

News Release
No.: REN0510(A)

Renesas Electronics Europe Introduces New Inverter Kits that Enable Rotation of Permanent Magnet AC Motors in Under One Minute

Separate Sheet

Kit description	RX220 inverter kit	RX62T inverter kit
Kit part-name	YROTATE-IT-RX220	YROTATE-IT-RX62T
MCU performances	32-bit @ 32MHz 50DMIPS	32-bit @ 100MHz 165DMIPS, FPU, MPU
Field Oriented Control	Torque & speed control controlled	Torque & speed control controlled
Sensorless feedback	Single or three shunts	Single or three shunts
Flux estimation	Exact BEMF integration method	Exact BEMF integration method
Arithmetic used	Fixed point	Floating point
Space Vector Modulation	Yes	Yes
Flux Weakening support	Yes	Yes
PI current auto-tuning	Yes	Yes
Motor para. identification	Yes	Yes
PWM frequency	16KHz	16KHz
Control Loop frequency	8KHz	16KHz
CPU load	45%	60%
Flash / RAM Usage	24KB / 3KB	14KB / 2KB
Peripherals used	MTU2 timer 12-bit A/D converter Port Output Enable	FPU, MTU3 timer 12-bit A/D converter 6 channels Op-amp 6 Channels Comparators Port Output Enable