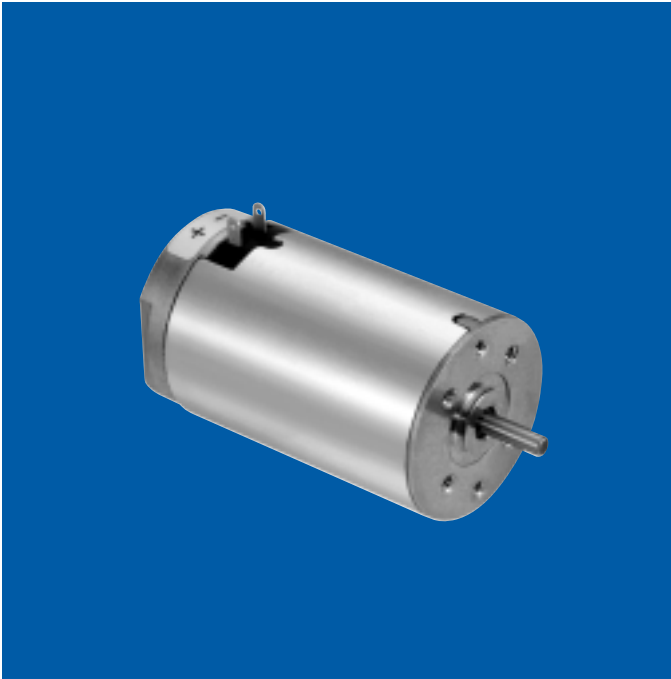


IM-15 MOTORS

DC Ceramic Permanent Magnet Motors

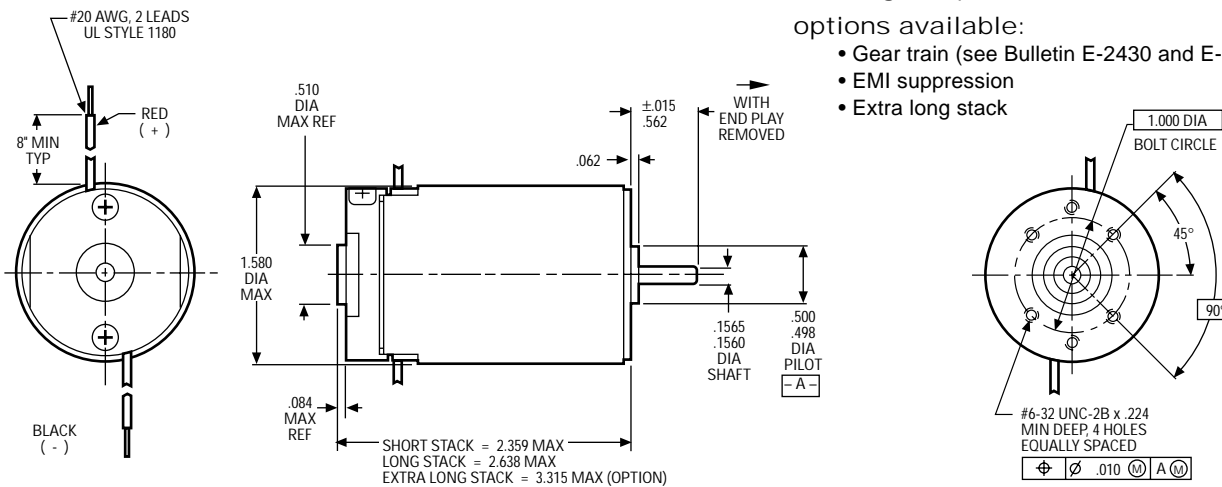
E-2400



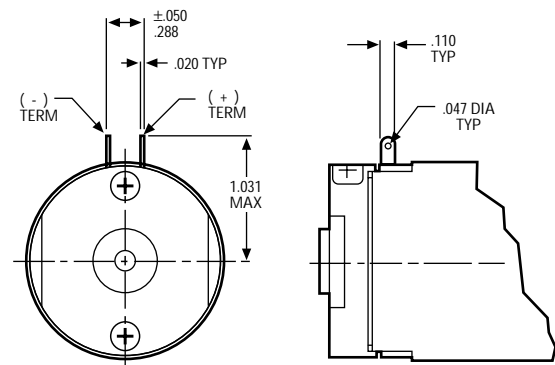
power rating: To .03 hp (22.4 W)
 voltage: 12 or 24 VDC
 weight: 9 ounces (short stack)
 11 ounces (long stack)
 inertia: See table, opposite page
 electrical time constant: 1.0 millisecond max
 mechanical time constant: 25.0 milliseconds max
 typical no load torque: 0.6 oz. in.
 shaft: Precision-ground and hardened stainless steel.
 Options: length, flats, pinions, gears. Shaft material may change depending upon options selected
 magnets: High energy ceramic to provide greater torque and high-pulse current without demagnetizing
 bearings:
 Ball: Pre-loaded to withstand higher side loads
 Sleeve: Self-aligning sleeve bearings are life-lubricated and withstand a 2-lb. side load and have .002" to .027" axial end play
 cables/leads: 8" min. #20 AWG 2 leads UL style 1180
 cover: Steel housing, zinc plate
 end bells: Die-cast zinc
 winding insulation rating: 180°C
 winding temperature rise: **See table, opposite page
 options available:

- Gear train (see Bulletin E-2430 and E-2435)
- EMI suppression
- Extra long stack

Dimensions



Terminal Configuration



ROTATION (VIEWED FROM SHAFT END)
 CW - POSITIVE VOLTAGE TO RED (+), NEGATIVE VOLTAGE TO BLACK (-)
 CCW - REVERSE POLARITY

NOTE: Consult factory prior to preparing spec control prints. Dimensions are for reference only

Standard Part Numbers and Data

VOLTAGE (VDC)	SPEED ±10% NO LOAD (rpm)	CURRENT NO LOAD (max amps)	RATED TORQUE (oz. in.)	CURRENT AT RATED TORQUE (max amps)	INERTIA (oz. in. sec. ² x 10 ⁻⁴)	TEMP. RISE (°C/ watt)	TORQUE CONSTANT (oz. in./ amp)	RESISTANCE (ohms)	STANDARD PART NUMBER*	
									WITH LEADS	WITH QUICK CONNECT TERMINAL
Short Stack — Sleeve Bearings										
12	5,200	.250	4.0	2.0	4.75	8.5	2.95	2.25	403A6005-2	403A6075-2
24	5,200	.125	4.0	1.0	4.75	8.5	6.00	9.00	403A6005-3	403A6075-3
12	5,950	.300	5.0	2.6	4.60	8.5	2.60	1.10	403A278-2	403A280-2
24	6,000	.180	5.0	1.3	4.60	8.5	5.30	4.50	403A278-3	403A280-3
Long Stack — Sleeve Bearings										
12	5,200	.300	5.0	2.3	6.00	7.0	3.00	2.00	403A6006-2	403A6076-2
24	5,200	.150	5.0	1.2	6.00	7.0	6.10	6.60	403A6006-3	403A6076-3
12	6,400	.330	6.0	3.1	5.90	7.0	2.50	0.85	403A279-2	403A281-2
24	6,150	.180	6.0	1.6	5.90	7.0	5.20	3.50	403A279-3	403A281-3
Short Stack — Ball Bearings										
12	5,200	.250	4.0	2.0	4.75	8.5	2.95	2.25	403A6007-2	403A6077-2
24	5,200	.125	4.0	1.0	4.75	8.5	6.00	9.00	403A6007-3	403A6077-3
12	5,950	.300	5.0	2.6	4.60	8.5	2.60	1.10	403A282-2	403A284-2
24	6,000	.180	5.0	1.3	4.60	8.5	5.30	4.50	403A282-3	403A284-3
Long Stack — Ball Bearings										
12	5,200	.300	5.0	2.3	6.00	7.0	3.00	2.00	403A6008-2	403A6078-2
24	5,200	.150	5.0	1.2	6.00	7.0	6.10	6.60	403A6008-3	403A6078-3
12	6,400	.330	6.0	3.1	5.90	7.0	2.50	0.85	403A283-2	403A285-2
24	6,150	.180	6.0	1.6	5.90	7.0	5.20	3.50	403A283-3	403A285-3

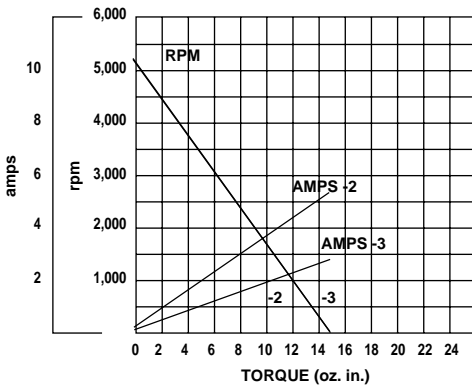
**Winding temperature rise measured when mounted to 8.00" x 8.00" x .25" aluminum plate. Multiply by 1.4 when mounted to a heat insulator

*When You Order

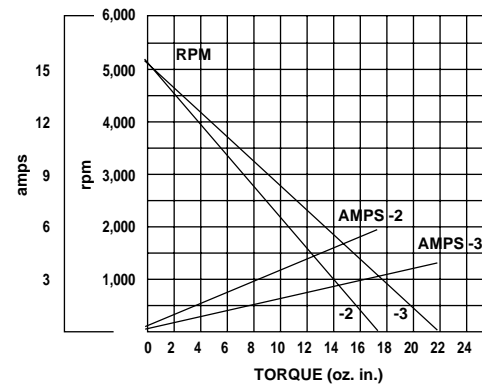
Units shown above are standard and may be ordered by part number. Remember to include armature winding dash number, EXAMPLE: 403A6005-2

Typical Motor Performance

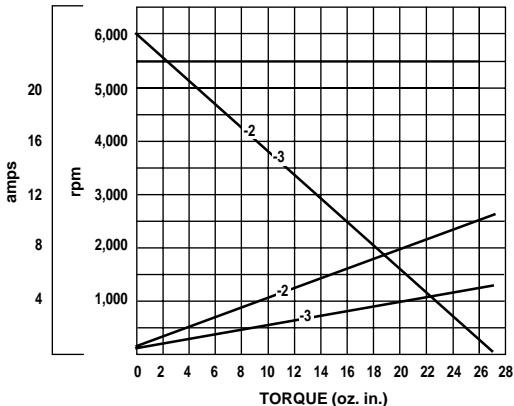
Short Stack Motors
Part Nos.: 403A6005, 6007, 6075, 6077



Long Stack Motors
Part Nos.: 403A6006, 6008, 6076, 6078



Part Nos.: 403A278, 403A280, 403A282, 403A284



Part Nos.: 403A279, 403A281, 403A283, 403A285

