



LISTED file n° E300607

TECHNICAL FEATURES

Conductor

Electrolytic copper Cu-ETP 99.90%

Laminate thickness 0.5 ÷ 1 mm

Insulation

Self-extinguishing PVC UL94V0

Fire Class: V0

Thickness: 2 mm

Max. elongation: 365%

Shore hardness: 85 A

Tensile strength: 19.6 MPa

Recyclable

Finished product

Dielectric rigidity: 20Kv/mm

Rated voltage: 1000Vac/1500 Vdc

Working temperature: from -40 to +105°C

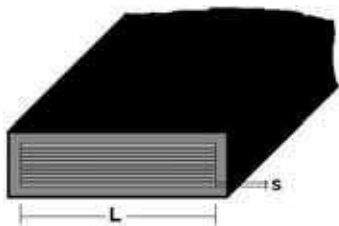
Reference example

BFX 20X4X1

Laminate width: L = 20 mm

Laminate number: 4

Laminate thickness: s = 1 mm



Selection based on temperature

In = Rated current A

Tf = Working temperature °C

Ta = Room temperature °C

ΔT = Heat increase °C

For an **In = 630 A** at **Tf = 80°C**

we can use as an example a

BFX 8x32x1 at **ΔT 40°C**

where:

BFX 8x32x1 = In **690 A** with **ΔT** di 40°C

Ta = 40°C

Tf = **Ta + ΔT** = 40° + 40° = **80°C**

Icc value (1 second)

(effective short-circuit current)

based on the following calculation

Calculation parameters

Initial temperature:

105°C - maximum working temperature of the conductor

Final temperature:

160°C - limit of temperature for PVC insulation compliant with IEC 60724 for cross-sections < 300 mm²

140°C - limit of temperature for PVC insulation compliant with IEC 60724 for cross-section > 300 mm²

Table of ampacities (A) based on temperature increase **ΔT** as per IEC 439-1

Reference room temperature 40°C

INSULATED FLEXIBLE COPPER BARS LENGTH 2 METERS

L	Code	Reference			kg	Sect. mm²	Icc (Amp)	Temperature increase ΔT (°C)				
								65°	50°	40°	30°	20°
								Rated intensity In (Amp)				
9	BFX1005	BFX 3X9X0,8	1	27	0.47	22	1879	190	165	140	120	95
	BFX1020	BFX 6X9X0,8	1	27	0.87	43	3757	295	255	210	175	135
	BFX1021	BFX 9X9X0,8	1	27	1.17	65	5636	385	330	270	225	175
13	BFX1022	BFX 3X13X0,5	1	24	0.43	20	1696	195	170	140	120	80
	BFX1023	BFX 6X13X0,5	1	12	0.80	39	3392	285	250	210	170	130
	BFX1024	BFX 10X13X0,5	1	12	1.33	65	5653	385	330	270	230	180
15,5	BFX1025	BFX 2X15,5X0,8	1	24	0.51	25	2157	230	200	170	140	120
	BFX1035	BFX 4X15,5X0,8	1	24	1.01	50	4314	340	295	245	210	160
	BFX1045	BFX 6X15,5X0,8	1	12	1.46	74	6470	430	375	305	260	200
	BFX1050	BFX 10X15,5X0,8	1	12	2.36	124	10784	590	510	410	345	270
20	BFX1055	BFX 2X20X1	1	20	0.85	40	3479	320	280	230	195	150
	BFX1060	BFX 3X20X1	1	20	1.21	60	5218	400	345	285	240	185
	BFX1065	BFX 4X20X1	1	20	1.58	80	6957	470	410	335	280	215
	BFX1070	BFX 5X20X1	1	10	1.94	100	8697	535	465	375	315	245
	BFX1075	BFX 6X20X1	1	10	2.30	120	10436	595	515	415	350	270
	BFX1076	BFX 8X20X1	1	10	3.00	160	13915	685	585	490	410	320
	BFX1080	BFX 10X20X1	1	10	3.74	200	17394	810	705	560	470	365
24	BFX1085	BFX 2X24X1	1	16	1.02	48	4174	370	320	265	225	175
	BFX1090	BFX 3X24X1	1	16	1.45	72	6262	465	400	330	275	215
	BFX1095	BFX 4X24X1	1	16	1.88	96	8349	545	470	380	320	250
	BFX1100	BFX 5X24X1	1	16	2.32	120	10436	615	535	440	360	280
	BFX1105	BFX 6X24X1	1	8	2.75	144	12523	680	590	475	400	310
	BFX1110	BFX 8X24X1	1	8	3.61	192	16698	810	700	560	470	370
	BFX1115	BFX 10X24X1	1	8	4.48	240	20872	925	800	630	530	410
32	BFX1120	BFX 2X32X1	1	12	1.35	64	5566	475	410	335	280	220
	BFX1125	BFX 3X32X1	1	12	1.92	96	8349	585	510	410	295	270
	BFX1130	BFX 4X32X1	1	12	2.50	128	11132	685	590	480	400	310
	BFX1135	BFX 5X32X1	1	12	3.07	160	13915	775	670	540	450	350
	BFX1140	BFX 6X32X1	1	6	3.65	192	16698	855	735	600	500	385
	BFX1145	BFX 8X32X1	1	6	4.80	256	22264	1000	870	690	580	450
	BFX1150	BFX 10X32X1	1	6	5.95	320	22496	1135	980	780	655	510
40	BFX1155	BFX 2X40X1	1	12	1.67	80	6957	575	495	400	335	260
	BFX1160	BFX 3X40X1	1	12	2.39	120	10436	705	615	490	415	320
	BFX1165	BFX 4X40X1	1	12	3.11	160	13915	820	715	570	480	375
	BFX1170	BFX 5X40X1	1	6	3.83	200	17394	925	805	640	540	420
	BFX1175	BFX 6X40X1	1	6	4.54	240	20872	1020	880	705	590	460
	BFX1180	BFX 8X40X1	1	6	5.94	320	22496	1195	1035	815	685	530
	BFX1185	BFX 10X40X1	1	6	7.41	400	28120	1340	1160	915	770	595
50	BFX1190	BFX 3X50X1	1	10	2.98	150	13045	855	745	590	495	385
	BFX1195	BFX 4X50X1	1	10	3.88	200	17394	990	860	685	575	445
	BFX1200	BFX 5X50X1	1	5	4.77	250	21742	1110	965	770	645	500
	BFX1205	BFX 6X50X1	1	5	5.67	300	22090	1220	1060	840	705	545
	BFX1210	BFX 8X50X1	1	3	7.46	400	28120	1410	1220	970	815	620
	BFX1215	BFX 10X50X1	1	3	9.25	500	35150	1585	1370	1080	905	705
63	BFX1220	BFX 3X63X1	1	8	3.75	189	16437	1050	900	715	600	460
	BFX1225	BFX 4X63X1	1	8	4.87	252	21916	1200	1040	825	680	535
	BFX1230	BFX 5X63X1	1	4	6.00	315	22144	1340	1160	925	775	600
	BFX1235	BFX 6X63X1	1	4	7.13	378	26573	1470	1270	1010	840	650
	BFX1240	BFX 8X63X1	1	4	9.38	504	35431	1680	1460	1160	970	750
	BFX1245	BFX 10X63X1	1	2	11.63	630	44288	1875	1625	1280	1075	830
80	BFX1250	BFX 3X80X1	1	4	4.75	240	20872	1280	1115	870	730	560
	BFX1255	BFX 4X80X1	1	4	6.17	320	22496	1475	1275	1010	865	650
	BFX1260	BFX 5X80X1	1	4	7.60	400	28120	1640	1425	1120	935	725
	BFX1265	BFX 6X80X1	1	4	9.03	480	33744	1780	1550	1220	1025	790
	BFX1270	BFX 8X80X1	1	2	11.89	640	44991	2045	1775	1390	1170	910
	BFX1275	BFX 10X80X1	1	2	14.75	800	56239	2260	1960	1545	1300	1005
100	BFX1280	BFX 4X100X1	1	4	7.71	400	28120	1780	1550	1210	1015	785
	BFX1285	BFX 5X100X1	1	4	9.49	500	35150	1980	1720	1350	1125	875
	BFX1290	BFX 6X100X1	1	2	11.28	600	42179	2150	1870	1455	1225	950
	BFX1295	BFX 8X100X1	1	2	14.85	800	56239	2410	2110	1655	1395	1080
	BFX1300	BFX 10X100X1	1	2	18.42	1000	70299	2680	2325	1830	1545	1190
	BFX1305	BFX 12X100X1	1	2	21.99	1200	84359	3135	2720	2135	1800	1385