

VFD Cables for Automation

VFD XLPE TR / VFD XLPE TR D

XLPE insulated, oil resistant and flexible VFD cable, available with drain wire
Type TC-ER



(UL) Type TC-ER 14AWG/3C RHW-2 CDRS + GNDG CDR 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:	class K tinned copper stranding
Insulation:	special formulated XLPE
Color code:	blackish gray #’d conductors with green/yellow ground
Shielding:	double shield, AMA foil and tinned copper braiding (85% coverage)
Jacket material:	special sunlight and oil resistant black PVC

Technical data:

Voltage:	UL/c(UL):	600 V
	CSA-AWM:	1000 V
	UL WTTC:	1000 V
Temperature:	UL/c(UL)/	up to +90°C static: -40/105°C
	CSA-AWM:	
	static:	
Burning characteristics:	UL/c(UL) FT4	



Outstanding features:

- XLPE insulation for excellent capacitance values
- Oil resistant meeting Oil Res 1 & 2
- Sun Res and Direct Burial approved
- Tinned copper class K stranding for improved flexibility
- UL TC-ER, UL MTW, UL WTTC & UL Flexible Motor Supply Cable
- c(UL) CIC-TC, CSA AWM FT 4
- Conductors rated for RHW-2

Part Number	AWG/c	Drain Wire AWG	nominal OD-Ø		Cable weight lbs/mft	Amperage†		Maximum Horse Power Rating*			Capacitance (pF/ft)		Impedance (Ohms)	
			inch	mm		75°	90°	230V	460V	575V	Mutual	Ground	Mutual	Ground
35681604	16/4c	-	0.477	12.1	125	-	18	2	3	5	15.0	27.0	104	57
35681604D	16/4c	-	0.493	12.3	144	-	18	2	3	5	15.0	27.0	104	57
35681404	14/4c	-	0.522	13.3	159	20	25	5	10	15	18.0	32.0	86	48
35681404D	14/4c	14	0.522	13.3	180	20	25	5	10	15	18.0	32.0	86	48
35681204	12/4c	-	0.592	15.0	214	25	30	7 1/2	15	20	20.0	35.0	79	43
35681204D	12/4c	12	0.592	15.0	237	25	30	7 1/2	15	20	20.0	35.0	79	43
35681004	10/4c	-	0.680	17.3	294	35	40	10	20	30	24.0	42.0	66	36
35681004D	10/4c	10	0.680	17.3	327	35	40	10	20	30	24.0	42.0	66	36
35680804	8/4c	-	0.886	22.5	556	50	55	15	30	40	24.0	42.0	66	36
35680804D	8/4c	4x14	0.886	22.5	550	50	55	15	30	40	24.0	42.0	66	36
35680604	6/4c	-	0.952	24.2	736	65	75	20	40	50	26.0	47.0	59	32
35680604D	6/4c	4x12	1.000	25.4	805	65	75	20	40	50	26.0	47.0	59	32
35680404	4/4c	-	1.090	27.7	1079	85	95	25	50	60	29.0	53.0	53	29
35680404D	4/4c	4x10	1.090	27.7	1150	85	95	25	50	60	29.0	53.0	53	29
35680204	2/4c	-	1.247	31.7	1550	115	130	40	75	100	33.0	60.0	46	25
35680204D	2/4c	4x8	1.247	31.7	1600	115	130	40	75	100	33.0	60.0	46	25

Part Number		EMC Cable Gland						VFD Termination Kit
		Metric Thread		PG Thread		NPT Thread		
Without Drain Wire	With Drain Wire	EMC-2	EMC-4	EMC-2	EMC-4	EMC-2	EMC-4	
35681604	35681604D	EM2-25	EM4-20C	EP2-16	EP4-16	EN2-3/4	EN4-1/2C	-
35681404	35681404D	EM2-25	EM4-20C	EP2-16	EP4-16	EN2-3/4	EN4-1/2C	VFD GRD KIT 14-1
35681204	35681204D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35681004	35681004D	EM2-25C	EM4-25	EP2-21	EP4-21	EN2-3/4	EN4-3/4	VFD GRD KIT 14-1
35680804	35680804D	EM2-32C	EM4-32	EP2-29	EP4-29	EN2-1	EN4-1	VFD GRD KIT 14-1
35680604	35680604D	EM2-40C	EM4-40	EP2-36	EP4-36	EN2-1	EN4-1 1/4	VFD GRD KIT 14-1
35680404	35680404D	EM2-40C	EM4-40	EP2-36	EP4-36	-	EN4-1 1/4	VFD GRD KIT 14-1
35680204	35680204D	EM2-50C	EM4-50	EP2-42	EP4-42	-	EN4-1 1/2	VFD GRD KIT 14-1

Table shows recommended cable glands. Other thread sizes may be available. Refer to EMC gland pages at the end of this brochure.

† Allowable ampacities are based on no more than three current carrying conductors in a raceway, cable, or direct buried and an ambient temperature of 30°C (2011 NEC Table 310.15(B)(16))
* Maximum Horse Power rating represents the largest HP motor the AWG is recommended for based on horse power (HP) and the full load current (FLC) x 125% per NEC Art. 430-122 (A). Amperes (FLC) were determined from NEC Art. 430-250