



SERIE RAV 1000 EXCITATION SYSTEMS GENERAL SPECIFICATIONS

AVR MODEL:	RAV 1100	RAV 1110	RAV 1101	RAV 1111
STANDARD FEATURES				
Recommended Range	0 - 33 MW	2-75 MW	2 - 75MW	33 - 600 MW
Field Excitation	Rings	Rings	Rings	Rings
Current Range (Amps)	20 - 735	108-1200	108 - 1200	550 - 9000
Converters	P10K - P330K	P45K - P550K	P45K - P550K	P220K - 3P990K
Voltage Range	0 - 800	0 - 800	0 - 800	0 - 1600
Auto & Manual Channels	Yes	Yes	Yes	Yes
Independent Manual/Auto Channels	No	Yes	No	Yes
Independent UCE's	No	Yes	No	Yes
Automatic Follower	Yes	Yes	Yes	Yes
Bumpless Transfer to Manual	Yes	Yes	Yes	Yes
Bumpless Transfer between UCE's	No	Yes	No	Yes
Soft Start Voltage Build-up	Yes	Yes	Yes	Yes
Volt/Hertz Limiter	Yes	Yes	Yes	Yes
Over Excitation Limiter	Yes	Yes	Yes	Yes
Minimum Excitation Limiter	Yes	Yes	Yes	Yes
Stator Current Limiter	Yes	Yes	Yes	Yes
Over Excitation Voltage Limiter	Yes	Yes	Yes	Yes
Maximum excitation current limiter	Yes	Yes	Yes	Yes
Minimum Excitation current limiter	Yes	Yes	Yes	Yes
Reactive Current Compensator	Yes	Yes	Yes	Yes
VAR Controller	Yes	Yes	Yes	Yes
Power Factor Controller	Yes	Yes	Yes	Yes
Power System Stabilizer	Yes	Yes	Yes	Yes
Local Monitoring Capability	Yes	Yes	Yes	Yes
Serial Port RS232 - Modbus	Yes	Yes	Yes	Yes
Lan - Ethernet	Yes	Yes	Yes	Yes
Dynamic Response Test Circuitry	Yes	Yes	Yes	Yes
Local Digital Control Panel	Yes	Yes	Yes	Yes
Excitation Overvoltage Protection	Yes	Yes	Yes	Yes
Excitation Overcurrent Protection	Yes	Yes	Yes	Yes
Feedback current Loss Protection	Yes	Yes	Yes	Yes
Gen Volt/Hertz Protection (24)	Yes	Yes	Yes	Yes
PT's Signal Loss Protection (60)	Yes	Yes	Yes	Yes
Gen Overvoltage Protection (59)	Yes	Yes	Yes	Yes
Microprocessor Based Electronics	Yes	Yes	Yes	Yes
Redundant Electronics	No	Yes	No	Yes
Redundant Sequencer	No	Yes	No	Yes
Redundant Power Supplies	No	Yes	No	Yes
Redundant pulse generator	No	Yes	No	Yes
Redundant Pulse Amplifier	No	Yes	No	Yes
Redundant Power Converters	No	No	Yes	Yes
Individual Thyristor Fuse Protection	Yes	Yes	Yes	Yes
Rectifier Over Temp. Protection	Yes	Yes	Yes	Yes
Rectifier air flow Protection	Yes	Yes	Yes	Yes
Excitation Transf. Overtemp. Prot.	Yes	Yes	Yes	Yes
Excitation Transf. Overcurrent Prot.	Yes	Yes	Yes	Yes
Field Flashing	Yes	Yes	Yes	Yes
DC Circuit Breaker	Yes	Yes	Yes	Yes
Non/Linear Discharge Resistor	Yes	Yes	Yes	Yes
Crowbar , Non-Linear resistor	Yes	Yes	Yes	Yes
Filter for Shaft Induced Current	Yes	Yes	Yes	Yes

AVAILABLE OPTIONS				
Remote Electronics	Yes	Yes	Yes	Yes
Digital Backup Manual Channel	Yes	Yes	Yes	Yes
Analog Backup Manual Channel	Yes	Yes	Yes	Yes
Remote Control Panel	Yes	Yes	Yes	Yes
Seccionalizable Power Converters	Yes	Yes	Yes	Yes
AC Circuit Breaker	Yes	Yes	Yes	Yes
Compound Excitation	Yes	Yes	Yes	Yes
Field flashing AC supply	Yes	Yes	Yes	Yes
Redundant Fans in bridges	Yes	Yes	Yes	Yes
Conduccion monitoring system	Yes	Yes	Yes	Yes
Overexcitation for 2 PU Ceiling	Yes	Yes	Yes	Yes
Field Ground Protection (64F)	Yes	Yes	Yes	Yes
Brush failure protection (64B)	Yes	Yes	Yes	Yes
Loss of Field Protection (40)	Yes	Yes	Yes	Yes
Gen Out-of-step Protection (78)	Yes	Yes	Yes	Yes
Fault recorder	Yes	Yes	Yes	Yes
Oil Type Excitation Transformer	Yes	Yes	Yes	Yes
Cast Resin Type Excitation Transf	Yes	Yes	Yes	Yes
Dry Type Excitation Transformer	Yes	Yes	Yes	Yes