



C64C / C84C Capacitor Modules

Capacitor Modules type C64C and C84C for installation in standard switchgear systems. Suitable for low-voltage networks without harmonic distortion.

- Power Range: 25 to 100 kvar per module
- Compact design; up to 5 modules per cabinet
- Ideal for mounting in all common switchgear systems
- Easy and quick mounting with multifunctional rails
- Power Factor Correction Capacitors LKT dry-type with four safety features

Application Recommendations

Capacitor modules type C64C and C84C are suitable for installation in standard switchgear systems. Additional mounting rails for all common switchgear systems:

- W = 600 mm, D = 400, 500, 600 mm resp.
- W = 800 mm, D = 400, 500, 600 mm

allow an easy and quick installation of complex Power Factor Correction Systems.

They are suitable for power factor correction in supply networks without harmonic distortion.

Attention: Even low harmonic levels can be amplified by network resonances. High harmonic levels can overload or damage all electrical devices and machines in the network.

Today, networks without harmonic distortion are quite rare. Therefore we generally recommend installing fixed capacitors with harmonic filter reactors (page 81 ff.).

PFC Systems on mounting plates / Capacitor Modules

Capacitor Modules

Power Range

Compact compensation module for installation in switchgear systems:

- 25 to 100 kvar

Construction

Sheet steel chassis with mounted power capacitors, contactors and fuses - ideal for mounting in all common switchgear systems.

The module consists of:

- Self-healing LKT type power capacitors with low loss self-healing dielectric made from segmented metallised polypropylene film. Filled with a PCB-free filler. With discharge resistors, as per EN 60831-1 and -2 as well as IEC 60831-1 and -2
- Capacitor Switching Contactors with leading transition contacts for damping of current peaks
- Busbar system with bus-mounting fuse bases, 3-pole, size NH00
- Control circuit with female connector (wired connector for connection with terminal strip incl.)

Application / Installation

The place of installation must comply with the requirements of the ingress protection and ambient temperature concerned.

Regulations

For installation and connection of Power Factor Correction Capacitors in Germany the following regulations must be complied with: VDE 0100, VDE 0105, VDE 0560 Part 46 and VDE 0106 Part 100 (German Association of Electrical Engineers). In other countries the equivalent local regulations must be followed.

Installation

Specific module rails are required for installation in the switchgear system. Those module rails are available for all common switchgear systems and can be supplied as an optional accessory.

Connection

The network connection can be done either vertically or horizontally. For the horizontal connection one has to connect the cables equipped with the cable lugs to the busbar by using the M12 screws.

A bus connection bracket CU AW-1 for vertical connection is available as an option.

Additional modules can be connected directly via the busbar system.

Technical Data

Design

Sheet steel chassis for installation in switchgear cabinets
C6xC... for cabinets (width = 600 mm)
C8xC... for cabinets (width = 800 mm)

Rated voltage 400 V/50 Hz

Rated voltage of capacitors 440 V/50 Hz

Ambient temperature -5 °C to +60 °C

Humidity Max. 90 %, no condensation

Standards EN 60831-1 and -2
IEC 60831-1 and -2
EN 61921
IEC 61921
EN 61439-1 and -2
IEC 61439-1 and 2

Important Notes

The presence of inductive and capacitive reactances in the low voltage network means that the harmonics generated there, together with those fed in from the medium voltage network, can be amplified many times over due to resonance. Particularly in industrial networks with loads that generate harmonics, the use of conventional power factor correction systems without Harmonic Filter Reactors is not advisable. Instead, detuned systems should be installed. See the C6xD... and C8xD... series of Capacitor Modules.

For further information on power factor correction and harmonics please refer to our "Manual of Power Factor Correction".

PFC Systems on mounting plates / Capacitor Modules

Capacitor Modules

Article- No.	Type	Rated power [kvar]	Step power [kvar]	Switching sequence	Dimensions			Weight (gross) approx. [kg]	Protection IP
					Width [mm]	Height [mm]	Depth [mm]		

Capacitor Modules for installation in switchgear systems with a width of 600 mm, rated mains voltage: 400 V / 50 Hz

Type series: C64C

34-64167	C64C 25-3,13-211-400/440-64	25	3.13	1:1:2:4	500	300	350	15	00
34-64163	C64C 25-6,25-21-400/440-64	25	6.25	1:1:2	500	300	350	15	00
34-64164	C64C 25-12,5-2-400/440-64	25	12.5	1:1	500	300	350	15	00
34-64165	C64C 25-25-1-400/440-64	25	25	1	500	300	350	16	00
34-64170	C64C 31,25-6,25-12-400/440-64	31.25	6.25	1:2:2	500	300	350	16	00
34-64180	C64C 34,38-3,13-112-400/440-64	34.38	3.13	1:2:4:4	500	300	350	16	00
34-64172	C64C 37,5-6,25-22-400/440-64	37.5	6.25	1:1:2:2	500	300	350	16	00
34-64173	C64C 37,5-12,5-11-400/440-64	37.5	12.5	1:2	500	300	350	16	00
34-64177	C64C 43,75-6,25-111-400/440-64	43.75	6.25	1:2:4	500	300	350	17	00
34-64181	C64C 46,88-3,13-1111-400/440-64	46.88	3.13	1:2:4:8	500	300	350	17	00
34-64288	C64C 50-3,13-2111-400/440-64	50	3.13	1:1:2:4:8	500	300	350	18	00
34-64182	C64C 50-6,25-211-400/440-64	50	6.25	1:1:2:4	500	300	350	18	00
34-64185	C64C 50-12,5-21-400/440-64	50	12.5	1:1:2	500	300	350	19	00
34-64186	C64C 50-25-2-400/440-64	50	25	1:1	500	300	350	19	00
34-64187	C64C 50-50-1-400/440-64	50	50	1	500	300	350	18	00
34-64193	C64C 62,5-12,5-12-400/440-64	62.5	12.5	1:2:2	500	300	350	19	00
34-64194	C64C 68,75-6,25-112-400/440-64	68.75	6.25	1:2:4:4	500	300	350	22	00
34-64196	C64C 75-12,5-22-400/440-64	75	12.5	1:1:2:2	500	300	350	23	00
34-64200	C64C 75-25-11-400/440-64	75	25	1:2	500	300	350	23	00
34-64845	C64C 75-12,5-11A-400/440-64	75	12.5	1:2:3	500	300	350	21	00
34-64203	C64C 87,5-12,5-111-400/440-64	87.5	12.5	1:2:4	500	300	350	24	00
34-64205	C64C 93,75-6,25-1111-400/440-64	93.75	6.25	1:2:4:8	500	300	350	24	00
34-64206	C64C 100-12,5-211-400/440-64	100	12.5	1:1:2:4	500	300	350	26	00
34-64208	C64C 100-25-21-400/440-64	100	25	1:1:2	500	300	350	29	00
34-64188	C64C 100-50-2-400/440-64	100	50	1:1	500	300	350	24	00

Other rated voltages, frequencies and power ratings on request.

Recommended supply lead cross sections: please refer to the technical annex (page 137 ff.).

PFC Systems on mounting plates / Capacitor Modules

Capacitor Modules

Article- No.	Type	Rated power	Step power	Switching sequence	Dimensions			Weight (gross) approx.	Protection IP
					Width	Height	Depth		
		[kvar]	[kvar]		[mm]	[mm]	[mm]	[kg]	

Capacitor Modules for installation in switchgear systems with a width of 800 mm, rated mains voltage: 400 V / 50 Hz

Type series: C84C

34-64289	C84C 25-3,13-211-400/440-84	25	3.13	1:1:2:4	700	300	350	16	00
34-64290	C84C 25-6,25-21-400/440-84	25	6.25	1:1:2	700	300	350	16	00
34-64213	C84C 25-12,5-2-400/440-84	25	12.5	1:1	700	300	350	16	00
34-64214	C84C 25-25-1-400/440-84	25	25	1	700	300	350	17	00
34-64291	C84C 31,25-6,25-12-400/440-84	31.25	6.25	1:2:2	700	300	350	17	00
34-64292	C84C 34,38-3,13-112-400/440-84	34.38	3.13	1:2:4:4	700	300	350	17	00
34-64293	C84C 37,5-6,25-22-400/440-84	37.5	6.25	1:1:2:2	700	300	350	17	00
34-64215	C84C 37,5-12,5-11-400/440-84	37.5	12.5	1:2	700	300	350	18	00
34-64294	C84C 43,75-6,25-111-400/440-84	43.75	6.25	1:2:4	700	300	350	18	00
34-64295	C84C 46,88-3,13-1111-400/440-84	46.88	3.13	1:2:4:8	700	300	350	19	00
34-64296	C84C 50-3,13-2111-400/440-84	50	3.13	1:1:2:4:8	700	300	350	19	00
34-64297	C84C 50-6,25-211-400/440-84	50	6.25	1:1:2:4	700	300	350	20	00
34-64217	C84C 50-12,5-21-400/440-84	50	12.5	1:1:2	700	300	350	20	00
34-64218	C84C 50-25-2-400/440-84	50	25	1:1	700	300	350	19	00
34-64219	C84C 50-50-1-400/440-84	50	50	1	700	300	350	20	00
34-64222	C84C 62,5-12,5-12-400/440-84	62.5	12.5	1:2:2	700	300	350	21	00
34-64298	C84C 68,75-6,25-112-400/440-84	68.75	6.25	1:2:4:4	700	300	350	21	00
34-64299	C84C 75-12,5-22-400/440-84	75	12.5	1:1:2:2	700	300	350	21	00
34-64224	C84C 75-25-11-400/440-84	75	25	1:2	700	300	350	21	00
34-64846	C84C 75-12,5-11A-400/440-84	75	12.5	1:2:3	700	300	350	21	00
34-64227	C84C 87,5-12,5-111-400/440-84	87.5	12.5	1:2:4	700	300	350	20	00
34-64229	C84C 93,75-6,25-1111-400/440-84	93.75	6.25	1:2:4:8	700	300	350	22	00
34-64126	C84C 100-12,5-211-400/440-84	100	12.5	1:1:2:4	700	300	350	24	00
34-64232	C84C 100-25-21-400/440-84	100	25	1:1:2	700	300	350	27	00
34-64127	C84C 100-50-2-400/440-84	100	50	1:1	700	300	350	26	00

Other rated voltages, frequencies and power ratings on request.

Recommended supply lead cross sections: please refer to the technical annex (page 137 ff.).

For options and accessory equipment for PFC Systems on mounting plates, module rails, ordering examples and dimensional drawings see page 87 ff.