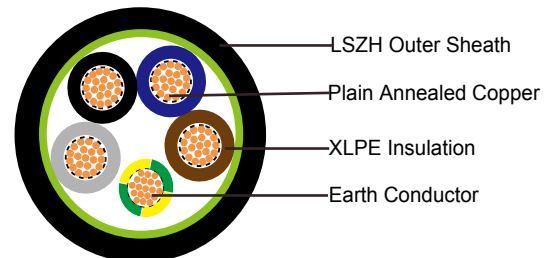
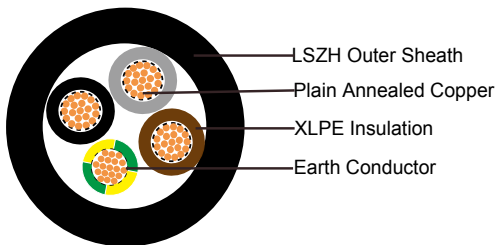
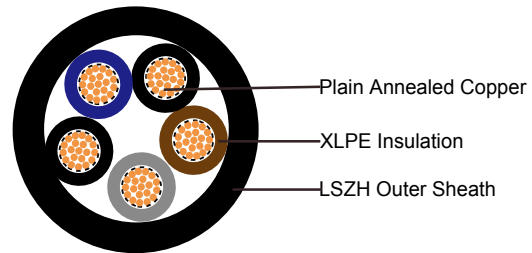
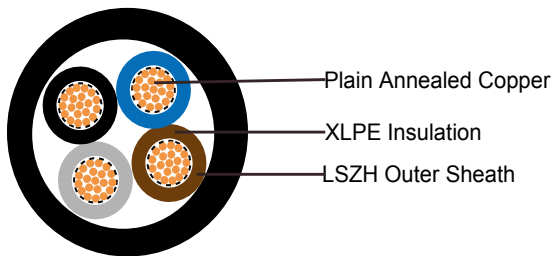
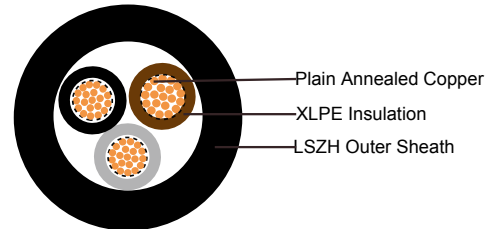
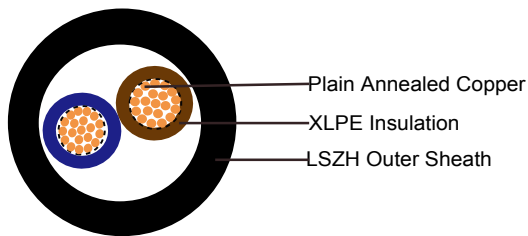




600/1000V XLPE Insulated, LSZH Sheathed, Power Cables (Multicore)

FTX400 1RZ1-R (CU/XLPE/LSZH 600/1000V Class 2)

Indoor Lighting, Socket and UPS Outlet Power Cables



APPLICATION

The cables are mainly used in power stations, mass transit underground passenger systems, airports, petrochemical plants, hotels, hospitals, and high-rise buildings.

STANDARDS

Basic design to IEC 60502-1

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*

No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic Gases	NES 02-713; NF C 20-454

Note: Asterisk * denotes superseded standard.

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Plain annealed copper wire, stranded according to IEC 60228 class 2.

Insulation: Extruded cross-linked XLPE compound.

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1.

COLOUR CODE

Insulation Colour as per BS7671

	With Earth Conductor	Without Earth Conductor
2 Cores	-	Brown, Blue
3 Cores	Yellow/Green, Brown, Blue	Brown, Gray, Black
4 Cores	Yellow/Green, Brown, Gray, Black	Brown, Gray, Black, Blue
5 Cores	Yellow/Green, Brown, Gray, Black, Blue	Brown, Gray, Black, Blue, Black
Above 5 Cores	Yellow/Green, Black Numbered	Black Numbered

Sheath Colour: Black (other colors upon request)

PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation: -30°C ~ 90°C

Temperature Range during Installation : -5°C ~ 50°C

Minimum Bending Radius: 6 x OD

ELECTRICAL PROPERTIES

Dielectric Test:	3500 V r.m.s. x 5' (core / core)
Insulation Resistance	500 MΩ x km (at 20°C)
Short circuit Temperature	250°C (up to 5 secs)

CONSTRUCTION PARAMETERS

Cable Code	Conductor			Nominal Overall Diameter	Approx. Weight
	No. of Core X Cross Section / CPC Cross Section	No./Nominal Diameter of Strands	Nominal Insulation Thickness		



	No.×mm ²	No./mm	mm	mm	mm
2 CORES					
FTX400 1RZ1-R 2G1.5	2x1.5	7/0.53	0.7	10.0	126
FTX400 1RZ1-R 2G2.5	2x2.5	7/0.67	0.7	10.8	158
FTX400 1RZ1-R 2G4	2x4	7/0.85	0.7	11.9	205
FTX400 1RZ1-R 2G6	2x6	7/1.04	0.7	13.0	264
FTX400 1RZ1-R 2G10	2x10	7/1.35	0.7	14.9	378
FTX400 1RZ1-R 2G16	2x16	7/1.70	0.7	17.0	534
FTX400 1RZ1-R 2G25	2x25	7/2.14	0.9	20.4	650
FTX400 1RZ1-R 2G35	2x35	7/2.52	0.9	22.7	880
3 CORES					
FTX400 1RZ1-R 3G1.5	3x1.5	7/0.53	0.7	10.5	145
FTX400 1RZ1-R 3G2.5	3x2.5	7/0.67	0.7	11.4	185
FTX400 1RZ1-R 3G4	3x4	7/0.85	0.7	12.5	247
FTX400 1RZ1-R 3G6	3x6	7/1.04	0.7	13.8	323
FTX400 1RZ1-R 3G10	3x10	7/1.35	0.7	15.8	474
FTX400 1RZ1-R 3G16	3x16	7/1.70	0.7	18.0	682
FTX400 1RZ1-R 3G25	3x25	7/2.14	0.9	21.7	910
FTX400 1RZ1-R 3G35	3x35	7/2.52	0.9	24.0	1180
FTX400 1RZ1-R 3G50	3x50(S)	19/1.78	1.0	25.5	1600
FTX400 1RZ1-R 3G70	3x70(S)	19/2.14	1.1	29.0	2240
FTX400 1RZ1-R 3G95	3x95(S)	19/2.52	1.1	33.5	3050
FTX400 1RZ1-R 3G120	3x120(S)	37/2.03	1.2	37.5	3800
FTX400 1RZ1-R 3G150	3x150(S)	37/2.25	1.4	40.5	4640
FTX400 1RZ1-R 3G185	3x185(S)	37/2.52	1.6	45.0	5870
FTX400 1RZ1-R 3G40	3x240(S)	61/2.25	1.7	50.5	7670
FTX400 1RZ1-R 3G300	3x300(S)	61/2.52	1.8	57.0	9460
FTX400 1RZ1-R 3G400	3x400(S)	61/2.85	2.0	63.0	11945
3 CORE + 1 EARTH CONDUCTOR					
FTX400 1RZ1-R 3G16/6	3x16/6	7/1.70	0.7	16.5	698
FTX400 1RZ1-R 3G16/10	3x16/10	7/1.70	0.7	18.85	793

FTX400 1RZ1-R 3G25/6	3x25/6	7/2.14	0.9	21.7	956
FTX400 1RZ1-R 3G25/10	3x25/10	7/2.14	0.9	22.1	1021
FTX400 1RZ1-R 3G25/16	3x25/16	7/2.14	0.9	23.0	1070
FTX400 1RZ1-R 3G35/10	3x35/10	19/1.53	0.9	22.9	1263
FTX400 1RZ1-R 3G35/16	3x35/16	19/1.53	0.9	24.3	1349
FTX400 1RZ1-R 3G35/25	3x35/25	19/1.53	0.9	25.2	1470
FTX400 1RZ1-R 3G50/16	3x50/16	19/1.78	1.0	26.1	1769
FTX400 1RZ1-R 3G50/25	3x50/25	19/1.78	1.0	27.3	1890
FTX400 1RZ1-R 3G50/35	3x50/35	19/1.78	1.0	27.8	1995
FTX400 1RZ1-R 3G70/25	3x70/25	19/2.14	1.1	30.2	2530
FTX400 1RZ1-R 3G70/35	3x70/35	19/2.14	1.1	30.9	2660
FTX400 1RZ1-R 3G70/50	3x70/50	19/2.14	1.1	31.5	2840
FTX400 1RZ1-R 3G95/25	3x95/25	19/2.52	1.1	35.1	3340
FTX400 1RZ1-R 3G95/35	3x95/35	19/2.52	1.1	36.0	3470
FTX400 1RZ1-R 3G95/50	3x95/50	19/2.52	1.1	36.8	3650
FTX400 1RZ1-R 3G95/70	3x95/70	19/2.52	1.1	36.9	3890
FTX400 1RZ1-R 3G120/35	3x120/35	37/2.03	1.2	38.2	3920
FTX400 1RZ1-R 3G120/50	3x120/50	37/2.03	1.2	39.1	4400
FTX400 1RZ1-R 3G120/70	3x120/70	37/2.03	1.2	40.0	4610
FTX400 1RZ1-R 3G120/95	3x120/95	37/2.03	1.2	41.2	4820
FTX400 1RZ1-R 3G150/50	3x150/50	37/2.25	1.4	41.5	5240
FTX400 1RZ1-R 3G150/70	3x150/70	37/2.25	1.4	42.3	5450
FTX400 1RZ1-R 3G150/95	3x150/95	37/2.25	1.4	43.6	5660
FTX400 1RZ1-R 3G150/120	3x150/120	37/2.25	1.4	44.8	6240
FTX400 1RZ1-R 3G185/70	3x185/70	37/2.52	1.6	47.5	6680
FTX400 1RZ1-R 3G185/95	3x185/95	37/2.52	1.6	47.9	6990
FTX400 1RZ1-R 3G185/120	3x185/120	37/2.52	1.6	48.5	7395
FTX400 1RZ1-R 3G185/150	3x185/150	37/2.52	1.6	49.2	7580
FTX400 1RZ1-R 3G240/95	3x240/95	61/2.25	1.7	53.4	8690



FTX400 1RZ1-R 3G240/120	3x240/120	61/2.25	1.7	54.9	9095
FTX400 1RZ1-R 3G240/150	3x240/150	61/2.25	1.7	55.6	9380
FTX400 1RZ1-R 3G240/185	3x240/185	61/2.25	1.7	56.8	9687
FTX400 1RZ1-R 3G300/120	3x300/120	61/2.52	1.8	58.1	10480
FTX400 1RZ1-R 3G300/150	3x300/150	61/2.52	1.8	57.3	11170
FTX400 1RZ1-R 3G300/185	3x300/185	61/2.52	1.8	58.7	11480
FTX400 1RZ1-R 3G300/240	3x300/240	61/2.52	1.8	62.4	11290
4 CORES					
FTX400 1RZ1-R 4G1.5	4x1.5	7/0.53	0.7	11.3	169
FTX400 1RZ1-R 4G2.5	4x2.5	7/0.67	0.7	12.3	220
FTX400 1RZ1-R 4G4	4x4	7/0.85	0.7	13.6	297
FTX400 1RZ1-R 4G6	4x6	7/1.04	0.7	15.0	392
FTX400 1RZ1-R 4G10	4x10	7/1.35	0.7	17.2	585
FTX400 1RZ1-R 4G16	4x16	7/1.70	0.7	19.7	851
FTX400 1RZ1-R 4G25	4x25	7/2.14	0.9	23.9	1200
FTX400 1RZ1-R 4G35	4x35(S)	7/2.52	0.9	25.0	1600
FTX400 1RZ1-R 4G50	4x50(S)	19/1.78	1.0	28.0	2200
FTX400 1RZ1-R 4G70	4x70(S)	19/2.14	1.1	32.0	3050
FTX400 1RZ1-R 4G95	4x95(S)	19/2.52	1.1	37.0	4070
FTX400 1RZ1-R 4G120	4x120(S)	37/2.03	1.2	42.0	5915
FTX400 1RZ1-R 4G150	4x150(S)	37/2.25	1.4	46.0	6350
FTX400 1RZ1-R 4G185	4x185(S)	37/2.52	1.6	50.0	7890
FTX400 1RZ1-R 4G240	4x240(S)	61/2.25	1.7	57.0	10400
FTX400 1RZ1-R 4G300	4x300(S)	61/2.52	1.8	63.0	12810
FTX400 1RZ1-R 4G400	4x400(S)	61/2.85	2.0	71.0	15869
FTX400 1RZ1-R 4G500	4x500(S)	61/3.20	2.2	78.0	20300
4 CORE + 1 EARTH CONDUCTOR					
FTX400 1RZ1-R 4G16/6	4x16/6	7/1.70	0.7	19	654
FTX400 1RZ1-R 4G16/10	4x16/10	7/1.70	0.7	21.9	962
FTX400 1RZ1-R 4G25/6	4x25/10	7/2.14	0.7	25.3	1256

FTX400 1RZ1-R 4G25/10	4x25/10	7/2.14	0.7	26.6	1311
FTX400 1RZ1-R 4G25/16	4x25/16	7/2.14	0.7	27.3	1369
FTX400 1RZ1-R 4G35/10	4x35/10	19/1.53	0.9	26.8	1658
FTX400 1RZ1-R 4G35/16	4x35/16	19/1.53	0.9	27.6	1769
FTX400 1RZ1-R 4G35/25	4x35/25	19/1.53	0.9	28.4	1890
FTX400 1RZ1-R 4G50/16	4x50/16	19/1.78	1.0	29.4	2369
FTX400 1RZ1-R 4G50/25	4x50/25	19/1.78	1.0	31.6	2490
FTX400 1RZ1-R 4G50/35	4x50/35	19/1.78	1.0	33.2	2599
FTX400 1RZ1-R 4G70/25	4x70/25	19/2.14	1.1	34.2	3340
FTX400 1RZ1-R 4G70/35	4x70/35	19/2.14	1.1	35.6	3470
FTX400 1RZ1-R 4G70/50	4x70/50	19/2.14	1.1	37.8	3650
FTX400 1RZ1-R 4G95/25	4x95/25	19/2.52	1.1	42.6	4360
FTX400 1RZ1-R 4G95/35	4x95/35	19/2.52	1.1	43.3	4510
FTX400 1RZ1-R 4G95/50	4x95/50	19/2.52	1.1	44.1	4670
FTX400 1RZ1-R 4G95/70	4x95/70	19/2.52	1.1	45.3	4783
FTX400 1RZ1-R 4G120/35	4x120/35	37/2.03	1.2	42.6	6335
FTX400 1RZ1-R 4G120/50	4x120/50	37/2.03	1.2	43.8	6515
FTX400 1RZ1-R 4G120/70	4x120/70	37/2.03	1.2	45.9	6725
FTX400 1RZ1-R 4G120/95	4x120/95	37/2.03	1.2	46.4	6920
FTX400 1RZ1-R 4G150/50	4x150/50	37/2.25	1.4	47.3	6950
FTX400 1RZ1-R 4G150/70	4x150/70	37/2.25	1.4	48.5	7160
FTX400 1RZ1-R 4G150/95	4x150/95	37/2.25	1.4	50.2	7370
FTX400 1RZ1-R 4G150/120	4x150/120	37/2.25	1.4	53.7	7965
FTX400 1RZ1-R 4G185/70	4x185/70	37/2.52	1.6	52.4	8490
FTX400 1RZ1-R 4G185/95	4x185/95	37/2.52	1.6	53.9	8700
FTX400 1RZ1-R 4G185/120	4x185/120	37/2.52	1.6	55.6	8910
FTX400 1RZ1-R 4G185/150	4x185/150	37/2.52	1.6	59.4	9260
FTX400 1RZ1-R 4G240/95	4x240/95	61/2.25	1.7	61.9	11210
FTX400 1RZ1-R 4G240/120	4x240/120	61/2.25	1.7	63.4	11420
FTX400 1RZ1-R 4G240/150	4x240/150	61/2.25	1.7	63.9	12010
FTX400 1RZ1-R 4G240/185	4x240/185	61/2.25	1.7	64.3	12090



FTX400 1RZ1-R 4G300/120	4x300/120	61/2.52	1.8	64.0	12110
FTX400 1RZ1-R 4G300/150	4x300/150	61/2.52	1.8	66.1	13830
FTX400 1RZ1-R 4G300/185	4x300/185	61/2.52	1.8	71.5	14520
FTX400 1RZ1-R 4G300/240	4x300/240	61/2.52	1.8	72.0	14830
5 CORES					
FTX400 1RZ1-R 5G1.5	5x1.5	7/0.53	0.7	13.7	205
FTX400 1RZ1-R 5G2.5	5x2.5	7/0.85	0.7	14.9	265
FTX400 1RZ1-R 5G4	5x4	7/0.85	0.7	16.3	360
FTX400 1RZ1-R 5G6	5x6	7/1.04	0.7	18.2	478
FTX400 1RZ1-R 5G10	5x10	7/1.04	0.7	20.8	720
FTX400 1RZ1-R 5G16	5x16	7/1.04	0.7	24.2	1050
FTX400 1RZ1-R 5G25	5x25	7/1.04	0.7	29.4	1485
FTX400 1RZ1-R 5G35	5x35(S)	7/2.52	0.9	30.3	1940
FTX400 1RZ1-R 5G50	5x50(S)	19/1.78	1.0	34	2667
FTX400 1RZ1-R 5G70	5x70(S)	19/2.14	1.1	38.5	3698
FTX400 1RZ1-R 5G95	5x95(S)	19/2.52	1.1	44.6	4934
FTX400 1RZ1-R 5G120	5x120(S)	37/2.03	1.2	45.8	7171
FTX400 1RZ1-R 5G150	5x150(S)	37/2.25	1.4	55.6	7699
FTX400 1RZ1-R 5G185	5x185(S)	37/2.52	1.6	60.4	9566
FTX400 1RZ1-R 5G240	5x240(S)	61/2.25	1.7	69.1	12610
FTX400 1RZ1-R 5G300	5x300(S)	61/2.52	1.8	76.4	15532
FTX400 1RZ1-R 5G400	5x400(S)	61/2.85	2.0	86.1	19241
FTX400 1RZ1-R 5G500	5x500(S)	61/3.20	2.2	94.4	24613

ELECTRICAL PROPERTIES

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

Current-Carrying Capacities (Amp)

Conductor cross-sectional area	Reference Method 4 (enclosed in conduit in thermally insulating wall etc)	Reference Method 3 (enclosed in conduit on a wall or in trunking etc)	Reference Method 1 (clipped direct)	Reference Method 11 (on a perforated cable tray, horizontal or vertical)	Reference Method 12 (free air)		
					Horizontal flat spaced	Vertical flat spaced	Trefoil

	2 cables, single-phase a.c. or d.c.	3 or 4 cables, 3-phase a.c.	2 cables, single-phase a.c. or d.c.	3 or 4 cables, 3-phase a.c.	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, 3-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. flat and touching	3 or 4 cables, 3-phase a.c. flat and touching or trefoil	2 cables, single-phase a.c. or d.c. or 3 cables three phase	2 cables, single-phase a.c. or d.c. or 3 cables three phase	3 cables, trefoil 3-phase a.c.
1	2	3	4	5	6	7	8	9	10	11	12
mm ²	A	A	A	A	A	A	A	A	A	A	A
1.5	18	17	22	19	25	23	-	-	-	-	-
2.5	24	23	30	26	34	31	-	-	-	-	-
4	33	30	40	35	46	41	-	-	-	-	-
6	43	39	51	45	59	54	-	-	-	-	-
10	58	53	71	63	81	74	-	-	-	-	-
16	76	70	95	85	109	99	-	-	-	-	-
25	100	91	126	111	143	130	158	140	183	163	138
35	125	111	156	138	176	161	195	176	226	203	171
50	149	135	189	168	228	209	293	215	274	246	209
70	189	170	240	214	293	268	308	279	351	318	270
95	228	205	290	259	355	326	375	341	426	389	330
120	263	235	336	299	413	379	436	398	495	453	385
150	300	270	375	328	476	436	505	461	570	524	445
185	341	306	426	370	545	500	579	530	651	600	511
240	400	358	500	433	644	590	686	630	769	711	606
300	459	410	573	493	743	681	794	730	886	824	701
400	-	-	684	584	868	793	915	849	1065	994	820
500	-	-	783	666	990	904	1044	973	1228	1150	936

Voltage Drop (Per Amp Per Meter)

Size of conductor	2 cables d.c.	2 cables, single-phase a.c.		3 or 4 cables, 3-phase a.c.		
		Ref. Methods 3 and 4 (enclosed in conduit etc, in or on a wall)	Ref. Methods 1 and 11 (clipped direct or on trays touching)	Ref. Methods 3 and 4 (enclosed in conduit etc, in or on a wall)	Ref. Methods 1, 11 and 12 (in trefoil)	Ref. Methods 1 and 11 (Flat and touching)
1	2	3	4	5	6	7
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
1.5	31	31	27	27	27	27



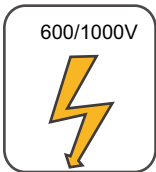
2.5	19	19			16			16			16			16		
4	33	12			10			10			10			10		
6	7.8	7.9			6.8			6.8			6.8			6.8		
10	4.7	4.7			4.7			4			4			4		
16	2.9	2.9			2.9			2.5			2.5			2.5		
		r	x	z	r	x	z	r	x	z	r	x	z	r	x	z
25	1.85	1.85	0.31	1.90	1.85	0.190	1.85	1.60	0.27	1.65	1.600	0.165	1.600	1.600	0.190	1.600
35	1.35	1.35	0.29	1.35	1.35	0.180	1.35	1.15	0.25	1.15	1.150	0.155	1.50	1.150	0.180	1.150
50	0.99	1.00	0.29	1.05	0.99	0.180	1.00	0.87	0.25	0.90	0.860	0.155	0.870	0.860	0.180	0.870
70	0.68	0.70	0.28	0.75	0.68	0.175	0.71	0.60	0.24	0.65	0.590	0.150	0.610	0.590	0.175	0.620
95	0.49	0.51	0.27	0.58	0.49	0.170	0.52	0.44	0.23	0.50	0.430	0.145	0.450	0.430	0.170	0.460
120	0.39	0.41	0.26	0.48	0.39	0.165	0.43	0.35	0.23	0.42	0.340	0.140	0.370	0.340	0.165	0.380
150	0.32	0.33	0.26	0.43	0.32	0.165	0.36	0.29	0.23	0.37	0.280	0.140	0.310	0.280	0.165	0.320
185	0.25	0.27	0.26	0.37	0.26	0.165	0.30	0.23	0.23	0.32	0.220	0.140	0.260	0.220	0.165	0.280
240	0.19	0.21	0.26	0.33	0.20	0.160	0.25	0.185	0.22	0.29	0.170	0.140	0.220	0.170	0.165	0.240
300	0.155	0.175	0.25	0.31	0.16	0.160	0.22	0.150	0.22	0.27	0.140	0.140	0.195	0.135	0.160	0.210
400	0.12	0.140	0.25	0.29	0.13	0.155	0.20	0.125	0.22	0.25	0.110	0.135	0.175	0.110	0.160	0.195
500	0.093	0.120	0.25	0.28	0.105	0.155	0.185	0.100	0.22	0.24	0.090	0.135	0.160	0.088	0.160	0.180

Note :

r = conductor resistance at operating temperature

x = reactance

z = impedance



600/1000V

Rated Voltage



IEC 60502-1

Standard



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4



Flame Retardancy
NF C32-070-2.1(C2)

IEC60332-1-2/EN50265-2-1



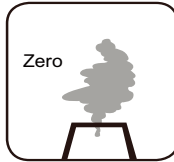
Low Toxicity
NES 02-713/NF C 20-454



Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074



Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073



Zero

Halogen Free
IEC60754-1
EN50267-2-1