

Compliant with NFPA 79
2018: Article "4.2.2.8
Circuits Supplied from Power
Conversion Equipment"

TRAY & VFD CABLES



VFD Combo XLPE Type TC-ER

Variable frequency drive -
double shielded VFD cable with XLPE
insulation and shielded pair

CSA AWM I/II A/B 90°C 1000V FT1 FT2 CE



Marking for VFD Combo XLPE 35691404:

SAB NORTH AMERICA VFD Combo XLPE P/N 35691404 (UL) Type TC-ER 14AWG/3C RHW-2 CDRS + GNDG CDR + 14AWG/1PR 90C Dry/Wet 600V, Oil Res I & II, Sunlight Resistant, Direct Burial, (UL) WTTC 1000V, (UL) Flexible Motor Supply Cable, c(UL) CIC-TC XLPE 600V FT4, CSA AWM I/II A/B 90C 1000V FT4 RoHS CE

VFD Combo XLPE is a flexible shielded motor supply cable designed for adjustable speed drives and servo systems. Included is an individually shielded pair for wiring a brake or temperature sensor. The cores are insulated with a thicker cross linked insulation providing better heat resistance, low capacitance and better protection against corona discharge. VFD Combo XLPE is UL TC-ER, 600V, UL WTTC, UL flexible motor supply cable 1000V, c(UL) CIC/TC, & UL/CSA AWM approved up to 1000V and is 100% shielded with both a foil and braided shield making this cable resistant to Electromagnetic Interference (EMI) from voltage spikes, harmonics, and power distortions frequently associated with variable frequency drives. This cable can be used both indoors and outdoors within or without conduit (exposed runs) up to any length. Its unique flame retardant jacket makes the VFD Combo XLPE approved for both cable tray (TC) applications as well as control and instrumentation applications. VFD Combo XLPE is suitable for installations in wet or dry locations (90°C), is UV resistant, and is rated for direct burial. VFD Combo XLPE is permitted to be used in hazardous (classified) locations Class 1 Division 2 per NEC Article 501.4 (B), and is UL Type WTTC in acc. to UL standard 2277. Wind Turbine power and control cable (WTTC) is intended to be installed in cable trays or raceways within a wind turbine generator.

Construction:

Conductor:	tinned copper strands class K
Insulation:	special formulated crosslinked PE, earth wire PVC, pair PVC/nylon
Color code:	black conductors with consecutive white numbers and green-yellow earth wire, pair is black with white #5 and #6
Stranding:	in layers
Screen (pair):	aluminum foil and drain wire (drain wire same size as pair)
Screen (overall):	double shield, AMA foil and tinned copper braiding
Jacket material:	special sunlight and oil resistant copolymer
Jacket color:	black

Outstanding features:

- interconnection of variable frequency drive control device to variable frequency motors
- shielded pairs for a brake or temperature sensor
- WTTC approval
- WTTC: UL subject 2277
- TC-ER: UL standard 1277
- UL flexible motor supply cable 1000V
- crosslinked conductors, better for longer installations
- Oil Res I & II
- double shield (100% shielded)
- rated for UL 90°C wet

Technical data:

Voltage:	(UL) / c(UL): 600 V CSA-AWM: 1000 V (UL) WTTC: 1000 V
Testing voltage:	3000 V
Min. bending radius:	12 x O.D.
Temperature:	(UL) / c(UL) / CSA-AWM: up to +90°C -40/+105°C
<i>static:</i>	
Burning characteristics:	(UL) / c(UL) FT4, c(UL) / CSA-AWM FT1, FT2
Oil resistance:	yes
Sunlight resistance:	yes
Exposed Runs:	yes
Cold bend test:	-40°C
Direct Burial:	yes
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

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- Temperature resistant down to -40°C.
- Heavy duty application.

item no.	AWG/c	AWG/pair	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
➤ 35691614	16/4c	18/1pr	0.573	14.6	144
➤ 35691414	14/4c	18/1pr	0.616	15.6	175
➤ 35691404	14/4c	14/1pr	0.628	16.0	213
➤ 35691464	14/4c	18/2pr	0.662	16.8	254
➤ 35691214	12/4c	18/1pr	0.654	16.6	231
➤ 35691204	12/4c	14/1pr	0.667	16.9	277
➤ 35691264	12/4c	18/2pr	0.698	17.7	299
➤ 35691004	10/4c	14/1pr	0.736	18.7	354

item no.	AWG/c	AWG/pair	nominal inch	outer-ø mm	cable weight ≈ lbs/mft
➤ 35691064	10/4c	18/2pr	0.762	19.4	383
➤ 35690804	8/4c	14/1pr	0.960	24.4	536
➤ 35690864	8/4c	18/2pr	0.961	24.4	576
➤ 35690604	6/4c	14/1pr	1.030	26.2	726
➤ 35690664	6/4c	16/2pr	1.032	26.2	766
➤ 35690404	4/4c	14/1pr	1.140	29.0	1011
➤ 35690204	2/4c	14/1pr	1.280	32.5	1401

Other dimensions and colors are possible on request.

E-mail: info@sabcable.com



Web site: www.sabcable.com