²	Shielded power and control tray	Shielded control	12 core	18 AWG / 0.82 mm ²	600 V	22.6 Ω/km	16.2 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 12 core 16 AWG / 1.31 mm ²	Shielded power and control tray	Shielded control	12 core	16 AWG / 1.31 mm ²	600 V	14.1 Ω/km	16.6 mm
TC-ER shielded 600 V Shielded power and control tray Shielded control 12 core 14 AWG / 2.08 mm ²	Shielded power and control tray	Shielded control	12 core	14 AWG / 2.08 mm ²	600 V	8.89 Ω/km	17.1 mm
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