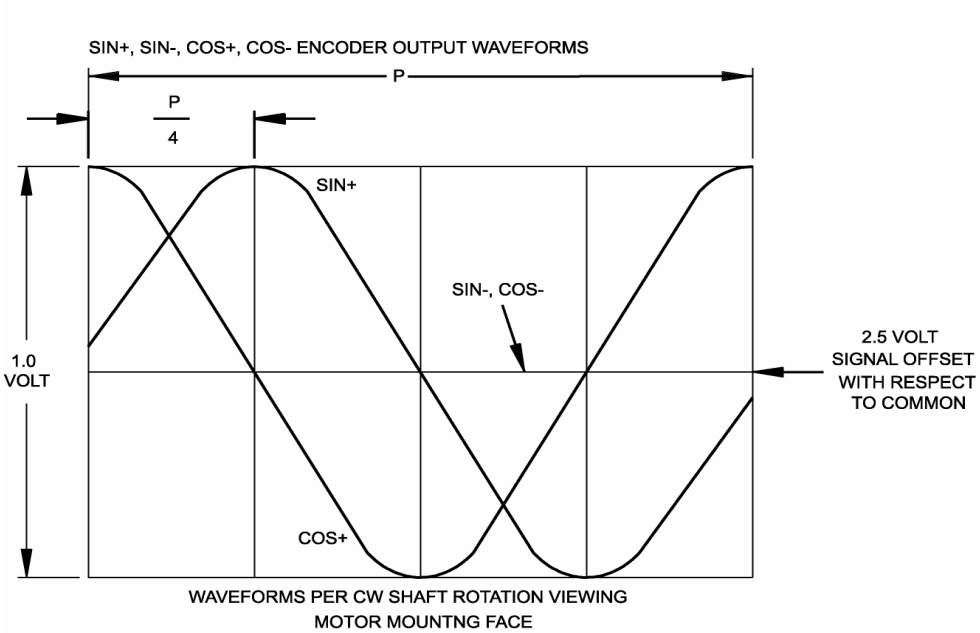

RADIAL LOAD CAPACITY (Kgs) -
NO AXIAL LOAD - FOR L10 LIFE OF 10,000 HOURS
Radial Load Capacity at the End of the Shaft (Kgs)

2500 RPM	1750 RPM	1150 RPM	850 RPM
450	530	530	530

AXIAL THRUST CAPACITY (Kgs) -
NO RADIAL LOAD - FOR L10 LIFE OF 10,000 HOURS
Horizontal Mounting Load Capacity at the End of the Shaft (Kgs)

2500 RPM	1750 RPM	1150 RPM	850 RPM
260	310	380	440

Notes: Print or enlarge waveforms for improved clarity.
For additional specifications see L18M5163ESM.

01	1020346	VS	RELEASED		
REV	ECN	BY	REVISION DESCRIPTION	CHKR	DATE

PREPARED BY	DATE	DESIGN ENGINEER	DATE
VS	2/1/2006		

TITLE

ES, ELEC, HPK-B1815C-SA42BA

Allen-Bradley

PART NO.
L18M5163ESE

A SIZE | SHEET 1 OF 4

Specifications:

1. Motor type: 4 pole, 3 phase, asynchronous, ventilated
2. Base speed: 1480 RPM.
3. Maximum speed: 3000 RPM.
4. Continuous stall torque: 360 Nm (3186 lb-in) max at 155C winding temperature in a 40C
5. Peak stall torque: 850 Nm (7523 lb-in) max.
6. Continuous output rating: 55.9 kW (hp) max at 1480 RPM. Continuous current @ 1480 RPM 153.7 Amps 0 to peak max.(109 Amps.RMS)
7. Operating voltage: 460 VAC RMS Ref. (Not for direct connection to AC line).
8. Continuous stall current: 153.7 Amps 0 to peak max.(109 Amps.RMS)
9. Magnetizing current: 54 Amps. RMS ref.
10. Peak stall current: 402 Amps 0 to peak max.(285 Amps. RMS)
11. Insulation class: 180 (H).
12. Housing temperature: 125C max.
13. Winding resistance: .054 Nom. Ohms, phase to phase at 20C to 30C.
14. Winding inductance: 3.2 mH, phase to phase Ref.
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: .468 kg-m^2 Ref.
17. Rotor balancing: Quality grade G-6.3.
18. Product weight: 474 kg (1045lb) 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

Equivalent circuit parameters

X1: .159 Ohms/phs Ref at 20C to 30C.
X1: .226 Ohms/phs Ref at 20C to 30C.
Xm : 4.22 Ohms/phs Ref at 20C to 30C
R1: .0272 Ohms/phs Ref at 20C to 30C
R2: .0198 Ohms/phs Ref at 20C to 30C

Notes: "Ref" denotes untoleranced specifications, provided for reference only.

Speed, torque and current specifications are for motor operation with Allen Bradley drives.

01	TITLE
REV	ES, ELEC, HPK-B1815C-SA42BA
Allen-Bradley	PART NO. L18M5163ESE
	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.

Note: "Ref" denotes untoleranced specifications, provided for reference only.

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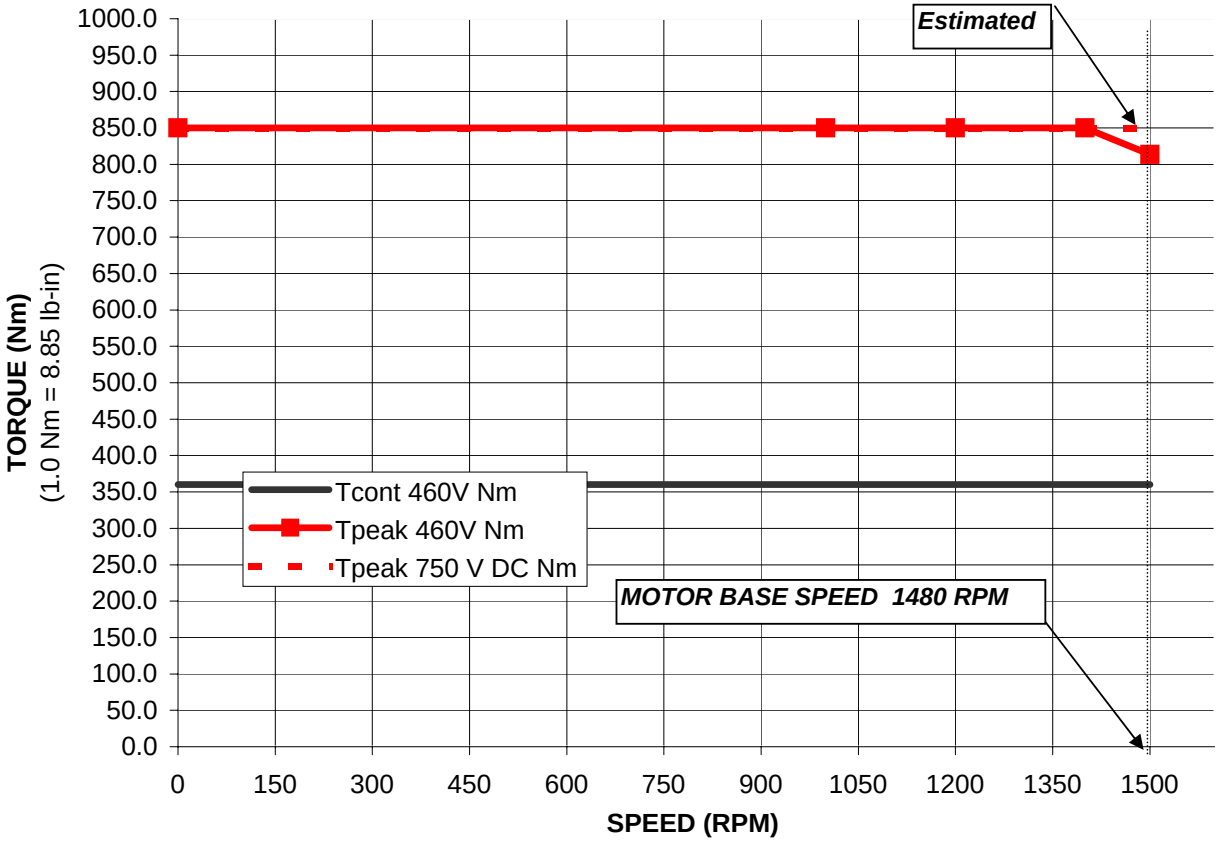
REV	ES, ELEC, HPK-B1815C-SA42BA
Allen-Bradley	PART NO. L18M5163ESE
	A SIZE / SHEET 3 OF 4

SPEED RPM	TORQUE		
	Tcont 460V	Tpeak 460V	Tpeak 750 V DC
	Nm	Nm	Nm
0	360.0	850.1	850.1
1000	360.0	850.1	850.1
1200	360.0	850.1	850.1
1400	360.0	850.1	850.1
1500	360.0	813.6	850.1

SPEED RPM	TORQUE		
	Tcont 460V	Tpeak 460V	Tpeak 750 V DC
	lb-in	lb-in	lb-in
0	3186.0	7523	7523
1000	3186.0	7523	7523
1200	3186.0	7523	7523
1400	3186.0	7523	7523
1500	3186.0	7200	7523

Note: Nm torque values shown are converted from tested lb-in data.

HPK-B1815C-SA42BA Performance with 2099-BM11
at 460 VAC and 750 V DC Drive Input, 40C Motor Ambient



01	TITLE
REV	ES, ELEC, HPK-B1815C-SA42BA
Allen-Bradley	PART NO. L18M5163ESE
	A SIZE / SHEET 4 OF 4