FREP XL CONTROL CABLE

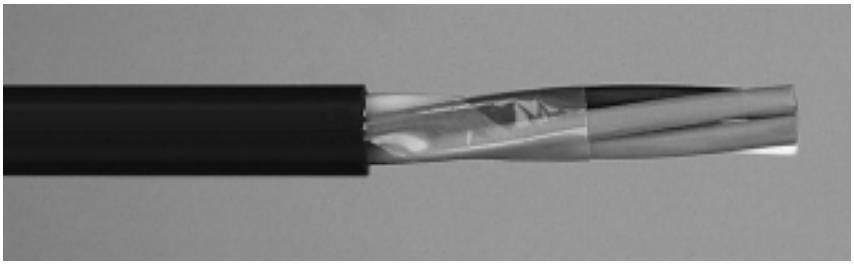
BICCCables

SPECIFICATION #FREP XL-C-0001

CONTROL CABLE

UL TYPE TC
600V

EPR/XL-CPE



Description

Conductors:
Tinned, annealed copper per ASTM B3 & B33; Class B stranding per ASTM B8

Sizes:
#18 AWG through #10 AWG

Insulation:
Color coded, flame-retardant ethylene propylene rubber (EPR) Type II

Color Code:
Per ICEA Method 1;
- Table K-1 (includes white and green)
- Table K-2 (does not include white or green)

Cable Core:
Conductors are cabled with non-hygroscopic, fillers and wrapped with an overall binder tape.

Overall Jacket:
Flame-retardant, heavy duty cross-linked chlorinated polyethylene (XL-CPE)

Options:
- Flexible stranded copper conductors
- Insulated or uninsulated ground conductors
- Bare or tinned copper tape shield or aluminum/polymer tape shield with tinned copper drain wire over cable core
- Integrabon® Moisture Barrier System

Features and Benefits

Temperature Rating:
- UL listed.....90°C Wet or Dry
- ICEA S-73-532.....90°C Wet or Dry

FREP-XL Control Cable Listings:
Insulated conductors are:
- UL Type XHHW-2, VW-1 in sizes #14 AWG and larger
- #18 AWG conductors pass VW-1
- Pass the FTI Flame Test in accordance with CSA Standard C22.2, No. 0.3
- #18 AWG conductors are UL listed as 90°C Wet or Dry

Flame-Retardant EPR Insulation, UL Class XL and Type II in Accordance with ICEA S-73-532, Provides:
- Excellent electrical, thermal and physical properties
- Excellent moisture resistance
- Excellent resistance to crush, compression cuts, and heat deformation
- Excellent flame resistance
- Excellent low temperature cold bend and cold impact characteristics

Flame-Retardant Heavy Duty Thermoset Jacket Provides:
- Resistance to “cold flow”
- Abrasion and chemical resistance
- Sunlight and weathering resistance
- High flexibility
- High tear resistance
- Enhanced flame resistance

FREP XL Control Cables:
- Pass the following Low Temperature Tests:
  - ICEA S-19-81 cold bend test at -65°C
- Meets the following Flame Tests:
  - IEEE 1202 (70,000 BTU/hr)/ CSA FT4
  - ICEA T-29-520 (210,000 BTU/hr)
  - IEEE 383 (70,000 BTU/hr)
  - UL 1277 (70,000 BTU/hr)

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Applications

For applications where high performance reliability is essential and where environmental factors require cable characteristics including durability and flexibility, flame retardance and resistance to chemicals, sunlight and weathering.

May Be Installed:
- In free air, raceways, or direct burial
- In wet or dry locations
- In Class I Division 2 industrial hazardous locations per NEC Article 501-4(b)
- At temperatures as low as -35°C

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EPR/XL-CPE CONTROL CABLE – UL TYPE TC 600V FREP XL

BICC Part Number	AWG and Stranding	Number of Conductors	Insulation Thickness (inches	Jacket Thickness (inches	Nominal O.D. (inches	Net Weight (lbs/1000 ft)
FREP XL-S600TC-18-2	18 AWG 7/.0152	2	0.025	0.045	0.297	40
FREP XL-S600TC-18-3	18 AWG 7/.0152	3	0.025	0.045	0.313	51
FREP XL-S600TC-18-4	18 AWG 7/.0152	4	0.025	0.045	0.339	62
FREP XL-S600TC-18-5	18 AWG 7/.0152	5	0.025	0.045	0.387	74
FREP XL-S600TC-18-7	18 AWG 7/.0152	7	0.025	0.045	0.396	95
FREP XL-S600TC-18-9	18 AWG 7/.0152	9	0.025	0.045	0.458	118
FREP XL-S600TC-18-10	18 AWG 7/.0152	10	0.025	0.045	0.495	131
FREP XL-S600TC-18-12	18 AWG 7/.0152	12	0.025	0.045	0.511	150
FREP XL-S600TC-18-15	18 AWG 7/.0152	15	0.025	0.060	0.585	199
FREP XL-S600TC-18-19	18 AWG 7/.0152	19	0.025	0.060	0.629	241
FREP XL-S600TC-18-30	18 AWG 7/.0152	30	0.025	0.060	0.770	358
FREP XL-S600TC-18-37	18 AWG 7/.0152	37	0.025	0.060	0.827	428
FREP XL-S600TC-16-2	16 AWG 7/.0192	2	0.025	0.045	0.321	50
FREP XL-S600TC-16-3	16 AWG 7/.0192	3	0.025	0.045	0.339	65
FREP XL-S600TC-16-4	16 AWG 7/.0192	4	0.025	0.045	0.368	80
FREP XL-S600TC-16-5	16 AWG 7/.0192	5	0.025	0.045	0.400	96
FREP XL-S600TC-16-7	16 AWG 7/.0192	7	0.025	0.045	0.432	124
FREP XL-S600TC-16-9	16 AWG 7/.0192	9	0.025	0.045	0.501	156
FREP XL-S600TC-16-10	16 AWG 7/.0192	10	0.025	0.060	0.578	191
FREP XL-S600TC-16-12	16 AWG 7/.0192	12	0.025	0.060	0.596	219
FREP XL-S600TC-16-15	16 AWG 7/.0192	15	0.025	0.060	0.639	263
FREP XL-S600TC-16-19	16 AWG 7/.0192	19	0.025	0.060	0.689	320
FREP XL-S600TC-16-30	16 AWG 7/.0192	30	0.025	0.080	0.887	512
FREP XL-S600TC-16-37	16 AWG 7/.0192	37	0.025	0.080	0.951	613
FREP XL-S600TC-14-2	14 AWG 7/.0242	2	0.030	0.045	0.369	68
FREP XL-S600TC-14-3	14 AWG 7/.0242	3	0.030	0.045	0.391	90
FREP XL-S600TC-14-4	14 AWG 7/.0242	4	0.030	0.045	0.436	113
FREP XL-S600TC-14-5	14 AWG 7/.0242	5	0.030	0.045	0.465	136
FREP XL-S600TC-14-7	14 AWG 7/.0242	7	0.030	0.045	0.504	179
FREP XL-S600TC-14-9	14 AWG 7/.0242	9	0.030	0.060	0.623	246
FREP XL-S600TC-14-10	14 AWG 7/.0242	10	0.030	0.060	0.674	272
FREP XL-S600TC-14-12	14 AWG 7/.0242	12	0.030	0.060	0.696	314
FREP XL-S600TC-14-15	14 AWG 7/.0242	15	0.030	0.060	0.748	380
FREP XL-S600TC-14-19	14 AWG 7/.0242	19	0.030	0.060	0.809	466
FREP XL-S600TC-14-30	14 AWG 7/.0242	30	0.030	0.080	1.043	746
FREP XL-S600TC-14-37	14 AWG 7/.0242	37	0.030	0.080	1.121	896
FREP XL-S600TC-12-2	12 AWG 7/.0305	2	0.030	0.045	0.405	89
FREP XL-S600TC-12-3	12 AWG 7/.0305	3	0.030	0.045	0.430	120
FREP XL-S600TC-12-4	12 AWG 7/.0305	4	0.030	0.045	0.469	152
FREP XL-S600TC-12-5	12 AWG 7/.0305	5	0.030	0.045	0.514	185
FREP XL-S600TC-12-7	12 AWG 7/.0305	7	0.030	0.060	0.593	264
FREP XL-S600TC-12-9	12 AWG 7/.0305	9	0.030	0.060	0.688	333
FREP XL-S600TC-12-10	12 AWG 7/.0305	10	0.030	0.060	0.746	369
FREP XL-S600TC-12-12	12 AWG 7/.0305	12	0.030	0.060	0.771	429
FREP XL-S600TC-12-15	12 AWG 7/.0305	15	0.030	0.060	0.830	522
FREP XL-S600TC-12-19	12 AWG 7/.0305	19	0.030	0.080	0.939	679
FREP XL-S600TC-12-30	12 AWG 7/.0305	30	0.030	0.080	1.158	1029
FREP XL-S600TC-12-37	12 AWG 7/.0305	37	0.030	0.080	1.247	1243
FREP XL-S600TC-10-2	10 AWG 7/.0385	2	0.030	0.045	0.455	122
FREP XL-S600TC-10-3	10 AWG 7/.0385	3	0.030	0.045	0.484	167
FREP XL-S600TC-10-4	10 AWG 7/.0385	4	0.030	0.060	0.565	231
FREP XL-S600TC-10-5	10 AWG 7/.0385	5	0.030	0.060	0.617	280
FREP XL-S600TC-10-7	10 AWG 7/.0385	7	0.030	0.060	0.668	372
FREP XL-S600TC-10-9	10 AWG 7/.0385	9	0.030	0.060	0.779	471
FREP XL-S600TC-10-10	10 AWG 7/.0385	10	0.030	0.080	0.886	554
FREP XL-S600TC-10-12	10 AWG 7/.0385	12	0.030	0.080	0.915	643
FREP XL-S600TC-10-15	10 AWG 7/.0385	15	0.030	0.080	0.984	782
FREP XL-S600TC-10-19	10 AWG 7/.0385	19	0.030	0.080	1.066	967
FREP XL-S600TC-10-30	10 AWG 7/.0385	30	0.030	0.080	1.319	1477
FREP XL-S600TC-10-37	10 AWG 7/.0385	37	0.030	0.080	1.422	1792

Print: "BICC CABLES FREP XL XX/C XX AWG EPR/XL-CPE (UL) TYPE TC XHHW-2 CDRS DIR BUR SUN RES 600V" plus sequential footage mark.

Dimensions and weights are nominal, subject to industry tolerance.

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