

EXTRUDER DUTY RPM AC MOTORS

RPM AC EXTRUDER DUTY MOTORS

- 1000:1 constant torque
- 10 to 700 HP at 1750 RPM
- NEMA Class B rise at all speeds (including zero speed)
- 200% starting and overload torque up to base speed
- Higher constant power speed range for higher productivity
- Compact and rugged laminated steel frames with cast iron brackets standard on every motor – coolest bearings for long life
- FL180 is rugged extruded aluminum frame with cast iron brackets
- Shutdown and warning thermostats for superior winding protection
- Washable canister filter reduces contamination (Replaceable on L440 frames)
- Encoder provisions are standard
- UL recognized and CSA certified (CE mark when requested)
- Surpasses NEMA MG.1 Part 31 spike voltage requirements

When your extruder or injection molding application demands high inverter duty performance, RPM AC Drip-Proof Guarded Force Ventilated motors offer the ideal solution. Now, for those applications that require lower surface and winding temperatures, the RPM AC Extruder Duty design allows you to easily select cooler operating motors.

RPM AC Extruder Duty motors include premium epoxy Class H insulation system, and have been sized to operate at NEMA class B temperature rises. **Even at zero speed with continuous full load torque,**



the temperature rise is Class B. The benefit is four times the motor insulation system life. These designs are not just re-rated motors, but are carefully power matched to the HP needed for optimum amps and full load torque.

Unique laminated frame technology achieves high power density, resulting in frames that are more compact and lighter weight than most DC and NEMA cast iron motors – easy to replace any motor AC or DC.

The constant HP range also has been extended to allow full constant horsepower operation at higher speeds than competitive ratings. This feature may allow replacement of multiple base speed motor ratings with one RPM AC Extruder Duty motor. See rating chart on reverse side of this sheet.

✓ Aggregate/Cement

✓ Food

✓ Mining

✓ Forest/Paper

✓ Petro/Chem

✓ Unit/Baggage Handling

✓ HVAC/Industrial Air Handling

✓ Environmental/Fluid Power

✓ Automotive

✓ Metals

RPM AC EXTRUDER DUTY RATING TABLE⁽³⁾

| HP | BASE RPM | CONSTANT HP RPM | FRAME | TYPICAL FLA @460V | WEIGHT (LBS) | DIMENSION SHEET | MOUNTING(2) |
|-----|----------|-----------------|-----------|-------------------|--------------|-----------------|-------------|
| 10 | 1750 | 3500 | FL1831CZ | 14 | 153 | 617528-13 | FOOT/210TC |
| | 1150 | 2300 | FL1844CZ | 14 | 201 | 617233-23 | FOOT/250TC |
| 15 | 1750 | 3000 | FL1844CZ | 21 | 201 | 617233-23 | FOOT/250TC |
| | 1150 | 2300 | FL1852CZ | 21 | 230 | 617236-23 | FOOT/250TC |
| 20 | 1750 | 3000 | FL1852CZ | 27 | 230 | 617236-23 | FOOT/250TC |
| | 1150 | 1800 | RL2162CZ | 27 | 305 | 617202-5 | FOOT/250TC |
| 25 | 1750 | 3500 | RL2158CZ | 34 | 278 | 617259-13 | FOOT/250TC |
| | 1150 | 2300 | RL2168CZ | 34 | 345 | 617206-4 | FOOT/250TC |
| 30 | 1750 | 3510 | RL2162CZ | 40 | 305 | 617202-5 | FOOT/250TC |
| | 1150 | 1730 | RL2168CZ | 40 | 345 | 617206-4 | FOOT/250TC |
| 40 | 1750 | 3230 | RL2168CZ | 52 | 345 | 617206-4 | FOOT/250TC |
| | 1150 | 1800 | RL2570CZ | 52 | 480 | 617214-13 | FOOT/250TC |
| 50 | 1750 | 2550 | RL2173CZ | 65 | 375 | 617210-13 | FOOT/250TC |
| | 1150 | 2000 | RL2578C | 65 | 545 | 617218-13 | FOOT/250TC |
| 60 | 1750 | 2600 | RL2570C | 77 | 480 | 617214-13 | FOOT/250TC |
| | 1150 | 2200 | L2882 | 77 | 775 | 616760-1 | FOOT |
| 75 | 1750 | 3000 | RL2578C | 96 | 545 | 617218-13 | FOOT/250TC |
| | 1150 | 1750 | L2882Z | 96 | 775 | 616760-1 | FOOT |
| 100 | 1750 | 2650 | L2882Z | 124 | 775 | 616760-1 | FOOT |
| | 1150 | 1400 | L2898Z | 124 | 1065 | 616760-1 | FOOT |
| 125 | 1750 | 2950 | L2890Z | 157 | 915 | 616760-1 | FOOT |
| | 1150 | 2350 | L3203Z | 156 | 1185 | 616764-1 | FOOT |
| 150 | 1750 | 2650 | L2898Z | 180 | 1065 | 616760-1 | FOOT |
| | 1150 | 2350 | L3213Z | 180 | 1325 | 616764-1 | FOOT |
| 200 | 1750 | 2500 | L3203Z | 240 | 1185 | 616764-1 | FOOT |
| | 1150 | 2000 | L3614Z | 240 | 1715 | 609998-1 | FOOT |
| 250 | 1750 | 2500 | L3698Z | 300 | 1395 | 609998-1 | FOOT |
| | 1150 | 2000 | L4034Z | 302 | 2050 | 609998-1 | FOOT |
| 300 | 1750 | 3000 | L3614Z | 360 | 1715 | 609998-1 | FOOT |
| | 1150 | 2000 | L4034Z | 361 | 2000 | 609998-1 | FOOT |
| 350 | 1750 | 2700 | L4034Z | 414 | 2000 | 609998-1 | FOOT |
| | 1150 | 2500 | L4046Z | 398 | 2050 | 609998-1 | FOOT |
| 400 | 1750 | 2500 | L4034Z | 449 | 2000 | 609998-1 | FOOT |
| | 1150 | 1700 | L4429Z(1) | 507 | 3000 | 615917-1 | FOOT |
| 450 | 1750 | 2650 | L4046Z | 530 | 2050 | 609998-1 | FOOT |
| | 1150 | 2000 | L4461Z(1) | 580 | 3889 | 615917-1(1) | FOOT |
| 500 | 1750 | 3000 | L4046Z | 560 | 3000 | 609998-1 | FOOT |
| | 1150 | 2380 | L4461Z(1) | 669 | 3889 | 615917-1 | FOOT |
| 600 | 1750 | 2700 | L4451Z(1) | 747 | 3612 | 615917-1 | FOOT |
| 700 | 1750 | 2700 | L4461Z(1) | 864 | 3889 | 615917-1 | FOOT |

(1) All L440 frames include premium class H insulation with VPI, and an insulated opposite drive end bearing.

(2) For other flange mounting options, IEC frames, and TEFC or TEBC options, contact Reliance Electric

(3) For IEC frame extruder duty RPM AC motors see the Variable Speed Motors catalog at www.reliance.com

www.ptplace.com www.dodge-pt.com www.reliance.com www.endorsia.com



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This material is not intended to provide operational instructions. Appropriate Dodge/Reliance Electric instruction manuals and precautions should be studied prior to installation, operation or maintenance of equipment.