



### NEMA FRAME MOTORS • SCR RATED

#### General Specifications:

High voltage permanent magnet DC motors are typically used with an SCR (thyristor) controller in applications requiring adjustable speed and constant torque throughout the speed range. They are also widely used in applications requiring dynamic braking or adjustable speed/reversing capabilities.



#### Mechanical Features:

Low profile space-saving design. Unique brush holder design provides easy access to brushes and integral constant pressure brush/spring assembly for servicing. Large over-sized brushes assure longer brush life. Heavy-duty, stamped steel, bolt-on base (removable). NEMA C face mounting at no additional cost. Rugged die cast aluminum endshields with cast iron bearing inserts. Permanently lubricated sealed ball bearings. May be converted NEMA 48 base and/or C face using modification kits noted below.

#### Electrical Features:

Input power of 115 or 230 volts rectified AC when used with an appropriate SCR control. Linear speed/torque characteristics over entire speed range. High starting torque for heavy load applications. Capable of dynamic braking for faster stops. Reversible rotation with simple two-lead connection. For further information on Direct Current Motors, request Bulletin 1600.

### PWM RATED PM DC MOTORS

The DC motors listed above have been designed for use on unfiltered SCR (Thyristor) type rectified AC input. These motors may also be used with PWM (pulse width modulated) type DC adjustable speed drives at a higher HP rating. Contact LEESON for re-rating data.

### NEMA FRAME LOW VOLTAGE MOTORS

#### General Specifications:

Low voltage permanent magnet DC motors are suitable for installations having battery or solar powered operations, or generator supplied low voltage DC.

#### Mechanical Features:

Unique brush holder design provides easy access to brushes and integral, constant pressure brush/spring assembly for servicing. Larger over-sized brushes assure longer brush life. Heavy-duty, stamped steel, bolt-on base (removable). NEMA C face mounting flange at no additional cost. High strength rolled steel frame. Rugged die cast aluminum endshields with steel bearing inserts. Permanently lubricated sealed ball bearings.



#### Electrical Features:

High starting torques for heavy load applications. Linear speed/torque characteristics over entire speed range. Capable of dynamic braking for faster stops. Reversible rotation and simple two-lead connection. Convenient wiring access.

### TEFC • SCR RATED 90 & 180 VOLTS NEMA 56C • C FACE WITH REMOVABLE BASE

HP	Full Load RPM	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/4	1750	SS56C	098002	19	90	115	2.5	10.81
	1750	SS56C	098003	22	180	230	1.4	11.31
1/3	1750	SS56C	098004	23	90	115	3.5	11.31
	1750	SS56C	098005	23	180	230	1.7	11.31
1/2	1750	SS56C	098000	26	90	115	5.0	11.81
	1750	S56C	108014	29	90	115	5.0	12.81
	1750	SS56C	098008	25	180	230	2.5	11.81
	1750	S56C	108015	30	180	230	2.5	12.81
3/4	1750	SS56C	098032	36	90	115	7.6	13.81
	1750	S56C	108018	38	90	115	7.6	13.81
	1750	SS56C	098069	36	180	230	3.8	13.81
	1750	S56C	108019	35	180	230	3.8	13.81
1	1750	S56C	108022	47	90	115	10.0	16.31
	1750	S56C	108023	39	180	230	5.0	14.81
1 1/2	1750	S56C	108092	53	180	230	7.6	16.88
	1750	S56/145TC	108262	54	180	230	7.6	17.38
	1750	145TC	128000	70	180	230	7.5	18.34
2	1750	145TC	128010	83	180	230	9.5	19.34
	1750	182/145TC	128001	84	180	230	9.5	19.34
3	1750	182/145TC	108502	88	180	230	14.0	21.75

◀ NEMA 145TC face mounting with removable NEMA 182T rigid base.

■ NEMA 145TC frame shaft 7/8 x 2-1/4" and NEMA 56 removable base.

### LOW VOLTAGE (12 & 24V) • TENV / TEFC NEMA C FACE WITH REMOVABLE BASE

HP	Full Load RPM	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Arm. Volts DC	F.L. Amps DC	"C" Dim. (Inches)
1/4	1800	S56C	108045♣	21	12	21.0	10.44
	1800	S56C	108046♣	24	12	27.0	11.44
1/3	1800	S56C	108050♣	22	24	13.5	10.94
	1800	S56C	108047♣	29	12	39.0	12.44
1/2	1800	S56C	108051♣	29	24	20.0	11.94
	1800	S56C	108048♦**	30	12	58.0	13.81
3/4	1800	S56C	108052**	30	24	29.0	12.81
	1800	S56C	108052**	30	24	29.0	12.81
1	1800	S56C	108322♦**	39	12	80.0	13.81
	1800	S56C	108053♦**	37	24	39.0	13.81

♣ Built-in conduit box located at 12:00.

♦ Studs at 12:00.

Σ If base is removed, do not reinstall bolts without using washers to compensate for thickness of base.

\*\* These motors are totally enclosed fan cooled.