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AUTOMATION, INC. PARTS MUST CONFORM TO APPLICABLE

ROCKWELL AUTOMATION MANUFACTURING STANDARDS

SHEET 1 OF 4

1000000373

DOCUMENT NUMBER

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Specifications:			
1. Motor type: 4 pole, 3 phase, asynchronous, ventilated			
2. Base speed: 1480 RPM.			
3. Maximum speed: 3000 RPM.			
4. Continuous stall torque: 482 Nm (4266 lb-in) max at 155C winding temperature in a 400	C		
5. Peak stall torque: 870 Nm (7700 lb-in) max.			
	1480 RPM 243 Amps 0 to peak max.(172.5 Amps.RMS)		
<ol><li>Operating voltage: 400 VAC RMS Ref. (Not for direct connection to AC line).</li></ol>			
8. Continuous stall current: 243 Amps 0 to peak max.(172.5 Amps.RMS)	Equivalent circuit parameters		
9. Magnetizing current: 82.5 Amps. RMS ref.			
10. Peak stall current: 440 Amps 0 to peak max.( 312 Amps. RMS)	X1: .0736 Ohms/phs Ref at 20C to 30C.		
11. Insulation class: 180 (H).	X2: .0995 Ohms/phs Ref at 20C to 30C.		
12. Housing temperature: 125C max.	Xm: 2.26 Ohms/phs Ref at 20C to 30C		
13. Winding resistance: .025 Nom. Ohms, phase to phase at 20C to 30C.	R1: .0124 Ohms/phs Ref at 20C to 30C		
14. Winding inductance: 1.46 mH, phase to phase Ref.	R2: .00984 Ohms/phs Ref at 20C to 30C		
15. Dielectric rating of motor power connections (U,V,W), and thermostat connections			
(TS+, TS-) to ground: 2350 VAC RMS 50/60 Hz for 1 second.			
16. Rotor inertia: .885 kg-m2 Ref.	BRAKE: 460VAC 48Nm max. holding torque		
17. Rotor balancing: Quality grade G-6.3.			
18. Product weight: 351 kg (1170 lb) Ref.			
19. Operating ambient temperature: 0C to 40C (32F to 104F).			
20. Storage ambient temperature: -30C to 70C (-22F to 158F).			
21. Relative humidity: 5% to 95% non-condensing.			
22. Liquid / dust protection: IP54 with blower installed			
23. Shock: 10 g peak max, 6 msec duration (18 occurances tested).			
24. Vibration: 2.5 g peak max, 30 to 2000 Hz.			
25. Shaft material: Steel, grade 1040/1045.			
26. Paint: Black. Shaft, key (if provided), front mounting surface, and connectors are			
not painted.			
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	00 DESCRIPTION		
	VER HPK-E2010C-SC44BA,ESE		
Notes: "Ref" denotes untoleranced specifications, provided for reference only.			
Speed, torque and current specifications are for motor operation with	Automation 1000000373		
Allen Bradley drives.	A SIZE SHEET 2 OF 4		

## Feedback Specifications:

Electrical Hardware:

- 1. SIN, COS waveform output: 1024 sinusoids/rev.
- 2. SIN, COS waveform amplitude: 0.9 to 1.1 Volts peak to peak.
- 3. SIN -, COS voltage offset with respect to power input common: 2.2 to 2.8 VDC.
- 4. +5VDC voltage input: 4.5 to 12.0 VDC.
- 5. +5VDC current input: 125 mA DC max continuous, 1.0 A DC max inrush.
- 6. TS+, TS- thermostat operating voltage: 250 Volts max.
- 7. TS+, TS- thermostat operating current: 1.6/2.5 Amps max at 0.6/1.0 power factor.

Serial Communication:

- 1. DATA+, DATA- signal type, rate: RS 485, 9600 baud, asynchronous.
- 2. Communication hierarchy: Encoder is slave, communication is externally initiated.
- 3. Single turn absolute position value range: 0 to 32,767 steps (12 bit).
- 4. Absolute position data: Binary, value increases with CW shaft rotation viewing motor mounting face.
- 5. Data (byte) format: Start bit, 8 data bits, parity bit, stop bit.
- 6. Memory storage capacity: 128 bytes, EEPROM.
- 7. Encoder temperature data: Binary value of encoder temperature in degrees C.

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