



全密型單相鑄鐵馬達 (TEFC)
(For NEMA)

MODEL : **BECCFD/BECSFD**

SINGLE - PHASE FARM DUTY MOTORS
LOW VOLTAGE SQUIRREL CAGE
FRAME SIZE : 143T ~ 215T



DWG NO.

31057D708

REV. 04

		SPECIFICATION TABLE	MODEL
		SINGLE PHASE INDUCTION MOTORS LOW VOLTAGE SQUIRREL CAGE	BECCFD/BECSFD
ITEM		STANDARD SPECIFICATION	
R A T I N G	Kind of Motors	Squirrel - Cage Single Phase Induction Motors (Capacitor Start Induction Run or Capacitor Start and Permanent Split Capacitor Run)	
	Voltages	Rated Voltage 115 / 230V (208V De - Rating Operation) . 3HP ~ 10HP 230V Single Voltage .	
	Frequency	Rated Frequency 60Hz .	
	Output Range	1HP ~ 10HP , 1 ~ 1 1/2HP Capacitor Start Induction Run (BECCFD) , 2HP~10HP Capacitor Start and Permanent Split Capacitor Run (BECSFD)	
	R.P.M. (Syn.)	1800 R.P.M.	
	Time Duty	Continuous . S.F. 1.15 .	
	Frame Size	143T ~ 215T .	
	Protection Enclosure	Totally Enclosed Fan Cooled (IP 44) .	
	Cooling Method	Self External Fan, Surface Cooling (IC 411) .	
	Mounting	Horizontal Foot Mounting (F-1)	
A P P L I C A T I O N	Power Condition	Voltage : $\pm 10\%$, Frequency $\pm 5\%$, and 10% Max. of Combined Voltage and Frequency, But Frequency Variation does not Exceed $\pm 5\%$.	
	Environment Conditions	Place : Non - Hazardous. Ambient Temperature : $-15^{\circ}\text{C} \sim 40^{\circ}\text{C}$ Relative Humidity : Less Than 90%RH (Non - Condensation) . Altitude : Less Than 1,000m (3300ft) .	
	Drive Method	Belt Service or Direct Coupling Service.	
	Direction of Rotation	Bi - Directional.	
	Method of Starting	Full Voltage Direct - On - Line.	
P E R F O R M A N C E	Winding Temperature Rise	B Class Insulation Not to Exceed 90°C for S.F. 1.15 or 80°C for S.F. 1.0 by Resistance Method . F Class Insulation Not to Exceed 115°C for S.F. 1.15 or 105°C for S.F. 1.0 by Resistance Method .	
	Over Speed	120% Syn. R.P.M. for 2 Minute.	
	Over Torque	160% Rated Torque for 15 Sec.	

	PERFORMANCE DATA	MODEL BECCFD/BECSFD
	SINGLE - PHASE SQUIRREL CAGE FARM DUTY MOTORS	

TEFC , NEMA T - FRAME CLASS - B & F
40°C , AMBIENT , CONTINUOUS DUTY
S.F. 1.15 115 / 230 VOLTS 60Hz

TYPICAL PERFORMANCE

(230V)

MODEL	Output		Full Load RPM	Frame Size	Full Load				Locked Rotor		Max. Torque %	Starting Capacitor		Running Capacitor	
	P	HP			Torque lb-ft	Eff. %	P.F. %	Current Amp	Torque %	Current Amp		MFD	VAC	MFD	VAC
	BECCFD	4			1	1750	143T	3.0	70.0	66.0		7	300	40	270
BECCFD	4	1.5	1740	145T	4.5	70.0	63.0	11	350	58	260	500	125	—	—
BECSFD	4	2	1750	182T	6.0	73.0	63.5	14	340	89	330	800	125	60	250
BECSFD	4	3	1760	182T	8.9	74.0	63.0	21	400	156	340	300	250	20	440
BECSFD	4	5	1750	184T	15.0	78.5	69.0	30	340	192	300	400	250	25	440
BECSFD	4	7.5	1740	213T	22.6	80.0	84.5	36	350	218	240	560	330	60	440
BECSFD	4	10	1710	215T	31.0	78.5	87.0	48	350	275	220	720	330	100	440

NOTE :

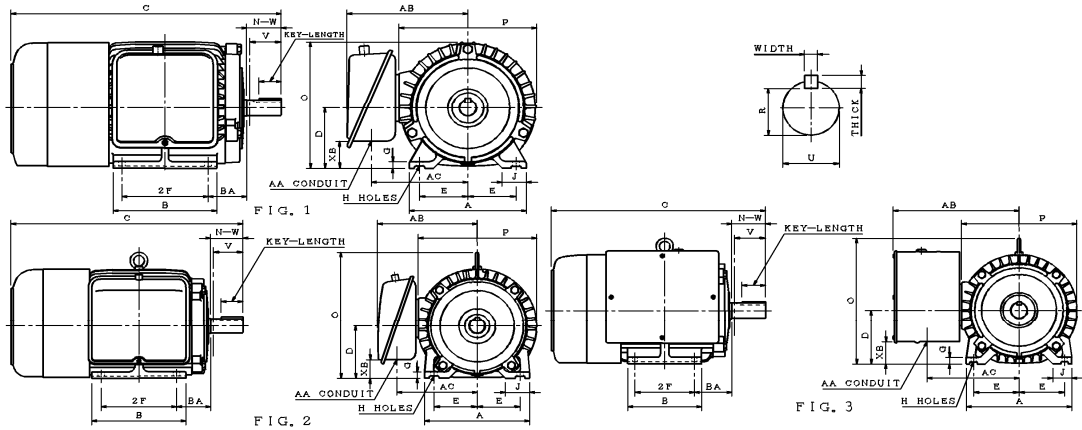
1. The above are typical values based on test
2. Breakdown & locked rotor torque are shown as actual value
3. Actual load & full voltage starting : According to ANSI / IEEE Standard 114
4. Data subject to change without notice.
5. BECCFD is Capacitor Start Induction Run
BECSFD is Capacitor Start and Permanent Split Capacitor Run
6. 3HP - 10HP Rated Voltage 230V only

OUTLINE DIMENSIONS SHEET

MODEL
BECCFD/BECSFD

SINGLE - PHASE INDUCTION MOTORS
FRAME SIZE. 143T ~ 215T

Totally Enclosed Fan Cooled Type, Squirrel - Cage Rotor.



Dimension in inches

Output (HP)	FRAME SIZE	FIG. NO.	Mounting				A	B	C	D	G	J	O	P	Keyseat R
			E	2F	H	BA									
1	143T	1	2.75	4.00	0.34	2.25	6.70	5.12	15.23	3.50	0.35	1.40	7.45	7.87	0.771
1.5 2	145T		2.75	5.00	0.34	2.25	6.70	5.90	16.21	3.50	0.35	1.40	7.45	7.87	0.771
3	182T	2	3.75	4.50	0.41	2.75	8.80	5.90	17.38	4.50	0.65	1.75	10.47	9.37	0.986
5	184T		3.75	5.50	0.41	2.75	8.80	6.90	18.41	4.50	0.65	1.75	10.47	9.37	0.986
7.5	213T	3	4.25	5.50	0.41	3.50	9.85	6.90	20.54	5.25	0.70	1.75	12.28	10.75	1.201
10	215T		4.25	7.00	0.41	3.50	9.85	8.35	22.03	5.25	0.70	1.75	12.28	10.75	1.201

FRAME SIZE	Key			Shaft Extension			Terminal Housing				Mounting		APPROX. WEIGHT LBS
	WIDTH	THICK	LENGTH	N-W	U	V	AA	AB	AC	XB	DRIVE END	OPPOSITE DRIVE END	
143T	0.188	0.188	1.41	2.25	0.875	2.2	0.87	6.81	5.12	1.22	6205ZZ	6205ZZ	48
145T	0.188	0.188	1.41	2.25	0.875	2.2	0.87	6.81	5.12	1.22	6205ZZ	6205ZZ	70
182T	0.250	0.250	1.78	2.75	1.125	2.7	0.87	7.64	5.99	1.63	6306ZZ	6306ZZ	92
184T	0.250	0.250	1.78	2.75	1.125	2.7	0.87	7.64	5.99	1.63	6306ZZ	6306ZZ	103
213T	0.312	0.312	2.41	3.38	1.375	3.3	0.87	11.76	7.74	2.18	6308ZZ	6306ZZ	178
215T	0.312	0.312	2.41	3.38	1.375	3.3	0.87	11.76	7.74	2.18	6308ZZ	6306ZZ	181

- Note :
1. Dimension D tolerance : +0.00 inch , -0.03 inch
 2. Dimension U tolerance : +0.000 inch , -0.0005 inch
 3. Dimension R tolerance : +0.000 inch , -0.015 inch
 4. Dimension V is length of straight part of shaft.