

Power Factor Correction Systems



PRODUCT INFORMATION
UPDATED: FEB 2025

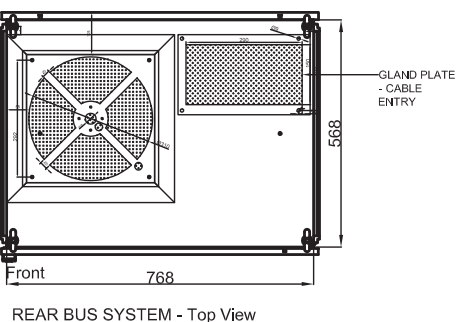
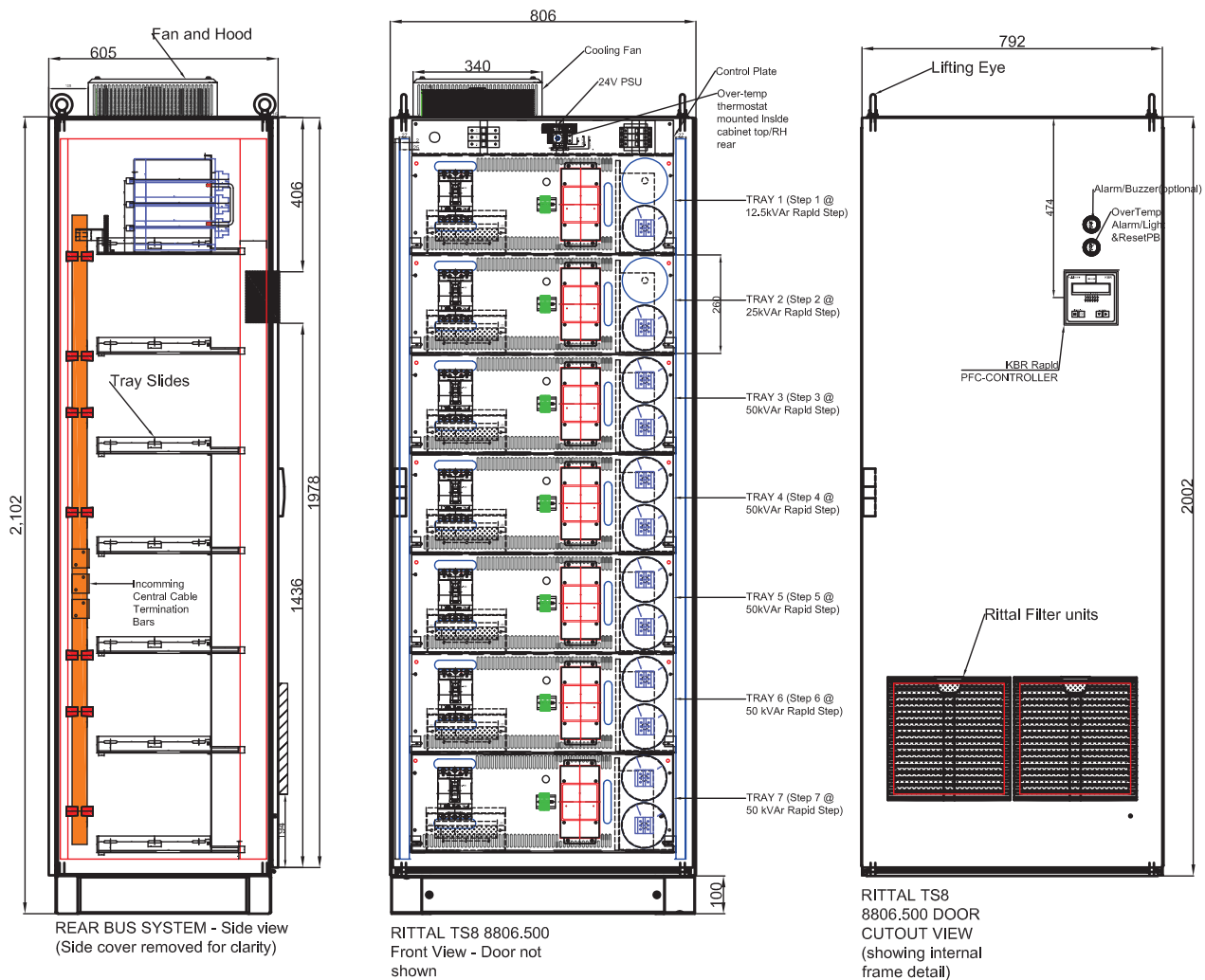
Product: Capacitor Based Power Factor Unit.

Type: Rapid Rearbus System

Description: Up to 300kVAr, Capacitor Based 7 step unit,

- Standard Rearbus connection, which makes it easier to hot-swap trays.

Major Part Vendor: Rittal, KBR, Elecktra & Noark



Capacitor Based PFC: Rapid Rearbus System

Specification					
	Cabinet Dimensions:	2202H x 792W x 578D – Fits 7 Trays			
	Trays Available:	Rapid: 12.5,25,33,50 kVAR			
		Standard: 25,33,50,67 kVAR			
	Suggested Combinations. (mix of rapid & standard)	8.3,12.5,25,33,50,50 (Rapid) 67 (standard)	8.3,12.5,25,50 (Rapid) 67,67,67 (Standard)	12.5,25,50 (Rapid) 67,67,67,67 (Standard)	12.9,25,50,50,50,50 (Rapid) 67 (Standard)
	kVAR Possible	245.8 kVAR	296.8 kVAR	304.5 kVAR	355.5 kVAR
	Nominal Current	330A	400A	480A	412A
	Recommended Supply, Circuit Breaker	630A	630A	800A	630A
	Working Voltage	415V / 440V			
	Power Grid Frequency	50Hz / 60Hz (Range: 45Hz - 62.5Hz)			
	Wiring Structure	3phase+Earth and Control Neutral			
Function	Step Switching	KBR Thyro units for Rapid, NOARC contactors for Standard			
	Reactive Power	Adjustable to 0.99			
	Compensation				
	Step Protection	MCCB			
	Connection	Rearbus connection, hot-swappable and power on maintenance of steps			
	Protection Device for supply	1.5x nominal current			
Technical Parameter	Current Transformer	50/5 ~ 6000/5			
	Harmonic Reactor Tune	187Hz			
	Filter Performance	THDi<5%			
	Noise Level	<50dB (when fans are running)			
	Response Time	0.2 Milliseconds (Rapid), 15 seconds (Standard)			
	Capacitors	KBR resin filled with discharge resistors			
	Control	KBR Thyro unit for Rapid, NOARC contactors for Standard			
	Reactor	Elektra – Tuned at 187Hz			
	Correction	Lagging			
Communication & Monitoring Capability	Communication Port	RS485 Communications & MODBUS			
	Communication Protocol	Modbus Protocol / Optional Ethernet			
	Controller	KBR 6x Rapid thyristor steps + 6x Standard relay steps			
	Protection Function	Thermostat Controlled fan, Thermostat controlled overtemp lockout, individual step MCCBs			
	Relays	Overtemp lockout, generator interface			
Mechanical Parameter	Mounting Type	Ground Mount			
	Color	Grey - Rittal			
	Altitude	1% up 2000 m. Between 2000 m to 4000 m, according to GB/T3859.2,the power decreases by 1% for every additional 100 m.			
	Relative Humidity	5% to 95% non-condensing			
	Operating Temperature	55°			
	Protection Class	IP 20			
	Standard Compliance	IEC 61000/62477			

