

MPP Film Capacitor Solutions Across Applications

DOMESTIC | INDUSTRIAL | POWER & ENERGY

Designed and manufactured with precision, SYSCAP capacitors support a wide range of applications, from everyday appliances to industrial systems and advanced power electronics.





About SYSCAP

Established in 1972, SYSCAP has built a strong legacy in capacitor manufacturing, backed by decades of engineering expertise and consistent manufacturing practices. Over the years, we have expanded our capabilities to serve a diverse range of applications across domestic appliances, motors, industrial systems, and power electronics.

With in-house manufacturing, quality control, and a deep understanding of application requirements, SYSCAP continues to support OEMs, distributors, and partners with dependable capacitor solutions designed for real-world operating conditions.



**Tested for safety
and efficiency**



**Built for reliability
& durability**

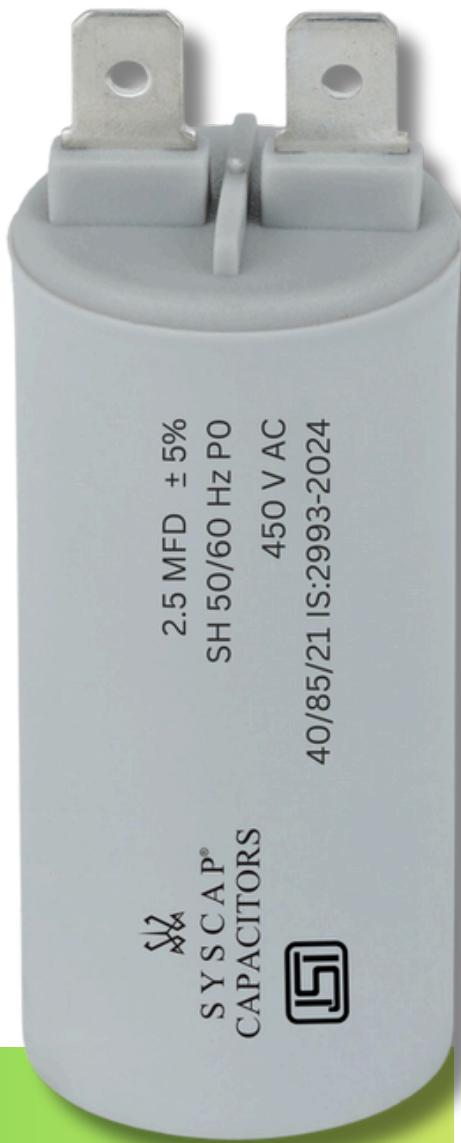


**Compatible across
key industries**



CEILING, TABLE FANS & COOLERS

Motor Run - Fan Application



CONSTRUCTION

- Metallized polypropylene film
- Plastic casing
- PU Resin
- Dry type
- Flexible wire terminals

KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- Compliance to IS 1709

ELECTRICAL RANGE

- Capacitance range: 2.5 MFD to 100 MFD
- Rated voltage: 440 V AC
- Rated frequency: 50 Hz
- Tolerance: ±5%



APPLICATIONS

For general sine wave applications, mainly as motor run capacitors for fans.

Technical data and specifications

Reference standards	IS 1709
Safety class	P0
Tolerance	±5%
Rated voltage VR	440 V AC
Rated frequency FR	50 Hz

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/85/21 to IEC 60068-1
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Compatibility to RoHS

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm))	VOLTAGE V AC
1 MFD	27 x 51	440 V AC
1.25 MFD	27 x 51	440 V AC
1.5 MFD	27 x 51	440 V AC
2 MFD	27 x 51	440 V AC
2.25 MFD	27 x 51	440 V AC
2.5 MFD	27 x 51	440 V AC
3.15 MFD	27 x 51	440 V AC
4 MFD	27 x 51	440 V AC

LIGHTING SYSTEMS

Capacitors designed for stable operation in lighting circuits and luminaire systems.



CONSTRUCTION

- Metallized polypropylene film
- Plastic casing
- PU Resin
- Dry type
- Flexible lead wires with sleeve

KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- P0 safety class
- In-built discharge resistor



ELECTRICAL RANGE

- Capacitance range: 2 MFD to 45 MFD
- Rated voltage 250 V AC
- Rated frequency: 50 Hz
- Tolerance: ±5%

APPLICATIONS

For general sine wave applications, mainly as lighting capacitor

Technical data and specifications

Reference standards	IS 1569, IEC 61048
Safety class	P0
Tolerance	±5%
Rated voltage VR	250 V AC
Rated frequency FR	50/60 Hz

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/85/21
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Compatibility to RoHS

Compliance to directive 2011/65/EU

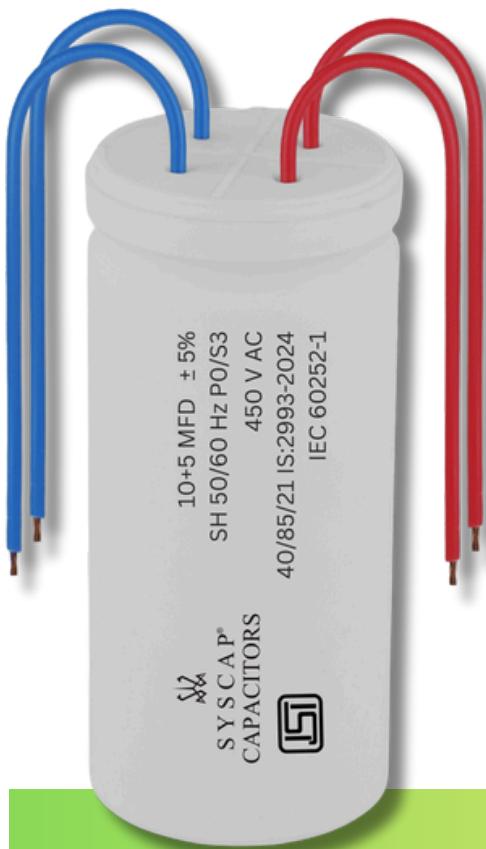
CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm))	VOLTAGE V AC
2 MFD	25 x 48	250 V AC
3 MFD	25 x 48	250 V AC
4 MFD	25 x 48	250 V AC
5 MFD	30 x 52	250 V AC
6 MFD	30 x 52	250 V AC
7 MFD	30 x 52	250 V AC
8 MFD	30 x 72	250 V AC
10 MFD	30 x 72	250 V AC
12 MFD	35 x 72	250 V AC
15 MFD	35 x 72	250 V AC
16 MFD	35 x 72	250 V AC
18 MFD	35 x 72	250 V AC
20 MFD	35 x 72	250 V AC
25 MFD	40 x 72	250 V AC
30 MFD	40 x 72	250 V AC
33 MFD	40 x 96	250 V AC
40 MFD	40 x 96	250 V AC
42 MFD	45 x 96	250 V AC
45 MFD	45 x 96	250 V AC

WASHING MACHINE CAPACITORS

Dual Value Capacitors

APPLICATIONS

For general sine wave applications, mainly for motor run capacitors for washing machine



CONSTRUCTION

- Metallized polypropylene film
- Plastic casing
- PU Resin
- Dry type
- Flexible lead wires

KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- P0/S3/P2 safety class
- Mounting groove

ELECTRICAL RANGE

- Capacitance range: 7+5 MFD to 13+6 MFD
- Rated voltage 440 V AC
- Rated frequency: 50 Hz
- Tolerance: ±5%



Technical data and specifications

Reference standards	IS 2993
Life Expectancy to IS 2993	440 V / +70 °C: 3000 Hrs (Class C)
Safety class	P0
Tolerance	±5%
Rated voltage VR	440 V AC
Rated frequency FR	50 Hz

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/70/21 to IEC 60068-1
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Compatibility to RoHS

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm)	VOLTAGE V AC
7+3.5 MFD	40 x 80	440 V AC
8+4 MFD	40 x 80	440 V AC
8.5+5 MFD	40 x 80	440 V AC
8+5 MFD	40 x 80	440 V AC
8+6 MFD	40 x 80	440 V AC
9+4 MFD	40 x 80	440 V AC
9.5+4 MFD	40 x 80	440 V AC
9+5 MFD	40 x 80	440 V AC
9+6 MFD	40 x 80	440 V AC
10+4 MFD	40 x 80	440 V AC
10+5 MFD	40 x 80	440 V AC
10+6 MFD	40 x 80	440 V AC
11+4 MFD	40 x 80	440 V AC
11+5 MFD	40 x 80	440 V AC
11+6 MFD	40 x 80	440 V AC
12+4 MFD	40 x 80	440 V AC
12+5 MFD	40 x 80	440 V AC
12+6 MFD	40 x 80	440 V AC
13+5 MFD	40 x 80	440 V AC
13+6 MFD	40 x 80	440 V AC

AIR CONDITIONING & HVAC CAPACITORS

Motor Run Capacitor

KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- In-built pressure interrupter
- Indoor mounting

ELECTRICAL RANGE

- Capacitance range: 2 MFD to 61+10 MFD
- Rated voltage **440 V AC and above**
- Rated frequency: 50 Hz
- Tolerance: $\pm 5\%$



CONSTRUCTION

- Metallized polypropylene film
- Aluminum casing with metal top
- Gel Resin
- Safety capacitor with pressure interrupter
- 2+2 fast-on terminal 6.3 x 0.8mm



APPLICATIONS

For general AC Filtering Application

Technical data and specifications

Reference standards	IS 2993, UL 810 (10000 AFC PROTECTED UP TO 450 V), IEC 60252-1	
Safety class	S2 / P2	
Tolerance	±5%	
Rated voltage VR	370/450 V AC	
Rated frequency FR	50/60 Hz	

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/85/21 to IEC 60068-1	
Compatibility to RoHS		

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm)	VOLTAGE V AC
2 MFD	30 x 72	440 V AC
2.5 MFD	30 x 72	440 V AC
4 MFD	30 x 72	440 V AC
5 MFD	30 x 72	440 V AC
6 MFD	30 x 72	440 V AC
8 MFD	30 x 72	440 V AC
10 MFD	30 x 72	440 V AC
15 MFD	30 x 72	440 V AC
20 MFD	40 x 72	440 V AC
25 MFD	40 x 72	440 V AC
30 MFD	40 x 72	440 V AC
35 MFD	40 x 105	440 V AC
40 MFD	40 x 105	440 V AC
45 MFD	40 x 105	440 V AC
50 MFD	45 x 105	440 V AC
55 MFD	45 x 105	440 V AC
60 MFD	45 x 105	440 V AC

Technical data and specifications

Reference standards	IS 2993, UL 810 (10000 AFC PROTECTED UP TO 450 V), IEC 60252-1	
Safety class	S2 / P2	
Tolerance	±5%	
Rated voltage VR	370/450 V AC	
Rated frequency FR	50/60 Hz	

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/85/21 to IEC 60068-1
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Compatibility to RoHS

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm))	VOLTAGE V AC
25+2/4/6/7.5 MFD	45 x 105	440 V AC
30+2/4/6/7.5 MFD	45 x 105	440 V AC
35+2/4/6/7.5 MFD	45 x 105	440 V AC
40+2/4/6/7.5 MFD	45 x 105	440 V AC
45+2/4/6/7.5/10 MFD	45 x 105	440 V AC
50+2/4/6/7.5/10 MFD	45 x 105	440 V AC
55+2/4/6/7.5/10 MFD	50 x 110	440 V AC
60+2/4/6/7.5/10 MFD	50 x 110	440 V AC
65+2/4/6/7.5/10 MFD	50 x 110	440 V AC

MOTOR RUN CAPACITORS

Capacitors designed for continuous-duty motor run and compressor applications in air conditioning and HVAC systems.



KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- P0 safety class



CONSTRUCTION

- Metallized polypropylene film
- Plastic casing
- PU Resin
- Dry type
- Flexible lead wires with sleeve (optional)
- Double fast-on



APPLICATIONS

For general sine wave applications, mainly as a motor run capacitor

Technical data and specifications

Reference standards	IS 2993, IEC 60252-1	
Life Expectancy to IEC 60252-1	440 V AC +85 °C: 10000 Hrs (Class B)	
Safety class to IEC 60252-1/ IS 2993	P0 / S0	
Tolerance	±5%	
Rated voltage VR	440 V AC	
Rated frequency FR	50/60 Hz	

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/85/21
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Compatibility to RoHS

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\varnothing D x L (mm)	VOLTAGE V AC
5 MFD	30 x 52	440 V AC
6 MFD	30 x 52	440 V AC
8 MFD	35 x 52	440 V AC
10 MFD	35 x 72	440 V AC
15 MFD	35 x 72	440 V AC
20 MFD	40 x 72	440 V AC
25 MFD	45 x 72	440 V AC
30 MFD	40 x 96	440 V AC
36 MFD	45 x 96	440 V AC
40 MFD	45 x 96	440 V AC
45 MFD	50 x 96	440 V AC
50 MFD	50 x 96	440 V AC
60 MFD	50 x 96	440 V AC
72 MFD	50 x 118	440 V AC

MOTOR START CAPACITORS

Capacitors designed to deliver high starting torque in induction motors and utility pump applications.



CONSTRUCTION

- Metallized polypropylene film
- Plastic casing
- PU Resin
- Dry type
- Wire with sleeve

KEY FEATURES

- Self-healing properties
- High insulation resistance
- Low dissipation factor
- PO safety class

ELECTRICAL RANGE

- Capacitance range: 30 MFD to 120 MFD
- Rated voltage 250 V AC
- Rated frequency: 50 Hz
- Tolerance: ±5%

APPLICATIONS

For general sine wave applications, mainly for motor start

Technical data and specifications

Reference standards	IS 2993
Safety class	P0
Tolerance	±5%
Rated voltage VR	250 V AC
Rated frequency FR	50 Hz
Rated maximum duty cycle	2.20%

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.3 IR	(IR = Rated Current)

Climatic data

Climatic category	25/70/21
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Compatibility to RoHS

Compliance to directive 2011/65/EU

CAPACITANCE μ F	CAN SIZE (\emptyset D x L (mm)	VOLTAGE V AC
30 MFD 40/60	35 x 96	250 V AC
45 MFD 60/80	35 x 96	250 V AC
60 MFD 80/100	40 x 96	250 V AC
75 MFD 100/120	40 x 96	250 V AC
90 MFD 120/150	45 x 96	250 V AC
105 MFD 150/200	50 x 96	250 V AC
120 MFD 200/250	50 x 96	250 V AC

INDUSTRIAL & POWER FACTOR CORRECTION CAPACITORS (KVAR)

Capacitors designed for power factor correction and industrial electrical panel applications.



KEY FEATURES

- Self-healing dielectric
- Low dielectric losses
- Built-in pressure-sensitive disconnector
- Dry-Type, Resin-Filled Construction
- Low power loss (≤ 0.5 W/kVAR)
- IEC 60831-1 & 2, S 13585 Compliant



ELECTRICAL RANGE

- Capacitance range: 1 to 50 KVAR
- Rated voltage 415V, 440V, 480V, 525V, 690V
- Rated frequency: 50 Hz
- Tolerance: $\pm 5\%$



CONSTRUCTION

- Metallized polypropylene film
- Cylindrical Aluminium Can Design
- Heavy-duty stud terminals / fast-on terminals

APPLICATIONS

- Industrial plants
- APFC panels
- Renewable energy systems
- HVAC & chiller plants
- Data centers & commercial buildings
- Heavy infrastructure

Technical data and specifications

Reference standards	IEC 60831-1 & 2, S 13585 Compliant
Safety class	P2
Tolerance	±5%
Rated voltage VR	415V, 440V, 480V, 525V, 690V
Rated frequency FR	50 Hz
Rated maximum duty cycle	Continuous operation

Maximum Ratings

Maximum permissible voltage Vmax	1.1 VR	(VR = Rated Voltage)
Maximum permissible current Imax	1.5 IR	(IR = Rated Current)

Climatic data

Climatic category	25 / 55 / 21
Rated Reactive Power in KVAR @ 50 Hz	

CAPACITANCE µF	CAN SIZE (ØD x L (mm)	VOLTAGE V AC
1 KVAR	50 x 110	440 V AC
5 KVAR	63.5 x 155	440 V AC
7.5 KVAR	75 x 160	440 V AC
10 KVAR	75 x 205	440 V AC
12.5 KVAR	85 x 205	440 V AC
15 KVAR	85 x 205	440 V AC
20 KVAR	85 x 278	440 V AC
25 KVAR	90 x 278	440 V AC
30 KVAR	116 x 278	440 V AC
40 KVAR	116 x 278	440 V AC
50 KVAR	136 x 278	440 V AC

POWER ELECTRONICS CAPACITORS (DC LINK & SNUBBER)

Capacitors designed for demanding power electronics and high-frequency switching applications.

ELECTRICAL RANGE SNUBBER

- Rated Voltage: 630-3000VDC
- Capacitance Tolerance $\pm 5\%$, $\pm 10\%$
- Capacitance Range $0.22\mu\text{F}$ to $10\mu\text{F}$



CONSTRUCTION

- Metallized polypropylene film
- Compact, robust construction
- Dry-type design

ELECTRICAL RANGE DC LINK

- Rated Voltage: 450 - 3000VDC
- Capacitance Tolerance $\pm 5\%$, $\pm 10\%$
- Capacitance Range $1\mu\text{F}$ to $3000\mu\text{F}$



KEY FEATURES

- Low ESR and ESL characteristics
- High ripple current capability
- Excellent thermal stability
- Self-healing MPP film dielectric
- Standardized Internal Structure

APPLICATIONS

- Solar inverters
- Wind power inverters
- UPS systems
- Industrial drives
- Medical Equipment
- Automotive Systems



CHARACTERISTICS

HIGH STABILITY AND RELIABILITY

MPP film capacitors ensure stable performance in different temperatures and environments.

SELF-HEALING CAPABILITY

In a dielectric breakdown, the metallized layer vaporizes around the fault, enabling the capacitor to maintain functionality with a minimal performance impact.

LONG LIFESPAN

The durable construction and high-quality materials in MPP film capacitors increase their lifespan, reducing replacement frequency.

HIGH PULSE CURRENT HANDLING

MPP film capacitors can manage high pulse currents, essential in applications like switching power supplies and snubber circuits.

LOW DIELECTRIC LOSS

These capacitors are highly efficient for AC and high-frequency applications due to minimal energy loss.

HIGH VOLTAGE HANDLING

MPP film capacitors operate at high voltages, making them ideal for power conditioning and high-power applications.

COMPACT DESIGN

Their efficient design allows for a smaller footprint, beneficial in space-constrained applications.

NON-INDUCTIVE CONSTRUCTION

The design of these capacitors ensures minimal inductance, making them suitable for high-frequency applications.



CHARACTERISTICS

MOISTURE RESISTANCE

The materials and construction techniques used provide excellent resistance to moisture, enhancing durability in humid environments.

THERMAL STABILITY

Our capacitors maintain performance at high temperatures, suitable for industrial and automotive use.

LOW ESR AND ESL

MPP film capacitors show low ESR and ESL, enhancing efficiency in high-frequency circuits.

ROHS COMPLIANCE

Our capacitors meet RoHS standards, are environmentally friendly, and are safe for diverse applications.

WIDE CAPACITANCE RANGE

Available in a broad range of capacitance values, making them versatile for various circuit requirements.

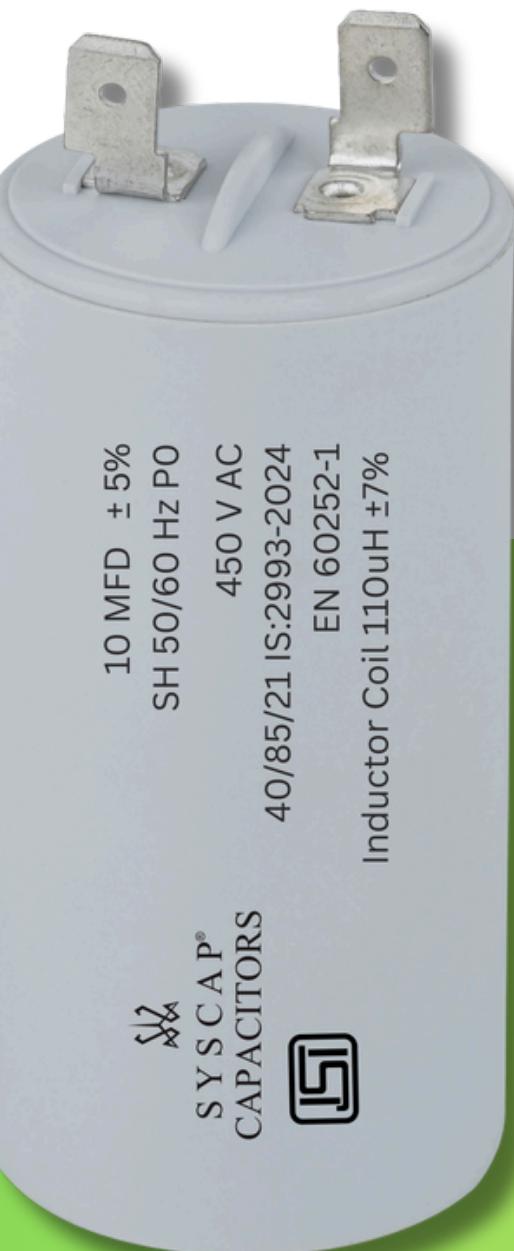
ENVIRONMENTAL RESISTANCE

The robust construction makes them resistant to environmental factors such as vibration and mechanical stress, ensuring reliability in harsh conditions.



KEY FEATURES

- Ref Std : IEC/EN 60252-1 : IS 2993-1998
- Ref Std : IEC 60831-1 : 2002 IS : 13340 : PART 1 : 2012
- Operating Voltage 110V to 830V
- Operating Temperature : -40 to 85 Deg C
- Plastic and Aluminium Casing
- S0/S2/S3 - Safety Standards
- Class A/B/C/D Standard of Operation
- Single and Dual Value Capacitor Range - 0.68 MFD to 350 MFD
- PFC/KVAR Capacitors from 1 KVAR to 50 KVAR



OPTIONAL FITMENTS AVAILABLE ON REQUEST

- Threaded stud at bottom, M8, Max. Torque = 5 Nm
- Single Fast-on Terminals 6.3 x 0.8 mm
- Double Fast-on Terminals 6.3 x 0.8 mm
- FR grade plastic casing with FR grade polyurethane resin
- Inductor coil



ISI 2993:2024
CML No. 6200116889



TUV RoHS

REACH
COMPLIANT



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