

Quantum LMV – TEFC

200-600 HP; 460, 2300/4000 volt

features & benefits

GE Experience

The Quantum* LMV-TEFC incorporates GE's long history of building reliable motors with the latest technology. The ratings listed in this publication meet NEMA Premium® efficiencies and comply with the Energy Independence & Security Act.

Industries & Applications

Quantum LMV motors are commonly used in the petrochemical, power generation, mining, and general process industries for various applications, including pumps, blowers, compressors, crushers, and conveyors.

Reliability is Key

The Quantum design possesses the following notable features and benefits:

- Meets or exceeds NEMA Premium® efficiency levels providing for lower operating cost and lower environmental impact.
- Lower than IEEE 841 specified vibration levels. 100% tested not to exceed 0.075 in/sec, which provides for maximum bearing life.
- Low noise levels
 - < 88 dBA @ 3600 RPM
 - < 85 dBA or less @ 1800 & 1200 RPM
- Internal cooling circuit that eliminates hot spots, lowers stator and bearing temperatures, providing increased motor life
- Dual mounting holes for greater frame flexibility.

Stock Offerings

The Quantum LMV-TEFC is now available in the following configurations:

Quantum Severe Duty Medium Voltage

- Included standard accessories
 - 115V space heaters
 - Qty (6) 100 Ohm platinum winding RTD's
 - Qty (2) 100 Ohm platinum bearing RTD's
 - Accessory conduit box
- 1200 RPM through 400 HP standard with roller bearing & high strength shaft material
- 3 year warranty

Quantum Severe Duty Low Voltage with IEEE 841 Features

- Extended offering beyond X\$D Ultra* 841
- Features per IEEE 841 Std. 2009
- Dual Inpro/Seal® Bearing Isolators
- 5 year warranty

Quantum Severe Duty Low Voltage

- Standard endshield and C Face models available
- 3600 RPM fan and pump motors
- Dual rated 60/50 Hz
- 3 year warranty



HP	RPM	Volts	Frame ¹	FLA	Nom. Eff.	Cat. No.	Norm Stk.	Wt. (lbs)	C Dim. (in)	Notes
Quantum Severe Duty Medium Voltage										
200	1200	2300/4000	509L	46.6/26.8	95.0	Q514	Y	4450	72.38	148
250	3600	2300/4000	509LS	53.2/30.6	95.0	Q500	Y	4650	66.13	145
250	1800	2300/4000	509LL	55.3/31.8	95.0	Q507	Y	4350	67.13	
250	1200	2300/4000	509L	57.9/33.3	95.0	Q515	Y	4475	72.38	148
300	3600	2300/4000	509LS	63.5/36.5	95.0	Q501	Y	4500	66.13	145
300	1800	2300/4000	509LL	66.1/38	95.0	Q508	Y	4550	67.13	
300	1200	2300/4000	5011L	68.5/39.4	95.4	Q516	Y	5400	80.39	148
350	3600	2300/4000	5011LS	73.7/42.4	95.0	Q502	Y	4950	74.14	145
350	1800	2300/4000	5011LL	77.6/44.6	95.4	Q509	N	5200	75.14	
350	1200	2300/4000	5011L	80.7/46.4	95.0	Q517	Y	5500	80.39	148
400	3600	2300/4000	5011LS	83.8/48.2	95.0	Q503	Y	5300	74.14	145
400	1800	2300/4000	5011LL	87.7/50.4	95.0	Q510	Y	5800	75.15	
400	1200	2300/4000	5011L	93.9/54	95.0	Q518	Y	5700	80.39	148
450	3600	2300/4000	5011LS	93.9/54	95.4	Q504	Y	5550	74.14	145
450	1800	2300/4000	5013S	99.1/57	95.0	Q511	Y	6500	85.13	
450	1200	2300/4000	5013S	103.7/59.6	95.0	Q519	N	6600	85.13	
500	3600	2300/4000	5013ST	103.8/59.7	95.4	Q505	Y	6350	83.13	145
500	1800	2300/4000	5013S	109.4/62.9	95.0	Q512	Y	7000	85.13	
500	1200	2300/4000	5013S	114.6/65.9	95.0	Q520	N	7150	85.13	
600	3600	2300/4000	5013ST	124.5/71.6	95.4	Q506	N	6700	83.13	145
600	1800	2300/4000	5013S	130.4/75	96.2	Q513	Y	7150	85.13	
600	1200	2300/4000	5013S	138.3/79.5	95.0	Q521	N	7150	85.13	149

Quantum Severe Duty Low Voltage with IEEE 841 Features										
300	1200	460	509LL	339	95.8	Q808	Y	4650	67.13	146
350	3600	460	5011LS	364	95.8	Q800	Y	5400	74.14	112,145,146
350	1800	460	5011LL	380	96.2	Q804	Y	5600	75.14	146
350	1200	460	5011LL	391	95.8	Q809	N	5150	75.14	146
400	3600	460	5011LS	416	95.8	Q801	Y	5400	74.14	112,145,146
400	1800	460	5011LL	432	96.2	Q805	Y	5700	75.14	146
400	1200	460	5011LL	452	95.8	Q810	Y	5400	75.14	146
450	3600	460	5011LS	468	95.8	Q802	Y	5475	74.14	112,145,146
450	1800	460	5013S	484	96.2	Q806	N	6275	85.13	146,147
450	1200	460	5011LL	508	95.8	Q811	N	5700	75.14	146
500	3600	460	5011LS	517	95.8	Q803	Y	5750	74.14	112,145,146,147
500	1800	460	5013S	538	96.2	Q807	N	6750	85.13	146,147

Quantum Severe Duty Low Voltage										
350	3600	460	5011LS	364/366	95.8	Q527	N	5200	74.14	106,145
400	3600	460	5011LS	416/418	95.8	Q528	N	5300	74.14	106,145
450	3600	460	5011LS	468/470	95.8	Q529	N	5375	74.14	106,145
500	3600	460	5011LS	517/517	95.8	Q530	N	5750	74.14	106,145
600	3600	460	5013ST	617/620	95.8	Q531	N	6700	83.13	106,145

Quantum Severe Duty Low Voltage with C Face										
350	3600	460	5011LSC	364/366	95.8	Q522	Y	5200	75.08	106,145
400	3600	460	5011LSC	416/418	95.8	Q523	Y	5300	75.08	106,145
450	3600	460	5011LSC	468/470	95.8	Q524	Y	5375	75.08	106,145
500	3600	460	5011LSC	517/517	95.8	Q525	Y	5750	75.08	106,145
600	3600	460	5013STC	617/620	95.8	Q526	Y	6700	84.08	106,145

¹ Dual Drilled for 508/509, 5010/5011, 5012/5013

- 106 Usable on 400V, 50 Hz at 1.0 service factor
- 112 Noise level exceeds IEEE 841
- 145 CCW rotation facing opposite drive end. For CW fans use Part #148C8070AA1; except for 350 HP 3600 RPM motors use #148C8070BA1.
- 146 Aluminum fan. Aluminum fan complies with API541.
- 147 Motors have an Auto Ignition Temperature of 215C degree stamped on the nameplate.
- 148 Roller bearing on drive end. High strength shaft material. For belted loads only. Refer to Belt Drive Table in Application Guide.
- 149 Class F rise at 1.0 SF only.

For more information, contact your GE sales representative.
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 GEA-18672 (10/11)

