FREP II-XL CONTROL CABLE

BICCCables

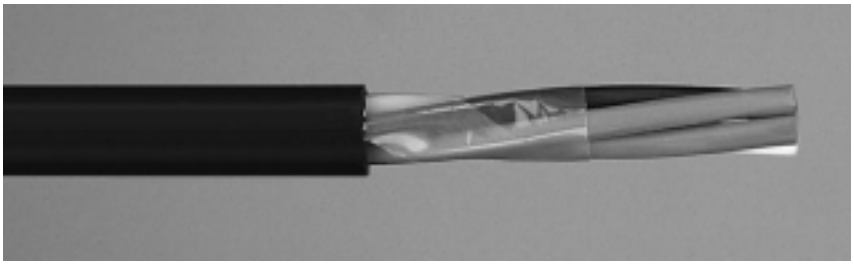
SPECIFICATION #FREP II-XL-C-0001

CONTROL CABLE

UL TYPE TC 600V

EPR/XL-LSZH

LOW SMOKE, ZERO HALOGEN



Description

Conductors:
Tinned, annealed copper per ASTM 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 where necessary and an overall binder tape.

Overall Jacket:
Flame-retardant, thermoset, Low Smoke, Zero Halogen polyolefin

Options:
- Bare copper conductors
- Insulated or uninsulated ground conductors
- Copper tape shield or aluminum/polymer tape shield with tinned copper drain wire over cable core

Features and Benefits

Temperature Rating:
- UL listed.....90°C Wet or Dry
- ICEA S-68-516.....90°C Wet or Dry

FREP II XL Control Cable Listings:
Insulated conductors are:
- UL Type XHHW-2, VW-1, 600V in sizes #14 AWG and larger
- ICEA S-68-516, 600V and 1000V

Complete cables are:
- UL Type TC in 600 Volts
- ICEA S-68-516, 600V and 1000V

Flame-Retardant EPR Insulation, UL Class XL and Type II in Accordance with ICEA S-68-516 (NEMA WC-8), 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 characteristics (insulated conductors pass low temperature cold bend test at -50°C; completed cable passes at -35°C

Cross-linked, Low Smoke, Zero Halogen Jacket:
- Provides a high degree of flame resistance
- Exhibits significant reduction in emission of smoke and halogens over more conventional cables under conditions of fire
- Provides improved personnel and equipment safety during the hazards of fire
- Rated oil res II
- Generates very low smoke during flaming mode

FREP II XL 600V Control Cables:
- Are OSHA acceptable
- Meet 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 minimal smoke and halogen emission when burned and flame retardance.

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)
- In enclosed areas where personnel and/or sensitive electronic equipment would be exposed to toxic emissions in the event of a fire

BICC Cables has made every effort to ensure the accuracy of the information provided in this catalog, however, we cannot be responsible for errors, omissions, or changes due to obsolescence. All data herein is subject to change without notice. Data and suggestions made in this catalog are not to be construed as recommendations to use any product in violation of any government law or regulations relating to any material or its use.

EFFECTIVE 1999-01-31

EPR/XL-LSZH CONTROL CABLE – UL TYPE 600V FREP II-XL LOW SMOKE, ZERO HALOGEN

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 II-XL-S600TC-18-2	18 AWG 7/.0152	2	0.025	0.045	0.297	43
FREP II-XL-S600TC-18-3	18 AWG 7/.0152	3	0.025	0.045	0.313	53
FREP II-XL-S600TC-18-4	18 AWG 7/.0152	4	0.025	0.045	0.339	65
FREP II-XL-S600TC-18-5	18 AWG 7/.0152	5	0.025	0.045	0.367	77
FREP II-XL-S600TC-18-7	18 AWG 7/.0152	7	0.025	0.045	0.396	97
FREP II-XL-S600TC-18-9	18 AWG 7/.0152	9	0.025	0.045	0.458	121
FREP II-XL-S600TC-18-10	18 AWG 7/.0152	10	0.025	0.045	0.495	134
FREP II-XL-S600TC-18-12	18 AWG 7/.0152	12	0.025	0.045	0.511	153
FREP II-XL-S600TC-18-15	18 AWG 7/.0152	15	0.025	0.060	0.585	205
FREP II-XL-S600TC-18-19	18 AWG 7/.0152	19	0.025	0.060	0.629	246
FREP II-XL-S600TC-18-30	18 AWG 7/.0152	30	0.025	0.060	0.770	364
FREP II-XL-S600TC-18-37	18 AWG 7/.0152	37	0.025	0.060	0.827	434
FREP II-XL-S600TC-16-2	16 AWG 7/.0192	2	0.025	0.045	0.321	53
FREP II-XL-S600TC-16-3	16 AWG 7/.0192	3	0.025	0.045	0.339	67
FREP II-XL-S600TC-16-4	16 AWG 7/.0192	4	0.025	0.045	0.368	83
FREP II-XL-S600TC-16-5	16 AWG 7/.0192	5	0.025	0.045	0.400	99
FREP II-XL-S600TC-16-7	16 AWG 7/.0192	7	0.025	0.045	0.432	127
FREP II-XL-S600TC-16-9	16 AWG 7/.0192	9	0.025	0.045	0.501	159
FREP II-XL-S600TC-16-10	16 AWG 7/.0192	10	0.025	0.060	0.578	197
FREP II-XL-S600TC-16-12	16 AWG 7/.0192	12	0.025	0.060	0.596	224
FREP II-XL-S600TC-16-15	16 AWG 7/.0192	15	0.025	0.060	0.639	268
FREP II-XL-S600TC-16-19	16 AWG 7/.0192	19	0.025	0.060	0.689	326
FREP II-XL-S600TC-16-30	16 AWG 7/.0192	30	0.025	0.080	0.887	523
FREP II-XL-S600TC-16-37	16 AWG 7/.0192	37	0.025	0.080	0.953	623
FREP II-XL-S600TC-14-2	14 AWG 7/.0242	2	0.030	0.045	0.369	71
FREP II-XL-S600TC-14-3	14 AWG 7/.0242	3	0.030	0.045	0.391	93
FREP II-XL-S600TC-14-4	14 AWG 7/.0242	4	0.030	0.045	0.436	116
FREP II-XL-S600TC-14-5	14 AWG 7/.0242	5	0.030	0.045	0.465	139
FREP II-XL-S600TC-14-7	14 AWG 7/.0242	7	0.030	0.045	0.504	182
FREP II-XL-S600TC-14-9	14 AWG 7/.0242	9	0.030	0.060	0.623	252
FREP II-XL-S600TC-14-10	14 AWG 7/.0242	10	0.030	0.060	0.674	278
FREP II-XL-S600TC-14-12	14 AWG 7/.0242	12	0.030	0.060	0.696	320
FREP II-XL-S600TC-14-15	14 AWG 7/.0242	15	0.030	0.060	0.748	386
FREP II-XL-S600TC-14-19	14 AWG 7/.0242	19	0.030	0.060	0.809	472
FREP II-XL-S600TC-14-30	14 AWG 7/.0242	30	0.030	0.080	1.043	756
FREP II-XL-S600TC-14-37	14 AWG 7/.0242	37	0.030	0.080	1.121	906
FREP II-XL-S600TC-12-2	12 AWG 7/.0305	2	0.030	0.045	0.405	93
FREP II-XL-S600TC-12-3	12 AWG 7/.0305	3	0.030	0.045	0.430	124
FREP II-XL-S600TC-12-4	12 AWG 7/.0305	4	0.030	0.045	0.469	156
FREP II-XL-S600TC-12-5	12 AWG 7/.0305	5	0.030	0.045	0.514	189
FREP II-XL-S600TC-12-7	12 AWG 7/.0305	7	0.030	0.060	0.593	271
FREP II-XL-S600TC-12-9	12 AWG 7/.0305	9	0.030	0.060	0.688	342
FREP II-XL-S600TC-12-10	12 AWG 7/.0305	10	0.030	0.060	0.746	378
FREP II-XL-S600TC-12-12	12 AWG 7/.0305	12	0.030	0.060	0.771	439
FREP II-XL-S600TC-12-15	12 AWG 7/.0305	15	0.030	0.060	0.830	532
FREP II-XL-S600TC-12-19	12 AWG 7/.0305	19	0.030	0.080	0.939	694
FREP II-XL-S600TC-12-30	12 AWG 7/.0305	30	0.030	0.080	1.158	1047
FREP II-XL-S600TC-12-37	12 AWG 7/.0305	37	0.030	0.080	1.247	1262
FREP II-XL-S600TC-10-2	10 AWG 7/.0385	2	0.030	0.045	0.455	125
FREP II-XL-S600TC-10-3	10 AWG 7/.0385	3	0.030	0.045	0.484	171
FREP II-XL-S600TC-10-4	10 AWG 7/.0385	4	0.030	0.060	0.565	238
FREP II-XL-S600TC-10-5	10 AWG 7/.0385	5	0.030	0.060	0.617	287
FREP II-XL-S600TC-10-7	10 AWG 7/.0385	7	0.030	0.060	0.668	378
FREP II-XL-S600TC-10-9	10 AWG 7/.0385	9	0.030	0.060	0.779	479
FREP II-XL-S600TC-10-10	10 AWG 7/.0385	10	0.030	0.080	0.886	566
FREP II-XL-S600TC-10-12	10 AWG 7/.0385	12	0.030	0.080	0.915	656
FREP II-XL-S600TC-10-15	10 AWG 7/.0385	15	0.030	0.080	0.986	796
FREP II-XL-S600TC-10-19	10 AWG 7/.0385	19	0.030	0.080	1.066	979
FREP II-XL-S600TC-10-30	10 AWG 7/.0385	30	0.030	0.080	1.319	1491
FREP II-XL-S600TC-10-37	10 AWG 7/.0385	37	0.030	0.080	1.422	1805

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

Dimensions and weights are nominal, subject to industry tolerance.

BICC Cables has made every effort to ensure the accuracy of the information provided in this catalog, however, we cannot be responsible for errors, omissions, or changes due to obsolescence. All data herein is subject to change without notice. Data and suggestions made in this catalog are not to be construed as recommendations to use any product in violation of any government law or regulations relating to any material or its use.
EFFECTIVE 1998-09-30