



CONSISTENT QUALITY | SUPERIOR TECHNOLOGY | ENERGY EFFICIENT



# Power Factor Correction Capacitors Harmonic Filter Reactors Capacitor Duty Contactors

Tibrewala Electronics Limited  
[www.tibcon.net](http://www.tibcon.net)



## About Us

As one of the most renowned manufactures of Capacitors and MPP Film in India, Tibrewala Electronics Limited (TEL) has successfully reached the elite 25 Million USD segment, having ventured to capture global markets across Asia, Africa, Australia, Europe and America.

With an established presence of nearly three decades in the sector, TEL has become an invaluable resource in the appliances of several reputed international brands and even defense electronics. Presently over 40% of our products are earmarked exclusively for export.

With a staggering investment of over 10 Million USD today, we proudly stand on the threshold of phenomenal outbound growth, adding value to our partners, customers and vendors, strongly contributing to the nation's industrial strength. TEL has now become the world leader with its rich expertise and global standards.

### Quality

TIBCON is a well-known brand of Capacitors Globally for its performance. Reliability and Durability. The Quality of our products has been a key driver of our growth and prominence in the capacitor industry.

TIBCON products conform to global industry norms and international standards.

- UL 810 (Underwriters Laboratories)
- CSA (Canadian Standards)
- CE (European-Declaration of Conformity)
- ISI (Indian Standards Institution)

TEL is an ISO 9001 Certified Company.



## Power Factor Correction Capacitors

The efficiency of power generation, transmission or conversion is improved when operated at near unity power factor. The least expensive way to achieve the same is by installing Power Factor Correction Capacitors. Power factor correction capacitors must be able to withstand high voltage transients and power line variations without breakdown.

TIBCON PFC Capacitors are designed and manufactured for the most demanding applications and toughest ambient conditions. These capacitors are durable, safe, reliable and high performance solution for power factor correction in Industrial & semi-industrial application, with its rich expertise and global standards.



## Design & Construction

TIBCON PFC Capacitors are made in accordance with Metallized Polypropelene technology with built in SELF HEALING properties. We mastered this technology over a period of last 30 years and have the state of art manufacturing facility for metallization of the film. The elements are wound on fully automatic numerically controlled winding machine that ensures no corona discharge & ionization. The elements are housed in cylindrical shaped aluminum case with in built explosion proof safety device

## Unique Features

- Compact Cylindrical Construction
- 3 Phase - Delta Connection
- Non - PCB Oil Encapsulation
- High Temperature Withstanding Capacity
- Self Healing Properties
- Explosion Proof Design Safe-Touch, Shock-Proof Terminals
- Longer Life Expectancy
- ECO-Friendly
- Wide Range-Standard Duty, Heavy Duty & Super Heavy Duty

## Explosion Proof Safety Device

Sometimes Capacitors may explode due to very high voltages in repetitive peaks, which cannot be 'self healed' by the regenerative with an internal Over-Pressure Disconnecter ,which disconnects the capacitor from the power source and prevents it from exploding.

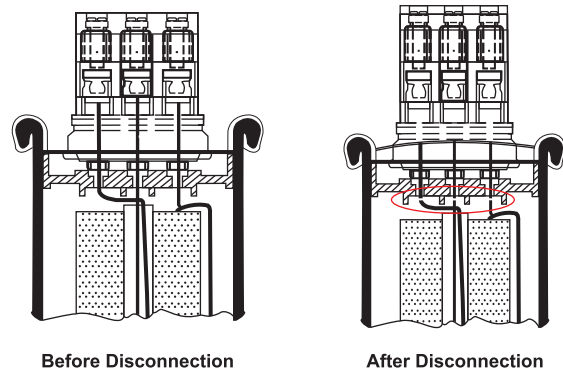
## Construction details of capacitors

TIBCON manufacture three different types of PFC Capacitors - Standard Duty (400/415/440V),Heavy Duty (440/480V) and Super Heavy Duty (525/690V). The Standard Duty capacitors are manufactured by using standard thickness of dielectric material with heavy edge metallization.

**Heavy Duty Capacitors** are manufactured with thicker dielectric material, housed in a bigger aluminium can.

**Super Heavy Duty Capacitors** are made of Internal Series Metallized Film, which will reduce the terminal voltage at the capacitor level by half. This will help in drastic reduction of temperature with in the capacitor.

### INTERNAL OVER PRESSURE DISCONNECTOR

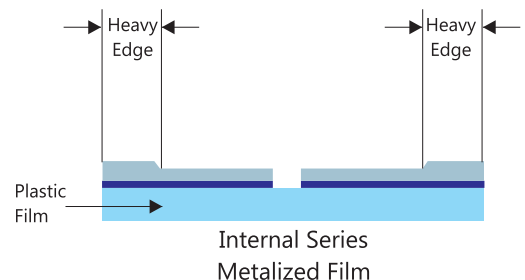


## Application

- APFC Control Panels
- Wind Turbines
- Commercial Establishments
- Industrial and Semi Industrial Applications
- De-tuned and Tuned Harmonic Filters
- Fixed Compensation ( Individual and Group)
- Motors and Transforms
- Welding
- Furnaces

## Range of PFC Capacitors

Series	Voltage	Type	Output
<b>STANDARD DUTY</b>	400V	Cylindrical	1-50 KVAR
		Box Type	1-30 KVAR
	415V	Cylindrical	1-50 KVAR
		Box Type	1-30 KVAR
	440V	Cylindrical	1-50 KVAR
		Box Type	1-30 KVAR
<b>HEAVY DUTY</b>	440V	Cylindrical	5-25 KVAR
		Box Type	5-25 KVAR
	480V	Cylindrical	5-30 KVAR
		Box Type	5-25 KVAR
<b>SUPER HEAVY DUTY</b>	525V	Cylindrical	5-33 KVAR
		Box Type	5-25 KVAR
	690V	Cylindrical	5-25 KVAR
		Box Type	5-25 KVAR



**ALUMINIUM CYLINDER & MS BOX TYPE**

• Standard	IEC 60831-1 & 2, IS :13340 PART 1 & 2
• Type	MKP Cylindrical / MS Box
• Rated Voltage	230-690 Volts
• Rated Frequency	50/60 Hz
• Maximum Over Voltage U Max	U <sub>N</sub> + 10% 8 h in every 24 h U <sub>N</sub> + 15% 30 min in every 24 h U <sub>N</sub> + 20% 5 min in every 24 h U <sub>N</sub> + 30% 1 min in every 24 h
• Dielectric System	Metallized Polypropylene film with Zn/Al, alloy, slpe profile, special edge (wave cut)
• Losses	<0.25 Watt/Kvar (Without Resistor) & <0.5 Watt/Kvar
• Protecting Class	Ip 20
• Cooling	Natural Air Cooled
• Max Above Sea Level	4,000
• Case:	Extruded Aluminum Can/Powder Coated MS Box
• Discharge Resistor	Special Design Internal Discharge, Resistance 50 V In Less Than 60 Sec
• Terminals	Three phase terminal with electric shock protection ( finger proof ), designed for up to 25sq.mm cable termination Double fast-on with cable ( < 8kVAR) Tin Plated MS Studs for Box Type Capacitors
• Execution	Indoor
• Tolerance On Capacitance	-5% To +10%
• Test Voltage Terminal To Terminal	Type Test : 2.15U <sub>N</sub> , 10 Sec, Routine Test : 2.15 U <sub>N</sub> , 2 Sec
• Test Voltage Terminal To Casing	U <sub>N</sub> ≤ 600 V : 3000V AC 10 Sec, U <sub>N</sub> = 660 V : 6000V AC 10 Sec
• Temperature Category	-25°c / + 55°c ( Class D )
• Max Humidity	95%
• Grounding And Mounting	With M12 Stud At The Bottom Of Case
• Mounting Position	Vertical
• Connection	Three Phase Delta Connection ( Single Phase on Request )
• Protection Type	Dry Type, Self-Healing, Internal Over Pressure Disconnecter
• Impregnant	Non PCB, Biodegradable Natural Oil, High Viscosity Resin

**STANDARD DUTY - CYLINDRICAL**

• Rated reactive Power	0.25-50 KVAR Single Unit
• Over Current	1.54 × I <sub>n</sub>
• Inrush Current	200 × I <sub>n</sub>
• Life Expectancy	> 1,00,000 Operation Hours
• No. of Annual Switching Operations	5,000

**HEAVY DUTY - CYLINDRICAL**

• Rated reactive Power	5-30 KVAR Single Unit
• Over Current	2.0 × I <sub>n</sub>
• Inrush Current	300 × I <sub>n</sub>
• Life Expectancy	> 1,50,000 Operation Hours
• No. of Annual Switching Operations	10,000

**SUPER HEAVY - CYLINDRICAL**

• Rated reactive Power	5-33 KVAR Single Unit
• Over Current	1.54 × I <sub>n</sub>
• Inrush Current	200 × I <sub>n</sub>
• Life Expectancy	> 1,00,000 Operation Hours
• No. of Annual Switching Operations	5,000

**STANDARD DUTY CAPACITORS - CYLINDRICAL TYPE. Rated Voltage 400/415/440V,50Hz,3-Phase, Delta Connection**

Voltage	Output KVAR			Dim.(diaxht) (uF)	Capacitance	Current	Fig	Part Number
	400v	380v	415v					
400	1.0	0.90	1.08	063.50 X 87	6.64	1.44	A	PFC-1.00-3-400-50-C-13
400	2.0	1.81	2.15	063.50 X 87	13.3	2.88	A	PFC-2.00-3-400-50-C-13
400	2.5	2.26	2.69	063.50 X 87	16.6	3.60	A	PFC-2.50-3-400-50-C-13
400	5.0	4.52	5.38	076.0 X 175	33.2	7.20	B	PFC-5.00-3-400-50-C-10
400	7.5	6.76	8.07	076.0 X 210	49.8	10.80	B	PFC-7.50-3-400-50-C-05
400	8.33	7.53	8.97	076.0 X 210	55.3	12.00	B	PFC-8.33-3-400-50-C-05
400	10.0	9.02	10.76	076.0 X 247	66.4	14.40	B	PFC-10.00-3-400-50-C-16
400	12.5	11.28	13.46	085.0 X 247	83.0	18.00	B	PFC-12.50-3-400-50-C-17
400	15.0	13.54	16.15	085.0 X 278	3x99.6	21.60	B	PFC-15.00-3-400-50-C-14
400	20.0	18.04	21.53	095.0 X 278	3x132.8	28.80	B	PFC-20.00-3-400-50-C-18
400	25.0	22.56	26.91	095.0 X 278	3x166	36.00	B	PFC-25.00-3-400-50-C-18
400	30.0	27.06	32.29	116.0 X 278	3x199.2	43.20	B	PFC-30.00-3-400-50-C-19
400	30.0	27.06	32.29	085.0 X 353	3x199.2	43.20	C	PFC-30.00-3-400-50-C-15
400	40.0	36.08	43.06	136.0 X 247	3x265.6	57.60	C	PFC-40.00-3-400-50-C-12
400	50.0	45.10	53.82	136.0 X 278	3x332	72.00	C	PFC-50.00-3-400-50-C-20

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	415v	400v	440v					
415	1.0	0.93	1.12	050.0 X 135	3x6.16	1.39	A	PFC-01.00-3-415-50-C-0
415	2.0	1.86	2.25	050.0 X 135	3x12.32	2.78	A	PFC-02.00-3-415-50-C-0
415	2.5	2.32	2.81	050.0 X 135	3x15.4	3.48	A	PFC-02.50-3-415-50-C-0
415	5.0	4.65	5.62	063.5 X 135	3x30.8	6.95	A	PFC-5.00-3-415-50-C-2
415	7.5	6.97	8.43	063.5 X 195	3x46.2	10.42	A	PFC-07.50-3-415-50-C-4
415	8.33	7.74	9.36	063.5 X 195	3x51.31	11.57	A	PFC-08.33-3-415-50-C-4
415	10.0	9.29	11.24	076.0 X 210	3x61.6	13.90	B	PFC-10.00-3-415-50-C-5
415	12.5	11.61	14.05	076.0 X 210	3x77	17.37	B	PFC-12.50-3-415-50-C-5
415	15.0	13.94	16.86	085.0 X 210	3x92.4	20.85	B	PFC-15.00-3-415-50-C-6
415	20.0	18.58	22.48	085.0 X 278	3x123.2	27.80	B	PFC-20.00-3-415-50-C-14
415	25.0	23.23	28.10	085.0 X 278	3x154	34.75	B	PFC-25.00-3-415-50-C-14
415	28.0	26.04	31.40	095.0 X 247	3x172.5	38.92	B	PFC-28.00-3-415-50-C-8
415	30.0	27.87	33.72	095.0 X 247	3x184.8	41.70	B	PFC-30.00-3-415-50-C-8
415	40.0	37.16	44.96	116.0 X 247	3x246.4	55.60	C	PFC-40.00-3-415-50-C-9
415	50.0	46.45	56.21	136.0 X 247	3x308	69.50	C	PFC-50.00-3-415-50-C-12

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	440v	415v	400v					
440	0.5	0.44	0.41	050.0 X 135	3x2.74	0.66	A	PFC-00.50-3-440-50-C-00
440	1.0	0.89	0.83	050.0 X 135	3x5.48	1.31	A	PFC-01.00-3-440-50-C-00
440	2.0	1.78	1.65	050.0 X 135	3x10.96	2.62	A	PFC-02.00-3-440-50-C-00
440	2.5	2.22	2.07	050.0 X 135	3x13.7	3.27	A	PFC-02.50-3-440-50-C-00
440	3.0	2.67	2.48	050.0 X 155	3x16.44	3.93	A	PFC-03.00-3-440-50-C-01
440	4.0	3.56	3.30	063.5 X 135	3x21.92	5.24	A	PFC-04.00-3-440-50-C-02
440	5.0	4.45	2.05	063.5 X 135	3x27.4	6.55	A	PFC-05.00-3-440-50-C-02
440	7.5	6.67	6.20	063.5 X 195	3x41.1	9.82	A	PFC-07.50-3-440-50-C-04
440	8.33	7.41	6.88	063.5 X 195	3x45.64	10.90	A	PFC-08.33-3-440-50-C-04
440	10.0	8.90	8.26	076.0 X 210	3x54.8	13.10	B	PFC-10.00-3-440-50-C-05
440	12.5	11.12	10.33	076.0 X 247	3x68.5	16.40	B	PFC-12.50-3-440-50-C-16
440	15.0	13.34	12.40	076.0 X 247	3x82.2	19.65	B	PFC-15.00-3-440-50-C-16
440	20.0	17.79	16.53	085.0 X 278	3x109.6	26.20	B	PFC-20.00-3-440-50-C-14
440	25.0	22.24	20.66	085.0 X 278	3x137	32.75	B	PFC-25.00-3-440-50-C-14
440	28.0	24.91	23.11	085.0 X 353	3x153.4	36.68	B	PFC-28.00-3-440-50-C-15
440	30.0	26.69	24.79	085.0 X 353	3x164.4	39.30	B	PFC-30.00-3-440-50-C-15
440	40.0	35.58	33.06	116.0 X 247	3x219.2	52.40	C	PFC-40.00-3-440-50-C-09
440	50.0	44.48	41.32	136.0 X 247	3x274	65.50	C	PFC-50.00-3-440-50-C-12

**HEAVY DUTY CAPACITORS - CYLINDRICAL TYPE. Rated Voltage 440/400/480V, 3-Phase Delta connection**

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	440v	480v	415v					
440	0.5	0.59	0.44	050.0 X 135	3x2.74	0.66	A	PFC-00.50-3-440-50-CH-0
440	1.0	1.19	0.89	050.0 X 135	3x5.48	1.31	A	PFC-01.00-3-440-50-CH-0
440	2.0	2.38	1.78	050.0 X 135	3x10.96	2.62	A	PFC-02.00-3-440-50-CH-0
440	3.0	3.57	2.67	050.0 X 135	3x16.44	3.93	A	PFC-03.00-3-440-50-CH-0
440	4.0	4.76	3.56	050.0 X 135	3x21.92	5.24	A	PFC-04.00-3-440-50-CH-0
440	5.0	5.95	4.45	076.0 X 175	3x27.40	6.55	B	PFC-5.00-3-440-50-CH-10
440	7.5	8.92	6.67	076.0 X 210	3x41.10	9.82	B	PFC-7.50-3-440-50-CH-5
440	8.33	9.90	7.41	076.0 X 210	3x45.64	10.90	B	PFC-8.33-3-440-50-CH-5
440	10.0	11.89	8.90	085.0 X 210	3x54.80	13.10	B	PFC-10.00-3-440-50-CH-6
440	12.5	14.86	11.12	095.0 X 210	3x68.50	16.40	B	PFC-12.50-3-440-50-CH-7
440	15.0	17.83	13.34	095.0 X 210	3x82.20	19.65	B	PFC-15.00-3-440-50-CH-7
440	20.0	23.77	17.79	095.0 X 247	3x109.60	26.20	B	PFC-20.00-3-440-50-CH-8
440	25.0	29.75	22.24	116.0 X 247	3x137.00	32.75	B	PFC-25.00-3-440-50-CH-9
440	28.0	33.30	24.91	136.0 X 247	3x153.44	36.68	C	PFC-28.00-3-440-50-CH-12
440	30.0	35.66	26.69	136.0 X 247	3x164.40	39.30	C	PFC-30.00-3-440-50-CH-12

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	400v	415v	440v					
400	5.0	5.38	6.05	076 X 175	33.2	7.20	B	PFC-5.00-3-400-50-CH-10
400	7.5	8.07	9.08	076.0 X 210	49.8	10.80	B	PFC-7.50-3-400-50-CH-05
400	10.0	10.76	12.10	076.0 X 247	66.4	14.40	B	PFC-10.00-3-400-50-CH-16
400	12.5	13.46	15.13	085.0 X 247	83.0	18.00	B	PFC-12.50-3-400-50-CH-17
400	15.0	16.15	18.15	085.0 X 278	3x99.6	21.60	B	PFC-15.00-3-400-50-CH-14
400	20.0	21.53	24.20	095.0 X 278	3x132.8	28.80	B	PFC-20.00-3-400-50-CH-18
400	25.0	26.91	30.25	095.0 X 278	3x166	36.00	B	PFC-25.00-3-400-50-CH-18
400	30.0	32.29	36.30	116.0 X 278	3x199.2	43.20	C	PFC-30.00-3-400-50-CH-19
400	40.0	43.06	48.40	136.0 X 247	3x265.6	57.60	C	PFC-40.00-3-400-50-CH-12
400	50.0	53.82	60.50	136.0 X 278	3x332	72.00	C	PFC-50.00-3-400-50-CH-20

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	480v	440v	415v					
480	5.0	4.20	3.74	076.0 X 175	3x23.05	6.00	B	PFC-5.00-3-480-50-CH-10
480	7.5	6.30	5.64	076.0 X 175	3x34.57	9.00	B	PFC-7.50-3-480-50-CH-10
480	8.33	7.00	6.32	076.0 X 210	3x38.40	10.00	B	PFC-8.33-3-480-50-CH-5
480	10.0	8.40	7.48	076.0 X 210	3x46.1	12.00	B	PFC-10.00-3-480-50-CH-5
480	12.5	10.50	9.34	085.0 X 210	3x57.62	15.00	B	PFC-12.50-3-480-50-CH-6
480	15.0	12.60	11.21	095.0 X 210	3x69.15	18.00	B	PFC-15.00-3-480-50-CH-7
480	20.0	16.81	14.95	095.0 X 247	3x92.2	24.00	B	PFC-20.00-3-480-50-CH-8
480	25.0	21.01	18.69	0116.0 X 247	3x115.25	30.00	B	PFC-25.00-3-480-50-CH-9
480	28.0	23.56	20.96	0116.0 X 247	3x129.08	33.60	B	PFC-28.00-3-480-50-CH-9
480	30.0	25.21	35.89	0116.0 X 247	3x138.30	36.00	B	PFC-30.00-3-480-50-CH-9

**STANDARD DUTY - CYLINDRICAL SINGLE PHASE 250V**

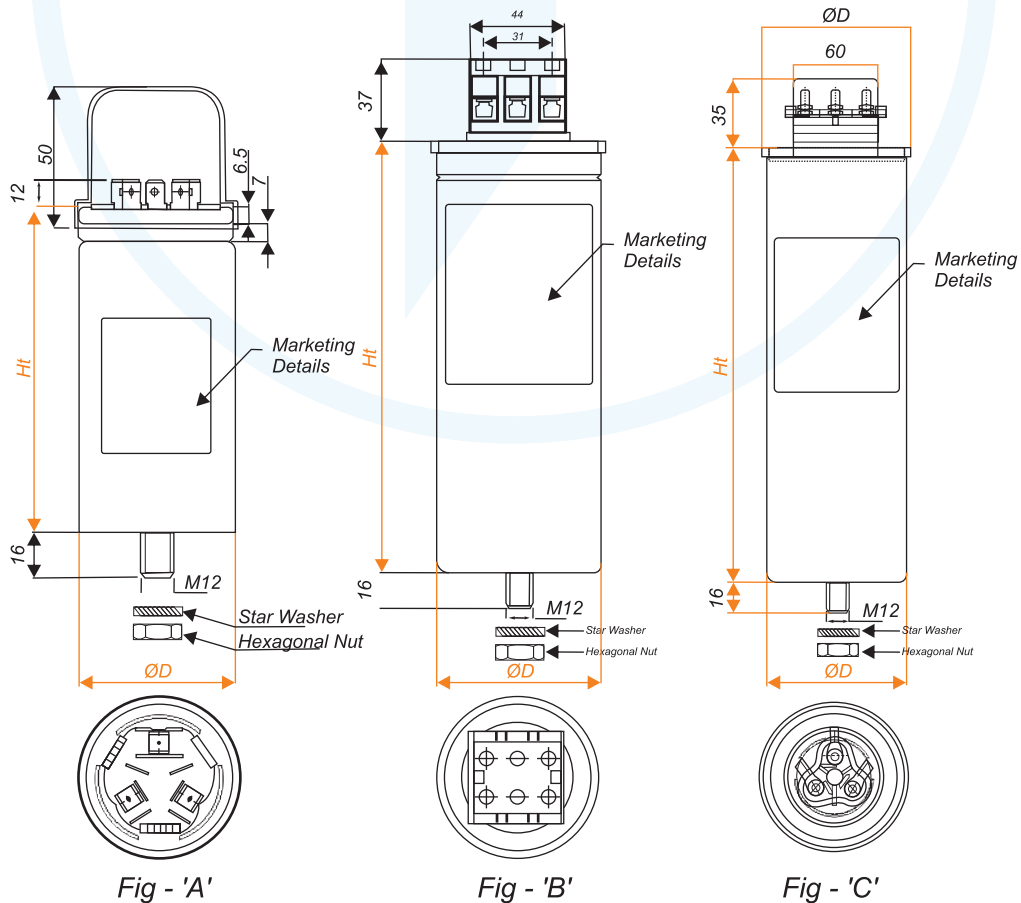
Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	400v							
250	1.0			050 X 110	51.0	4.00		PFC-1.00-1-250-50-C-21
250	2.0			050 X 135	102.0	8.00		PFC-2.00-1-250-50-C-00
250	3.0			63.5 X 135	153.0	12.00		PFC-3.00-1-250-50-C-02
250	4.0			63.5 X 170	204.0	16.00		PFC-4.00-1-250-50-C-22
250	5.0			63.5 X 200	255.0	20.00		PFC-5.00-1-250-50-C-23
250	8.0			85 X 210	408.0	32.00		PFC-8.00-1-250-50-C-06
250	16.0			95 X 247	815.0	64.00		PFC-16.00-1-250-50-C-08

**SUPER HEAVY DUTY CAPACITORS CAPACITORS - CYLINDRICAL TYPE. Rated Voltage 525/690V, 50Hz, 3-Phase, Delta Connection**

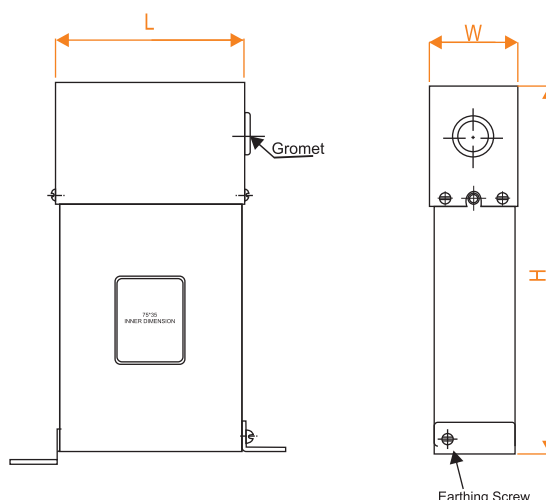
Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	525v	440v	480v					
525	5.0	3.51	4.18	076.0 X 175	3x19.25	5.50	B	PFC-5.00-3-525-50-CS-10
525	7.5	5.27	6.27	076.0 X 175	3x28.87	8.25	B	PFC-7.50-3-525-50-CS-10
525	8.33	5.85	6.96	076.0 X 210	3x32.07	9.16	B	PFC-8.33-3-525-50-CS-5
525	10.0	7.02	8.36	085.0 X 210	3x38.5	11.00	B	PFC-10.00-3-525-50-CS-6
525	12.5	8.78	10.45	085.0 X 210	3x48.12	13.70	B	PFC-12.50-3-525-50-CS-6
525	15.0	10.54	12.54	095.0 X 210	3x57.75	16.50	B	PFC-15.00-3-525-50-CS-7
525	17.0	11.94	14.20	095.0 X 247	3x65.45	18.70	B	PFC-17.00-3-525-50-CS-8
525	20.0	14.05	16.72	116.0 X 210	3x77.00	22.00	B	PFC-20.00-3-525-50-CS-11
525	25.0	17.56	20.90	116.0 X 247	3x96.25	27.50	B	PFC-25.00-3-525-50-CS-9
525	28.0	19.67	23.39	116.0 X 247	3x107.80	30.80	B	PFC-28.00-3-525-50-CS-9
525	30.0	21.08	25.05	116.0 X 247	3x115.50	33.00	B	PFC-30.00-3-525-50-CS-9
525	33.33	23.42	27.84	136.0 X 247	3x128.32	36.30	B	PFC-33.33-3-525-50-CS12

Voltage	Output KVAR			Dim.(diaxht)	Capacitance (uF)	Current	Fig	Part Number
	690v	600v	660v					
690	5.0	3.8	4.57	076.0 X 210	3x11.15	4.20	B	PFC-5.00-3-690-50-CS-5
690	7.5	5.7	6.86	076.0 X 210	3x16.72	6.30	B	PFC-7.50-3-690-50-CS-5
690	8.33	6.30	7.62	076.0 X 210	3x18.57	7.00	B	PFC-8.33-3-690-50-CS-5
690	10.0	7.56	9.15	085.0 X 210	3x22.30	8.40	B	PFC-10.00-3-690-50-CS-6
690	12.5	9.45	11.44	095.0 X 210	3x27.87	10.50	B	PFC-12.50-3-690-50-CS-7
690	15.0	11.34	13.72	095.0 X 210	3x33.45	12.60	B	PFC-15.00-3-690-50-CS-7
690	20.0	15.12	18.30	116.0 X 210	3x44.60	16.80	B	PFC-20.00-3-690-50-CS-11
690	25.0	18.90	22.87	85 X353	3x55.75	21.00	B	PFC-25.00-3-690-50-CS-15
690	25.0	18.90	22.87	116.0 X 247	3x55.75	21.00	C	PFC-25.00-3-690-50-CS-9

NOTE : OTHER VOLTAGES FREQUENCIES AND SIZES ARE AVAILABLE ON REQUEST







**COMPACT MODEL BOX TYPE. Rated Voltage 440V, 50Hz, 3-Phase, Delta Connection**

Voltage	Output KVAR	Dim.(diaxht)	Capacitance	Current	Part Number
440	01.0	108 x 38 x 123	3 x 005.48	01.31	PFC-01.00-3-440-50-BA-01
440	02.0	121 x 42 x 145	3 x 011.00	02.62	PFC-02.00-3-440-50-BA-02
440	03.0	121 x 42 x 145	3 x 016.44	03.93	PFC-03.00-3-440-50-BA-02
440	04.0	140 x 48 x 213	3 x 021.92	05.24	PFC-04.00-3-440-50-BA-03
440	05.0	140 x 48 x 213	3 x 027.40	06.55	PFC-05.00-3-440-50-BA-03
440	07.5	155 x 52 x 213	3 x 041.10	09.82	PFC-07.50-3-440-50-BA-04
440	10.0	155 x 52 x 213	3 x 054.80	13.10	PFC-10.00-3-440-50-BA-04
440	12.5	202 x 72 x 236	3 x 068.50	16.38	PFC-12.50-3-440-50-BA-05
440	15.0	202 x 72 x 236	3 x 082.20	19.65	PFC-15.00-3-440-50-BA-05
440	20.0	202 x 72 x 346	3 x 109.60	26.20	PFC-20.00-3-440-50-BA-06
440	25.0	202 x 72 x 346	3 x 137.00	32.75	PFC-25.00-3-440-50-BA-06

**STANDARD MODULAR BOX TYPE. Rated Voltage 440V, 50Hz, 3-Phase, Delta Connection**

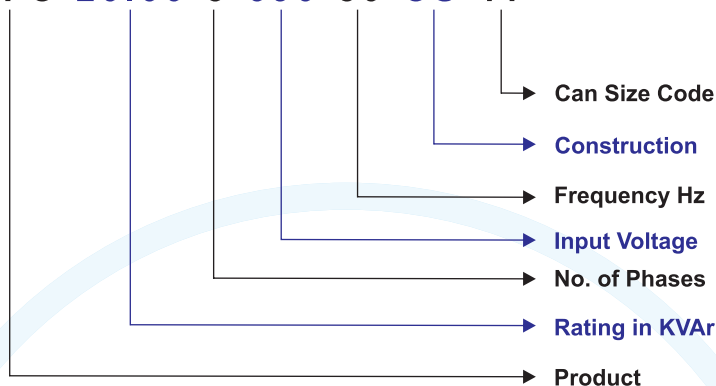
Voltage	Output KVAR	Dim.(diaxht)	Capacitance	Current	Part Number
440	05.0	175 x 056 x 260	3 x 027.40	06.55	PFC-05.00-3-440-50-BS-07
440	07.5	175 x 056 x 260	3 x 041.10	09.82	PFC-07.50-3-440-50-BS-07
440	10.0	212 x 076 x 320	3 x 054.80	13.10	PFC-10.00-3-440-50-BS-08
440	12.5	212 x 076 x 320	3 x 068.50	16.38	PFC-12.00-3-440-50-BS-08
440	15.0	212 x 076 x 320	3 x 082.20	19.65	PFC-15.00-3-440-50-BS-08
440	20.0	212 x 142 x 320	3 x 109.60	26.20	PFC-20.00-3-440-50-BS-09
440	25.0	212 x 142 x 320	3 x 137.00	32.75	PFC-25.00-3-440-50-BS-09

**HEAVY DUTY MODULAR BOX TYPE. Rated Voltage 440V, 50Hz, 3-Phase, Delta Connection**

Voltage	Output KVAR	Dim.(diaxht)	Capacitance	Current	Part Number
440	05.0	175 x 056 x 260	3 x 027.40	06.55	PFC-05.00-3-440-50-BH-07
440	07.5	212 x 076 x 320	3 x 041.10	09.82	PFC-07.50-3-440-50-BH-08
440	10.0	245 x 085 x 415	3 x 054.80	13.10	PFC-10.00-3-440-50-BH-10
440	12.5	245 x 085 x 415	3 x 068.50	16.38	PFC-12.50-3-440-50-BH-10
440	15.0	245 x 085 x 415	3 x 082.20	19.65	PFC-15.00-3-440-50-BH-10
440	20.0	245 x 170 x 415	3 x 109.60	26.20	PFC-20.00-3-440-50-BH-11
440	25.0	245 x 170 x 415	3 x 137.00	32.75	PFC-25.00-3-440-50-BH-11

**PART NUMBER INDEX**

**PFC-20.00-3-690-50-CS-11**



**PART NUMBER ABBREVIATION INDEX**

Construction		Cylinder Dimensions		Box Dimensions	
Type	Code	DiaxHt (mm)	Code	LxWxH (mm)	CODE
Cylindrical	C	50.0 X 135	0	108x38x123	1
Cyl.Heavy Duty	CH	50.0 X 155	1	121x42x145	2
Cyl.Super Heavy Duty	CS	63.5 X 135	2	140x48x213	3
Box Type - Compact/Agri	BA	63.5 X 155	3	155x52x213	4
Box Type - Std Modular	BS	63.5 X 195	4	202x72x236	5
Box Type - HD Modular	BH	76 X 210	5	202x72x346	6
		85 X 210	6	175x56x260	7
		95 X 210	7	212x76x320	8
		95 X 247	8	212x142x320	9
		116 X 247	9	245x85x415	10
		76 X 175	10	245x170x415	11
		116 X 210	11		
		136 X 247	12		
		63.5 X 087	13		
		85 X278	14		
		85 X 353	15		
		76 X 247	16		
		85 X 247	17		
		95 X 278	18		
		116 X 278	19		
		136 X 278	20		
		50.0 X 110	21		
		63.5 X 170	22		
		63.5 X 200	23		

## Influence of Harmonics & the need for Harmonic Filters

Development in modern semiconductor technology have led to a significant increase in the number of thyristor-and inverter fed loads. The growing use of these types of power electronic devices is causing an increasing level of harmonic distortion in the electrical system which very often leads to problems with capacitor installations. This can be controlled with the installation of Detuned Harmonic Reactors along with Capacitors, which will form Harmonic Filter.

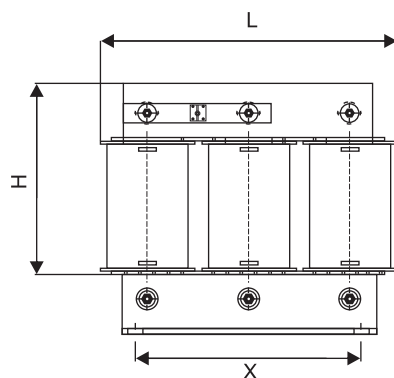
**Installation of a Detuned Harmonic Filters is recommended, if your Harmonic generating load is more than 10% of the transformer power. We strongly advise to conduct a comprehensive mains analysis, including measurement of the content, before designing and installing your power factor correction equipment.**

TIBCON Detuned filter reactors are high quality reactors designed to be used in detuned power factor correction units. Our reactors are made with special air gap configurations and the latest winding technology and as a result, there is a very small power loss in operation with a high degree of reliability. An integrated bimetal switch is provided for additional operational reliability. These reactors are compatible with Indian & European standards.

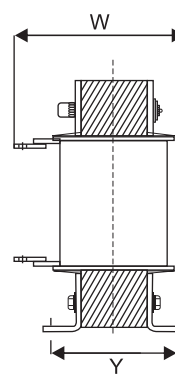


### Features

- Three phase, high permeable CRGO iron core, air cooled
- High conductive Copper or Aluminium Windings
- High harmonic loading capability
- Designed for very low power losses
- Low noise emissions of <65dB
- Stud type Terminals for easy Termination in up to 20KVAR & above
- Thermal Switch for overload protection
- Vacuum impregnated varnish to ensure silent and moisture-immune operation
- Manufactured under ISO 9000 quality management
- Wide range from 5KVAR to 100KVAR both in Aluminium & Copper



Elevation



R.H.Side View

**Technical Data of Three Phase Reactors**

Manufacturing Standard	IS 555/IEC60289
Design	3Phase Iron Cored
Harmonics*	V <sub>3</sub> =0.5% VR (duty cycle = 100%) V <sub>5</sub> =6.0% VR (duty cycle = 100%) V <sub>7</sub> =5.0% VR (duty cycle = 100%) V <sub>11</sub> =3.5% VR (duty cycle = 100%) V <sub>13</sub> =3.0% VR (duty cycle = 100%)
Efficient current	$I_{rms} = \sqrt{I_1^2 + I_3^2 + \dots + I_n^2}$
Fundamental Current	I <sub>1</sub> = 1.06.I <sub>R</sub> + (50 Hz or 60 Hz current of capacitor)
Rated Voltage	400V & 440V AC
Detuning	5.67%, 7% & 14%
Output	5 - 100KVAR
Cooling	AN
Noise Level	65dB
Enclosure	Ip00
Type of Core (Core Material)	CRGO
Nominal Line Frequency	50Hz
Ambient Temperature	-10 to + 40°C
Storage Temperature	-25 to + 60°C
Temperature Rise Limited to	90°C
Temperature Protection	Micro Switch (NC-140°C)
Insulation Class	H
Seperate coil test voltage (HV Test)	3KV
Tolereance of Inductance	±5%

**400V, 50Hz, 5.67% REACTOR (f<sub>r</sub> = 210 Hz Linearity: L ≥ 0.95, L<sub>R</sub> for current up to 2.08 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	6.12	3.06	2.45	2.04	1.53	1.22	0.61	0.31
RMS Current A	9.2	18.4	23.0	27.6	36.9	46.1	92.1	184.3
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR

**COPPER REACTOR**

Weight (Approx) in Kgs	6	9	11	12	14	16	28	50
Lenght in mm (L)	180	180	180	180	210	210	240	270
Depth in mm (W)	70	85	95	100	80	90	100	120
Height in mm (H)	165	165	165	165	215	215	265	315
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	60	75	85	90	80	90	110	140
Part No	HRC3400-50-5.67-5	HRC3400-50-5.67-10	HRC3400-50-5.67-12.5	HRC3400-50-5.67-15	HRC3400-50-5.67-20	HRC3400-50-5.67-25	HRC3400-50-5.67-50	HRC3400-50-5.67-100

**ALUMINIUM REACTOR**

Weitht (Approx) in Kgs	6	8	12	11	12	12	29	46
Length in mm (L)	180	180	210	180	210	210	240	270
Depth in mm (W)	71	86	80	100	80	80	110	120
Height in mm (H)	165	165	215	165	215	215	265	315
Mounting Dimensions X	136	136	16	136	136	175	175	175
Mounting Dimensions Y	61	76	80	90	80	80	120	140
Part No	HRC3400-50-5.67-5	HRC3400-50-5.67-10	HRC3400-50-5.67-12.5	HRC3400-50-5.67-15	HRC3400-50-5.67-20	HRC3400-50-5.67-25	HRC3400-50-5.67-50	HRC3400-50-5.67-100

**400V, 50Hz, 7% REACTOR (f<sub>r</sub> = 189 Hz, Linearity: L ≥ 0.95, L<sub>R</sub> for current up to 2.08 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	7.67	3.83	3.07	2.56	1.92	1.53	0.77	0.38
RMS Current A	8.2	16.4	20.5	24.6	32.8	41.0	81.9	163.9
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR

**COPPER REACTOR**

Weight (Approx) in Kgs	6	9	10	12	14	13	23	40
Lenght in mm (L)	180	180	180	180	210	210	210	240
Depth in mm (W)	73	90	95	102	90	80	110	125
Height in mm (H)	150	150	150	165	195	195	215	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	60	80	85	92	90	80	110	130
Part No	HRC3400-50-7-5	HRC3400-50-7-10	HRC3400-50-7-12.5	HRC3400-50-7-15	HRC3400-50-7-20	HRC3400-50-7-25	HRC3400-50-7-50	HRC3400-50-7-100

**ALUMINIUM REACTOR**

Weitht (Approx) in Kgs	7	9	9	12	12	15	27	44
Length in mm (L)	180	180	180	210	210	210	240	240
Depth in mm (W)	80	95	95	81	81	90	105	150
Height in mm (H)	150	150	150	215	215	215	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	70	85	85	81	81	90	115	160
Part No	HRC3400-50-7-5	HRC3400-50-7-10	HRC3400-50-7-12.5	HRC3400-50-7-15	HRC3400-50-7-20	HRC3400-50-7-25	HRC3400-50-7-50	HRC3400-50-7-100

**400V, 50Hz, 14% REACTOR (fr = 135 Hz, Linearity: L ≥ 0.95, L<sub>r</sub> for current up to 1.37 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	16.58	8.29	6.63	5.53	4.15	3.32	1.66	0.83
RMS Current A	7.7	15.5	19.3	23.2	30.9	38.6	77.3	154.5
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR
<b>COPPER REACTOR</b>								
Weight (Approx) in Kgs	8	10	12	14	17	20	37	54
Length in mm (L)	180	180	180	180	210	210	240	240
Depth in mm (W)	80	90	102	110	95	105	125	160
Height in mm (H)	175	175	175	175	225	225	275	275
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	70	80	92	100	95	105	135	170
Part No	HRC3400-50-14-5-5	HRC3400-50-14-10	HRC3400-50-14-12.5	HRC3400-50-14-15	HRC3400-50-14-20	HRC3400-50-14-25	HRC3400-50-14-50	HRC3400-50-14-100
<b>ALUMINIUM REACTOR</b>								
Weight (Approx) in Kgs	8	11	12	16	15	18	35	65
Length in mm (L)	180	180	210	210	210	210	240	270
Depth in mm (W)	83	105	80	95	95	105	125	155
Height in mm (H)	175	175	225	225	225	225	275	325
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	73	95	80	95	95	105	135	175
Part No	HRC3400-50-14-5-5	HRC3400-50-14-10	HRC3400-50-14-12.5	HRC3400-50-14-15	HRC3400-50-14-20	HRC3400-50-14-25	HRC3400-50-14-50	HRC3400-50-14-100

**440V, 50Hz, 5.67% REACTOR (f<sub>r</sub> = 210 Hz Linearity: L ≥ 0.95, L<sub>r</sub> for current up to 2.08 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	7.41	3.7	2.96	2.47	1.85	1.48	0.74	0.37
RMS Current A	8.4	16.8	21	25.2	33.7	42.1	84.1	168.3
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR
<b>COPPER REACTOR</b>								
Weight (Approx) in Kgs	7	9	11	13	13	14	24	42
Length in mm (L)	180	180	180	180	180	180	240	240
Depth in mm (W)	76	90	100	105	100	110	90	130
Height in mm (H)	150	150	150	165	165	165	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	66	80	90	95	90	100	100	100
Part No	HRC3400-50-5.67-5	HRC3400-50-5.67-10	HRC3400-50-5.67-12.5	HRC3400-50-5.67-15	HRC3400-50-5.67-20	HRC3400-50-5.67-25	HRC3400-50-5.67-50	HRC3400-50-5.67-100
<b>ALUMINIUM REACTOR</b>								
Weight (Approx) in Kgs	7	9	10	11	13	16	24	51
Length in mm (L)	180	180	180	180	210	210	240	240
Depth in mm (W)	80	95	100	105	85	95	95	165
Height in mm (H)	150	150	165	165	215	215	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	70	85	90	95	85	95	105	175
Part No	HRC3400-50-5.67-5	HRC3400-50-5.67-10	HRC3400-50-5.67-12.5	HRC3400-50-5.67-15	HRC3400-50-5.67-20	HRC3400-50-5.67-25	HRC3400-50-5.67-50	HRC3400-50-5.67-100

**440V, 50Hz, 7% REACTOR (fr = 189 Hz, Linearity: L ≥ 0.95, L<sub>r</sub> for current up to 2.08 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	9.28	4.64	3.71	3.09	2.32	1.86	0.93	0.46
RMS Current A	7.4	14.9	18.6	22.3	29.8	37.2	74.5	149.0
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR
<b>COPPER REACTOR</b>								
Weight (Approx) in Kgs	7	8	10	10	13	14	25	42
Length in mm (L)	180	180	180	180	180	180	240	240
Depth in mm (W)	80	85	95	90	105	110	90	130
Height in mm (H)	150	150	150	165	165	165	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	70	75	85	80	95	100	100	140
Part No	HRC3400-50-7-5	HRC3400-50-7-10	HRC3400-50-7-12.5	HRC3400-50-7-15	HRC3400-50-7-20	HRC3400-50-7-25	HRC3400-50-7-50	HRC3400-50-7-100
<b>ALUMINIUM REACTOR</b>								
Weight (Approx) in Kgs	7	10	10	13	11	14	25	45
Length in mm (L)	180	180	180	210	210	210	240	240
Depth in mm (W)	80	100	95	86	77	86	100	150
Height in mm (H)	150	150	165	215	215	215	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	70	90	85	86	77	86	110	160
Part No	HRC3400-50-7-5	HRC3400-50-7-10	HRC3400-50-7-12.5	HRC3400-50-7-15	HRC3400-50-7-20	HRC3400-50-7-25	HRC3400-50-7-50	HRC3400-50-7-100

**440V, 50Hz, 14% REACTOR (fr = 135 Hz, Linearity: L ≥ 0.95, L<sub>r</sub> for current up to 1.37 × 11)**

Reactor Rating	5KVAR	10KVAR	12.5KVAR	15KVAR	20KVAR	25KVAR	50KVAR	100KVAR
Rated Inductance mH	20.06	10.03	8.03	6.69	5.02	4.01	2.01	1.00
RMS Current A	7.0	14.0	17.6	21.1	28.1	35.1	70.02	140.5
Terminal	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	STUD TYPE	BUS BAR	BUS BAR	BUS BAR
<b>COPPER REACTOR</b>								
Weight (Approx) in Kgs	8	11	13	15	19	23	39	57
Length in mm (L)	180	180	180	180	210	210	240	240
Depth in mm (W)	83	95	110	115	100	115	130	165
Height in mm (H)	165	165	165	165	215	215	265	265
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	73	85	100	105	100	115	140	175
Part No	HRC3400-50-14.5-5	HRC3400-50-14.5-10	HRC3400-50-14.5-12.5	HRC3400-50-14.5-15	HRC3400-50-14.5-20	HRC3400-50-14.5-25	HRC3400-50-14.5-50	HRC3400-50-14.5-100
<b>ALUMINIUM REACTOR</b>								
Weight (Approx) in Kgs	9	12	13	17	17	21	37	67
Length in mm (L)	180	180	210	210	210	210	240	270
Depth in mm (W)	90	110	85	100	100	115	130	160
Height in mm (H)	165	165	215	215	215	215	265	315
Mounting Dimensions X	136	136	136	136	136	175	175	175
Mounting Dimensions Y	80	100	85	100	100	115	140	180
Part No	HRC3400-50-14.5-5	HRC3400-50-14.5-10	HRC3400-50-14.5-12.5	HRC3400-50-14.5-15	HRC3400-50-14.5-20	HRC3400-50-14.5-25	HRC3400-50-14.5-50	HRC3400-50-14.5-100

INPUT VOLTAGE 400V AC		INPUT VOLTAGE 415V AC		INPUT VOLTAGE 440V AC	
KVAR Output	5.67% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	5.67% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	5.67% DETUNED HARMONIC FILTER APPLICATION
05.0	415V 5KVAR (440V 5.6KVAR)	05.0	440V 5KVAR (480V 6.0KVAR)	05.0	525V 7.5KVAR
10.0	415V 5KVAR (440V 11.2KVAR)	10.0	440V 10KVAR (480V 12.5KVAR)	10.0	525V 15KVAR
12.5	415V 5KVAR (440V 14KVAR)	12.5	440V 12.5KVAR (480V 15.0KVAR)	12.5	525V 17KVAR
15.0	415V 5KVAR (440V 16.8KVAR)	15.0	440V 15KVAR (480V 18.0KVAR)	15.0	525V 20KVAR
20.0	415V 5KVAR (440V 22.5KVAR)	20.0	440V 20KVAR (480V 25.0KVAR)	20.0	525V 28KVAR
25.0	415V 5KVAR (440V 28.1KVAR)	25.0	440V 25KVAR (480V 30KVAR)	25.0	525V 33.3KVAR
50.0	415V 25KVAR - 2NOS	50.0	440V 50KVAR (480V 30KVAR)-2NOS	50.0	525V 33.3KVAR - 4NOS
100.0	415V 25KVAR - 4NOS	100.0	440V 100KVAR (480V 30KVAR)-4NOS	100.0	525V 33.3KVAR - 4NOS
KVAR Output	7% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	7% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	7% DETUNED HARMONIC FILTER APPLICATION
05.0	415V 5KVAR (440V 5.6KVAR)	05.0	440V 5KVAR (480V 6.0KVAR)	05.0	525V 7.5KVAR
10.0	415V 5KVAR (440V 11.2KVAR)	10.0	440V 10KVAR (480V 12.5KVAR)	10.0	525V 15KVAR
12.5	415V 5KVAR (440V 14KVAR)	12.5	440V 12.5KVAR (480V 15.0KVAR)	12.5	525V 17KVAR
15.0	415V 5KVAR (440V 16.8KVAR)	15.0	440V 15KVAR (480V 18.0KVAR)	15.0	525V 20KVAR
20.0	415V 5KVAR (440V 22.5KVAR)	20.0	440V 20KVAR (480V 25.0KVAR)	20.0	525V 28KVAR
25.0	415V 5KVAR (440V 28.1KVAR)	25.0	440V 25KVAR (480V 30KVAR)	25.0	525V 33.3KVAR
50.0	415V 25KVAR - 2NOS	50.0	440V 50KVAR (480V 30KVAR)-2NOS	50.0	525V 33.3KVAR - 4NOS
100.0	415V 25KVAR - 4NOS	100.0	440V 100KVAR (480V 30KVAR)-4NOS	100.0	525V 33.3KVAR - 4NOS
KVAR Output	14% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	14% DETUNED HARMONIC FILTER APPLICATION	KVAR Output	14% DETUNED HARMONIC FILTER APPLICATION
10.0	480V 12.5KVAR	10.0	525V 15KVAR	10.0	525V 12.5KVAR
12.5	480V 15KVAR	12.5	525V 17KVAR	12.5	525V 15KVAR
15.0	480V 20KVAR	15.0	525V 20KVAR	15.0	525V 20KVAR
20.0	480V 25KVAR	20.0	525V 28KVAR	20.0	525V 25KVAR
25.0	480V 30KVAR	25.0	525V 33.3KVAR	25.0	525V 30KVAR
50.0	480V 30KVAR - 2NOS	50.0	525V 33.3KVAR - 2NOS	50.0	525V 30KVAR - 2NOS
75.0	480V 30KVAR - 3NOS	75.0	525V 33.3KVAR - 3NOS	75.0	525V 30KVAR - 3NOS
100.0	480V 30KVAR - 4NOS	100.0	525V 33.3KVAR - 4NOS	100.0	525V 30KVAR - 4NOS

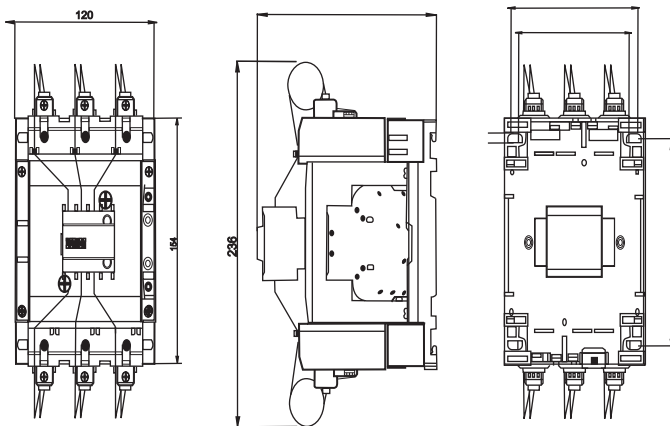
## Product Application

In a Low Voltage installations, when a Capacitor is switched "ON", it results in resonant circuit damped to a greater degree. In addition to the rated current, over current of high amplitude ( $>180 I_n$ ) and high frequencies (3-15 KHz) occur during transit period (1 to 2 ms). The resultant high in-rush current peaks, caused due to capacitor switching, depends upon following factors.

- Network inductances
- Transformer power and short circuit voltage
- Type of power factor correction: fixed or automatic
- Harmonics presence in the system

The in-rush current of such high magnitudes is undesirable and it is likely to weld main poles of any standard contactor. Therefore, contactor for capacitor bank switching must be designed to withstand:

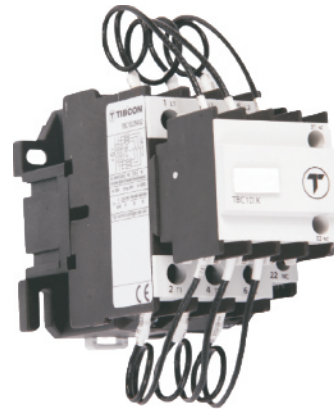
- Permanent current that reach 1.5 time the nominal current of capacitor bank
- short but high peak current on pole closing Hence, selection of capacitor duty switching device requires careful product selection. It is always recommended to use dedicated Capacitor Duty switching Contactor for switching Capacitor bank, which optimizes the switchgear cost & enhances the equipment life.



Dimensional Drawing

## Operating Principal

Capacitor contactor are specially designed to meet stringent requirements of capacitor switching as deliberated above. These contactors are fitted with front-mounted block of 3 early make auxiliary in series with quick discharge damping six-resistors-2per phase to limit peak current to value within contactor making capacity such that normal rated capacitor current is carried by main contacts which, after closing, effectively the resistors.



## Product Range

- Eight Ratings: 7kVAR~100kVAR  
3p, 415VAC, 50/60Hz
- Conforms to IEC60947-4-1 and IS/IEC 60947-4-1 AC-6b utilization category

## Features and Benefits

- Excellent damping of In-rush Current
- Reduced watt loss during 'ON' condition, saves energy
- Capacitor Bank Switching in parallel without de-rating
- Enhanced equipment life
- Low maintenance & down-time
- Power quality improvement
- Optimized solution cost

### AC Coil Voltage - Capacitor Duty Contactors

Contactor TC1-D**K	24V	110V	220V	240V	415V
50Hz	B5	F5	M5	U5	N5
50/60Hz	B7	F7	M7	U7	N7

## Specifications

KVAR ratings at 50/60 Hz		Instantaneous Auxiliary Contacts		Maximum Operating Rate	Electical life at rated load	Product Reference
55° c (3)						
200 / 240	400 / 440V	NO	NC	Operation hour	Operations	
4	7.5	1	1	240	200000	TC1-D07K11
		0	2			TC1-D07K02
5.5	10	1	1	240	200000	TC1-D10K11
		0	2			TC1-D10K02
6.7	12.5	1	1	240	200000	TC1-D12K11
		0	2			TC1-D12K02
8.5	16.7	1	1	240	200000	TC1-D16K11
		0	2			TC1-D16K02
10	20	1	1	240	200000	TC1-D20K11
		0	2			TC1-D20K02
15	25	1	1	240	200000	TC1-D25K11
		0	2			TC1-D25K02
20	33.3	1	2	240	150000	TC1-D33K12
25	40	1	2	100	100000	TC1-D40K12
40	60	1	2	100	100000	TC1-D60K12
40	75	1	2	100	100000	TC1-D75K12
48	80	1	2	100	100000	TC1-D80K12
60	100	1	2	100	100000	TC1-D100K12

### NOTES:

- Additional Auxiliary Contact block (Side mounted) type TA8DN20 can be mounted, if required
- Contactor Type TC1-D07K-TC1-D25K: Suitable type clip-on mounting into 35mm DIN rail Contactor Type TC1-D33K-TC1-D100K: Suitable type clip-on mounting into 65mm DIN rail
- Average temperature over a 24-hour period, in accordance with IEC 70 and 831
- Standard Control Circuit Voltage / Frequency



### TIBREWALA ELECTRONICS LTD.

Corporate Office: 803, Manjeera Trinity Corporate, KPHB,  
Phase III, Kukatpally, Hyderabad - 500 072, Telangana, INDIA  
Tel: + 91 40 4819 4444.  
Email: [salessupport@tibcon.net](mailto:salessupport@tibcon.net) | [info@tibcon.net](mailto:info@tibcon.net)  
Visit us at: [www.tibcon.net](http://www.tibcon.net)



**DISCLAIMER:** The technical specifications and the product design are subject to change as per the evolving market requirements and product research. Customers may contact Tibrewala Electronics Limited for updates on product design and technical specifications.

The image shown in the brochure are only representation of the actual products. The colour, design and specifications of the actual product may vary.

Edition: 01/2020

© Reproduction, publication and dissemination of this technical literature and the contents therein without TIBREWALAELECTRONICS LTD. prior written permission is strictly prohibited.