



RACK3X Without Reactors & With Reactors 7%, 14%

Advantages

- **Increased thermal efficiency.**

Thanks to the intelligent design, once the system is assembled, efficient thermal chimney is created, able to guarantee the best cooling of the components. Furthermore, the capacitor and reactor are thermally segregated to reduce thermal stress on both components.

- **Modular design for easy assembly and removal**

Rapid assembly with interconnecting bus system incorporated as part of the module. RACK3X is the solution for switchboard manufacturers.

- **Reduced size**

Compact compensation module designed for 600 x 600 mm (W x D) cabinets. Ideal for mounting in all common switchgear systems and save space in switchrooms.

- **Easy to handle**

The compact design and low weight make installation quick and easy. Rapid assembly with interconnecting incorporated bus system.

- **Up to 6 modules per 2000 mm height cabinet**

Each module fitted with capacitor, reactor if required, contactor, temperature cut out switch and protection fuses.

- **Standardized design**

Same module for standard and detuned systems reduces the quantity of cabinets in your stock.

Design

All the components used for the production of the RACK3X universal power factor correction module are entirely made by Gruppo Energia in Italy with first choice raw materials and controlling the entire process in order to guarantee the best quality and long life.

- **Capacitors**

RACK3X module can be equipped with different types of capacitors, Intact Base (standard), Intact Plus (Heavy Duty) or Intact All-Power (Extra Heavy Duty) according to customer needs.

All capacitors are produced with the most advanced technology where the capacitor winding is vacuum dried after insertion into the aluminium can.

The capacitor is then filled with a dry insulation resin to improve heat exchange and sure moisture and air do not cause internal corrosion leading to early failure.

- **Reactors**

According to the customer's needs, the RACK3X functional tray can be supplied with adjusted (GERTM3 type) or non-adjusted (GERT3 type) rating reactors with tuning frequency 5,67%, 7% or 14%.

All reactors are impregnated with the special thermosetting polyester resin and subjected to the thermal cycle to guarantee the quality and performance.

All the reactors as standard are equipped with temperature cut out switches to protect the system.

- **Contactors**

To ensure correct operation, all CSC contactors of our production come with six quick discharge damping resistors (two per phase) and three auxiliary contacts that limit peak current during the first stage of switching.

In this way, the stress due to the high inrush current which is created during the insertion of the capacitors is reduced and the life of the components is extended.

- **Fuse Disconnecter and Fuses**

For maximum convenience all RACK3X are equipped with NH00 fuse switch disconnecter mounted on the busbars (30 mm width and 10 mm thickness).

The fuse disconnecter provide isolation of all three phases for increased operator safety.

Thanks to the transparent cover, the state of the fuses can be checked without switching off the system.

UNIVERSAL MODULES FOR POWER FACTOR CORRECTION NEW RACK3X

RACK3X For System 400 V / 415 V 50 Hz / 60 Hz Without Reactors

ORDER CODE	Rated Power 400 V kVar	Rated Power 415 V kVar	Step Power 400 V kVar	Switching Sequence	Rated Current A	Fuse	* Dimension W x D x H mm	Weight kg
RACK3X18A400B2S	18,8	20,2	9,4	1 : 1	28	40	500 x 450 x 242	16
RACK3X28A400B2S	28,2	30,3	9,4	1 : 2	41	63Q	500 x 450 x 242	17
RACK3X37A400B2S	37,6	40,5	18,8	1 : 1	54	80	500 x 450 x 242	18
RACK3X56A400B2S	56,4	60,7	18,8	1 : 2	82	125	500 x 450 x 242	19
RACK3X75A400B2S	75,2	80,90	37,6	1 : 1	109	160	500 x 450 x 242	20
RACK3X75A400B1S	75,2	80,90	75,2	1	109	160	500 x 450 x 242	20

RACK3X For system 440 V / 400 V 50 Hz / 60 Hz Without Reactors

ORDER CODE	Rated Power 440 V kVar	Rated Power 400 V kVar	Step Power 440 V kVar	Switching Sequence	Rated Current A	Fuse	* Dimension W x D x H mm	Weight kg
RACK3X18A440B2S	18,8	15,5	9,4	1 : 1	25	40	500 x 450 x 242	16
RACK3X28A440B2S	28,2	23,3	9,4	1 : 2	37	63	500 x 450 x 242	17
RACK3X37A440B2S	37,6	31,1	18,8	1 : 1	49	80	500 x 450 x 242	18
RACK3X56A440B2S	56,4	46,6	18,8	1 : 2	74	125	500 x 450 x 242	19
RACK3X75A440B2S	75,2	62,2	37,6	1 : 1	99	160	500 x 450 x 242	20
RACK3X75A440B1S	75,2	62,2	75,2	1	99	160	500 x 450 x 242	20

RACK3X For System 400 V 50 Hz / 60 Hz With Reactors

ORDER CODE	Rated Power 400 V kVar	Relative Impedance P	Step Power 400 V kVar	Switching Sequence	Rated Current A	Fuse	* Dimension W x D x H mm	Weight kg
RACK3X12A400B2R7	12,5	7%	12,5	1	18	32	500 x 450 x 242	28
RACK3X25A400B2R7	25	7%	25	1	36	63	500 x 450 x 242	34
RACK3X50A400B2R7	50	7%	50	1	72	125	500 x 450 x 242	42
RACK3X12A400B2R1	12,5	14%	12,5	1	18	32	500 x 450 x 270	35
RACK3X25A400B2R1	25	14%	25	1	36	63	500 x 450 x 242	44
RACK3X50A400B2R1	50	14%	50	1	72	125	500 x 450 x 310	63

RACK3X For system 440 V / 400 V 50 Hz / 60 Hz Without Reactors

ORDER CODE	Rated Power 415 V kVar	Relative Impedance P	Step Power 415 V kVar	Switching Sequence	Rated Current A	Fuse	* Dimension W x D x H mm	Weight kg
RACK3X12A415B2R7	12,5	7%	12,5	1	17,5	32	500 x 450 x 242	28
RACK3X25A415B2R7	25	7%	25	1	35	63	500 x 450 x 242	34
RACK3X50A415B2R7	50	7%	50	1	70	125	500 x 450 x 242	42
RACK3X12A415B2R1	12,5	14%	12,5	1	17,5	32	500 x 450 x 270	35
RACK3X25A415B2R1	25	14%	25	1	35	63	500 x 450 x 242	44
RACK3X50A415B2R1	50	14%	50	1	70	125	500 x 450 x 310	63

* All dimensions will be confirmed at the time of order.

CONSTRUCTION DIAGRAM

