

# WOLONG

*Power your future*



## **MD800** **Direct Current** **Mill-Duty Motors**

5 - 250 HP



## Proven Rugged Design High Torque Applications

This low base speed, high torque motor is used in high performance, automatic control systems that require a fast transient response. These direct current motors are ideal for use in steel plants, excavating equipment, shipyard cranes, mine hoists, and coal/ore processing. They operate well in constant potential or adjustable voltage drive systems with either rectified power supplies or motor-generator sets.



Proven commutator design with high stability for severe MD applications with improved tracking resistance

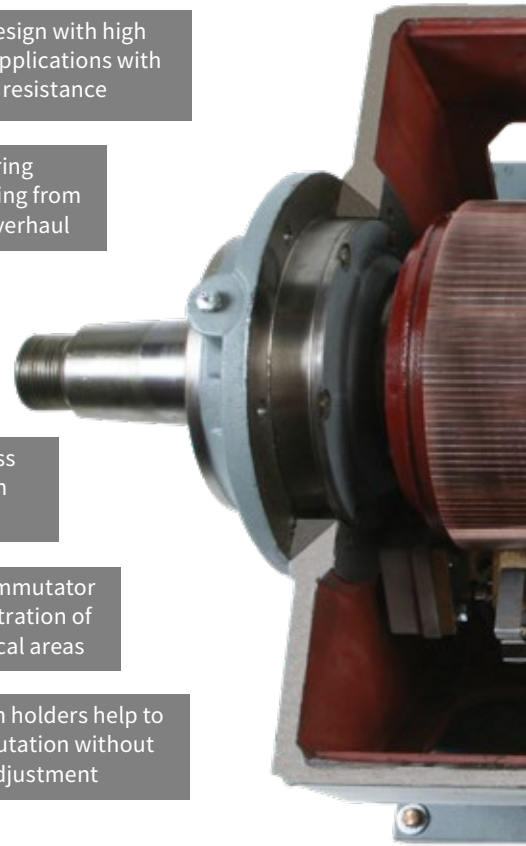
Cartridge-type bearing assemblies protect bearing from contaminants during overhaul

Grease relief plug prevents forcing of excess grease into internal parts

Drain holes allow excess moisture to drain from bottom of motor

Viton® is used to seal commutator bands, preventing penetration of contaminants into critical areas

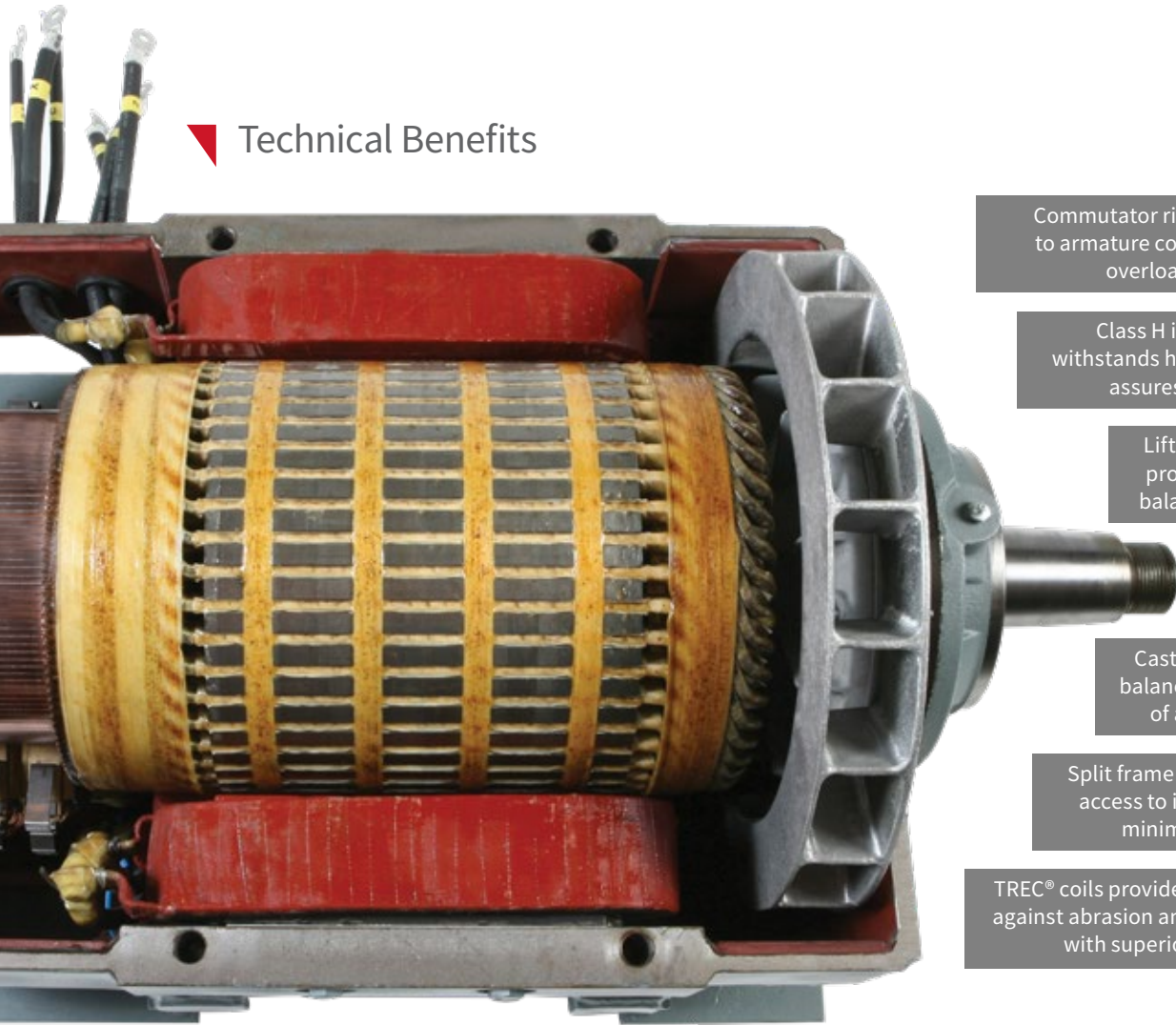
Constant-pressure brush holders help to assure excellent commutation without spring pressure adjustment



## Technical Features

HP Range	5 - 250
Voltage	230 Volt DC
Altitude	3300 ft
Ambient	40°C
Bearing Type	Single-width solid cylindrical roller bearing
Enclosures	Totally Enclosed and Forced Ventilated
Frames	Horizontally split steel frame with lifting lugs
Frame Size	MD802 through MD818
Insulation Class	H
Leads	Exit frame F2 configuration (conduit box not standard)
Shaft	Tapered and equal on DE and CE and replaceable without disturbing the windings
Speed	Various
Temperature Rise	75°C rise by thermometer or 110°C rise by resistance
Time Ratings	Continuous, 30 minutes or 60 minutes
Warranty	54 months from date of installation or 60 months from date of manufacture; whichever occurs first
Winding	Series, Shunt, and Compound

## Technical Benefits



Commutator risers are TIG welded to armature conductors for higher overload capability

Class H insulation system withstands high temperatures and assures long motor life

Lifting lugs are welded to provide strength, proper balance and safe handling

Heavy-duty shafts are replaceable

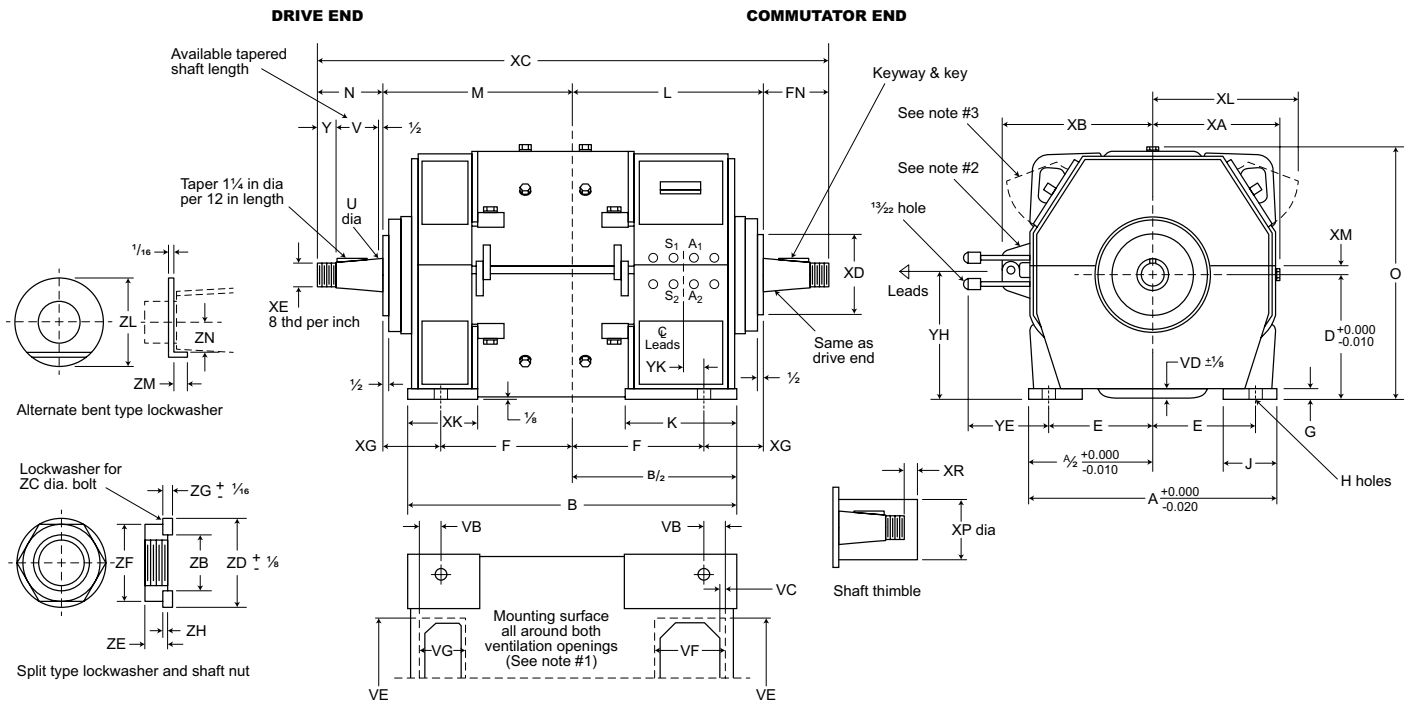
Cast fans are dynamically balanced separately for ease of addition or removal

Split frame permits fast and easy access to internal motor parts, minimizing downtime

TREC® coils provide maximum protection against abrasion and contaminants along with superior heat transfer

## Standard Ratings

Frame Size	60 min. 75°C Rise Totally Enclosed, or Continuous, 75°C Rise Force-Ventilated				30 min. 75°C Rise Totally Enclosed			Continuous Duty Cycle, 30% Time On, 75°C Rise, Totally Enclosed					
	HP	Full-Load Speed RPM (Approx.)			HP	Full-Load Speed RPM (Approx.)		Full-Load Speed RPM (Approx.)					
		Series	Compound or Shunt	Adjustable Speed		Series	Compound	Series		Compound		Shunt	
								HP	RPM	HP	RPM	HP	RPM
802A	5	900	1025	1025/2050	6.5	750	925	5.5	840	5	1080	5	1130
802B	7.5	800	900	900/1800	10	675	775	8	780	7.5	950	7.5	1000
802C	10	800	900	900/1800	13.5	675	775	10	800	9.5	940	9	1000
803	15	725	800	800/2000	19	620	725	15	725	14.5	840	14	880
804	20	650	725	725/1800	26	580	650	20	650	18.5	775	17	800
806	30	575	650	650/1950	39	500	600	30	575	28.5	690	25	715
808	50	525	575	575/1725	65	450	525	40	570	37.5	625	35	630
810	70	500	550	550/1650	90	440	500	60	550	52.5	615	45	600
812	100	475	515	515/1300	135	420	475	85	510	75	580	60	565
814	150	460	500	500/1250	200	400	460	115	515	110	565	85	560
816	200	450	480	480/1200	265	400	450	150	500	140	540	110	535
818	250	410	435	435/1100	325	360	400	185	485	165	490	130	470

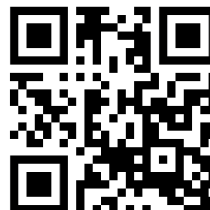
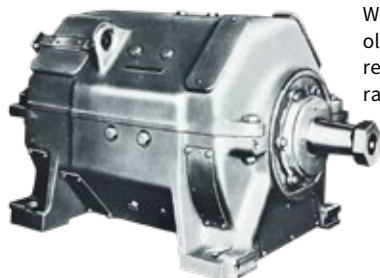


Frame	Approx. Net Wgt in lbs.	Dimensions in Inches																			
		A	B	D	E	F	G	H	J	K	LM	O	XA	XB	XC	XD	XG	XK	XL	XM	XP
802	600	15.00	20.50	7.63	6.25	8.25	0.75	0.78	3.13	8.63	12.00	15.56	8.19	9.88	32.88	4.50	3.75	5.13	9.75	0.63	2.75
803	770	17.00	23.50	8.50	7.00	9.00	0.88	0.91	3.63	9.13	13.50	17.31	9.00	10.69	37.00	5.50	4.50	5.88	10.63	0.63	3.63
804	960	18.00	25.50	9.00	7.50	9.50	0.88	0.91	4.00	9.75	14.50	18.31	9.31	11.00	39.00	5.50	5.00	5.75	10.88	0.75	3.63
806	1300	20.00	27.50	10.00	8.25	10.50	1.00	1.03	4.25	10.00	15.50	20.31	10.31	12.25	42.25	6.25	5.00	6.75	12.00	0.75	4.25
808	1790	22.75	31.25	11.25	9.38	12.38	1.13	1.19	4.75	11.75	17.50	22.94	11.69	13.50	42.50	7.25	5.13	7.00	13.50	0.88	4.25
810	2450	24.50	32.50	12.25	10.25	13.00	1.13	1.19	5.25	11.00	18.75	24.94	12.69	14.50	50.25	8.00	5.75	7.00	14.50	1.00	6.06
812	3280	27.00	36.00	13.38	11.25	14.50	1.25	1.31	5.75	11.00	20.50	27.19	13.81	15.63	55.00	8.75	6.25	8.25	15.75	1.00	6.06
814	4500	30.00	41.50	14.75	12.50	16.00	1.50	1.56	6.25	13.50	23.25	29.94	15.19	-	60.75	10.00	7.25	8.75	17.25	1.13	7.69
816	5780	32.50	46.75	16.00	13.50	17.50	1.50	1.56	7.25	17.50	26.00	32.44	16.44	-	67.50	10.00	8.50	9.75	19.50	1.25	7.69
818	7500	36.00	49.75	17.75	15.00	19.50	1.75	1.81	7.75	17.75	17.50	35.94	18.19	-	70.63	10.00	8.00	11.00	21.50	1.38	7.69

Frame	Dimensions in Inches																										
	Shaft					Keyway			Key			Nut and Lockwasher							Vent. Duct Flange Surface					Motor Leads			
	N	FN	U	V	Y	XE	W	D	L	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZL	ZM	ZN	VB	VC	VD	VE	VF	VG	YE	YH
802	4.44	1.75	2.75	1.19	1.00	0.50	0.25	2.62	1.38	1.50	2.38	0.88	2.00	0.25	0.19	2.50	0.25	1.00	0.88	0.38	0.50	7.25	4.75	2.19	7	8.62	3.0
803	5.00	2.00	3.25	1.25	1.25	0.50	0.25	3.12	1.50	1.50	2.38	0.94	2.25	0.25	0.19	2.88	0.31	1.33	1.75	0.50	0.50	8.50	5.00	3.25	7	9.50	3.0
804	5.00	2.00	3.25	1.25	1.25	0.50	0.25	3.12	1.50	1.50	2.38	0.94	2.25	0.25	0.19	2.88	0.31	1.12	2.25	0.50	0.62	9.00	5.50	2.75	7	10.00	3.0
806	5.62	2.50	3.75	1.38	1.50	0.50	0.25	3.75	2.00	2.00	2.88	1.06	2.75	0.38	0.31	3.25	0.38	1.25	2.12	0.50	0.75	10.25	6.00	3.38	7	11.00	3.0
808	6.25	3.00	4.25	1.50	2.00	0.75	0.25	4.12	2.50	2.50	3.50	1.19	3.50	0.44	0.38	4.31	0.66	1.50	2.00	0.50	0.88	11.50	6.50	3.50	10	12.50	3.0
810	6.38	3.25	4.25	1.62	2.25	0.75	0.25	4.12	2.75	2.75	3.75	1.31	4.00	0.50	0.44	4.75	0.75	1.62	2.12	0.50	0.88	12.00	7.00	3.62	10	13.50	3.0
812	7.00	3.62	4.75	1.75	2.50	0.75	0.25	4.62	3.00	3.00	4.00	1.44	4.25	0.50	0.44	5.00	0.62	1.88	2.50	0.62	1.00	13.75	8.25	4.88	10	14.62	3.0
814	7.12	4.25	4.75	1.88	3.00	1.00	0.38	4.62	3.50	3.50	5.00	1.56	4.75	0.38	0.31	5.88	0.72	2.22	3.38	0.62	1.25	15.25	9.25	5.50	12	16.25	3.0
816	7.75	4.62	5.25	2.00	3.25	1.25	0.38	5.12	4.00	4.00	6.00	1.69	5.38	0.38	0.31	6.50	0.62	2.62	2.50	1.00	1.12	16.00	11.00	6.62	12	17.50	4.5
818	7.81	5.00	5.75	1.56	3.50	1.25	0.50	5.62	4.00	4.00	6.00	1.25	5.75	0.38	0.31	6.75	0.75	2.62	3.88	1.00	1.38	18.00	12.00	7.12	12	19.25	4.5

### MD600 Replacements

Wolong can mechanically replace your old MD600 motors. Contact your sales representative for a quote on direct rating replacements.



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