FREP CONTROL CABLE

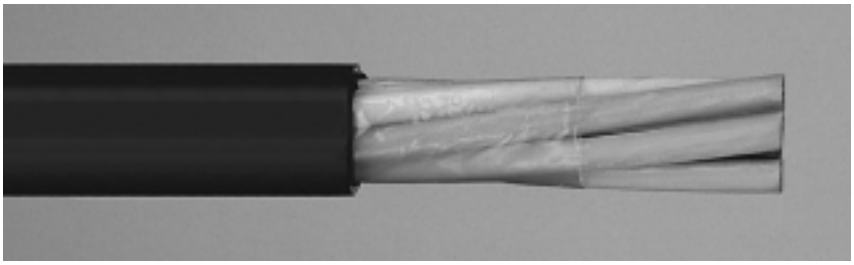
BICCCables

SPECIFICATION #FREP-C-0001

CONTROL CABLE

UL TYPE TC
600V

EPR/CPE



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-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 thermoplastic chlorinated polyethylene (CPE)

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
- Duralox® aluminum interlocked armor
- Table K-1 color code
- Thermoplastic Low Smoke, Zero Halogen jacket
- Thermoset Low Smoke, Zero Halogen jacket
- Intergrabon® Moisture Barrier System

Features and Benefits

Temperature Rating:
- ICEA & UL.....90°C Wet or Dry

EPR/CPE Control Cable Listing:
Insulated conductors are:
- UL Type XHHW-2, VW-1, 600V in sizes #14 AWG and larger
- ICEA S-68-516 – 600V

Complete cables are:
- UL Type TC – 600 Volts
- ICEA S-68-516 – 600V

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)

Flame-Retardant CPE Jacket Provides:
- Excellent flame resistance – burns to an ash; does not exhibit "thermoplastic drip"
- Low coefficient of friction for easy pulling
- Excellent thermal and mechanical properties
- Excellent balance of physical properties contributes to ease of installation
- Low heat deformation
- Sunlight and weather resistance
- UL Oil Resistant II

FREP 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 flame-retardance, resistance to moisture, chemicals, thermal stability and physical durability.

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

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EFFECTIVE 1999-01-31

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

BICC Part Number	AWG and Stranding	Number of Conductors	Insulation Thickness (inches	Jacket Thickness (inches	Nominal O.D. (inches	Net Weight (lbs/1000 ft)
T-87800(2/18)	18 AWG 7/.0152	2	0.025	0.045	0.295	41
T-87800(3/18)	18 AWG 7/.0152	3	0.025	0.045	0.310	51
T-87800(4/18)	18 AWG 7/.0152	4	0.025	0.045	0.340	62
T-87800(5/18)	18 AWG 7/.0152	5	0.025	0.045	0.365	74
T-87800(7/18)	18 AWG 7/.0152	7	0.025	0.045	0.395	95
T-87800(9/18)	18 AWG 7/.0152	9	0.025	0.045	0.455	121
T-87800(10/18)	18 AWG 7/.0152	10	0.025	0.045	0.485	134
T-87800(12/18)	18 AWG 7/.0152	12	0.025	0.045	0.510	150
T-87800(15/18)	18 AWG 7/.0152	15	0.025	0.060	0.580	195
T-87800(19/18)	18 AWG 7/.0152	19	0.025	0.060	0.625	235
T-87800(25/18)	18 AWG 7/.0152	25	0.025	0.060	0.720	308
T-87800(30/18)	18 AWG 7/.0152	30	0.025	0.060	0.770	355
T-87800(37/18)	18 AWG 7/.0152	37	0.025	0.060	0.830	425
T-87800(2/16)	16 AWG 7/.0192	2	0.025	0.045	0.320	51
T-87800(3/16)	16 AWG 7/.0192	3	0.025	0.045	0.340	65
T-87800(4/16)	16 AWG 7/.0192	4	0.025	0.045	0.365	80
T-87800(5/16)	16 AWG 7/.0192	5	0.025	0.045	0.400	97
T-87800(7/16)	16 AWG 7/.0192	7	0.025	0.045	0.430	126
T-87800(9/16)	16 AWG 7/.0192	9	0.025	0.045	0.500	160
T-87800(10/16)	16 AWG 7/.0192	10	0.025	0.060	0.565	192
T-87800(12/16)	16 AWG 7/.0192	12	0.025	0.060	0.590	215
T-87800(15/16)	16 AWG 7/.0192	15	0.025	0.060	0.640	262
T-87800(19/16)	16 AWG 7/.0192	19	0.025	0.060	0.690	318
T-87800(25/16)	16 AWG 7/.0192	25	0.025	0.060	0.795	413
T-87800(30/16)	16 AWG 7/.0192	30	0.025	0.080	0.890	507
T-87800(37/16)	16 AWG 7/.0192	37	0.025	0.080	0.955	609
T-87800(2/14)	14 AWG 7/.0242	2	0.030	0.045	0.370	71
T-87800(3/14)	14 AWG 7/.0242	3	0.030	0.045	0.390	92
T-87800(4/14)	14 AWG 7/.0242	4	0.030	0.045	0.425	115
T-87800(5/14)	14 AWG 7/.0242	5	0.030	0.045	0.465	139
T-87800(7/14)	14 AWG 7/.0242	7	0.030	0.045	0.505	183
T-87800(9/14)	14 AWG 7/.0242	9	0.030	0.060	0.620	250
T-87800(10/14)	14 AWG 7/.0242	10	0.030	0.060	0.670	281
T-87800(12/14)	14 AWG 7/.0242	12	0.030	0.060	0.700	317
T-87800(15/14)	14 AWG 7/.0242	15	0.030	0.060	0.755	383
T-87800(19/14)	14 AWG 7/.0242	19	0.030	0.060	0.815	468
T-87800(25/14)	14 AWG 7/.0242	25	0.030	0.080	0.985	645
T-87800(30/14)	14 AWG 7/.0242	30	0.030	0.080	1.050	747
T-87800(37/14)	14 AWG 7/.0242	37	0.030	0.080	1.130	897
T-87800(2/12)	12 AWG 7/.0305	2	0.030	0.045	0.410	94
T-87800(3/12)	12 AWG 7/.0305	3	0.030	0.045	0.435	124
T-87800(4/12)	12 AWG 7/.0305	4	0.030	0.045	0.475	157
T-87800(5/12)	12 AWG 7/.0305	5	0.030	0.045	0.520	191
T-87800(7/12)	12 AWG 7/.0305	7	0.030	0.060	0.595	268
T-87800(9/12)	12 AWG 7/.0305	9	0.030	0.060	0.695	347
T-87800(10/12)	12 AWG 7/.0305	10	0.030	0.060	0.745	385
T-87800(12/12)	12 AWG 7/.0305	12	0.030	0.060	0.780	437
T-87800(15/12)	12 AWG 7/.0305	15	0.030	0.080	0.880	561
T-87800(19/12)	12 AWG 7/.0305	19	0.030	0.080	0.955	688
T-87800(25/12)	12 AWG 7/.0305	25	0.030	0.080	1.095	894
T-87800(30/12)	12 AWG 7/.0305	30	0.030	0.080	1.175	1040
T-87800(37/12)	12 AWG 7/.0305	37	0.030	0.080	1.265	1256
T-87800(2/10)	10 AWG 7/.0385	2	0.030	0.045	0.455	128
T-87800(3/10)	10 AWG 7/.0385	3	0.030	0.045	0.485	172
T-87800(4/10)	10 AWG 7/.0385	4	0.030	0.060	0.560	234
T-87800(5/10)	10 AWG 7/.0385	5	0.030	0.060	0.615	284
T-87800(7/10)	10 AWG 7/.0385	7	0.030	0.060	0.670	381
T-87800(9/10)	10 AWG 7/.0385	9	0.030	0.060	0.785	488
T-87800(10/10)	10 AWG 7/.0385	10	0.030	0.080	0.880	572
T-87800(12/10)	10 AWG 7/.0385	12	0.030	0.080	0.920	651
T-87800(15/10)	10 AWG 7/.0385	15	0.030	0.080	0.990	794
T-87800(19/10)	10 AWG 7/.0385	19	0.030	0.080	1.075	976
Print: BICC CABLES FREP XX/C XXAWG EPR/CPE (UL) TYPE TC XHHW-2 CDRS BUR SUN RES 600V, SEQUENTIAL FOOTAGE MARK						

Dimensions and weights are nominal, subject to industry tolerance.

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EFFECTIVE 1998-09-30