

PhiCap; Metallized Polypropylene Film Capacitor; 3-Phase
Preliminary data
Features

- Dielectric Polypropylene film
- Resin filling Non-PCB, soft polyurethane
- Safety device Overpressure disconnecter, self-healing technology
- Case Extruded round aluminum can with stud
- Mounting and grounding Threaded M8 (Ø 53 mm) / M12 stud on bottom of can
- Cooling Naturally air-cooled (or forced air cooling)
- Degree of protection Indoor mounting (optionally with cap for IP32)
- Terminals Series B32343 – 6.3 mm fast-on terminals
Series B32344 – Sigut terminal
- Three-phase delta-connected and provided with discharge resistors

Characteristics

Rated capacitance C_N and Q_N	According to specification table
Tolerance	-5% / +10%
Rated voltage U_N	According to specification table
Rated frequency f_R	50 and 60 Hz

Maximum ratings

Maximum permissible voltage U_{max}	1.1 x U_N for a maximum of 8 h daily 1.2 x U_N (up to 5 min) and 1.3 x U_N (up to 1 min)
Maximum permissible current I_{max}	1.5 x I_N
Maximum transient inrush current	200 x I_N
Power dissipation	$\leq 0.35 \text{ W} / \text{kVAr}$

Test data

AC test voltage terminal-to-terminal	2.15 x U_N , 2s
Insulation voltage between terminals and container	3000 Vac, 10s
Dissipation factor $\tan\delta$ at 50 Hz	$\leq 6.0 \times 10^{-4}$

Climatic category –25/D

Lower category temperature T_{min}	-25°C
Upper category temperature T_{max}	+55°C
Maximum permissible humidity	95%
Maximum permissible altitude	4000 m above sea level
Life expectancy	> 100,000 operating hours

Reference standards IEC 831 – 1 / 2 and IS:2834

Preliminary data
Specification table and ordering codes
Rated voltage 230 V

Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP230-D-0.5	0.5	0.60	10.0	53 x 114	0.3	B32343C2002A530
MKP230-D-0.7	0.7	0.90	15.0	53 x 114	0.3	B32343C2002A730
MKP230-D-1.0	1.0	1.20	20.0	63.5 x 129	0.3	B32343C2012A030
MKP230-D-1.5	1.5	1.80	30.0	63.5 x 129	0.4	B32343C2012A530
MKP230-D-2.5	2.5	3.00	50.0	79.5 x 195	0.6	B32344C2022A530
MKP230-D-5.0	5.0	6.00	100.0	89.5 x 270	1.7	B32344C2052A030
MKP230-D-7.5	7.5	9.00	150.0	89.5 x 270	2.1	B32344C2072A530
MKP230-D-10.0	10.0	12.00	200.0	89.5 x 345	2.1	B32344C2102A030

Rated voltage 400 V

Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP400-D-1.0	1.0	1.20	7.0	53 x 114	0.3	B32343C4012A000
MKP400-D-1.5	1.5	1.80	10.0	53 x 114	0.3	B32343C4012A500
MKP400-D-2.0	2.0	2.40	14.0	63.5 x 129	0.4	B32343C4022A000
MKP400-D-2.5	2.5	3.00	17.0	63.5 x 129	0.4	B32343C4022A500
MKP400-D-5.0	5.0	6.00	34.0	63.5 x 129	0.4	B32343C4052A000
MKP400-D-6.3	6.3	7.50	42.0	79.5 x 195	0.6	B32344C4071A500
MKP400-D-7.5	7.5	9.00	50.0	79.5 x 195	0.9	B32344C4072A500
MKP400-D-8.3	8.3	10.00	55.0	79.5 x 195	0.9	B32344C4101A000
MKP400-D-10.0	10.0	12.00	66.5	79.5 x 195	0.9	B32344C4102A000
MKP400-D-12.5	12.5	15.00	83.0	89.5 x 270	1.3	B32344C4122A500

Preliminary data

MKP400-D-15.0	15.0	18.00	99.5	89.5 x 270	1.7	B32344C4152A000
MKP400-D-20.0	20.0	24.00	132.5	89.5 x 345	2.1	B32344C4202A000
MKP400-D-25.0	25.0	--	166.0	89.5 x 345	2.1	B32344C4252A000

Rated voltage 415 V

Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP415-D-1.0	1.0	1.20	6.0	53 x 114	0.3	B32343C4012A010
MKP415-D-1.5	1.5	1.80	9.0	53 x 114	0.3	B32343C4012A510
MKP415-D-2.0	2.0	2.40	12.5	53 x 114	0.4	B32343C4022A010
MKP415-D-2.5	2.5	3.00	15.5	63.5 x 129	0.4	B32343C4022A510
MKP415-D-5.0	5.0	6.00	31.0	63.5 x 154	0.4	B32343C4052A010
MKP415-D-6.3	6.3	7.50	39.0	79.5 x 195	0.6	B32344C4071A510
MKP415-D-7.5	7.5	9.00	46.0	79.5 x 195	0.9	B32344C4072A510
MKP415-D-10.0	10.0	12.00	61.5	79.5 x 195	0.8	B32344C4102A010
MKP415-D-12.5	12.5	15.00	77.0	89.5 x 270	1.3	B32344C4122A510
MKP415-D-15.0	15.0	18.00	92.5	89.5 x 270	1.3	B32344C4152A010
MKP415-D-20.0	20.0	24.00	123.0	89.5 x 345	2.1	B32344C4202A010
MKP415-D-25.0	25.0	30.00	154.0	89.5 x 345	2.1	B32344C4252A010

Preliminary data
Rated voltage 440 V

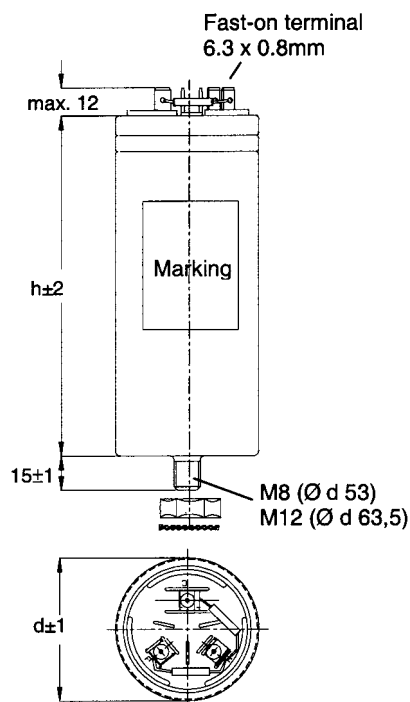
Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP440-D-0.9	0.9	1.00	5.0	53 x 114	0.3	B32343C4011A040
MKP440-D-1.0	1.0	1.20	5.5	53 x 114	0.3	B32343C4012A040
MKP440-D-1.2	1.2	1.50	7.0	53 x 114	0.3	B32343C4011A540
MKP440-D-1.5	1.5	1.70	8.0	53 x 114	0.3	B32343C4012A540
MKP440-D-2.1	2.1	2.50	11.5	53 x 114	0.4	B32343C4021A540
MKP440-D-2.5	2.5	3.00	13.5	63.5 x 129	0.3	B32343C4022A540
MKP440-D-4.2	4.2	5.00	23.0	63.5 x 129	0.4	B32343C4051A040
MKP440-D-5.0	5.0	6.00	27.5	63.5 x 154	0.5	B32343C4052A040
MKP440-D-6.3	6.3	7.50	34.0	79.5 x 195	0.7	B32344C4071A540
MKP440-D-7.5	7.5	9.00	41.0	79.5 x 195	0.8	B32344C4072A540
MKP440-D-8.3	8.3	10.00	45.5	79.5 x 195	0.9	B32344C4101A040
MKP440-D-10	10.0	12.00	55.0	79.5 x 230	1.1	B32344C4102A040
MKP440-D-10.4	10.4	12.50	57.0	89.5 x 270	1.7	B32344C4121A540
MKP440-D-12.5	12.5	15.00	68.5	89.5 x 270	1.7	B32344C4151A040
MKP440-D-15.0	15.0	18.00	82.0	89.5 x 270	1.7	B32344C4152A040
MKP440-D-16.7	16.7	20.00	91.5	89.5 x 345	2.1	B32344C4201A040
MKP440-D-20.8	20.8	25.00	114.0	89.5 x 345	2.1	B32344C4251A040
MKP440-D-25.0	25.0	30.00	138.0	94 x 345	2.1	B32344C4252A040

Preliminary data
Rated voltage 480 V

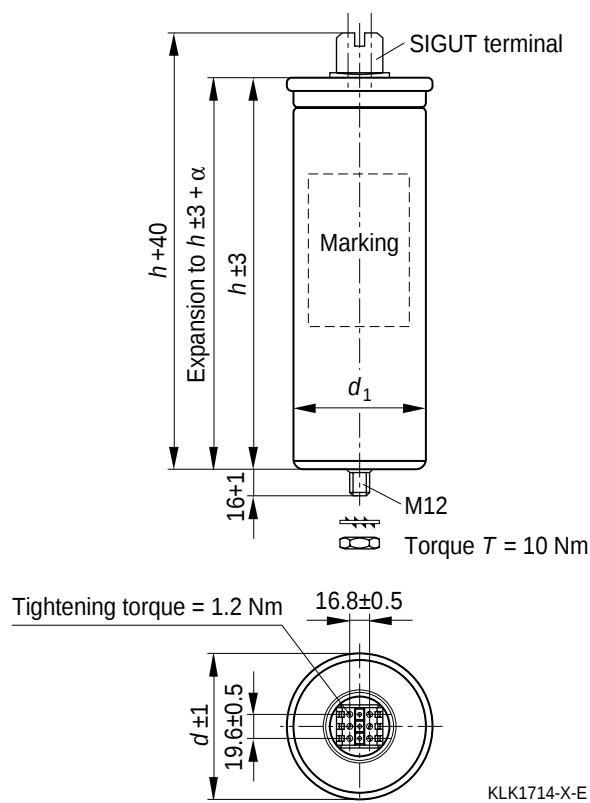
Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP-D-480-1.0	1.0	1.20	4.5	53 x 114	0.4	B32343C4012A080
MKP-D-480-1.5	1.5	1.80	7.0	63.5 x 129	0.4	B32343C4012A580
MKP-D-480-2.0	2.0	2.40	9.0	63.5 x 129	0.4	B32343C4022A080
MKP-D-480-2.5	2.5	3.00	11.5	63.5 x 129	0.4	B32343C4022A580
MKP-D-480-5.0	5.0	6.00	23.0	79.5 x 195	0.8	B32344C4052A080
MKP-D-480-6.3	6.3	7.50	29.0	89.5 x 270	0.8	B32344C4071A580
MKP-D-480-7.5	7.5	8.90	34.5	89.5 x 270	0.8	B32344C4072A580
MKP-D-480-8.3	8.3	10.00	28.5	89.5 x 270	0.8	B32344C4101A080
MKP-D-480-10.4	10.4	12.50	48.0	89.5 x 345	2.1	B32344C4121A580
MKP-D-480-12.5	12.5	15.00	57.5	89.5 x 345	2.1	B32344C4151A080
MKP-D-480-15.0	15.0	18.00	69.0	89.5 x 345	1.7	B32344C4152A080
MKP-D-480-16.7	16.7	20.00	77.0	89.5 x 345	1.8	B32344C4162A780
MKP-D-480-20.8	20.8	25.00	96.0	89.5 x 345	2.0	B32344C4202A080

Preliminary data
Rated voltage 525 V

Type	Output kvar at 50 Hz	Output kvar at 60 Hz	Capacitance μF 3 x	d x h mm	Weight kg	Ordering code
MKP525-D-1.0	1.0	1.20	4.0	53 x 114	0.3	B32343C5012A020
MKP525-D-1.5	1.5	1.80	5.5	53 x 114	0.3	B32343C5012A520
MKP525-D-2.0	2.0	2.40	7.5	63.5 x 129	0.4	B32343C5022A020
MKP525-D-2.5	2.5	2.70	9.5	63.5 x 129	0.4	B32343C5022A520
MKP525-D-6.5	5.0	6.00	19.2	79.5 x 195	0.8	B32344C5071A520
MKP525-D-6.3	6.3	7.50	24.0	79.5 x 195	0.8	B32344C5071A520
MKP525-D-8.3	8.3	10.00	32.0	89.5 x 270	0.8	B32344C5101A020
MKP525-D-10.4	10.4	12.50	40.0	89.5 x 345	2.1	B32344C5121A520
MKP525-D-12.5	12.5	15.00	48.0	89.5 x 345	2.1	B32344C5151A020
MKP525-D-16.7	16.7	20.00	64.0	89.5 x 345	2.1	B32344C5201A020
MKP525-D-20.0	20.0	25.00	80.0	89.5 x 345	2.1	B32344C5202A020
MKP525-D-25.0	25.0	30.00	96.0	89.5 x 345	2.1	B32344C5202A020

Preliminary data
Drawings
B32343

Maximum torque

M5 - 2.5 Nm
M8 - 4 Nm
M12 - 10 Nm

B32344


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