

TRAY & VFD CABLES



VFD Lean TR Type TC-ER and MTW Variable frequency drive - shielded tray cable and machine-tool cable



Marking for VFD Lean TR 08610404: SAB BRÖCKSKES · D-VIERSEN · VFD Lean TR 4 AWG/4c 08610404
 THHN (UL) Type TC-ER 90°C 600V, Oil I, Sunlight Resistant, Direct Burial, FT4 (UL) WTTC 90°C 1000V (UL) MTW 4 AWG/4c 600V
 AWM Style 21179 1000V c(UL) Type CIC SHIELDED 4 AWG/4c 90°C dry 600V FT1, FT2, FT4 CSA AWM I/II A/B 90°C 1000V FT1 FT2 CE

VFD Lean TR is a flexible shielded motor supply cable designed for automated servo systems. Also machine-tool cable 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). This cable can be used without conduit (exposed runs). Its unique flame retardant jacket makes the VFD Lean TR rated for 600V suitable for tray cable application and also as Control and Instrumentation Cable, UL and CSA AWM approved for 1000 Volt. The VFD Lean TR has an outer PVC jacket and both a foil and a braid shield which helps with problems related to voltage spikes, harmonics, and power distortions frequently associated with variable frequency drives. The VFD Lean TR can be used to connect alternating current variable frequency drives to alternating current variable frequency motors and is recommended to make installations less cumbersome. This motor supply cable is also suitable for installation in wet or dry locations and is UV resistant. The VFD Lean TR can be used in indoor or outdoor applications and is rated for direct burial. The combination of the braid and foil shield makes the VFD Lean TR 100% shielded from excessive interference. VFD Lean TR is permitted to be used in hazardous (classified) locations Class I, Division 2 per NEC Article 501.4 (B), UL Type TC is in acc. to UL standard 1277 and NEC Article 336 (392, 501). Wind turbine power and control cable is intended to be installed in cable trays or raceways within a wind turbine generator. MTW listed cables can be used in NFPA 79 Machine areas.

Construction:

Conductor:	tinned copper strands acc. to DIN VDE 0295 class 5 + IEC 60228 class 5 + HD 383 class 5 from 18 AWG - 12 AWG, from 10 AWG - 2 AWG class k in acc. to ASTM B 172
Insulation:	special formulated PVC/Nylon
Color code:	black conductors with consecutive white numbers and green-yellow earth wire
Stranding:	in layers
Wrapping:	non-woven tape
Screen:	double shield, alu foil and tinned copper braiding
Jacket material:	special sunlight and oil resistant PVC
Jacket color:	black

Outstanding features:

- Interconnection of variable frequency drive control device to variable frequency motors
- NFPA 79 for Industrial Machinery
- Reduced O.D.
- WTTC: UL Subject 2277
- TC: UL Standard 1277
- (UL)/(cUL) listed

Technical data:

Voltage:	(UL) / c(UL): 600 V UL-AWM/CSA-AWM: 1000 V (UL) WTTC: 1000 V
Testing voltage:	conductor/conductor 7500 V conductor/screen 3000 V
Min. bending radius:	12 x O.D.
Temperature:	UL-AWM: up to +105°C (UL) / c(UL) / CSA-AWM: up to +90°C <i>static:</i> -25°C
Burning characteristics:	(UL) / c(UL) FT4, c(UL) / CSA-AWM FT1, FT2
Oil resistance:	yes
Sunlight resistance:	yes
Exposed Runs:	yes
Direct Burial:	yes
Machinery Area:	yes
Absence of harmful substances:	acc. to RoHS directive of the European Union see page N/25

item no.	AWG/c	nominal outer-ø inch	mm	cable weight ≈ lbs/mft
▶ 08611804	18/4c	0.354	9.0	75
▶ 08611604	16/4c	0.382	9.7	91
▶ 08611404	14/4c	0.417	10.6	120
▶ 08611204	12/4c	0.472	12.0	177
▶ 08611004	10/4c	0.602	15.3	278
▶ 08610804	8/4c	0.764	19.4	430
▶ 08610604	6/4c	0.941	23.9	633
▶ 08610404	4/4c	1.118	28.4	916
▶ 08610204	2/4c	1.287	32.7	1283

Other dimensions and colors are possible on request.