

TRAY CABLES

Applications

■ Application of flexible Power and Control Tray Cable, Type TC, MTW and WTTC

This special multi-conductor cable shall be permitted for use in power, lighting, control and signal circuits in accordance to the National Electrical Code (NEC), NFPA 70 Article 336. In cable trays, in raceways and in outdoor locations supported by a messenger wire in accordance to Underwriters Laboratories Inc. (UL) Standard of Safety UL 1277. For class I division 2 circuits as permitted in NEC article 501.10 (B) and for class II division 2 circuits as permitted in NEC article 502.10 (B). In industrial establishments where the conditions of maintenance and supervision ensure that only qualified persons service the installation, and where the cable is continuously supported and protected against physical damage using mechanical protection, such as struts, angles or channels. This Tray Cable complies with the crush and impact requirements of Type TC and is identified for such use with the ER marking on the jacket. The cable is for use as exposed runs between a cable tray and the utilization device where the cable is continuously supported and protected against physical damage and is secured at intervals not exceeding 1.8 m (6 feet). Grounding for the utilization equipment shall be provided by an equipment grounding conductor within the cable. This Tray Cable shall also be permitted for use in wet locations and is resistant to moisture and corrosive agents. Cables that are surface marked "oil resistant I" have a jacket that is for exposure to mineral oil at temperature not in excess of 60°C (140°F). Marked with "oil resistant II" they have a jacket that is for exposure to mineral oil at temperatures not in excess of 75°C (167°C). The Type TC is flame retardant and self-extinguishing. Also sunlight resistant depending on the jacket color. MTW listed cables can be used in NFPA 79 Machine areas. MTW listed cable is for use as specified in the National Electrical Code (NFPA 70) and in the National Fire Protection Association Electrical Standard for Industrial Machinery (NFPA 79). Wind turbine power and control cable is intended to be installed in cable trays or raceways within a wind turbine generator.

Exemplary applications:

TR 600 Type TC, MTW and WTTC
TR 600 Auto Type TC, MTW and WTTC
TR 600 CY Type TC, MTW and WTTC
TR 600 CY Lean Type TC, MTW and WTTC
TR 600 Auto CY Type TC, MTW and WTTC
TR 249 Type TC and ST00W
D 331 PLTC Type PLTC
SABIX® D 331 PLTC Type PLTC

Recommended applications are machine tools, control systems assembly lines, CNC machining, grinding machines, bottling equipment, data processing equipment and connections between control panels and machines

Exemplary applications:

TR 600 HD Type WTTC
TR 600 C HD Type WTTC

In hazardous (classified) areas class I, Division 2 per NEC Article 501.4 (B), UL Type TC is in accordance with UL standard 1277 and NEC Article 336

Exemplary applications:

Servo VFD Type MTW and WTTC
Servo VFD Combo DS Type MTW and WTTC
VFD Lean TR Type MTW and WTTC
VFD Dual TR Type MTW and WTTC

Can be used to connect alternating current variable frequency drives to alternating current variable frequency motors

TRAY CABLES

Selection index

		Cable type	TR 600 black	TR 600 blue	TR 600 red	TR 600 yellow	TR 600 CY black	TR 600 CY blue	TR 600 CY Lean	TR 600 Auto black	TR 600 Auto blue	TR 600 Auto red	TR 600 Auto CY	TR 600 HD	TR 600 C HD	Servo VFD	Servo VFD Combo DS	VFD Lean TR	VFD Dual TR	TR 249	D 331 PLTC	SABIX® D 331 PLTC	
Application	Numbered conductors		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x
	Color code acc. to US 2																				x		
	Copper screen						x	x	x				x		x		x	x	x				
	Inner sheath						x	x					x		x				x				
Temperature range static*	UL-AWM: up to +105°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	(UL) / c(UL): up to +90°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	(UL) / c(UL) / CSA-AWM: up to +90°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	(UL): up to +90°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	(UL): up to +75°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
- 25°C		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Voltage	Voltage 300 V																					x	x
	Voltage (UL) / c(UL) 600 V																				x		
	Voltage UL-AWM / (UL) / c(UL) 600 V		x	x	x	x	x	x	x	x	x	x	x	x	x								
	Voltage (UL) / c(UL) 600 V UL-AWM/CSA-AWM 1000 V															x	x	x	x				
	Voltage (UL) WTTC 1000 V		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
	Testing voltage 1500 V																					x	x
	Testing voltage 3000 V																				x		
	Testing voltage 4000 V		x	x	x	x	x	x	x	x	x	x	x	x	x	x							
	Testing voltage 7500 V															x							
Testing voltage cond./cond. 7500 V conductor/screen 3000 V																x	x	x					
Standards and approvals	Zero halogen acc. to DIN VDE and IEC																						x
	Burning characteristics: (UL) FT4 und c(UL) FT1, FT2, FT4		x	x	x	x	x	x	x	x	x	x	x	x	x						x		
	Burning characteristics: (UL) / c(UL) FT4, c(UL) / CSA-AWM FT1, FT2															x	x	x	x				
Burning characteristics: (UL) FT4																					x	x	
Characteristics	Oil resistance I		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x		
	Oil resistance I + II													x	x								
	Sunlight resistance		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x	x
	Exposed Runs		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
	Direct Burial		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x		
	Machinery Area		x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x		

Temperature range:



*The temperature range for flexing is mentioned on the particular catalog page