



DC MOTORS

METRIC (IEC) FRAME • SCR RATED

DC METRIC (IEC) FRAME MOTORS IP54

General Specifications:

These metric dimensioned motors are built to IEC 34-1 electrical and mechanical standards.

The IEC 63 and smaller frames are stocked with an integral B5 flange or B14 face less base. An optional B3 rigid base kit is available.

A unique modular approach for IEC 71 frame and larger allows the motor to be field modified to B3 rigid base mounted construction, B5 flange mounted or B14 face mounted construction using conversion kits. Please note that one or more of the mounting kits must be used with IEC motors of these frame sizes. See listing on previous page for B5 flange and B14 face kits.

Electrical & Mechanical Features:

A terminal board is provided for connections. All fasteners are metric. Electrical and mechanical features are the same as listed for the NEMA frame motors on page 158. Tachometer mounting kits are available—please contact LEESON for data.



B5 IEC 56 & 63



B14 IEC 56 & 63



- ✕ For 230 VAC input controls.
- These motors are totally enclosed, non-ventilated. Other ratings utilize IC41 cooling—external cooling fan on motor shaft.

TOTALLY ENCLOSED • SCR RATED 180 VOLTS[⊗] WITH B5 FLANGE

KW/HP	Full Load RPM	IEC Frame	Catalog Number	App. Wgt. (lbs.)	F.L. Amps DC	"C" Dim. Inches (mm)
0.06/1/12	1800	56	M1130146●	8	0.5	6.24 (158.6)
0.09/1/8	1800	56	M1130147●	10	0.7	7.55 (191.7)
0.12/1/6	1800	63	M1130148	7	0.9	8.30 (210.8)
0.18/1/4	1800	63	M1130149	13	1.3	9.50 (241.3)

TOTALLY ENCLOSED • SCR RATED 180 VOLTS[⊗] WITH B14 FACE

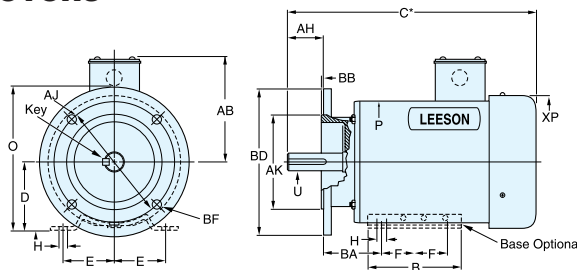
KW/HP	Full Load RPM	IEC Frame	Catalog Number	App. Wgt. (lbs.)	F.L. Amps DC	"C" Dim. Inches (mm)
0.06/1/12	1800	56	M1130136●	8	0.5	6.24 (158.6)
0.09/1/8	1800	56	M1130137●	14	0.7	7.55 (191.7)
0.12/1/6	1800	63	M1130138	8	0.9	8.30 (210.8)
0.18/1/4	1800	63	M1130139	10	1.3	9.50 (241.3)

TEFC • SCR RATED 180 VOLTS[⊗] • ROUND BODY

KW/HP	Full Load RPM	IEC Frame	Catalog Number	App. Wgt. (lbs.)	F.L. Amps DC	"C" Dim. Inches (mm)
0.25/1/3	1800	71	098014	23	1.7	11.28 (286.5)
0.37/1/2	1800	71	098015	26	2.5	11.78 (299.2)
0.55/3/4	1800	80	108369	34	3.5	14.64 (371.9)
0.75/1	1800	80	108370	48	4.6	17.14 (435.4)
1.1/1 1/2	1800	80	108371	52	7.0	17.14 (435.4)
	1800	90L	118007	64	7.5	18.97 (481.8)
1.5/2	1800	90L	118008	84	9.5	20.47 (519.9)
2.2/3	1800	112M	118014	90	14.0	21.79 (553.5)

IMPORTANT: These round body motors require either a B14 face or B5 flange kit. Catalog number 118014 comes complete with IEC 112 B14 face and B3 foot; shaft diameter is 24mm.

CONDENSED DIMENSIONS • DC METRIC (IEC) FRAME MOTORS



IEC FRAME DIMENSIONS (Millimeters)

IEC Frame	Mounting					Shaft						B14 Face/B5 Flange					General								
	2E	2F	BA	D	H	U	AH [◇]	KEY	S	R	TAP	AJ	AK	BD	BF	BB	AB	XP	B	O					
56	90	71	36	56	6	9	20	15	3	7.0	M3	65	100	50	80	80	120	M5	7	2.5	2.5	83	96	90	99
63	100	80	40	63	7	11	23	19	4	9.0	M4	75	115	60	95	90	140	M5	9	2.5	3.0	116	96	96	108
71	112	90	45	71	7	14	30	26	5	11.5	M5	85	130	70	110	105	160	M6	9	2.5	3.5	114	130	105	132
80	125	100	50	80	10	19	40	33	6	16.0	M6	100	165	80	130	120	200	M6	12	3.0	3.5	124	149	127	151
90S	140	100	56	90	10	24	50	36	8	20.5	M8	115	165	95	130	140	200	M8	12	3.0	3.5	135	182	152	173
90L	140	125	56	90	10	24	50	36	8	20.5	M8	115	165	95	130	140	200	M8	12	3.0	3.5	135	182	152	173
100L	160	140	63	100	12	28	60	41	8	24.5	M10	130	215	110	180	160	250	M8	15	3.5	4.0	135	182	176	173
112M	190	140	70	112	12	28	60	41	8	24.5	M10	130	215	110	180	160	250	M8	15	3.5	4.0	162	231	176	225

◇ Without face or flange AH shaft dimension is 12mm longer.
 * For overall length, see motor listing.



B3/B5 FLANGE-MOUNTED METRIC MOTORS • 230/460V

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. Motors have both B5 flange mounting and B3 base.

Typically used for replacement on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location. Kits are available for field conversion from B3 to B3/B5 or B3/B14.

Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.



THREE PHASE • IP55 • 1.15 S.F.

HP-KW	RPM 60 Hz	IEC Frame	Catalog Number	App. Wgt. (lbs.)	Voltage	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/4-0.18	1700	D63D	192015	11	230/460	1.0	68.0	8.54
1/3-0.25	1700	D71D	192025	13	230/460	1.4	68.0	9.45
1/2-0.37	1695	D71D	192035	14	230/460	1.8	74.0	9.45
3/4-0.55	1690	D80D	192045	18	230/460	2.5	74.0	11.10
1-0.75	1725	D80D	192055	26	230/460	3.2	80.0	11.10
1 1/2-1.1	1740	D90SD	192065	37	230/460	4.6	85.5	12.60
2-1.5	1710	D90LD	192075	38	230/460	5.8	84.0	12.60
3-2.2	1750	DF100LD	193085	84	230/460	8.2	87.5	14.96
4-3	1740	DF100LD	193095	84	230/460	10.4	85.5	14.96
5 1/2-4	1740	DF112MD	193105	104	230/460	15.0	87.5	15.75

Note: Aluminum motors have removable feet for round-body applications.



SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.

AC METRIC (IEC) MOTORS
THREE PHASE • RIGID BASE WITH FACE



B3/B14 FACE-MOUNTED METRIC MOTORS • 230/460V

Metric-dimensioned, AC motors meeting North American performance standards, including 1.15 service factor and EPACT efficiencies. These motors have both B14 face mounting and B3 base.

Typically used for replacement on machine tools, textile machinery and other equipment with metric dimensions but requiring the heavy-duty torque and performance characteristics of motors designed for use in North America.

IP55 weatherproof enclosures, 60/50 Hz interchangeability (60Hz 230/460V & 50Hz 200/400V), dual stamped nameplates, CE mark, and F3 conduit box location. Kits are available for field conversion from B3 to B3/B5 or B3/B14.



Motors are available in one of two frame constructions: aluminum or cast iron. Aluminum frame models are designated with a 192000 series catalog number; cast iron models are 193000 series.

THREE PHASE • IP55 • 1.15 S.F.

HP-KW	RPM 60 Hz	IEC Frame	Catalog Number	App. Wgt. (lbs.)	Voltage	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/4-0.18	1700	D63C	192018	11	230/460	1.0	68.0	8.55
1/3-0.25	1700	D71C	192028	13	230/460	1.4	68.0	9.46
1/2-0.37	1700	D71C	192038	14	230/460	1.8	74.0	9.46
3/4-0.55	1700	D80C	192048	18	230/460	2.5	74.0	11.11
1-0.75	1700	D80C	192058	26	230/460	3.2	80.0	11.11
1 1/2-1.1	1700	D90SC	192068	37	230/460	4.6	85.5	12.61
2-1.5	1700	D90LC	192078	38	230/460	5.8	84.0	12.61
3-2.2	1750	DF100LC	193088	84	230/460	8.2	87.5	14.97
4-3	1750	DF100LC	193098	84	230/460	10.4	85.5	14.97
5 1/2-4	1750	DF112MC	193108	104	230/460	15.0	87.5	15.76

Note: Aluminum motors have removable feet for round-body applications.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

Catalog numbers in green are EPACT motors.