

TOSHIBA

TOSHIBA INTERNATIONAL CORPORATION

LOW VOLTAGE MOTORS

EQP Global[®] QD



**QUARRY
DUTY**

BUILT FOR MINING OR AGGREGATE APPLICATIONS

Toshiba's Quarry Duty motor utilizes a totally enclosed fan cooled design and provides exceptional high-starting torques, oversized superior-grade bearings, and shafts built with high strength steel to withstand the harshest environments. These key features allow our Quarry Duty motors to provide optimum reliability, performance, and efficiency for the toughest aggregate & cement and mining & mineral industries.



EQP Global[®]
QD



Superior Performance

Delivers high-starting torques combined with high-breakdown torques to provide versatility for severe applications.

Insulation System

Designed for aggressive overloads, the motor offers a 1.25 SF (1.15 SF for frames 400 and larger) with large thermal margins for extended life and reliability.

Low Vibration

A vibration level of 0.1 inches/second, which exceeds NEMA MG1 requirements, provides stability and durability by prolonging motor life and reducing downtime.

Ingress Protection

A totally enclosed fan cooled design combined with a v-ring or shaft slinger seals provide an IP55 protection, helping prevent against humidity, dust, dirt, and other contaminants present in the environment.

Inverter Duty Rated

Designed for use with an adjustable speed drive that can lead to energy savings when run at optimum fan speed. The insulation system meets NEMA MG1 Part 31, providing speed ranges of up to 60:1 Variable Torque, 20:1 Constant Torque on frames 184-405T and 60:1 Variable Torque, 10:1 Constant Torque on frames 505 and larger.

GENERAL FEATURES

- 5 TO 600 HP
- 1.25SF Frames 184-365T; 1.15SF Frames 405T and Larger
- Frame Size 182T through 5810UZ
- IP55
- NEMA Premium or High Efficiency
- Hardware ASTM Grade 5 Frames 182T- 447T*; ASTM Grade 8 Frames 505UZ- 5810UZ

CONSTRUCTION

- Cast Iron Frame and Bearing Brackets
- Dual-Drilled with Multi-Mount Capabilities on Most Frames (See Appendix B in Industrial Catalog)
- Shaft Material AISI 1045 Frames 182T- 405T; AISI 4142 High Strength Steel Frames 444T* -5810UZ



BEARINGS

- Oversized 300 Series Bearings on DE & ODE; Roller Bearings on Frames 444T* and Larger
- Sealed Bearings Frames 182T - 256T; Regreasable Frames 284T and Larger
- L-10 100,000 Hours Direct Coupled; L-10 40,000 Hours Belted
- Load Side Locked Bearing Frames 213T and Larger with Additional Bearing Lock Nuts Frames 444T* and Larger



INDUSTRIES SERVED

- Aggregate
 - Mining & Minerals
 - Cement

APPLICATIONS

- Conveyors
- Screens
- Crushers



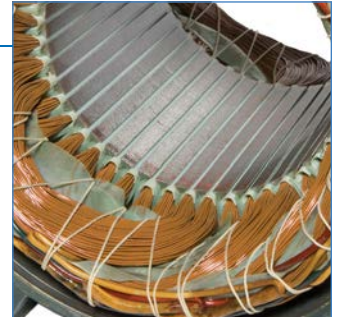
CONDUIT BOX

- Cast Iron
- Two 3 inch NPT Conduit Openings Frames 505 and Larger
- UL Grounding Lug Provision
- Rotatable 90° Increments
- Lead Seal Gasket



INSULATION

- Low-Loss Electrical Steel
- Phase Paper & Coil Bracing on DE & ODE
- Magnet Wire High Voltage Withstand Capability of 2000 V in 0.1 μ s
- Exceeds NEMA MG1 part 31
- Class F System with Class H Magnet Wire and Varnish



OPTIONAL FEATURES

- Insulated Bearings
- C or D Flanges
- Cast Iron Fan Covers
- Severe Duty Drip Covers
- Tropicalized Winding Varnish
- Fungus Proof Protective Coating
- Shaft Grounding Devices
- Thermal Protection (RTDs, Thermostats, Thermistors)
- Space Heaters
- Auxiliary Boxes (F1 and F2 locations)

TESTING

- 100% No-Load Commercial Test
- Vibration Test on 444T Frames and Larger
- Commercial Test Report with Vibration Data Supplied with Frames 444T* and Larger

3 THREE YEAR
WARRANTY



Voltage	RPM	HP	Frame	Model #	S.F.	FLA	LRA	LRT %	BDT %
460 V	1800	5	184T	0054QDAB41A-P	1.25	6.4	54	290	310
		7.5	213T	Y754QDAB41A-P	1.25	9.8	67	275	340
		10	215T	0104QDAB41A-P	1.25	13.6	96	290	240
		15	254T	0154QDAB41A-P	1.25	21	127	290	280
		20	256T	0204QDAB41A-P	1.25	25	160	260	280
		25	284T	0254QDAB41A-P	1.25	30	215	230	240
		30	286T	0304QDAB41A-P	1.25	39	287	260	330
		40	324T	0404QDAB41A-P	1.25	49	383	215	235
		50	326T	0504QDAB41A-P	1.25	62	494	240	250
		60	364T	0604QDAB41A-P	1.25	70	548	200	270
		75	365T	0754QDAB41A-P	1.25	87	736	210	360
		100	405T	1004QDAB41A-P	1.15	116	725	215	310
		250	505UZ	2504QDAB41-R	1.15	289	2086	275	260
		300	N587UZQ	3004QDAB41-R	1.15	345	2398	245	260
		350	N587UZQ	3504QDAB41-R	1.15	398	2550	240	315
	400	N587UZQ	4004QDAB41-R	1.15	462	3559	270	340	
	450	5010UZ	4504QDAB41-R	1.15	573	4159	245	345	
	500	5810UZ	5004QDAB41-R	1.15	551	4063	240	270	
	600	5810UZ	F6004FLF4BMQ	1.15	682	4579	230	255	
	1200	5	215T	0056QDAB41A-P	1.25	6.9	54	270	345
		7.5	254T	Y756QDAB41A-P	1.25	10.2	68	255	315
		10	256T	0106QDAB41A-P	1.25	13.4	88	250	275
		15	284T	0156QDAB41A-P	1.25	19.6	126	245	275
		20	286T	0206QDAB41A-P	1.25	25	166	260	275
		25	324T	0256QDAB41A-P	1.25	31	194	245	290
		30	326T	0306QDAB41A-P	1.25	37	236	220	265
		40	364T	0406QDAB41A-P	1.25	48	333	240	245
		50	365T	0506QDAB41A-P	1.25	60	448	245	280
		200	505UZ	2006QDAB41-R	1.15	235	1450	210	225
		250	N587UZQ	2506QDAB41-RF	1.15	308	2305	225	285
		300	N587UZQ	3006QDAB41-R	1.15	367	2623	215	270
		350	5010UZ	3506QDAB41-R1	1.15	426	3195	230	265
		400	5010UZ	F4006FLF4BMQ	1.15	510	3153	165	270
		450	5810UZ	4504QDAB41-R	1.15	573	4159	245	345
	500	5810UZ	F5006FLF4BMQ	1.15	645	4335	205	295	
	600	5810UZ	F6006FLF4BMQ	1.15	776	5272	210	295	
	900	200	N587UZQ	2008QDAB41-R	1.15	282	1678	250	220
		250	N587UZQ	2508QDAB41-R	1.15	341	2030	240	235
		300	5810UZ	F3008FLF4BMQ	1.15	443	3183	210	320
		350	5810UZ	F3508FLF4BMQ	1.15	488	3141	155	265
		400	5810UZ	F4008FLF4BMQ	1.15	514	3123	140	225
		450	5810UZ	F4508FLF4BMQ	1.15	543	3768	220	305

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*Coming Soon: 400 & 440 Frame Ratings

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