PLAIN POLYESTER FILM CAPACITORS
(Inductive)

MAIN APPLICATION: Blocking, bypassing, filtering, coupling and decoupling, interference suppression in low voltage application, low pulse application

CONSTRUCTION: Film/foil inductive type construction with aluminum foil as electrode and polyester (PET) film as dielectric, coated with flame retardant epoxy resin

CLIMATIC CATEGORY: 40/100/56

MAX. OPERATING TEMPERATURE: 125° C
Between 85° C and 125° C, a voltage derating of 1.25% per °C on the rated voltage has to be applied

APPLICABLE SPECIFICATION: IEC 384-11

CAP. VALUE, RATED VOLTAGE (DC): Refer dimension chart

CAPACITANCE TOLERANCE: ±5%, ±10%

VOLTAGE PROOF: Between terminals: 2 times of rated voltage for 2 seconds

TAN d: 0.8% (maximum) at 1 kHz

LIFE TEST CONDITIONS:
(Loading at elevated temperature)
Loaded at 1.5 times of rated voltage at 85° C or 1.5 times of category voltage at 100° C 1000 hours
Category voltage is 80% of rated voltage

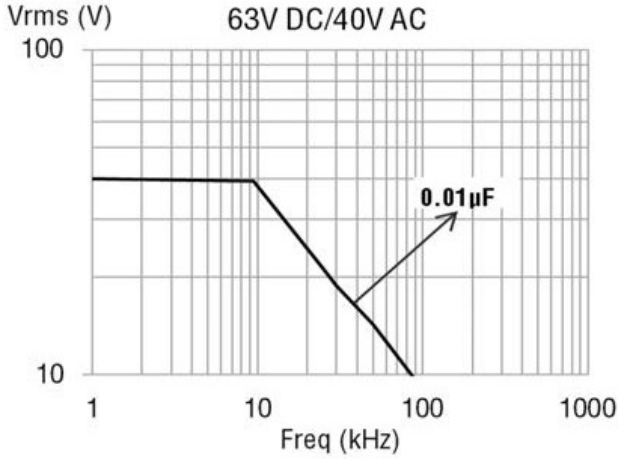
Criteria after the test:
Δc/c: = 5% of initial value
Change in Tan d: = 0.01 or 1.2 times the value measured before the test, whichever is higher
Insulation resistance: = 50% of the initial value mentioned in IR chart

APPROVALS: Capacitors tested at ERTL (North) as per IEC 384-11

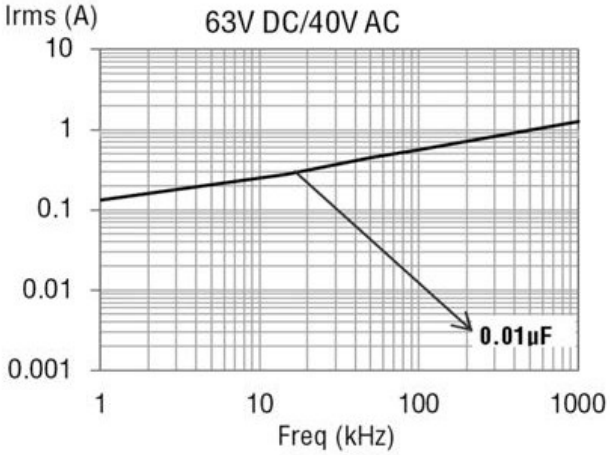
INSULATION RESISTANCE

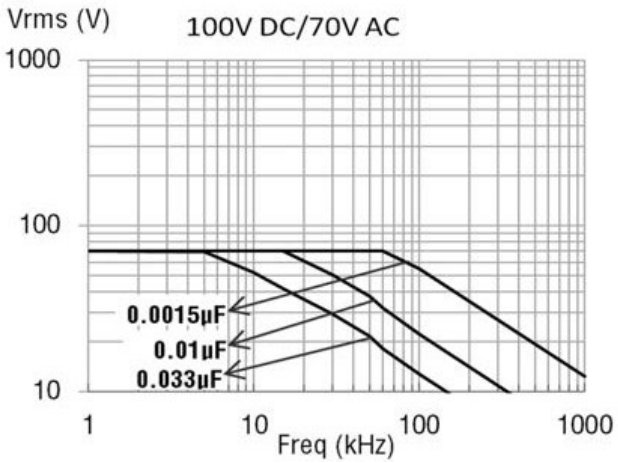
Minimum Insulation Resistance R_{IS}	V_R	C_R = 0.33 µF	C_R > 0.33 µF
(or) time constant $T = C_R \times R_{IS}$	= 100 V DC	30 GO	10000 s
at 25° C, relative humidity = 70%	= 250 V DC	100 GO	10000 s

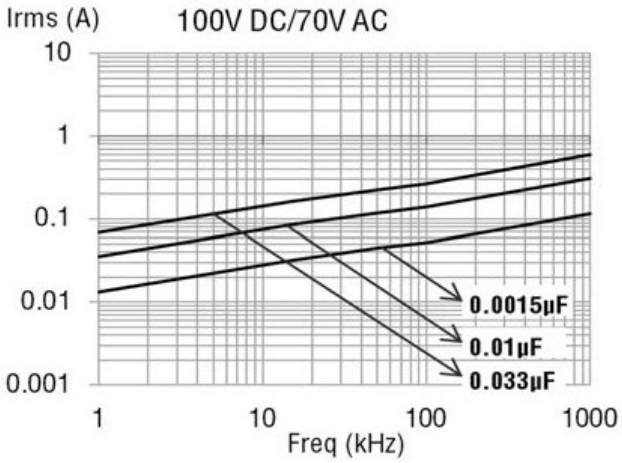
Max. Voltage (Vrms) vs. Frequency
(Sinusoidal Waveform at T = 55° C)

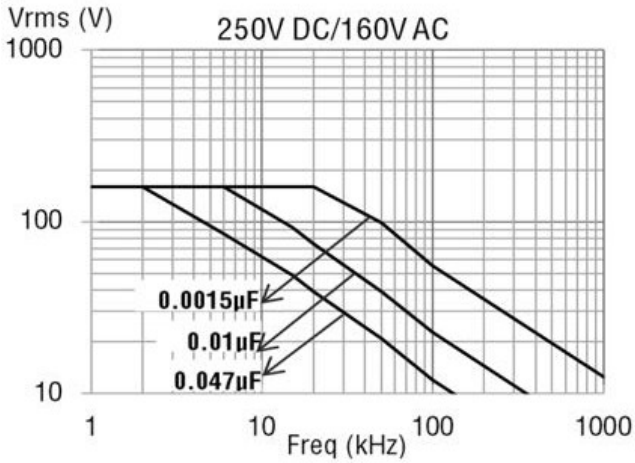


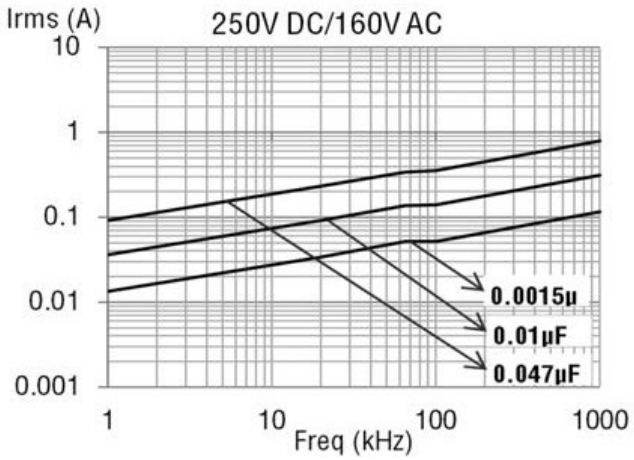
Max. Current (Irms) vs. Frequency
(Sinusoidal Waveform at T = 55° C)

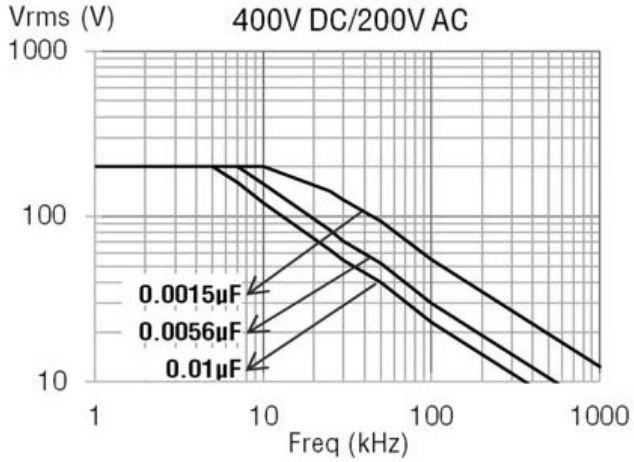


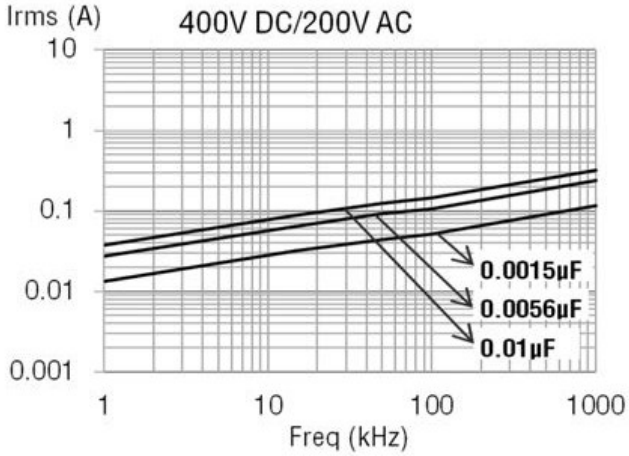

Vrms (V)
100V DC/70V AC
1000
100
10
0.0015μF
0.01μF
0.033μF
1
10
100
1000
Freq (kHz)

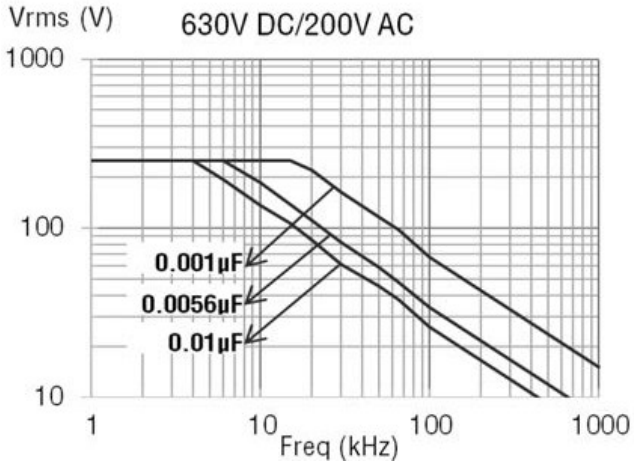

Irms (A)
100V DC/70V AC
10
1
0.1
0.01
0.001
0.0015μF
0.01μF
0.033μF
1
10
100
1000
Freq (kHz)

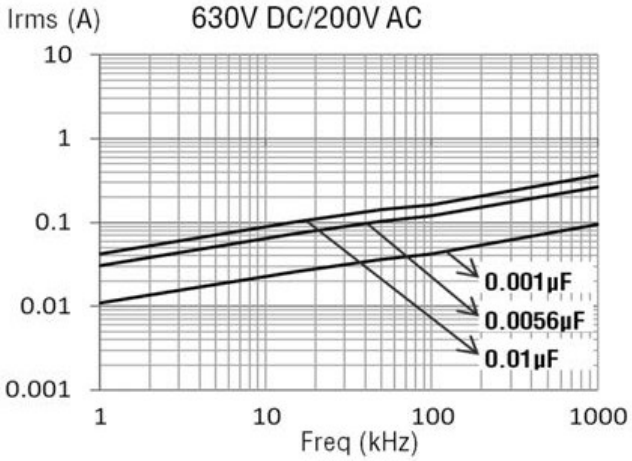

Vrms (V)
250V DC/160V AC
1000
100
10
0.0015μF
0.01μF
0.047μF
1
10
100
1000
Freq (kHz)

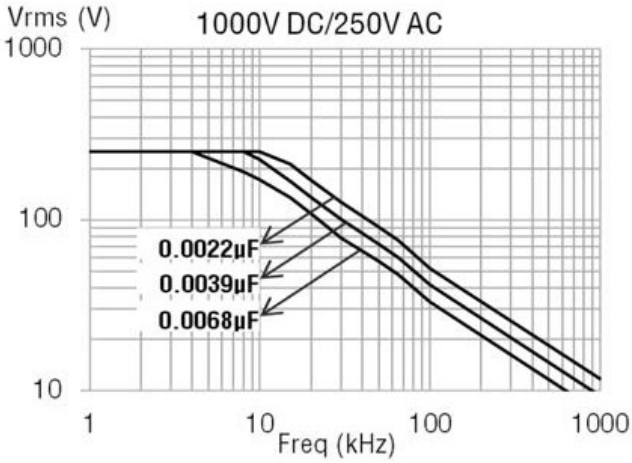

Irms (A)
250V DC/160V AC
10
1
0.1
0.01
0.001
0.0015μ
0.01μF
0.047μF
1
10
100
1000
Freq (kHz)

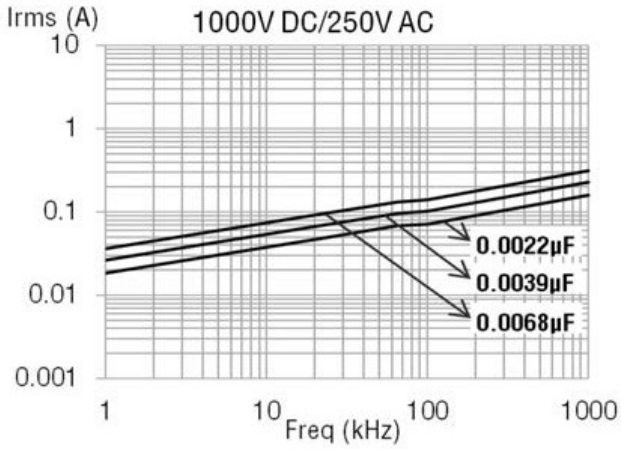

Vrms (V)
400V DC/200V AC
1000
100
10
0.0015μF
0.0056μF
0.01μF
1
10
100
1000
Freq (kHz)


Irms (A)
400V DC/200V AC
10
1
0.1
0.01
0.001
0.0015μF
0.0056μF
0.01μF
1
10
100
1000
Freq (kHz)


Vrms (V)
630V DC/200V AC
1000
100
10
0.001μF
0.0056μF
0.01μF
1
10
100
1000
Freq (kHz)


Irms (A)
630V DC/200V AC
10
1
0.1
0.01
0.001
0.001μF
0.0056μF
0.01μF
1
10
100
1000
Freq (kHz)


Vrms (V)
1000V DC/250V AC
1000
100
10
0.0022μF
0.0039μF
0.0068μF
1
10
100
1000
Freq (kHz)


Irms (A)
1000V DC/250V AC
10
1
0.1
0.01
0.001
0.0022μF
0.0039μF
0.0068μF
1
10
100
1000
Freq (kHz)

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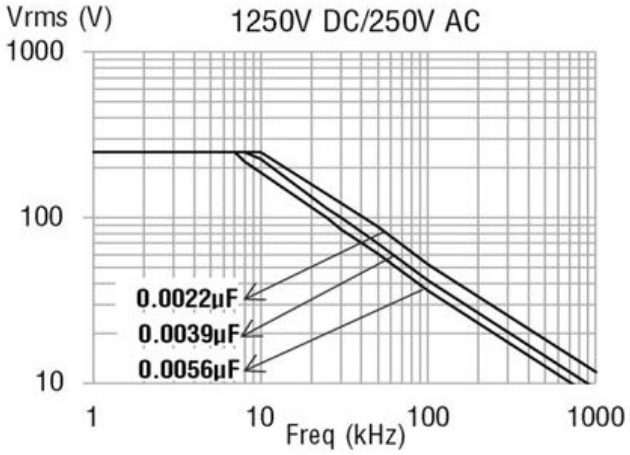
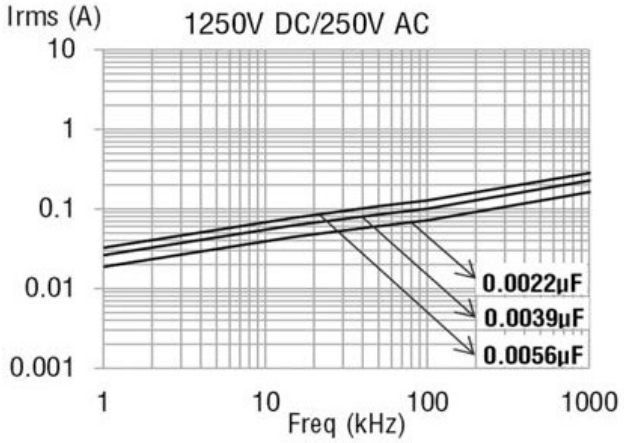
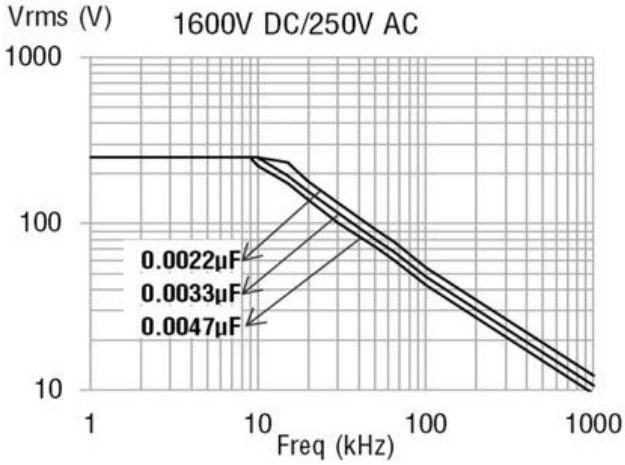
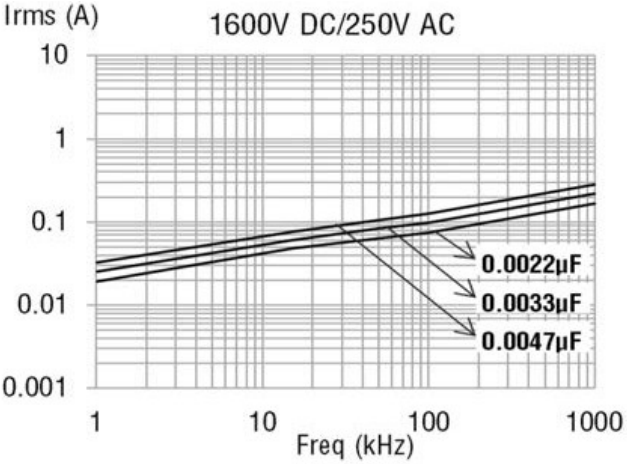
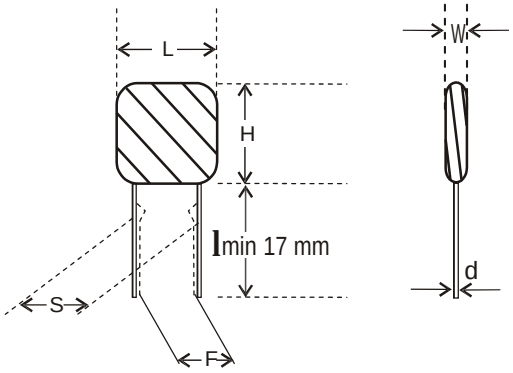








NOTE: The derating curves are based on the actual observed values



DEKI
Film Capacitor Solutions

PLAIN POLYESTER FILM CAPACITORS (Inductive)

Ordering codes and packaging units

Rated Voltage	Rated Cap. (µF)	Dimensions(mm) W ±0.5	H ±0.5	L ±0.5	d ±0.05	S ±0.5	F .8/-.2	DV/DT V/µs	Wt. g	Ordering code	Packing units Ammo	Bulk
63V DC	0.1000	6.0	14.0	11.0	0.5	7.0	5.0	10000	0.76	01 104 +1J*^	2000	2000
100V DC	0.0010	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.22	01 102 +2A*^	5000	2000
	0.0015	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.22	01 152 +2A*^	5000	2000
	0.0022	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.28	01 222 +2A*^	5000	2000
	0.0033	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.32	01 332 +2A*^	5000	2000
	0.0047	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.25	01 472 +2A*^	5000	2000
	0.0068	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.25	01 682 +2A*^	5000	2000
	0.0091	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.28	01 912 +2A*^	5000	2000
	0.0100	4.0	11.5	7.5	0.5	4.0	5.0	10000	0.35	01 103 +2A*^	4500	2000
	0.0150	4.0	11.5	7.5	0.5	4.0	5.0	10000	0.35	01153 +2A*^	4500	2000
	0.0220	4.0	11.5	7.5	0.5	4.5	5.0	10000	0.35	01 223 +2A*^	4500	2000
	0.0330	5.0	13.0	7.5	0.5	5.0	5.0	10000	0.40	01 333 +2A*^	4000	2000
	0.0470	5.0	13.0	9.5	0.5	5.5	5.0	10000	0.45	01473 +2A*^	2500	2000
	0.0560	5.0	13.0	10.0	0.5	6.0	5.0	10000	0.52	01 563 +2A*^	2500	2000
	0.0680	5.5	14.0	10.0	0.5	7.0	5.0	10000	0.60	01 683 +2A*^	2000	2000
	0.0820	6.0	14.0	11.0	0.5	7.0	5.0	10000	0.70	01 823 +2A*^	2000	2000
	0.1000	6.0	14.0	11.0	0.5	7.0	5.0	10000	0.75	01 104 +2A*^	2000	2000
	0.1500	6.5	15.0	12.0	0.5	7.5	5.0	10000	1.10	01 154 +2A*^	1500	1000
	0.2200	6.5	15.0	12.0	0.5	8.5	-	10000	1.56	01 224 +2A*^	-	1000
	0.4700	8.5	19.0	16.0	0.5	11.5	-	10000	2.88	01 474 +2A*^	-	400
250V DC	0.0010	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.28	01102 +2E*^	5000	2000
	0.0015	3.5	12.0	6.0	0.5	4.0	5.0	10000	0.30	01 152 +2E*^	5000	2000
	0.0022	3.5	12.0	6.0	0.5	4.0	5.0	10000	0.28	01 222 +2E*^	5000	2000
	0.0027	3.5	12.0	6.5	0.5	4.0	5.0	10000	0.32	01 272 +2E*^	5000	2000
	0.0033	3.5	12.0	6.5	0.5	4.0	5.0	10000	0.28	01 332 +2E*^	5000	2000
	0.0047	3.5	12.0	6.0	0.5	4.0	5.0	10000	0.32	01 472 +2E*^	5000	2000
	0.0100	4.0	13.0	7.5	0.5	5.0	5.0	10000	0.35	01 103 +2E*^	2500	2000
	0.0150	4.5	13.0	8.0	0.5	5.5	5.0	10000	0.42	01 153 +2E*^	2500	2000
	0.0220	4.5	13.0	9.0	0.5	6.0	5.0	10000	0.45	01 223 +2E*^	2500	2000
	0.0330	5.0	13.0	9.5	0.5	7.0	5.0	10000	0.64	01 333 +2E*^	2500	2000
	0.0470	6.0	14.0	11.0	0.5	7.0	7.5	10000	0.80	01 473 +2E*^	2000	2000
	0.0560	6.5	14.0	13.0	0.5	7.0	-	10000	0.90	01 563 +2E*^	-	2000
	0.1000	6.5	18.0	13.0	0.5	9.0	-	10000	1.30	01 104 +2E*^	-	1000
400V DC	0.0010	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.28	01 102 +2G*^	5000	2000
	0.0015	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.30	01 152 +2G*^	5000	2000
	0.0022	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.30	01 222 +2G*^	5000	2000
	0.0033	4.0	11.5	6.5	0.5	4.0	5.0	10000	0.35	01 332 +2G*^	5000	2000
	0.0047	4.0	11.5	7.0	0.5	5.0	5.0	10000	0.40	01 472 +2G*^	4500	2000
	0.0056	4.0	11.5	8.5	0.5	5.5	5.0	10000	0.45	01 562 +2G*^	4000	2000
	0.0100	4.5	12.0	8.5	0.5	6.5	5.0	10000	0.65	01 103 +2G*^	4000	2000
	0.0150	5.0	13.0	9.5	0.5	7.0	5.0	10000	0.62	01 153 +2G*^	2000	2000
	0.0220	5.5	14.0	10.0	0.5	7.0	5.0	10000	0.70	01 223 +2G*^	2000	2000
	0.0330	6.5	15.0	11.0	0.5	7.0	7.5	10000	0.95	01 333 +2G*^	2000	2000
	0.0390	6.5	15.0	12.0	0.5	7.0	-	10000	0.98	01 393 +2G^	-	1000
	0.0470	8.0	15.0	12.0	0.5	7.0	-	10000	1.00	01 473 +2G*^	-	1000
	0.0560	8.0	15.0	10.0	0.5	7.5	-	10000	1.30	01 563 +2G*^	-	1000
	0.1000	9.0	18.0	15.0	0.5	11.0	-	10000	2.16	01 104 +2G*^	-	400
630V DC	0.0010	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.28	01 102 +2J*^	5000	2000
	0.0015	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.30	01 152 +2J*^	5000	2000
	0.0022	3.5	11.5	6.5	0.5	4.0	5.0	10000	0.32	01 222 +2J*^	5000	2000
	0.0033	4.5	15.0	8.5	0.5	5.0	5.0	10000	0.45	01 332 +2J*^	4000	2000
	0.0047	4.5	15.0	8.5	0.5	5.0	5.0	10000	0.50	01 472 +2J*^	4000	2000
	0.0056	4.5	15.0	8.5	0.5	5.0	5.0	10000	0.52	01 562 +2J*^	4000	2000
	0.0068	5.0	15.0	9.0	0.5	5.5	5.0	10000	0.55	01 682 +2J*^	2000	2000
	0.0091	5.0	15.0	9.5	0.5	6.5	5.0	10000	0.55	01 912 +2J*^	2000	2000
	0.0100	5.5	15.0	10.0	0.5	7.5	7.5	10000	0.75	01 103 +2J*^	2000	2000
	0.0150	7.0	15.0	11.0	0.5	7.5	-	10000	0.80	01 153 +2J*^	-	2000
	0.0220	7.6	15.0	13.0	0.5	8.5	-	10000	1.08	01 223 +2J*^	-	1000
	0.0330	8.0	15.0	13.0	0.5	8.5	-	10000	1.70	01 333 +2J*^	-	1000
1000V DC	0.0022	5.0	15.0	8.5	0.5	5.0	5.0	10000	0.48	01 222 +3A*^	4000	2000
	0.0027	5.0	15.0	9.0	0.5	5.0	5.0	10000	0.56	01 272 +3A*^	4000	2000
	0.0033	5.0	15.0	9.0	0.5	5.0	5.0	10000	0.62	01 332 +3A*^	4000	2000
	0.0039	6.0	15.0	10.0	0.5	5.0	5.0	10000	0.62	01 392 +3A*^	4000	2000
	0.0047	6.0	15.0	10.0	0.5	5.0	5.0	10000	0.72	01 472 +3A*^	4000	2000
	0.0056	6.5	15.0	10.5	0.5	5.0	5.0	10000	0.84	01 562 +3A*^	3000	2000
	0.0068	6.5	15.0	11.0	0.5	5.0	5.0	10000	0.84	01 682 +3A*^	3000	2000
1250V DC	0.0022	5.0	15.0	8.5	0.5	5.0	5.0	10000	0.48	01 222 +3B*^	3000	2000
	0.0027	5.5	15.0	9.0	0.5	5.0	5.0	10000	0.56	01 272 +3B*^	3000	2000
	0.0033	6.0	15.0	9.5	0.5	5.0	5.0	10000	0.65	01 332 +3B*^	2500	2000
	0.0039	6.5	15.0	9.5	0.5	5.0	5.0	10000	0.72	01 392 +3B*^	2500	2000
	0.0047	7.0	15.0	11.0	0.5	5.0	5.0	10000	0.84	01 472 +3B*^	1500	2000
	0.0056	7.0	15.0	11.0	0.5	5.0	5.0	10000	0.85	01 562 +3B*^	1500	2000
1600V DC	0.0022	6.0	17.0	10.0	0.5	5.0	5.0	10000	0.70	01 222 +3C*^	1500	2000
	0.0027	6.5	18.0	10.0	0.5	7.5	5.0	10000	0.75	01 272 +3C*^	1500	2000
	0.0033	7.0	19.0	10.0	0.5	5.0	5.0	10000	0.80	01 332 +3C*^	1500	2000
	0.0039	6.5	19.0	11.0	0.5	7.5	5.0	10000	1.00	01 392 +3C*^	1000	2000
	0.0047	7.5	20.0	12.0	0.5	7.5	5.0	10000	1.15	01 472 +3C*^	1000	2000