TIBCON CAPACITORS

# Technical Datasheet

## MPP Film Power Factor Correction Standard & Heavy Duty(cylindrical) Capacitors

**Item Number / Code:**

**Construction**

- Dielectric: Metallized Polypropylene film
- Electrode: Metallized Film
- Connection: Δ
- External Discharge device: Resistor
- Encapsulation: Jelly Oíl
- Aluminium Container
- RoHS Compliant

---

**Terminals:**

- Screw / Stud type Finger proof terminals (IP 20)

---

**Typical Applications:**

- For Industrial Power factor correction applications

---

**Features:**

- Low dissipation factor
- Conforms to IEC 60831-1+2:2014 & IS 13340:2012
- Naturally air cooled (or forced air cooling)
- Indoor mounting
- High insulation resistance
- NPCB(Non-Polychlorinated biphenyl) compliant
- No. of switching per annum Max. 15000 switching

---

**Safety:**

- Over pressure disconnector ( Burst Proof)
- Self-healing properties
- Protection: IP 20 (optionally with terminal cap for IP54)

---

**Marking / Identification Label**

- Tibcon logo
- Rated voltage
- Rated Current
- Connection Δ
- Discharge Device: 
- Date of Manufacture
- CE Marking

Rated Kvar
Rated Frequency
3 Phase
SH- MPP
Over pressure Disconnector ≠
Temperature Category
Serial Number

---

**Delivery Mode**

- Sequential arranged Packing

---

TIBCON CAPACITORS

# Technical Datasheet

## MPP Film Power Factor Correction Standard & Heavy Duty(cylindrical) Capacitors

### Electrical Characteristics:

| | |
|---|---|
| ▪ Reference Standard | : IEC:60831-1+2 & IS:13340/41 |
| ▪ Rated Kvar | : 0.5 Kvar to 50 Kvar |
| ▪ No of Phases | : 3Ø |
| ▪ Capacitance tolerance | : -5 To + 10 % |
| ▪ Rated voltage VR | : 400 / 415 / 440 Vac |
| ▪ Inrush current | : 200 – 400 x in IR |
| ▪ Over Voltage Vmax | : VR x 1.1 ( Continuos) |
| ▪ Over Current I max | : Up to 1.3…2.0 * IR ( 2 X in) |
| ▪ Rated Frequency FR | : 50 - 60 Hz |
| ▪ AC test Voltage terminal to terminal | : 2.15 x VR ,2s (Routine test)<br>: 2.15 x VR ,10s (Type test) |
| ▪ AC test Voltage terminal to case | : Un, ≤ 500V : 3 KV AC , 10s |
| ▪ | : Un, > 500V : 2*Un+2 KV AC , 10s |
| ▪ Insulation Resistance R is at 20ºC, | : 3000 s |
| ▪ Relative Humidity | : 95 % rh |
| ▪ Discharge time | : < 75 V within 180 seconds. |
| ▪ Losses (tan $\delta$) | : 0.3 W / KVAr (without discharge resistors)<br>: 0.45 W / KVAr (with discharge resistors) |
| ▪ Temperature Category | : -25 / D OR - 40 / D ( As per Customer specifications) : 55 °C |
| ▪ Maximum Operating Temperature | : 65°C |
| ▪ Maximum Case Temperature | : - 40°C to +65°C |
| ▪ Storage Temperature | : Screw / Stud type Finger proof terminials |
| ▪ Type of Terminals | : Vertical |
| ▪ Mounting Position | : 150,000 / h 65 °C , 180,000 / h 55 °C |
| ▪ Mean Life Expectancy | : UN,+ 10% 8h in every 24h<br>: UN,+ 15% 30 min in every 24h<br>: UN,+ 20% 5 min in every 24h<br>: UN,+ 30% 1 min in every 24h |
| ▪ Max. over Voltage U max | |




**Important note:**

This data sheet is the sole property of TIBREWALA ELECTRONICS LTD. and content of this datasheet thereof must not be imparted to third party nor be used for any unauthorized purpose without written permission from the authoritie

TIBCON CAPACITORS

## Technical Datasheet

### MPP Film Power Factor Correction Standard & Heavy Duty(cylindrical) Capacitors

**Table:**

| Sr.No. | Kvar | Voltage | Amps | Al Can Size(ØdxHt) (mm) | Flange dia(D) | Total Height with Stud (mm) | Fig. |
|---|---|---|---|---|---|---|---|
| 1 | 0.5 | 400 | 0.72 | 63.5X87 | 68 | 145 | A |
| 2 | 1.0 | 400 | 1.44 | 63.5X87 | 68 | 145 | A |
| 3 | 1.5 | 400 | 2.16 | 63.5X87 | 68 | 145 | A |
| 4 | 2.5 | 400 | 3.6 | 63.5X112 | 68 | 145 | A |
| Heavy Duty | | | | | | | |
| 5 | 5.0 | 400 | 7.2 | 76X175 | 80 | 228 | B |
| 6 | 7.5 | 400 | 10.8 | 76X210 | 80 | 263 | B |
| 7 | 10.0 | 400 | 14.4 | 76X247 | 80 | 300 | B |
| 8 | 12.5 | 400 | 18.0 | 85X247 | 90 | 300 | B |
| 9 | 15.0 | 400 | 21.6 | 85X278 | 90 | 331 | B |
| 10 | 20.0 | 400 | 28.8 | 95X278 | 100 | 331 | B |
| 11 | 25.0 | 400 | 36.0 | 100X278 | 105 | 331 | B |
| 12 | 30.0 | 400 | 43.2 | 116X278 | 121 | 329 | C |
| 13 | 40.0 | 400 | 57.6 | 136X247 | 141 | 298 | C |
| 14 | 50.0 | 400 | 72.0 | 136X278 | 141 | 329 | C |

# Technical Datasheet

## MPP Film Power Factor Correction Standard & Heavy Duty(cylindrical) Capacitors

### Capacitor Drawing:

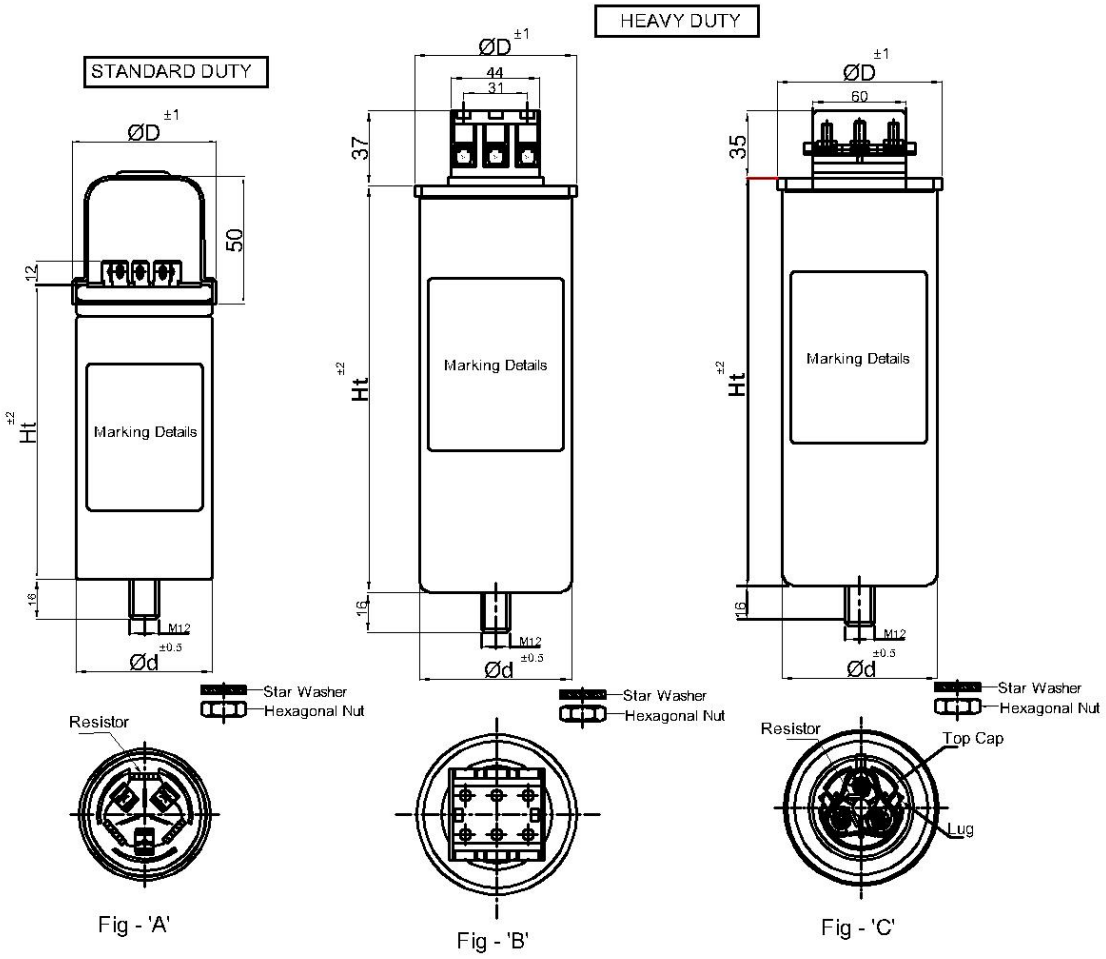



Fig - 'A'

Fig - 'B'

Fig - 'C'

### Marking Details

