



HRDE...

Rack systems incorporating anti-harmonic de-tuned reactors

HRSE series power racks are designed for direct panel mounting onto horizontal rail supports within panels

HRSE series rack design incorporates the following:

- Heavy duty sheet metal mounting frame
- Electronicon heavy duty "gas filled" cylindrical capacitors (*with integrated discharge resistors*)
- Suitably rated special capacitor switching contactors incorporating limiting resistors
- Anti-harmonic de-tuned reactors (*for networks with THDU ≤6% and/or THDI ≤40%*)
- Three-phase busbar mounted fuse holder for each capacitor bank with suitably rated HRC fuse links
- Incorporated busbar, supports and inter-connecting busbar links

type	kvar at:		description	dimensions (mm)		
	400V	440V		(H)	(W)	(D)

HRSE series power factor rack system with anti-Harmonic Reactors

HRSE series single step anti-harmonic racks

HRSE01204	12.5	15	single step capacitor + reactor unit	310	740	538
HRSE02504	25	30	single step capacitor + reactor unit	310	740	538
HRSE05004	50	60	single step capacitor + reactor unit	310	740	538

HRDE series double-step anti-harmonic racks

HRDE05024	2 x 25	2 x 30	double capacitor step + reactor unit	310	740	538
HRDE10024	2 x 50	2 x 60	double capacitor step + reactor unit	310	740	538
HRDE03734	12.5 + 25	15 + 30	double capacitor step + reactor unit	310	740	538
HRDE07534	25 + 50	30 + 60	double capacitor step + reactor unit	310	740	538

FHRE series floor standing power factor systems with anti-harmonic de-tuned reactors

For installations subject to harmonics on sites utilising harmonic generating devices such as: variable speed drives, inverters, UPS systems, battery chargers, LED lighting etc.

Complete ready-to-connect floor standing system comprising:

- Suitably ventilated floor standing enclosure with roof mounted exhaust fan
- Mains isolator, door interlocking (*with early make/late break auxiliary contact*)
- High end reactive control relay DCRG 8 (*with digital display of all important network parameters*)
- Can be configured to monitor three voltage and current phases, to provide accurate indication of:
 - Active, Apparent power as well as Active, Reactive, Apparent Energy monitoring
 - Current and Voltage Harmonics analysis (*up to 31st harmonic*)
 - Calendar-clock with backup reserve power
 - Event logging: alarms, setup, changes, etc. (*internal memory stores last 250 events*)
 - Internal panel temperature monitoring
- Expandable with up to 4 expansion modules for:
 - Additional steps, analog I/O's, RS323, RS485, Ethernet, GPRS/GSM modem communication

type	kvar at:		steps (kvar) at 400V			expands to kvar	dimensions (mm)		
	400V	440V	12.5	25	50		(H)	(W)	(D)

FHRE series floor standing complete power factor systems (440V capacitors)

- Reverse-flow roof mounted exhaust fan (*improved cooling and ventilation of the entire panel*)
- Bottom cable entry (*top entry available on request*)
- Series HR racks incorporating following:
 - Heavy duty Electronicon capacitors
 - Fusegear and busbars per capacitor bank
 - Anti-harmonic de-tuned reactors (*for networks with THDU ≤6% and/or THDI ≤40%*)

FHRE11304	113 (120)	136	1	2	1	320	2280	900	600
FHRE13804	138 (146)	166	1	1	2	346	2280	900	600
FHRE15004	150 (160)	180	-	2	2	360	2280	900	600
FHRE17504	175 (200)	210	-	1	3	400	2280	900	600
FHRE23804	238 (250)	300	1	1	4	350	2280	900	600
FHRE27504	275 (300)	330	-	1	5	400	2280	900	600
FHRE33804	338 (360)	420	1	1	6	-	2280	900	600
FHRE37504	375 (400)	450	-	1	7	-	2280	900	600
FHRE43824*	438 (465)	575	1	1	8	765	2350	1800	600
FHRE47524*	475 (500)	575	-	1	9	775	2350	1800	600
FHRE57524*	575 (610)	695	-	1	11	775	2350	1800	600
FHRE67524*	675 (720)	815	-	1	13	775	2350	1800	600
FHRE77524*	775 (825)	940	-	1	15	-	2350	1800	600

* Made up by combining two panels with one controller operating all capacitor banks

Remote monitoring

For remote monitoring and control of all electrical network parameters (*including harmonics*), panel internal temperature, alarms, events and all setup parameters. (*see page F-5 for all comm options*)



FHRE...