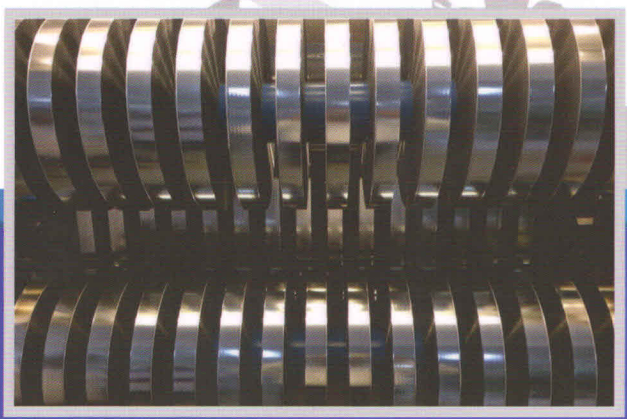
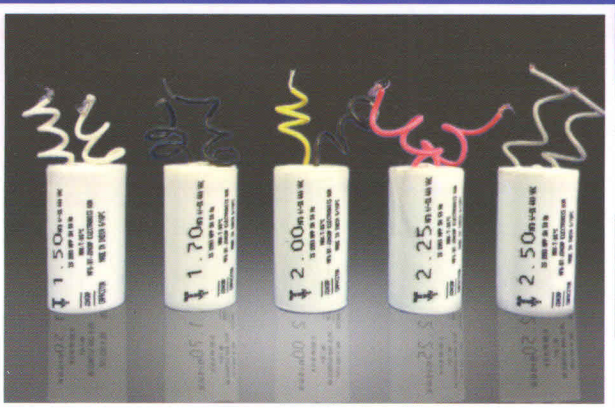
JIMCAP®

JIMCAP ELECTRONICS PVT.LTD

Energizing for generations





METALLISED FILMS & CAPACITORS

CE | IS : 13340 ISI CM/L 2248046

Jimcap Electronics Private Limited and **Priya Capacitors Pvt. Ltd.** are leading manufacturers and exporters for world class Metallised Polypropylene films and quality capacitors.

JIMCAP/PRIYA brand Capacitors and produced in the most modern and clean environment, having latest Imported Micro-Processor based fully Automatic Winding Machines and authorized production process.

The Company produces wide range of capacitors for Electrical appliances (Fans/Lighting), Motors for Run and Start applications. L.T. Power factor improvement and Metallised Polypropylene Films in various designs to suite most stringent industrial requirements since 1985.

Experience of decades in the field of manufacturing, ability to quickly and easily adapt the latest technologies to the customer needs has made these brands not only a quality and reliable products but also a highly respectable name in the industries we serve.

Quality Assurance System

ISO 9001:2000 certified by KVQA Norway.

Product Approvals

CE Approval from INTERTEK ETL SEMKO for

* Run Capacitors (EN/IEC 60252-1)
* Start Capacitors (EN/IEC 60252-2)

CE approval from Institute of Quality Management for

*L.T. Power factor improvement capacitors (EN/IEC 60831-1 & 2)

Certified by Bureau of Indian Standards (BIS)

Power factor improvement (shunt) Capacitors (IS:13340)/Licence No. CM/L:2248046

Our products are also tested and approved by :

* National Test House, Kolkatta (NTH)
* Electrical Research and Development Association (ERDA)
* Central Power Research Institute (CPRI)
* Various Electricity Boards
* RoHS approved Metallised Poly Propylene Films Capacitors from INTERTEK.

Product Range :

1. **Metalised Polypropylene Film**
   a. Aluminum.
   b. Bi layer (Zinc and Aluminum) with Reinforced border.
   c. Tri layer (Silver, Zinc and Aluminum) with Reinforced border.
   d. Slope/Taper/Ramp (Silver, Zinc and Aluminum) with Reinforced border.
2. **MPP Capacitors (DRY & OIL)**
   a. Capacitors for Fans and Motors (Regular/Burst proof designs), 1 to 144 MFD, up to 600 VAC.
   Conforms to : EN/IEC 60252-1 Ed.1.0–2001/IS 2993
   b. Capacitors for lighting fixtures 2 to 100 MFD up to 500 VAC.
   Conforms to : EN/IEC 61048 Ed. 2.0/IS 1569
3. **Electrolytic Capacitors (Motor Start)**
   40/60 MFD to 200/250 MFD
   Conforms to : EN/IEC 60252-2 Ed. 1.0/IS2993
4. **L. T. Power Factor Improvement (Shunt) Capacitors.**
   1 KVAR to 25 KVAR up to 500 VAC (Rating above 25 KVAR can also be constructed through Banking)
   Conforms to : EN/IEC 60831-1 Consol. ED 2.11/IS : 13340

JIMCAP® JIMCAP ELECTRONICS PVT.LTD

PRIYA® Priya Capacitors Pvt. Ltd.

Metallised Films

1. Types available

a. Aluminum
b. Bi layer (Zn and Aluminum)
c. TriLayer (Silver,ZnandAluminum), Conventional type and slope / Taper / RAMP Metallisation.

RoHS approved MPP film is also available with all types of Metallisation

Available sizes:
Thickness : 4 micron to 11 micron(±4%)
TotalWidth:30,36,37.5,50,75&100mm.(±0.5mm)
Free margin : 2.0mm(±0.5mm) for
Tri-layer MPP : 2.5 mm(±0.5mm) for Bi-layer.

2. Roll Dia

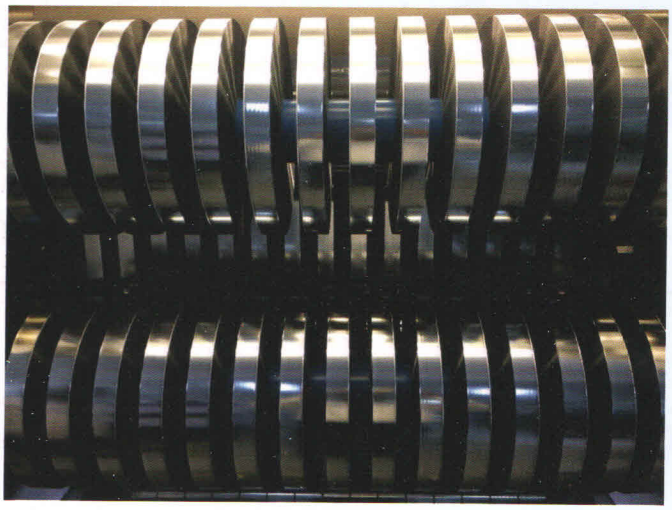
Core ID : 75mm.
Joints : 2 Nos. maximum.
Roll OD : 345 mm maximum.

Special dimensional requirements can also be made available on request.

3. Metallization

a. Aluminum : Conventional type metallization with Aluminum layer
b. Bi layer with Heavy/Reinforced edges (Aluminium / Zinc Alloy) to provide excellent bonding to end spray.
c. TriLayerwithHeavey/Reinforcededge (Silver/Zinc /AluminumAlloy) Conventional Type and slope / Taper / RAMP Metallisation.

Slope / Taper / RAMP
Linear slope is maintained while metallization by maintaining the resistance value of 2/3 Ohm, per sq. at heavy edge and gradually achieving 20 ohms per sq. towards free margin side.



Advantages of Slope / Taper / RAMP

a. Since there is no sudden transition in resistance value between Heavy edge to the active area, this feature makes the film electrically stronger & it can sustain more voltage surges as compared to the traditional MPP Films
b. During the process of winding the surface to surface bonding in case of Slope / taper MPP is extremely superior & this quality imparts NO AIRGAP between the dielectrics during winding. this helps in elimination of sparks near the Heavy edge.
c. When the voltage is applied to the capacitor the current and heat distribution is absolutely uniform in case of slope / taper MPP films

4. Standard Resistance Values

Sr.No.	Type of Metallization	Avg. Resistance Value	Heavy Edge Resistance Value
01	Aluminium	2 to 4 ohms / Sq	NA
02	Bi Layer	6 to 9 ohms / Sq	2 to 3 ohms / Sq
03	Tri Layer	6 to 9 ohms / Sq	2 to 3 ohms / Sq
04	Slope / Taper / Ramp	10 to 4 ohms / Sq	2 to 3 ohms / Sq

Special Resistance Values could also be considered

CAPACITORS

L. T. Power Factor Improvement (Shunt) Capacitors

Conforms to: EN / IEC 60831-1
Consol. Ed. 2.1 / IS 13340
1 KVAR to 25 KVAR up to 500 V ac

Rating above 25 KVAR can also be constructed through Banking.

Construction

Dielectric : Polypropylene
Elements : MPP with reinforced edge wound on higg-speed fully automatic winding machines.
End Spraying on automized spraying M/c.
Vaccum drying and or oil impregnated: Elements undergo vaccum impregnation. Non - toxic, non-hazardous, non-flammable, non -PCB, impregnated is used for impregnation
Encapsultion of elements wth ploryurethane.
Case : Steel cans/Aluminum cans (as per customers specs)
Terminals/ PVC Lead Wires
(wire sizes as per customers specs can be made)

Types / Designs Available

Sr. No.	Types / Designs	Range
1	**Double Dielectric**	5 to 25 KVAR
2	**Modular**	5 to 25 KVAR
3	**Industrial**	
a	Cylindrical with terminal type	1 to 25 KVAR
b	Cylindrical with wire type	1 to 25 KVAR
c	Square (Dry)	1 to 25 KVAR
4	**Industrial**	
a	Round	1 to 8 KVAR
b	Sqaure	1 to 8 KVAR

"Burst proof design in Industrial (Cylindrical with terminal tops) on customers request can also be made available."

Sr. No.	Rating	Product Size
01	5KVAR	160 X 100 X 280 mm
02	10 KVAR	200 X 70 X 200 mm
03	12.5 to 15 KVAR	200 X 70 X 260 mm
04	20 KVAR	210 x 70 x 320 mm
05	25 KVAR	210 X 70 X 320 mm

I. Double Dielectric Power Factor Improvement (Shunt) Capacitors

In order to build the correct degree of protection, a capacitor needs to be given a higher current and higher voltage withstanding capacity. This dual consideration has been taken into account to evolve a different construction of capacitors.

Series construction is adapted instead of parallel design to achieve the effect of Double Dielectric.

Over and above the normal features of a MPP capacitor, this design provides excellent overcurrent & surge voltage protection.

II. Modular type power factor improvement (Shunt) Capacitors

Sr. No.	Rating	Product Size
01	5 -6 KVAR	190 X 80 X 250 mm
02	8 KVAR	220 X 80 X 250 mm
03	10 - 15 KVAR	220 X 155 X280 mm
04	20 - 25 KVAR	220 X 155 X 380 mm

III. a. & b. Industrial Cylindrical with terminal tops

Basic cells are assembled in Round aluminum container with terminal tops. This design facilitates usage in APFC panels and control panels etc. where space is a constraints

Standard Dimensions :

Sr. No.	Rating	Product Size
01	1-4KVAR-415/440 V AC	Dia. 63.5 x 150mm
02	5-6KVAR-415/440 V AC	Dia 63.5 x 300mm
03	8-10KVAR-415/440 V AC	Dia 75 x 300mm
04	12.5-20KVAR-415/440 V AC	Dia 90 x 360mm
05	25KVAR-415/440 V AC	Dia 95 x 30mm

Industrial cylindrical with direct wire in similar sizes are also available up to 25 KVAR

III. c. Industrial Square

Standard Dimensions :

Sr. No.	Rating	Product Size
01	1 KVAR	65 x 36 x 115 mm
02	2 KVAR	65 x 36 x 115 mm
03	3 to 4 KVAR	90 x 40 x 150 mm
04	5 to 6 KVAR	90 x 50 x 160 mm
05	10 KVAR	90 x 55 x 200 mm
06	20 KVAR	90 x 55 x 200 mm
07	25 KVAR	90 x 55 x 200 mm

IV. a. Agri Cylindrical

Standard Dimensions

Sr. No.	Rating	Product Size
01	1 KVAR	Dia. 35 x 150 mm
02	2 KVAR	Dia. 45 x 150 mm
03	3 KVAR	Dia. 45 x 200 mm
04	4 KVAR	Dia. 50 x 200 mm
05	5 KVAR	Dia. 55 x 200 mm
06	6 KVAR	Dia. 60 X 200 mm

IV. b. Agri Square

Standard Dimensions :

Sr. No.	Rating	Product Size
01	1 KVAR	65 x 36 x 115 mm
02	2 KVAR	65 x 36 x 115 mm
03	3 & 4 KVAR	88 x 40 x 158 mm
04	5 & 6 KVAR	88 x 40 x 158 mm
05	7 & 8 KVAR	90 x 60 x 190 mm

Technical Data

Standards	Reference Standard: IEC 60831-1 Consol. Ed. 2.1/ IS 13340
Rated Voltage	Up to 500 V AC(other voltages on request)
Rated Frequency	50 Hz. (other frequency on request)
No of Phases	3(single phase on request)
Connection	Delta
Permissible Over Load	Maximum permissible current :: 1.2 times of rated Current Maximum permissible Voltage : 1.10 times of rated Voltage.
Ambient Temp	-10°C to +50 °C
Total Losses	0.5 watts/ KVAR without resistor
Capacitance tolerance	+ 10 %
Tan delta	0.20 % max

Different values and designs not covered in the catalogue, can also be made available on request

CAPACITORS

A. Capacitors for Fan / Motors (Regular / Burst proof designs)

Conforms to: EN / IEC 60252-1 Ed. 1.0 - 2001 / IS 2993 : 1998
Range : 1 to 144 MFD, up to 600 V AC

Dual type capacitors for washing machines as per customer designs are also available.

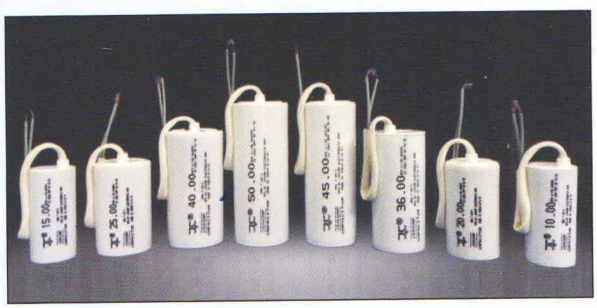
B. Capacitors for Lighting Fixtures

Conforms to : EN / IEC 61048 Ed. 2.0 / IS 1569
Range : 2 to 100 MFD & Voltage up to 500 V AC
Special type Capacitors with higher capacitance & voltage can be offered.

Capacitors for Fan motor

Capacitors for Lighting Fixture

Capacitors for Motors



Construction

Dielectric : Polypropylene

Encapsultion : Dry type resin / Oil filled.

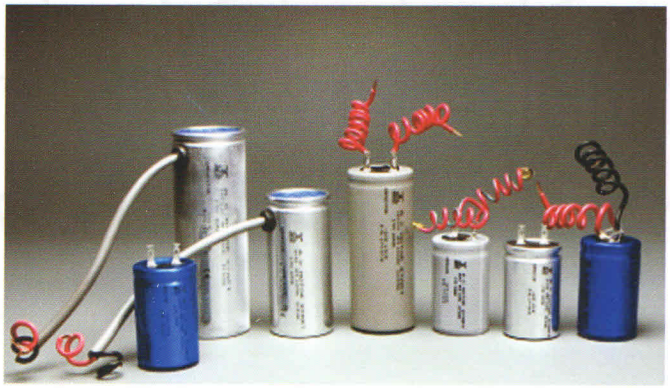
Case : PP cans/Aluminum cans (as per customers specs).

Burst proof construction:

Pressure relieving bellows are provided in the case to act as over pressure disconnections. In case of very high peak voltages this safety bellow activates and disconnects the capacitor elements from the energy sources.
To safeguard from abnormal pressures by internal or external heat and resulting gas formation the bellow expands vertically and breaks the notch allowing safe escape of gas and prevents explosion. The capacitor element is then safely disconnected.

"JIMCAP is a leading supplier to all Indian Fan Manufacturers/Exporters"

Electroytic Capacitors



Capacitors with Single Aluminium/ Double can are available with PVC wires/Terminals

µF	Double Can Product Size	Single Can Dim
40/60	Dia. 40 x 86 mm (Ht.)	Dia. 35 x 58 mm (Ht.)
60/80	Dia. 40 x 86 mm (Ht.)	Dia. 35 x 58 mm (Ht.)
80/100	Dia. 40 x 106 mm (Ht.)	Dia. 35 x 80 mm (Ht.)
100/120	Dia. 40 x 106 mm (Ht.)	Dia. 35 x 80 mm (Ht.)
120/150	Dia. 40 x 106 mm (Ht.)	Dia. 35 x 80 mm (Ht.)
150/200	Dia. 45 x 116 mm (Ht.)	Dia. 40 x 86 mm (Ht.)
200/250	Dia. 50 x 116 mm (Ht.)	Dia. 45 x 86 mm (Ht.)

C. Electroytic Capacitors

Conforms to: EN / IEC 60252-2 Ed. 1.0 / IS 2993
40 / 60 MFD to 200 / 250 MFD
Rated Voltage: 230 V Ac
Surge Voltage: 275 V Ac
Capacitors with Single Aluminium / Double can are available with PVC wires / Terminals

Construction

Dielectric : Electrolytic grade tissue paper

Elements : Aluminum foil film

Encapsulation : Electrolyte filled

Case : Aluminum cans (as per customers specs) Formed foil of different values based on requirement along with electrolytic grade tissue paper. Vacuum impregnated in electrolyte, assembled in aluminum can. Safety valve is provided on the rubberized bakelite disc. In case of abnormal pressure generated by internal or external heat, safety valve opens and pressure is released.

Different values and designs not covered in the catalogue, can also be made available on request

Applications of Capacitors

Sr. No.	MFD	VOLTAGE	APPLICATIONS
01	1.85, 2, 2.25, 2.5	400 VAC/440 VAC	Ceiling Fans
02	4.00, 6.00, 6.30	440 VAC	Cooler Motors 0.25 H.P .
03	8.00	440 VAC	Cooler Motors 0.50 H.P . Exhaust Fans
04	10	440 VAC	1/2 HPMonoblock & 1/2 HPLow Head Pump
05	12.5	440 VAC	1/2 HPSelf-priming Pump
06	15	440 VAC	1/2 HPMonoblock Pump
07	20	440 VAC	1.5 HPMonoblock Pump
08	25	440 VAC	1 HPJet Pump & 1 T on AC Unit
09	36	440 VAC	1.5 T on AC Unit
10	45	440 VAC	2 T on AC Unit
11	3.15	400 VAC / 440 VAC	FTL2 Nos of 40 WATS
12	4	250 VAC	FTL1 No of 40 WATS
13	5.7	400 VAC / 440 VAC	FTL1 No of 65 WATS

Sr. No.	MFD	VOLTAGE	APPLICATIONS
14	8	250 VAC	HPMV 1 No. 80 WATTS LPSV 1 No. 33 WATTS
15	10	250 VAC	HPMV 1 No. 125 WATTS HPSV 1 No. 70 WATTS
16	15	250 VAC	HPMV 1 No 250 WATTS
17	20	250 VAC	HPMV 1 No 400 WATTS HPSV 1 No 150 WATTS
18	33	250 VAC	HPSV 1 No 250 WATTS
19	42	250 VAC	HPSV 1 No 400 WATTS
20	40/60	230 VAC	1/4 H.P . Monoblock Pump
21	60/80	230 VAC	1/3 H.P . Monoblock Pump
22	80/100	230 VAC	1/2 H.P . Monoblock Pump
23	100/120	230 VAC	3/4 H.P . Monoblock Pump
24	120/150	230 VAC	1 H.P . Monoblock Pump
25	150/200	230 VAC	1 1/2 H.P . Monoblock Pump
26	200/250	230 VAC	

NOTE :

A) FTL : Fluorescent Tube Light.
B) HPMV : High Pressure Mercury Vapour Lamp.
C) HPSV : High Pressure Sodium Capour Lamp.
D) LPSV : Low Pressure Sodium Vapour Lamp.
E) AC : Air Conditioning
F) HP : Horse Power

RECOMMENDED CAPACITOR RATINGS

For direct connection to induction motors to improve power factor to 0.95 or better at all loads.

Motor HP	K.V.A.R. rating when motor speed is 3000 r.p.m.	1500 r.p.m.	1000 r.p.m.	750 r.p.m.	500 r.p.m.
2.5	1	1	1.5	2	2
5	2	2	2.5	3.5	4.0
7.5	2.5	3	3.5	4.5	5.5
10	3	4	4.5	5.5	6.5
15	4	5	6	7.5	9
20	5	6	7	9	12
25	6	7	9	10.5	14.5
30	7	8	10	12	17
40	9	10	13	15	21
50	11	12.5	16	18	25
60	13	14.5	18	20	28
70	15	16.5	20	22	31
80	17	19	22	24	34
90	19	21	24	26	37
100	21	23	26	28	40
110	23	25	28	30	43
120	25	27	30	32	46
130	27	29	32	34	49
140	29	31	34	36	52
145	30	32	35	37	54
150	31	33	36	38	55
155	32	34	37	39	56
160	33	35	38	40	57
165	34	36	39	41	59
170	35	37	40	42	60
175	36	38	41	43	61
180	37	39	42	44	62
185	38	40	43	45	63
190	38	40	43	45	65
200	40	42	45	47	67
250	45	50	55	60	70

K.V.A.R. CALCULATION CHART

Multiplying Factors For P.f. Improvement

	Initial P.F.			Proposed P.F.	
	0.85	0.90	0.95	0.98	1.00
0.30	2.5586	2.6935	2.8492	2.9648	3.1780
0.32	2.3402	2.4758	2.6314	2.7570	2.9602
0.34	1.1451	2.2806	2.4363	2.5619	2.7651
0.36	1.9716	2.1071	2.2628	2.3884	2.5916
0.38	1.8143	1.9498	2.1055	2.2311	2.4343
0.40	1.9707	1.8062	1.9619	2.0875	2.2907
0.42	1.5408	1.6763	1.8320	1.9576	2.1608
0.44	1.4213	1.5568	1.7125	1.8381	2.0413
0.46	1.3092	1.4447	1.6004	1.7260	1.9292
0.48	1.2065	1.3420	1.4977	1.6233	1.8265
0.50	1.112	1.248	1.403	1.529	1.732
0.52	1.024	1.160	1.315	1.441	1.644
0.54	0.939	1.075	1.230	1.356	1.559
0.56	0.860	0.996	1.151	1.227	1.490
0.58	0.785	0.921	1.076	1.202	1.405
0.60	0.714	0.849	1.005	1.131	1.334
0.62	0.645	0.781	0.936	1.062	1.265
0.64	0.580	0.716	0.871	0.997	1.200
0.66	0.518	0.654	0.809	0.935	1.138
0.68	0.459	0.595	0.750	0.876	1.079
0.70	0.400	0.526	0.691	0.811	1.020
0.72	0.343	0.479	0.634	0.754	0.963
0.74	0.289	0.425	0.580	0.700	0.909
0.76	0.235	0.371	0.526	0.652	0.855
0.78	0.183	1.319	0.473	0.594	0.803
0.80	0.130	0.266	0.410	0.541	0.750
0.82	0.078	0.214	0.369	0.489	0.698
0.84	0.026	0.162	0.317	0.437	0.645
0.86	-	0.109	0.264	0.390	0.593
0.88	-	0.054	0.209	0.335	0.538
0.90	-	-	0.155	0.281	0.484
0.92	-	-	0.097	0.223	0.426
0.94	-	-	0.034	0.160	0.363
0.96	-	-	-	0.089	0.292
0.98	-	-	-	-	0.203

NOTES: 1. Multiply the load I KW by the appropriate factor above for the desired P.F. to arrive at the required KVAR ratig of Capacitors

2. Values ot give above may be calculated by interpolation.

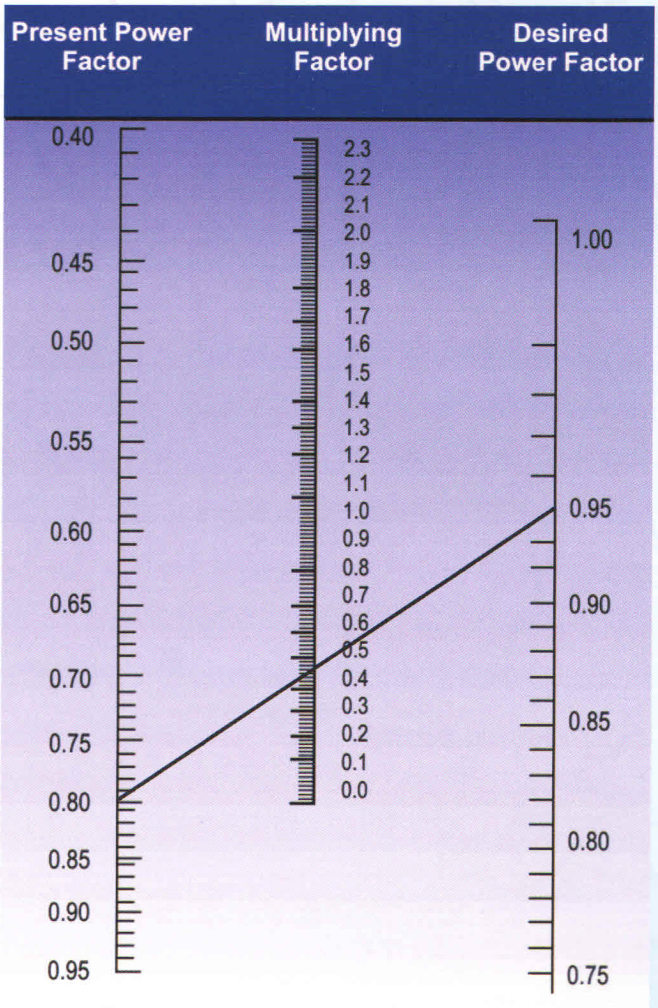
RECOMMENDED RATING OF ACCESSORIES

Recommended rating of control gear to be used with 415 or 440 Volts. 50 Hz, AC, 3 phase delta connected capacitors.

Kvar	Current Drawn (Amps.)	Cable Size (Sq.mm) Cu	Cable Size (Sq.mm) Al	Fuse Rating (Amps.)	Contactor* Rating (Amps.)
1	1.4	0.75	2.5	2	16
2	2.8	0.75	2.5	4	16
3	4.2	1.00	2.5	6	16
4	5.6	1.00	2.5	10	16
5	7	1.5	2.5	10	16
6	8.4	2.5	2.5	16	22
8	1 1.2	2.5	4	16	32
10	14	4	6	20	32
12.5	17.5	6	10	25	40
15	21	10	10	32	63
20	28	10	16	50	63
25	35	16	25	50	63

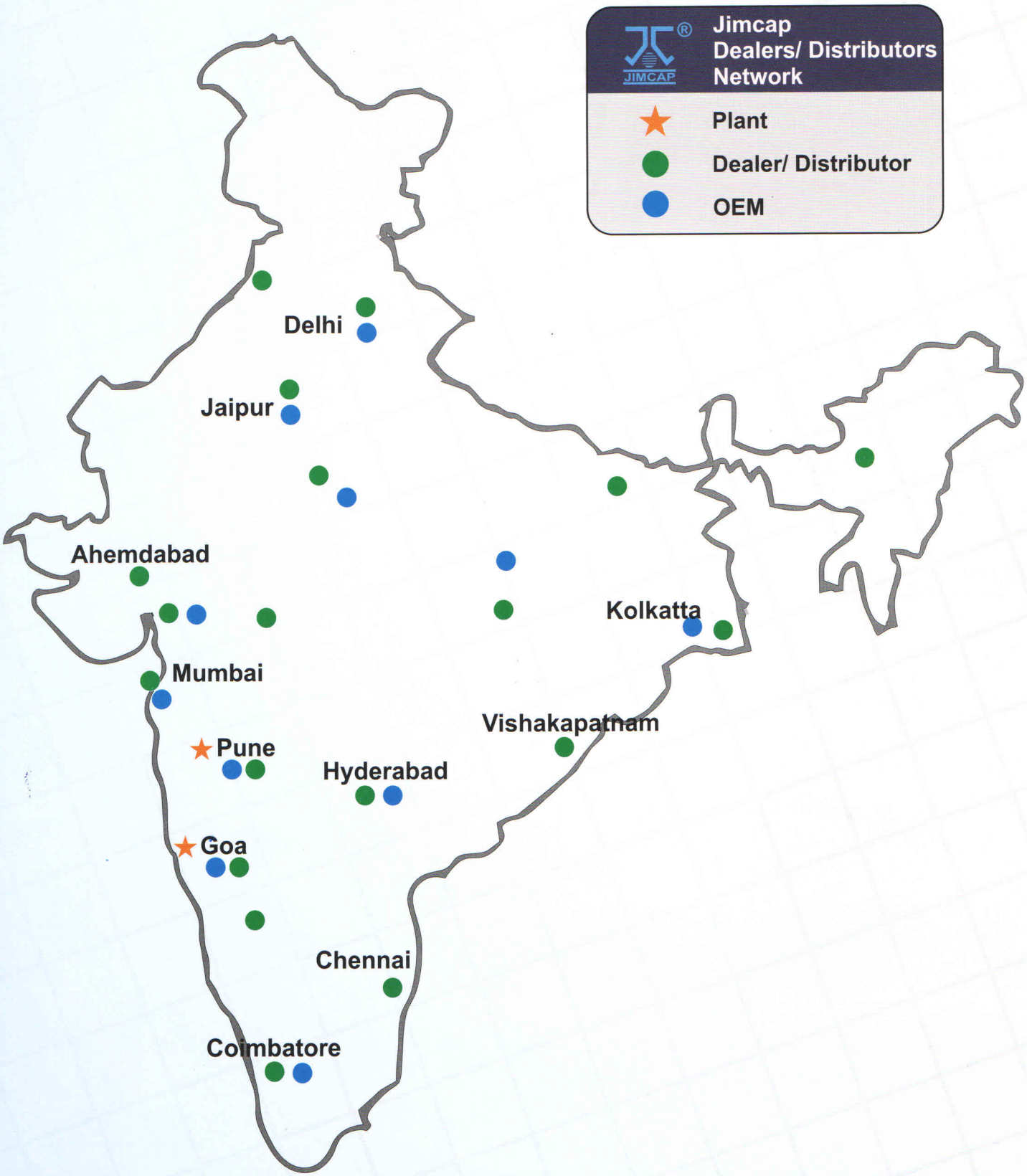
*Contactor rating recommended is for individual unit switching only.

NOMOGRAM FOR CALCULATION OF REQUIRED CAPACITOR RATING



Example

For given load of 50 H.P.
Corresponding KW = 50 x 0.746 = 37.30 KW
Present Power Factor = 0.80
Designed Power Factor = 0.95
Multiplying Factor = 0.43
Capacitor Rating required in KVAR
= KW x Multiplying Factor
= 37.30 x 0.43
= 16.039
Recommended use 15 KVAR capacitor

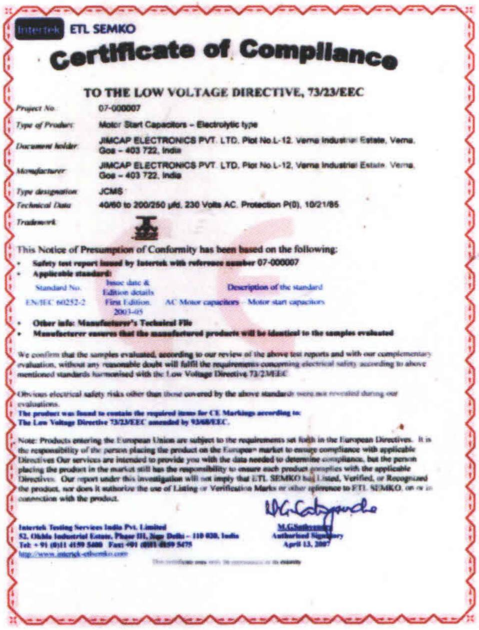


Works : 1
Jimcap Electronics Pvt. Ltd.
L- 12, Verna Industrial Estate,
Verna, GOA - 403722, India
Tel :91-0832-2782189/90
www.jimcapelectronics.com

Works : 2
Priya Capacitors Pvt. Ltd
J-346,MIDC, BHOSARI,
PUNE - 411 026. (India)
Tel. : 020 66307328 / 29/ 30
E-mail:marketing@priyajimcap.com

Marketing Office :
J-367, MIDC, BHOSARI.
PUNE - 411 026
TEL :66307328/29/30
Email: marketing@priyajimcap.com

Energizing for generations



Intertek ETL SEMKO

Certificate of Compliance

TO THE LOW VOLTAGE DIRECTIVE, 73/23/EEC

Project No.	07-000007
Type of Product	Motor Start Capacitors – Electrolytic type
Document holder	JIMCAP ELECTRONICS PVT. LTD. Plot No.L-12, Verna Industrial Estate, Verna, Goa – 403 722, India
Manufacturer	JIMCAP ELECTRONICS PVT. LTD. Plot No.L-12, Verna Industrial Estate, Verna, Goa – 403 722, India
Type designation	JCMS
Technical Data	40/60 to 200/250 µfd. 230 Volts AC. Protection P(0). 10/21/85
Trademark	

This Notice of Presumption of Conformity has been based on the following:

- **Safety test report issued by Intertek with reference number 07-000007**
- **Applicable standard:**

Standard No.	Issue date & Edition details	Description of the standard
EN/IEC 60252-2	First Edition. 2003-05	AC Motor capacitors – Motor start capacitors

- **Other info: Manufacturer's Technical File**
- **Manufacturer ensures that the manufactured products will be identical to the samples evaluated**

We confirm that the samples evaluated, according to our review of the above test reports and with our complementary evaluation, without any reasonable doubt will fulfil the requirements concerning electrical safety according to above mentioned standards harmonised with the Low Voltage Directive 73/23/EEC.

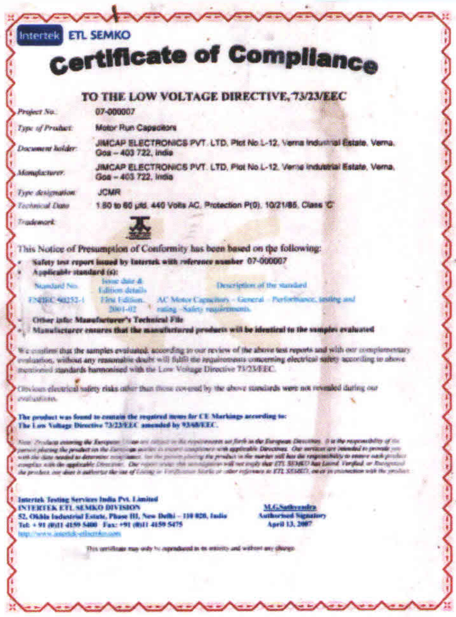
Obvious electrical safety risks other than those covered by the above standards were not revealed during our evaluations.

The product was found to contain the required items for CE Markings according to:
The Low Voltage Directive 73/23/EEC amended by 93/68/EEC.

Note: Products entering the European Union are subject to the requirements set forth in the European Directives. It is the responsibility of the person placing the product on the European market to ensure compliance with applicable Directives Our services are intended to provide you with the data needed to determine compliance, but the person placing the product in the market still has the responsibility to ensure each product complies with the applicable Directives. Our report under this investigation will not imply that ETL SEMKO has Listed, Verified, or Recognized the product, nor does it authorize the use of Listing or Verification Marks or other reference to ETL SEMKO, on or in connection with the product.

Intertek Testing Services India Pvt. Limited
52, Okhla Industrial Estate, Phase III, New Delhi – 110 020, India
Tel: + 91 (0)11 4159 5400 Fax: +91 (0)11 4159 5475
http://www.intertek-etlsemko.com

M.G.Sathyendra
Authorised Signatory
April 13, 2007



Intertek ETL SEMKO

Certificate of Compliance

TO THE LOW VOLTAGE DIRECTIVE, 73/23/EEC

Project No.	07-000007
Type of Product	Motor Run Capacitors
Document holder	JIMCAP ELECTRONICS PVT. LTD. Plot No.L-12, Verna Industrial Estate, Verna, Goa – 403 722, India
Manufacturer	JIMCAP ELECTRONICS PVT. LTD. Plot No.L-12, Verna Industrial Estate, Verna, Goa – 403 722, India
Type designation	JCMR
Technical Data	1.50 to 60 µfd. 440 Volts AC. Protection P(0). 10/21/85. Class 'C'
Trademark	

This Notice of Presumption of Conformity has been based on the following:

- **Safety test report issued by Intertek with reference number 07-000007**
- **Applicable standard (s):**

Standard No.	Issue date & Edition details	Description of the standard
EN/IEC 60252-1	First Edition. 2001-02	AC Motor Capacitors – General – Performance, testing and rating – Safety requirements.

- **Other info: Manufacturer's Technical File**
- **Manufacturer ensures that the manufactured products will be identical to the samples evaluated**

We confirm that the samples evaluated, according to our review of the above test reports and with our complementary evaluation, without any reasonable doubt will fulfil the requirements concerning electrical safety according to above mentioned standards harmonised with the Low Voltage Directive 73/23/EEC.

Obvious electrical safety risks other than those covered by the above standards were not revealed during our evaluations.

The product was found to contain the required items for CE Markings according to:
The Low Voltage Directive 73/23/EEC amended by 93/68/EEC.

Intertek Testing Services India Pvt. Limited
INTERTEK ETL SEMKO DIVISION
52, Okhla Industrial Estate, Phase III, New Delhi – 110 020, India
Tel: + 91 (0)11 4159 5400 Fax: +91 (0)11 4159 5475
http://www.intertek-etlsemko.com

M.G.Sathyendra
Authorised Signatory
April 13, 2007

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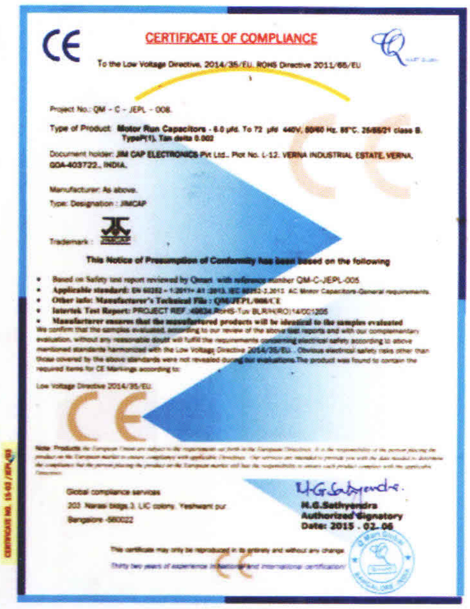

CE **CERTIFICATE OF COMPLIANCE**

To the Low Voltage Directive, 2014/35/EU, ROHS Directive 2011/65/EU

Project No.: QM - C - JEPL - 008.

Type of Product: **Motor Run Capacitors - 6.0 µfd. To 72 µfd 440V, 50/60 Hz. 85°C. 25/85/21 class B. Type P(1). Tan delta 0.002**

Document holder: **JIM CAP ELECTRONICS** Pvt Ltd., Plot No. L-12, VERNA INDUSTRIAL ESTATE, VERNA, GOA-403722., INDIA.

Manufacturer: As above.

Type: Designation : JIMCAP

Trademark :

This Notice of Presumption of Conformity has been based on the following

- Based on Safety test report reviewed by Qmart with reference number QM-C-JEPL-005
- **Applicable standard:** EN 60252 - 1:2011+ A1 :2013, IEC 60252-2,2013 AC Motor Capacitors-General requirements.
- **Other info: Manufacturer's Technical File : QM/JEPL/008/CE**
- **Intertek Test Report:** PROJECT REF 40634 ROHS-Tuv BLR/H/RO/14/001205
- **Manufacturer ensures that the manufactured products will be identical to the samples evaluated**

We confirm that the samples evaluated, according to our review of the above test reports and with our complementary evaluation, without any reasonable doubt will fulfill the requirements concerning electrical safety according to above mentioned standards harmonized with the Low Voltage Directive 2014/35/EU . Obvious electrical safety risks other than those covered by the above standards were not revealed during our evaluations.The product was found to contain the required items for CE Markings according to:

Low Voltage Directive 2014/35/EU

Global compliance services
203 Narasi bldgs.3, LIC colony, Yeshwant pur
Bangalore -560022

M.G.Sathyendra
Authorized Signatory
Date: 2015 . 02. 06

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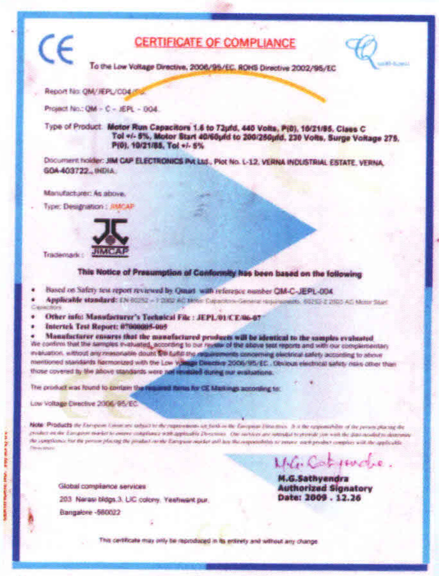
CERTIFICATE NO. 15-02 /JEPL/08



CE **CERTIFICATE OF COMPLIANCE**

To the Low Voltage Directive, 2006/95/EC, ROHS Directive 2002/95/EC

Report No: QM/JEPL/C04/09

Project No.: QM - C - JEPL - 004.

Type of Product: **Motor Run Capacitors 1.6 to 72µfd, 440 Volts, P(0), 10/21/85, Class C Tol +/- 5%, Motor Start 40/60µfd to 200/250µfd, 230 Volts, Surge Voltage 275, P(0), 10/21/85, Tol +/- 5%**

Document holder: **JIM CAP ELECTRONICS Pvt Ltd.,** Plot No. L-12, VERNA INDUSTRIAL ESTATE, VERNA, GOA-403722., INDIA.

Manufacturer: As above.

Type: Designation : JIMCAP

Trademark : JIMCAP

This Notice of Presumption of Conformity has been based on the following

- Based on Safety test report reviewed by Qmart with reference number QM-C-JEPL-004
- **Applicable standard:** EN 60252 – 1:2002 AC Motor Capacitors-General requirements, 60252-2 2003 AC Motor Start Capacitors
- **Other info: Manufacturer's Technical File : JEPL/01/CE/06-07**
- **Intertek Test Report: 07000005-005**
- **Manufacturer ensures that the manufactured products will be identical to the samples evaluated**

We confirm that the samples evaluated, according to our review of the above test reports and with our complementary evaluation, without any reasonable doubt will fulfill the requirements concerning electrical safety according to above mentioned standards harmonized with the Low Voltage Directive 2006/95/EC . Obvious electrical safety risks other than those covered by the above standards were not revealed during our evaluations.

The product was found to contain the required items for CE Markings according to:

Low Voltage Directive 2006/95/EC

Global compliance services
203 Narasi bldgs.3, LIC colony, Yeshwant pur
Bangalore -560022

M.G.Sathyendra
Authorized Signatory
Date: 2009 . 12.26

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CE **CERTIFICATE OF COMPLIANCE**

To the Low Voltage Directive, 2014/35/EU, ROHS Directive 2011/65/EU

Project No.: QM - C - JEPL - 007.

Type of Product: **Motor Start Capacitors- 40/60 µfd. 200/250 µfd 230V 50/60 Hz. 70°C. 25/70/21**

Document holder: **JIM CAP ELECTRONICS Pvt Ltd.,** Plot No. L-12, VERNA INDUSTRIAL ESTATE, VERNA, GOA-403722., INDIA.

Manufacturer: As above.

Type: Designation : JIMCAP

Trademark :

This Notice of Presumption of Conformity has been based on the following

Low Voltage Directive 2014/35/EU

Global compliance services
203 Narasi bldgs.3, LIC colony, Yeshwantpur
Bangalore -560022

M.G.Sathyendra
Authorized Signatory
Date: 2015 . 02. 06

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JIMCAP ELECTRONICS PVT.LTD

JIMCAP®

Route Map.