NFPA 79 for industrial machinery

SAB VFD

VFD Combo XLPE

Variable frequency drive - double shielded VFD cable with XLPE insulation and shielded pair, Type TC-ER-JP

Marking for VFD Combo XLPE 35691404:
SAB NORTH AMERICA VFD Combo XLPE P/N 35691404 (UL) Type TC-ER-JP 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

Construction:

Conductor:	tinned copper strands class K
Insulation:	special formulated crosslinked PE, ground wire: PVC, pair: PVC/Nylon
Color code:	blackish gray conductors with consecutive white numbers and green/yellow ground, pair is black with white #5 and #6
Stranding:	in layers
Shielding (pair):	aluminum foil and drain wire (drain wire same size as pair)
Shielding (overall):	double shield, AMA foil and tinned copper braiding
Jacket material:	special sunlight and oil resistant copolymer
Jacket color:	black (RAL 9005)

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 range:	**(UL) / c(UL) / CSA-AWM:** up to +90°C
static:	-40/105°C
Burning characteristics:	(UL) / c(UL) FT4, c(UL) / CSA-AWM FT1, FT2
Oil resistance I & II:	yes
Sunlight resistance:	yes
Exposed runs:	yes
Cold bend test:	-40°C
Direct burial:	yes
Approvals:	UL TC-ER-JP, UL WTTC, c(UL) CIC-TC, CSA AWM, CE, RoHS
Absence of harmful substances:	acc. to RoHS directive of the European Union see page O/30

Outstanding features:

- **interconnection of variable frequency drive control device to variable frequency motors**
- **shielded pairs for a brake or temperature sensor**
- **WTTC: UL subject 2277**
- **TC-ER: UL standard 1277**
- **UL flexible motor supply cable 1000 V**
- **crosslinked conductors, better for longer installations**
- **Oil Res I & II**
- **double shielded (100% shielded)**
- **rated for UL 90°C wet**
- **UL TC-ER-JP (joist pull)***
- **Class 1 Div 2 per NEC Article 501.4 (B)**

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

item no.	AWG/c	AWG/pair	nominal outer-ø inch 10%	nominal outer-ø mm 10%	cable weight ≈lbs/mft
35691614	16/4c	18/1pr	0.573	14.6	144
35691624D	16/4c	16/1pr	0.580	14.7	210
35691414	14/4c	18/1pr	0.616	15.6	175
35691404	14/4c	14/1pr	0.628	16.0	213
35691424D	14/4c	16/1pr	0.626	15.9	257
35691464	14/4c	18/2pr	0.662	16.8	254
35691214	12/4c	18/1pr	0.654	16.6	231
35691224D	12/4c	16/1pr	0.662	16.8	308
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
35691024D	10/4c	16/1pr	0.738	18.7	417

item no.	AWG/c	AWG/pair	nominal outer-ø inch 10%	nominal outer-ø mm 10%	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
35690464	4/4c	14/2pr	1.192	30.3	1068
35690204	2/4c	14/1pr	1.280	32.5	1401

Other dimensions and colors are possible on request.
D means drain wire in P/N

* UL TC-ER-JP (joist pull) added Sept. 1, 2021