RX Series 200 to 15000 VAC

The RX Series Specifications

Your prescription for a healthy motor!

by MOTORTRONICS

Design	Type of Load		3-phase AC induction motors
	AC Supply Voltage (Motor Voltage)		Direct: 200 - 600VAC, ± 10%, 50/60hz With 120V PTs: 690 - 15,000VAC
	Current Range		1 - 2000 Amps in 3 frame ratings
	Sevice Factor		Programmable from 1.00 to 1.30 for NEMA design motors
	Current Measurement		3 window CTs on units up to 75A, external CTs for higher ratings (meets NEC requirments for 3-leg protection)
	Power Wiring		Direct feed-through or external CT lead feed-through
	LED Display and Keypad		7-segment, 4-digit alpha-numeric display designed for use in high ambient light conditions. Full function, 4-quadrant navigation keys for easy access to status information and programmable functions.
	LED Status Lights		10 LED indicators on the front panel for relay status
Control	Control Voltage		Universal voltage supply, 85 - 265VAC or DC, 50/60Hz
	Multi-function Digital Input		One (1) dry contact input for Timer Start, Remote Start or Remote Trip
	Fault Reset		Manual reset via the keypad or cycle control power for remote reset
	Programmable Output Contacts		One (1) Form C (SPDT) 5A, 240VAC maximum One (1) Form A (SPST) 10A maximum, 1/2 HP @ 240VAC 29 programmable trip functions
	Event Timer Control		24 hr, 7 day, 7 event timer allows automatic start w/ batch run time control
	Batch Run Timer Control		Minimum run timer (resumes timing if stopped) or permissive run timer (only runs during set time). Time setting: 1 - 9999 minutes.
Protection	Overload Protection Method		Real-time Motor Thermal Modeling uses current sensors and microprocessor to continuously calculate motor temperature
	Retentive Thermal Memory		Remembers the thermal condition of the motor even if control power is lost. Thermal register is adjusted for Off-time when power is restored.
	Dual Overload Curve Settings		Two separately programmable overload trip curves; one for starting and one for running. OL trip range: Class 5 - 30.
	Learned Dynamic Reset		OL trip will not reset unless motor has regained enough themal capacity for successful restart (based on learned motor starting profile)
	Programmable Service Factor		Automatically adjusts other settings to compensate for programmed Service Factory. Adjustment Range: 1.0 - 1.15 SF.
	Current Imbalance Protection		Monitors phase-to-phase current levels and trips if imbalance exceeds setting. Setting: Off or 5 - 30% of FLA with 1-20 second delay.
	Phase Loss / Sequence Protection		Trips if any phase < 20% FLA. Sequence selectable A-B-C, C-A-B or Off.
	Current Trip	Over Current	Electronic shear-pin/shock relay. Off or 50-300% FLA, 1-20sec delay
		Under Current	Load-loss/loss of prime. Setting: Off or 10-90% FLA, 1-60sec delay
	Over Voltage Trip (any phase)		Setting: Off or 1-10% of set voltage with 1-20 second delay
	Under Voltage Trip	On Startup	Setting: Off or 1 - 20% of set voltage with 1-120 second startup time
		At Full Speed	Setting: Off or 1 - 20% of set voltage with 1-20 second trip delay
	Load Monitor (True Motor Power)		Under or over kW trip or alarm. Setting: Off or 20 - 100% of motor kW with 1-20sec delay
	Power Factor Monitor		Leading or lagging PF, trip or alarm. Setting: Off or 0.1 - 1.0PF (lead or lag) with 1-20 second delay
	Frequency Monitor		Over or under programmed frequency. Setting: Off or 1-10Hz with 1-20sec delay
	Equipment Ground Fault Protection		Electronic residual current protection method, no additional CTs needed. Setting: Off or 5-90% of CT with 1-60sec delay
	Short Circuit / Shorted Load		Peak current quick trip (electronic fuse). Trip level: Off or 800-1400% FLA with 0.1 - 0.5sec delay
	Restart Delay Timer		Programmable delay of restart after a power failure. Setting: 0 - 999 sec.
	Starts-per-Hour Lockout		Program maximum starts-per-hour in adherence with motor design limitations. Setting: Off or 0 - 10 starts/Hr.
	Minimum Time Between Starts		Used with or without starts-per-hour protection to prevent short cycling of motor. Setting: Off or 1 - 60 minutes between starts
	Coast-Down Timer		Back spin or anti-windmillling protection prevents restart after stop command has been given. Time setting: Off or 1 - 3600 seconds.