

Power Factor Correction Systems



Product: Capacitor Based Power Factor Unit

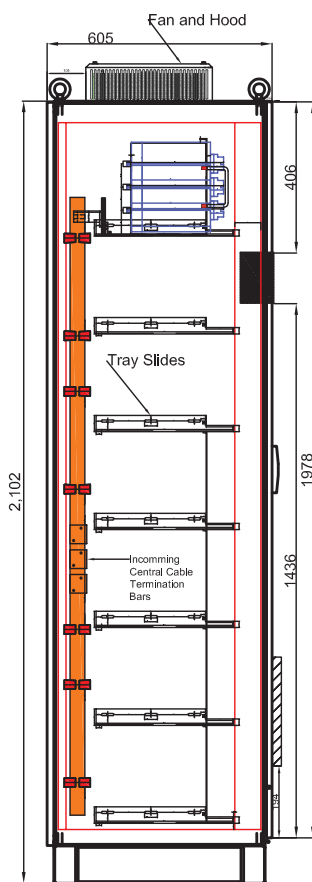
Type: Standard Rearbus System

PRODUCT INFORMATION
UPDATED: FEB 2025

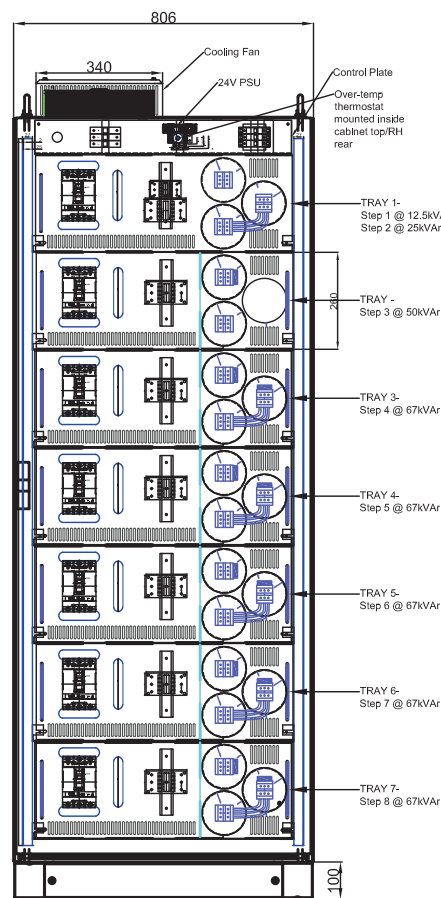
Description: Up to 405kVAR, Capacitor Based 7 step unit

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

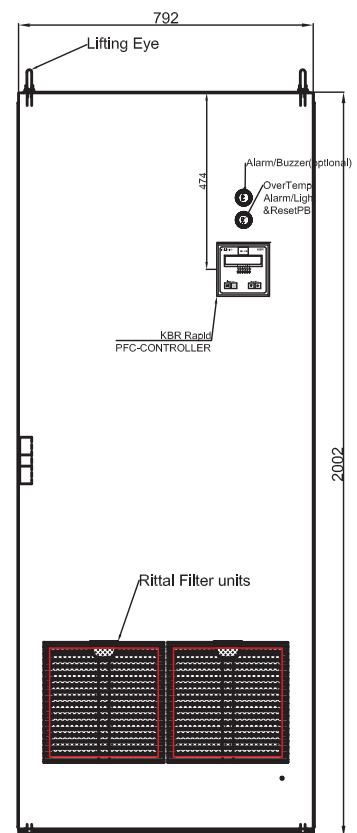
Major Part Vendor: Rittal, KBR, Elecktra & Noark



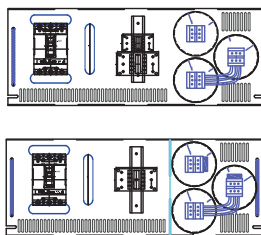
REAR BUS SYSTEM - Side view
(Side cover removed for clarity)



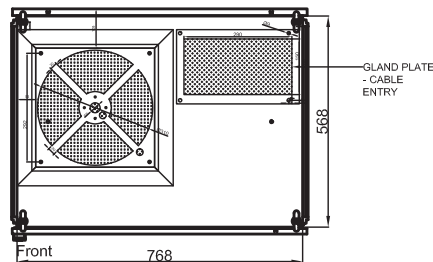
RITTAL TS8 8806.500
Front View - Door not shown



RITTAL TS8
8806.500 DOOR
CUTOUT VIEW
(showing internal frame detail)



STANDARD TRAY SYSTEM
- NOARC Or B&J Contactor
- NOARC MCB to suit step size
- Elekra Harmonic Blocking Reactor (187Hz)
- KBR Capacitors



REAR BUS SYSTEM - Top View

Capacitor Based PFC: Standard Rearbus System

Specification	kVar Possible	376 kVar	393.75 kVar	422.5 kVar	439.5 kVar
	Suggested Combinations	23,33,50,67,67,67,67	8.25/17.5,33,67,67,67,67,67	12.5/25,50,67,67,67,67,67	12.5/25,67,67,67,67,67,67
	Cabinet dimensions	2202H x 792W x 578D	2202H x 792W x 578D	2202H x 792W x 578D	2202H x 792W x 578D
	Nominal Current	513A	535A	575A	595A
	Recommended Supply, Circuit Breaker	800A	800A	1000A	1000A
	Working Voltage	415V / 440V			
	Power Grid Frequency	50Hz / 60Hz (Range: 45Hz - 62.5Hz)			
	Wiring Structure	3phase+Earth and Control Neutral			
Function	Step Switching	Contactor			
	Reactive Power Compensation	Adjustable to 0.99			
	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	182Hz			
	Filter Performance	THDi<5%			
	Noise Level	<50dB (when fans are running)			
	Response Time	5-15 Seconds (Cycle time 180 seconds)			
	Capacitors	KBR resin filled with discharge resistors			
	Control	NOARK Contactor – Rated per tray size			
	Reactor	Elektra – Tuned at 187Hz			
	Correction	Lagging			
Communication & Monitoring Capability	Controller	KBR 12 standard relay steps			
	Communication Protocol	Modbus Protocol / Optional Ethernet			
	Communication Port	RS485 Communications & MODBUS			
	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			

