

# NEMA C-FACE MOTORS

## CATALOG NUMBERING SYSTEM

### AC MOTORS

HP	VOLTAGE	ENCL.	MFR.
C - 1/6	R - 115/230-1-60	T - TENV	B=BALDOR
D - 1/4	S - 115-1-60	TF - TEFC	G=GENERAL-ELECTRIC
E - 1/3	T - 230-1-60		(BLANK)=BOSTON GEAR
F - 1/2	U - 230/460-3-60		
G - 3/4	Y - 575-3-60		
H - 1			
J - 1-1/2			
K - 2			
L - 3			
M - 5			
N - 7-1/2			
P - 10			

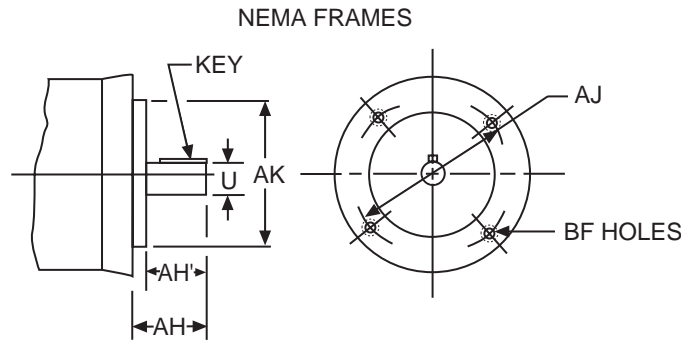
### PM MOTORS

HP	VOLTAGE	ENCL.	MFR.
16 - 1/6	9 - 90VDC	T, AT - TENV	B=BALDOR
25 - 1/4	18 - 180VDC	TF,ATF - TEFC	(BLANK)=BOSTON GEAR
33 - 1/3			
50 - 1/2			
75 - 3/4			
100 - 1			
150 - 1-1/2			
200 - 2			
300 - 3			
500 - 5			

CATALOG NUMBER EXAMPLE: FUTF  
1/2 HP, 230/460-3-60, TEFC, BOSTON GEAR

CATALOG NUMBER EXAMPLE: PM916T  
PERMANENT MAGNET, 90VDC, 1/6 HP, TENV, BOSTON GEAR

## NEMA MOTOR BOLT CIRCLE DIMENSIONS



ALL DIMENSIONS IN INCHES

BORE CODE	NEMA MTG.	U	AK	MAX. AH	MAX. AH'	KEY		AJ	BF
						SQ.	LG.		
B5	56C	.6250	4.500	2 5/32	—	3/16	1 3/8	5 7/8	3/8-16
		.6245	4.497						
B7	182C	.8750	4.500	2 5/32	—	3/16	1 3/8	5 7/8	3/8-16
	143TC	.8745	4.497						
	145TC								
B9	213C	1.1250	8.500	—	2 25/32	1/4	1 3/4	7 1/4	1/2-13
	215C	1.1245	8.497						
	182TC								
B11	254UC	1.3750	8.500	—	3 17/32	5/16	2 3/8	7 1/4	1/2-13
	256UC	1.3745	8.497						
	213TC								
	215TC								

Flanged gear drives are designed for use with motors having NEMA "C" face and shaft dimensions as shown. AH and AH' must not be exceeded.

# QUICK SELECTION GUIDE—DC NEMA C-FACE MOTORS

## PERMANENT MAGNET TOTALLY ENCLOSED 1750 RPM MOTORS

### ORDER BY CATALOG NUMBER OR ITEM CODE

HP	NEMA MTG.	BORE CODE +	CATALOG NUMBER*	ITEM CODE
1/6	56C	B5	PM916AT-B PM916T	19120 59476
1/4	56C	B5	PM925AT-B PM925T	19121 59478
1/3	56C	B5	PM933AT-B PM933T	19122 59480
1/2	56C	B5	PM950AT-B PM950TF PM1850TF-B PM1850TF	19123 59481 19186 59482

\*T = TENV – Totally Enclosed, Non-ventilated.  
 TF = TEFC – Totally Enclosed, Fan Cooled.  
 + See Page 58 for Bore Code explanation.  
 PM9-90 VDC (Armature Voltage)  
 PM18-180 VDC (Armature Voltage)

Letters after dash indicate manufacturer – B = Baldor  
 Blank = Boston Gear

HP	NEMA MTG.	BORE CODE +	CATALOG NUMBER*	ITEM CODE
3/4	56C	B5	PM975TF-B PM975TF PM1875TF-B PM1875TF	69853 59483 69866 59484
1	56C	B5	PM9100TF-5/8-B PM9100TF-5/8 PM18100TF-5/8-B PM18100TF-5/8	50421 59486 50426 59488
	56CZ	B7	PM9100TF-B PM9100TF PM18100TF-B PM18100TF	69867 59485 69869 59487
1-1/2	56CZ	B7	PM18150TF-B	69870
	140TC	B7	PM18150TF	59489
2	56CZ	B7	PM18200TF-B	68783
	140TC	B7	PM18200TF	59490
3	184TC	B9	PM18300TF-B	69411
5	1810ATC	B9	PM18500TF-B	69412

**ENCLOSURES**—Most applications can utilize open dripproof motors; other enclosures are listed. For information purposes, the various enclosures are defined below.

**OPEN, DRIPPROOF**—Same as open, except the construction of motor prevents the entrance of drops of liquid or particles falling on the motor at any angle not greater than 15 degrees from vertical.

**TOTALLY-ENCLOSED**—A motor so constructed as to prevent free exchange of air between the inside and outside of the motor case, but not air-tight.

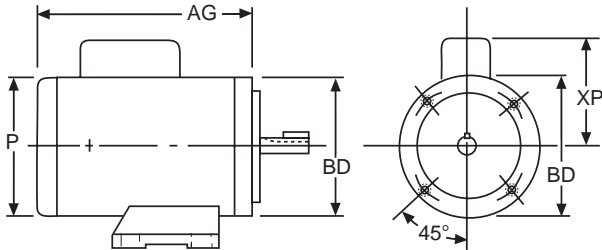
**TOTALLY-ENCLOSED, NON-VENTILATED (TENV)** —A totally-enclosed motor with openings closed and of sufficient size and mass to permit the necessary heat dissipation to eliminate the need for external cooling.

**TOTALLY-ENCLOSED FAN-COOLED (TEFC)**—Basically a TENV motor which has an external fan to blow cooling air over the motor. The additional cooling eliminates the necessity of a more costly oversized TENV motor. NOTE: TENV and TEFC construction are equal in all respects regarding application, temperature capabilities and performance.

FOR DIMENSIONS OF THESE MOTORS, SEE PAGE 54.  
 FOR OTHER AVAILABLE MOTORS, CONSULT FACTORY OR  
 CONSULT BOSTON GEAR'S COMPLETE  
 ELECTRICAL PRODUCTS CATALOG.

# DC PERMANENT MAGNET MOTOR DIMENSIONS

ALL DIMENSIONS IN INCHES



HP	NEMA MTG.	BORE CODE	-B (BALDOR) MOTORS					
			CATALOG NUMBER*	AG	BD	XP	P	D
1/6	56C	B5	PM916AT-B	8.25	6.50	4.56	4.69	3.50
1/4	56C	B5	PM925AT-B	9.19	6.50	4.56	4.69	3.50
1/3	56C	B5	PM933AT-B	10.13	6.50	4.56	4.69	3.50
1/2	56C	B5	PM950AT-B	11.88	6.50	4.56	4.69	3.50
	56C	B5	PM1850TF-B	10.56	6.63	4.00	4.69	
3/4	56C	B5	PM975TF-B	11.69	6.63	4.00	6.25	3.50
	56C	B5	PM1875TF-B					
1	56CZ	B7	PM9100TF-B	12.62	6.63	4.00	6.25	3.50
	56C	B5	PM9100TF-5/8-B	12.57				
	56CZ	B7	PM18100TF-B	12.62				
	56C	B5	PM18100TF-5/8-B	12.57				
1-1/2	56CZ	B7	PM18150TF-B	15.06	6.63	4.25	6.50	3.50
2	56CZ	B7	PM18200TF-B	16.06	6.63	4.25	6.50	3.50
3	184TC	B9	PM18300TF-B	21.46	9.00	6.06	8.88	4.50
5	1810ATC	B9	PM18500TF-B	25.46	9.00	6.06	8.88	4.50

ALL DIMENSIONS IN INCHES

HP	NEMA MTG.	BORE CODE	BOSTON GEAR MOTORS					
			CATALOG NUMBER	AG	BD	XP*	P	D
1/6	56C	B5	PM916T	9.19	4.87	4.47	4.87	3.50
1/4	56C	B5	PM925T	9.72	4.87	4.47	4.87	3.50
1/3	56C	B5	PM933T	10.19	4.87	4.47	4.87	3.50
1/2	56C	B5	PM950TF	11.81	4.87	4.47	4.87	3.50
	56C	B5	PM1850TF	11.81	4.87	4.47	4.87	
3/4	56C	B5	PM975TF	14.31	4.87	4.47	4.87	3.50
	56C	B5	PM1875TF	13.81				
1	56CZ	B7	PM9100TF-5/8	15.81	5.61	4.87	5.61	3.50
	56C	B5	PM9100TF	16.31				
	56CZ	B7	PM18100TF-5/8	14.81				
	56C	B5	PM18100TF	15.31				
1-1/2	140TC	B7	PM18150TF	18.34	6.50	5.31	6.50	3.50
2	140TC	B7	PM18200TF	19.34	6.50	5.31	6.50	3.50

Note: See page 52 for mounting and shaft dimensions.  
 D dimension is measured from the base to centerline.  
 \* Conduit box is rotated 90° (F1 Position)

# QUICK SELECTION GUIDE — AC NEMA C-FACE MOTORS

## TOTALLY ENCLOSED AND OPEN DRIPPROOF 1750 RPM AC MOTORS

ORDER BY CATALOG NUMBER OR ITEM CODE

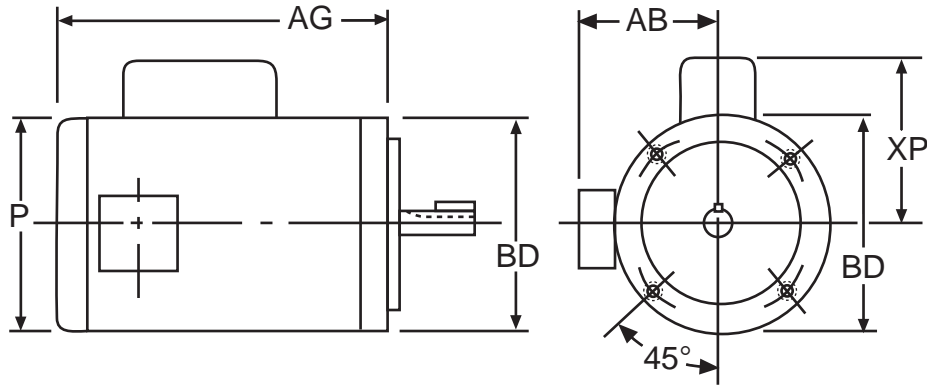
HP	NEMA MTG.	BORE CODE +	TOTALLY ENCLOSED*						OPEN DRIPPROOF			
			115/230-1-60 VAC		208-230/460-3-60 VAC		575-3-60 VAC		115/230-1-60 VAC		208-230/460-3-60 VAC	
			CATALOG NUMBER	ITEM CODE	CATALOG NUMBER	ITEM CODE	CATALOG NUMBER	ITEM CODE	CATALOG NUMBER	ITEM CODE	CATALOG NUMBER	ITEM CODE
1/6	56C	B5	CRT-G	66034	CUT-G	66037	---	---	CR-G	49655	CU-G	66108
			CRTF-G	66190	CUTF-G	66197	---	---	---	---	---	---
1/4	56C	B5	DRT	63544	DUT	63801	---	---	DR	63315	DU	63531
			DRTF	63545	DUT-G	66038	---	---	DR-B	66109	DU-B	66115
			DRTF-B	66199	DUTF	63949	DYTF	64963	DR-G	66111	---	---
			DRTF-G	66200	DUTF-B	66205	DYTF-B	66208	DS**	63316	---	---
			DSTF-B**	66202	DUTF-G	66206	---	---	DS-B**	66112	---	---
1/3	56C	B5	ERT	63732	EUT	63952	---	---	ER	63317	EU	63532
			ERTF	63750	EUTF	63958	EYTF	64944	ER-B	66121	EU-B	66124
			ERTF-B	66211	EUTF-B	66214	EYTF-B	66217	---	---	---	---
1/2	56C	B5	FRTF	63754	FUT	63959	---	---	FR	63318	FU	63533
			FRTF-B	66219	FUTF	63961	FYTF	64945	FR-B	66130	FU-B	66133
			---	---	FUTF-B	66223	FYTF-B	66226	---	---	---	---
			---	---	FUTF-G	66224	---	---	---	---	---	---
3/4	56C	B5	GRTF	63755	GUTF	63979	GYTF	64946	GR	63319	GU	63536
			GRTF-B	66228	GUTF-B	66231	GYTF-B	66831	GR-B	66139	GU-B	66142
1	56C	B5	HRTF-5/8	63795	HUTF-5/8	63980	---	---	---	---	HU-5/8	63537
	143TC	B7	HRTF-5/8-B	19178	HUTF-5/8-B	50428	HYTF-5/8-B	19179	HR-5/8-B	19183	HU-5/8-B	50427
1-1/2	56C	B5	---	---	JUTF-5/8	63988	---	---	---	---	---	---
	145TC	B7	JRTF	63800	JUTF	64281	JYTF	64949	---	---	JU	63539
2	56C	B5	---	---	JUTF-B	66246	JYTF-B	66249	JR-B	66154	JU-B	66157
	145TC	B7	---	---	JUTF-G	66248	---	---	---	---	---	---
3	56C	B5	---	---	KUTF-5/8	64769	---	---	---	---	---	---
	145TC	B7	---	---	KUTF-5/8-B	19785	---	---	---	---	---	---
5	182TC	B9	---	---	KUTF	64770	KYTF	64950	---	---	KU	63540
	184TC	B9	---	---	KUTF-B	66252	KYTF-B	66255	---	---	KU-B	66163
7-1/2	182TC	B9	---	---	KUTF-G	66254	---	---	---	---	---	---
	213TC	B11	---	---	LUTF	64771	LYTF	64954	---	---	LU	63542
10	215TC	B11	---	---	LUTF-B	66258	LYTF-B	66260	---	---	LU-B	66166
	215TC	B11	---	---	MUTF	64772	MYTF	64955	---	---	MU	63543
10	215TC	B11	---	---	MUTF-B	66262	MYTF-B	66264	---	---	MU-B	66170
	215TC	B11	---	---	NUTF-B	66266	---	---	---	---	NU-B	66174
10	215TC	B11	---	---	PUTF-B	66270	---	---	---	---	PU-B	66176

\* T = TENV – Totally Enclosed, Non-ventilated.      \*\* 115 Volt only.  
 TF = TEFC – Totally Enclosed, Fan Cooled.      + See Page 52 for Bore Code explanation.  
 Letters after dash indicate manufacturer — B = Baldor; G = General Electric.; Blank = Boston Gear

FOR DIMENSIONS OF THESE MOTORS, SEE PAGES 56 AND 57.

FOR OTHER AVAILABLE MOTORS, CONSULT FACTORY.

# AC TOTALLY ENCLOSED MOTOR DIMENSIONS



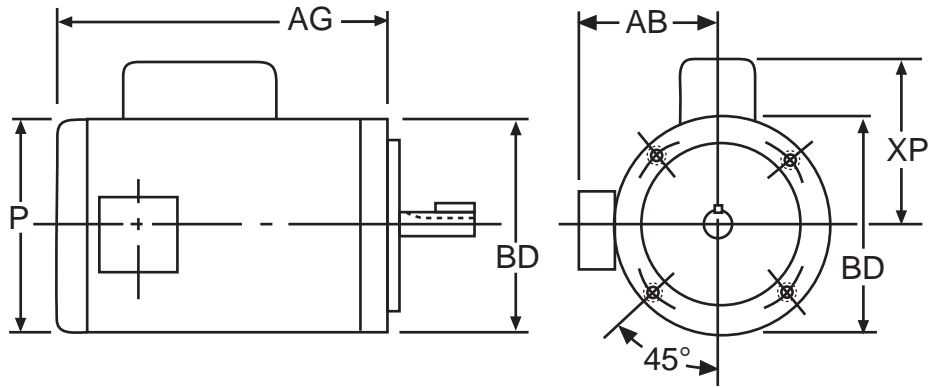
ALL DIMENSIONS IN INCHES

HP	NEMA MTG.	BORE CODE	-B (BALDOR) MOTORS							(BLANK) BOSTON GEAR MOTOR						
			CATALOG NUMBER	ITEM CODE	AB	AG	BD	XP	P	CATALOG NUMBER	ITEM CODE	AB	AG	BD	XP	P
1/4	56C	B5	DRTF-B	66199	4.50	9.32	6.62	6.62	6.13	DRT	63544	—	7.88	6.53	5.24	6.53
	56C	B5	DSTF-B	66202	4.50	9.32	6.62	6.62	6.13	DUT	63801	—	7.38	5.61	—	5.61
	56C	B5	DUTF-B	66205	4.50	9.32	6.62	6.62	6.13	DRTF	63545	4.87	7.75	5.61	4.81	5.88
	56C	B5	DYTF-B	66208	4.50	9.32	6.62	6.62	6.13	DUTF	63949	4.87	7.75	5.61	—	5.88
	56C	B5	—	—	—	—	—	—	—	DYTF	64963	4.87	7.75	5.61	—	5.88
1/3	56C	B5	—	—	—	—	—	—	—	ERT	63732	—	7.88	6.53	5.24	6.53
	56C	B5	—	—	—	—	—	—	—	EUT	63952	—	7.38	6.53	—	6.53
	56C	B5	ERTF-B	66211	4.50	9.32	6.62	4.38	6.13	ERTF	63750	5.09	8.88	6.53	5.24	7.16
	56C	B5	EYTF-B	66217	4.50	9.32	6.62	—	6.13	EYTF	63958	5.09	8.88	6.53	—	7.16
1/2	56C	B5	—	—	—	—	—	—	—	FUT	63959	—	8.88	6.53	—	6.53
	56C	B5	FRTF-B	66219	4.50	9.94	6.62	4.38	6.13	FRTF	63754	5.09	8.88	6.53	5.24	7.16
	56C	B5	FUTF-B	66223	4.50	9.32	6.62	—	6.13	FUTF	63961	5.09	8.88	6.53	—	7.16
	56C	B5	FYTF-B	66226	4.50	9.32	6.62	—	6.13	FYTF	64945	5.09	8.88	6.53	—	7.16
3/4	56C	B5	GRTF-B	66228	5.25	11.25	6.50	5.56	7.19	GRTF	63755	5.09	9.38	6.53	5.24	7.16
	56C	B5	GUTF-B	66231	4.50	10.32	6.50	—	6.13	GUTF	63979	5.09	9.38	6.53	—	7.16
	56C	B5	GYTF-B	66831	4.50	10.32	6.50	—	6.13	GYTF	64946	5.09	9.38	6.53	—	7.16
1	56C	B5	HRTF-5/8-B	19178	5.25	11.26	6.50	5.56	7.19	HRTF-5/8	63795	5.09	9.88	6.53	5.24	7.16
	56C	B5	HUTF-5/8-B	50428	5.25	10.25	6.50	—	7.19	HUTF-5/8	63980	5.09	9.88	6.53	—	7.16
	56C	B5	HYTF-5/8-B	19179	5.25	10.25	6.50	—	7.19	—	—	—	—	—	—	
	143TC	B7	HRTF-B	66234	5.25	11.25	6.50	5.56	7.19	HRTF	63797	5.09	9.88	6.53	5.24	7.16
	143TC	B7	HUTF-B	66237	5.25	10.25	6.50	—	7.19	HUTF	63981	5.09	9.88	6.53	—	7.16
1-1/2	56C	B5	JUTF-5/8-B	19784	5.25	10.26	6.50	—	7.19	JUTF-5/8	63988	5.09	10.38	6.53	—	7.16
	145TC	B7	JRTF-B	66243	5.25	12.13	6.50	5.56	7.19	JRTF	63800	5.09	10.38	6.53	5.05	7.16
	145TC	B7	JUTF-B	66246	5.25	11.25	6.50	—	7.19	JUTF	64281	5.09	10.38	6.53	—	7.16
	145TC	B7	JYTF-B	66249	5.25	11.25	6.50	—	7.19	JYTF	64949	5.09	10.38	6.53	—	7.16
2	56C	B5	KUTF-5/8-B	19785	5.25	11.25	6.50	—	7.19	KUTF-5/8	64769	5.09	10.38	6.53	—	7.16
	145TC	B7	KUTF-B	66252	5.25	11.25	6.50	—	7.19	KUTF	64770	5.09	10.38	6.53	—	7.16
	145TC	B7	KYTF-B	66255	5.25	11.25	6.50	—	7.19	KYTF	64950	5.09	10.38	6.53	—	7.16
3	182TC	B9	LUTF-B	66258	5.88	12.56	9.00	—	8.50	LUTF	64771	6.30	11.03	8.88	—	9.09
	182TC	B9	LYTF-B	66260	5.88	12.56	9.00	—	8.50	LYTF	64954	6.30	11.03	8.88	—	9.09
5	184TC	B9	MUTF-B	66262	5.88	13.89	9.00	—	8.50	MUTF	64772	6.30	11.03	8.88	—	9.09
	184TC	B9	MYTF-B	66264	5.88	13.89	9.00	—	8.50	MYTF	64955	6.30	11.03	8.88	—	9.09
7-1/2	213TC	B11	NYTF-B	66266	7.38	15.56	9.00	—	10.19	—	—	—	—	—	—	
10	215TC	B11	PUTF-B	66270	7.38	16.31	9.00	—	10.19	—	—	—	—	—	—	

HP	NEMA MTG.	BORE CODE	-G (GENERAL ELECTRIC) MOTORS						
			CATALOG NUMBER	ITEM CODE	AB	AG	BD	XP	P
1/6	56C	B5	CRT-G	66034	—	6.94	5.61	—	5.61
	56C	B5	CUT-G	66037	—	6.94	5.61	—	5.61
	56C	B5	CRTF-G	66190	4.74	8.24	6.78	—	5.61
	56C	B5	CUTF-G	66197	4.74	8.24	6.78	—	5.61
1/4	56C	B5	DUT-G	66038	—	7.92	6.64	—	6.42
	56C	B5	DRTF-G	66200	4.74	8.24	6.78	4.34	5.61
	56C	B5	DUTF-G	66206	4.74	8.24	6.78	—	5.61
1/2	56C	B5	FUTF-G	66224	4.74	8.87	6.78	4.34	5.61
3/4	56C	B5	GUTF-G	66233	5.27	9.50	7.10	5.37	6.42
1	143TC	B7	HUTF-G	66237	5.94	9.50	7.10	—	6.42
1-1/2	145TC	B7	JUTF-G	66248	5.27	9.98	7.10	5.37	6.42
2	145TC	B7	KUTF-G	66254	5.27	10.50	7.10	5.37	6.42

Note: See page 52 for mounting and shaft dimensions.  
 T = Totally-enclosed, non-ventilated.  
 TF = Totally-enclosed, fan cooled.

# AC OPEN DRIPPROOF MOTOR DIMENSIONS



ALL DIMENSIONS IN INCHES

HP	NEMA MTG.	BORE CODE	-B (BALDOR) MOTORS							(BLANK) BOSTON GEAR MOTORS					
			CATALOG NUMBER	ITEM CODE	AB	AG	BD	XP	P	CATALOG NUMBER	ITEM CODE	AG	BD	XP	P
1/4	56C	B5	DR-B	66109	4.38	8.00	6.62	4.38	5.69	DR	63315	6.81	5.61	4.75	5.61
	56C	B5	DS-B	66112	4.38	8.00	6.62	4.38	5.69	DS	63316	6.81	5.61	4.75	5.61
	56C	B5	DU-B	66115	4.38	8.00	6.62	—	5.69	DU	63531	7.31	5.61	—	5.61
1/3	56C	B5	ER-B	66121	4.38	8.00	6.62	4.38	5.69	ER	63317	7.31	5.61	4.75	5.61
	56C	B5	EU-B	66124	4.38	8.00	6.62	—	5.69	EU	63532	7.31	5.61	—	5.61
1/2	56C	B5	FR-B	66130	4.38	9.50	6.62	4.38	5.69	FR	63318	7.81	5.61	4.75	5.61
	56C	B5	FU-B	66133	4.38	8.00	6.62	—	5.69	FU	63533	7.81	5.61	—	5.61
3/4	56C	B5	GR-B	66139	4.38	9.50	6.62	5.12	5.69	GR	63319	8.81	5.61	4.75	5.61
	56C	B5	GU-B	66142	4.38	8.63	6.62	—	5.69	GU	63536	8.81	5.61	—	5.61
1	56C	B5	HR-5/8-B	19183	4.38	10.00	6.50	5.56	6.63	HR-5/8	63537	8.81	5.61	—	5.61
	56C	B5	HU-5/8-B	50427	4.38	9.00	6.50	—	6.63	—	—	—	—	—	—
	143TC	B7	HR-B	66145	4.38	10.00	6.50	5.56	6.63	HU	63538	8.81	5.61	—	5.61
	143TC	B7	HU-B	66148	4.38	9.00	6.50	—	6.63	—	—	—	—	—	—
1-1/2	145TC	B7	JR-B	66154	5.25	10.00	6.50	5.56	6.63	JU	63539	9.31	5.61	—	5.61
	145TC	B7	JU-B	66157	5.25	9.00	6.50	—	6.63	—	—	—	—	—	—
2	145TC	B7	KU-B	66163	5.25	10.00	6.50	—	6.63	KU	63540	9.31	5.61	—	5.61
3	182TC	B9	LU-B	66166	5.88	11.00	9.00	—	7.88	LU	63542	9.75	5.61	—	5.61
5	184TC	B9	MU-B	66170	5.88	12.33	9.00	—	7.88	MU	63543	10.25	5.61	—	5.61
7-1/2	213TC	B11	NU-B	66174	7.38	13.94	9.00	—	9.56	—	—	—	—	—	—
10	215TC	B11	PU-B	66176	7.38	13.94	9.00	—	9.56	—	—	—	—	—	—

Note: See page 52 for mounting and shaft dimensions.

-G (GENERAL ELECTRIC) MOTORS									
HP	NEMA MTG.	BORE CODE	CATALOG NUMBER	ITEM CODE	AB	AG	BD	XP	P
1/6	56C	B5	CR-G	49655	—	7.19	6.52	—	5.61
	56C	B5	CU-G	66108	—	7.19	6.52	—	5.61
1/4	56C	B5	DR-G	66111	—	7.84	6.52	4.34	5.61