

## RPM III PRODUCT EXTENSION

NEMA frame size C500 IEC frame size GS315

The C500/GS315 DC Motor is the newest addition to the Reliance Electric RPM III family of DC Motors. The RPM III Global design features combine to present a DC motor with more power, greater reliability, and more application flexibility than older, larger designs.

Some facts about the NEMA design:

- Up to 800 Hp available in a 12.5 inch shaft height machine  
DPG-SV, DPG-FV, TEDC-AW, TEDC-AA, TENV enclosures available
- Continuous duty at 1.0 SF, capable of 150% overload for 1 minute
- NEMA Class F insulation
- Complies with NEMA standard naming convention for dimensions
- Dimension sheets in English units

Some facts about the IEC design:

- Up to 600kW available in a 315mm shaft height machine
- Degree of protection available: IP22, IP23, IP44, IP54
- Cooling methods available: IC06, IC17, IC37, IC410, IC616
- All metric hardware
- IEC class H insulation
- Dimension sheets in metric units

RPM III Design Features:

Global design allows for the flexibility of specifying either NEMA or IEC dimensional requirements. Power Code 6/6-460-50/60-0 allows for this motor to be on 50 or 60 Hz power without any external inductance.

Larger armature diameters provide a significant increase in rating per frame size and improved torque-to-inertia ratios for quick response.

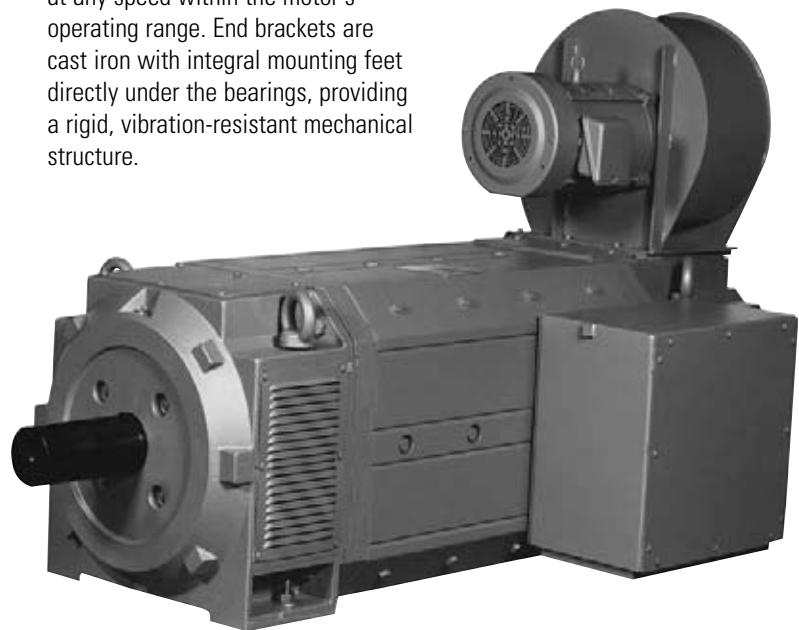
Four-pole configuration in a square laminated frame provides improve commutation over a wide speed range, improves heat dissipation, and requires less mounting space than a round body motor.

End brackets with integral mounting feet are designed to eliminate vibration at any speed within the motor's operating range. End brackets are cast iron with integral mounting feet directly under the bearings, providing a rigid, vibration-resistant mechanical structure.

PLS lubrication system uses open bearings that run cooler for long life. Unique configuration of bearing cavity ensures proper bearing lubrication regardless of motor mounting position. It also eliminates the possibility of damage to the motor or bearings due to overgreasing.

Mechanically kept commutator provides dynamic stability, eliminating high or low bars and undesirable thermal stress.

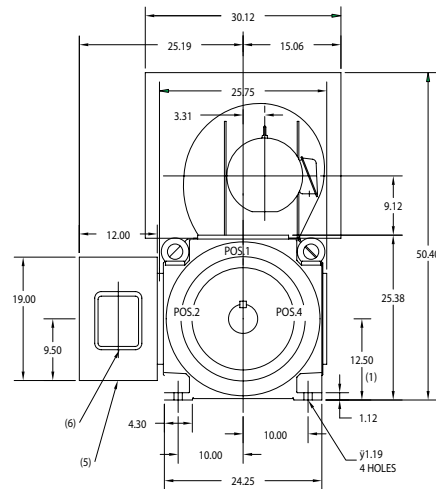
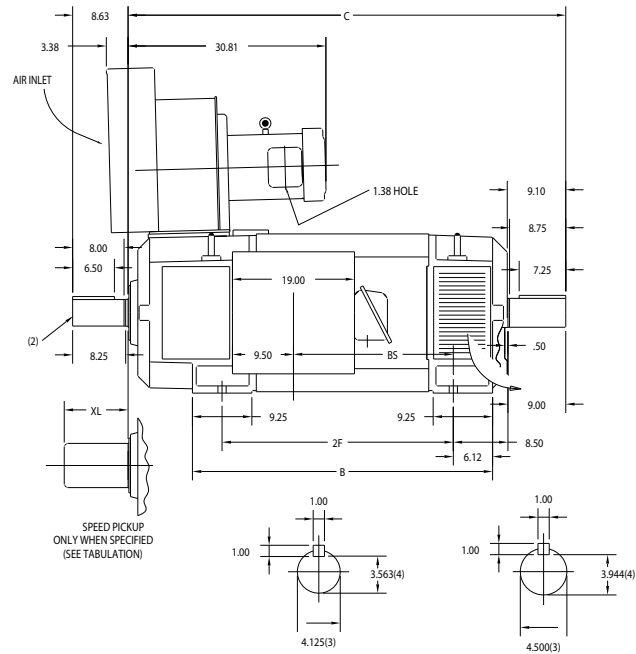
Radial brush holders with a constant tension coiled spring ensure positive, continuous contact between the brush and commutator. This results in optimum commutation and better utilization of the brush length for increased brush life.



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## NEMA RATING MATRIX

HP	Base Speed	FW Speed	RPM III Frame
125	300	925	C5011
150	500	1500	C5010
150	400	1200	C5010
150	300	950	C5011
200	300	820	C5012
250	650	1750	C5011
250	500	900	C5011
250	400	750	C5012
300	850	1800	C5010
300	650	1425	C5011
300	500	1150	C5012
400	1150	2000	C5010
400	850	1400	C5011
400	650	1150	C5012
500	1750	1950	C5010
500	1150	1600	C5011
500	850	1200	C5012
600	1750	1800	C5010
600	1150	1250	C5011
600	850	1000	C5013
700	1750	1750	C5010
700	1150	1200	C5012
800	1750	1750	C5011
800	1150	1250	C5013



DIMENSIONS ARE IN INCHES.

FRAME	DUTY	C	B	BS	2F	WT. (LBS.)
C5010ATZ	COUPLED	64.12	42.75	20.88	32.00	3635
C5011ATZ	COUPLED	68.12	46.75	24.88	36.00	4195
C5012ATZ	COUPLED	72.12	50.75	28.88	40.00	4760
C5013ATZ	COUPLED	77.12	55.75	33.88	45.00	5465

[www.baldor.com](http://www.baldor.com) [www.ptplace.com](http://www.ptplace.com) [www.dodge-pt.com](http://www.dodge-pt.com) [www.reliance.com](http://www.reliance.com)



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