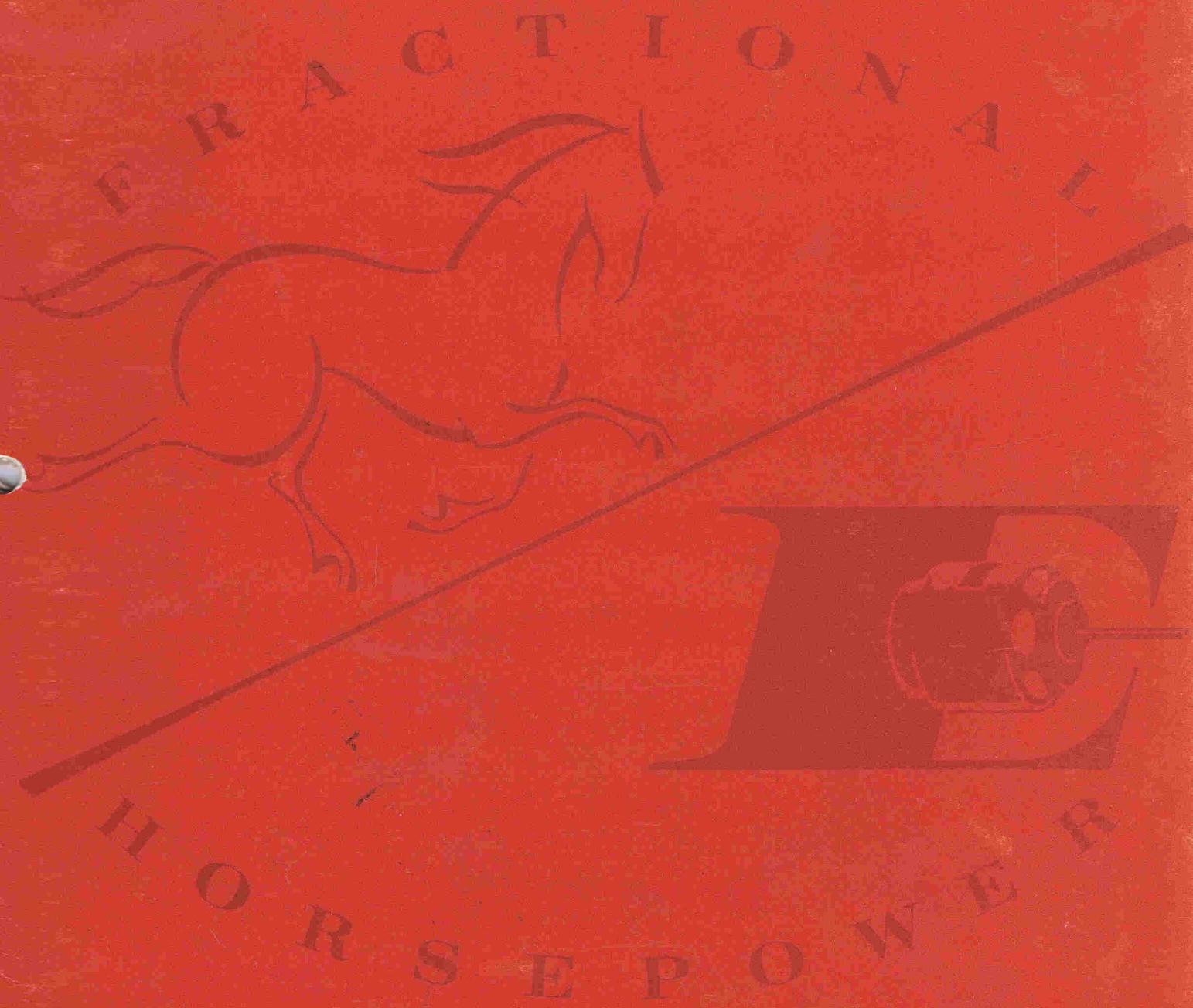


# air **BLOWERS** and **FANS**



**Dynco**

# ELINCO 7a

The research and development laboratory of Electric Indicator Company, Inc., is available to you. Such service assistance as this has contributed to critical cost reductions, sound design and improved efficiency. The blowers and fans listed in this catalog are but a few that can be manufactured by ELINCO. The value of ELINCO'S research and engineering facilities are considerable in the preliminary stages of product development. Before your design plans have been finalized — send us your specifications. They will be reviewed in complete confidence.

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# Selection of a Blower or Fan

The proper selection of a unit to move air to ventilate enclosures or cool equipment requires some knowledge of blower and fan performance. In general, a blower discharges air in a relatively narrow or confined stream at elevated velocity and will operate against pressure or resistance to air flow. The air delivery of a fan is over a larger area, at lower velocity and does not produce a velocity pressure to overcome high back pressure or resistance to air flow. The volume of air delivered by a blower or fan depends on the size and design as well as the speed at which it operates. In general, the higher the speed, the higher the velocity, the greater the air delivery and the higher the air noise level.

In an enclosure or compartment containing equipment that uses air as a cooling means, the natural draft or upward flow of warm air should be utilized to best advantage. Pockets of hot air will only develop when the air is restricted in its natural upward flow. If the air moving device delivers enough air throughout the enclosure to keep down the average temperature, hot spots will usually not be serious. Openings at the top of the cabinet should be of sufficient area to allow free exit of air.

It is preferable to place the enclosure under a slight over pressure rather than an under pressure. This prevents air entering the cabinet from other than desirable areas. This can be accomplished by forcing air in at the bottom of the cabinet and discharging it freely at the top.

## Design Data

The volume of air moved through the cabinet or enclosure should be sufficient to limit the temperature rise to the required limit. To determine the volume of air necessary, the following formula may be used:

$$\Delta T = \frac{3000}{CFM} = KW$$

$\Delta T$  = Temperature Rise of the Air  
in Degrees Fahrenheit

CFM = Cubic Feet of Air Actually Moved

KW = Power in Kilowatts. Dissipated  
inside the Cabinet

(One degree centigrade equals 1.8  
degrees fahrenheit)

After determining the amount or volume of air in CFM necessary to properly cool the equipment in the enclosure, the next step is to decide whether to use a centrifugal blower or a propeller fan. If the cabinet is well filled with equipment causing high static pressure (SP) or high resistance to the flow of air, it may require a blower to deliver enough air at that SP. There is no formula to calculate the SP as each application is different. Only an estimate can be made unless tests are taken to actually determine the SP. In highly restricted areas, or in ducts, the SP may be from ".25 to 2."; in extreme cases the SP is higher.

In general a propeller fan should be used when the back pressure is 0." SP up to ".125 SP. A centrifugal blower should be used when back pressure is ".125 SP and up. Mechanical arrangement will also be a determining factor in selecting a blower or a fan.

Knowing the required CFM and the SP, to select a blower, find a unit listed in the tabulated section for centrifugal blowers that delivers more CFM at 0." SP than required. Check the curve for SP at which the required CFM is delivered for this unit. If this is near the SP established, the unit should be satisfactory.

To select a propeller fan, use the data shown on pages 20 through 29 and pick a unit that delivers more CFM in free air than required. The required CFM should fall between that given at 0." SP and the CFM at ".125 SP.

## Abbreviations:—

RPM — Speed in revolutions per minute.

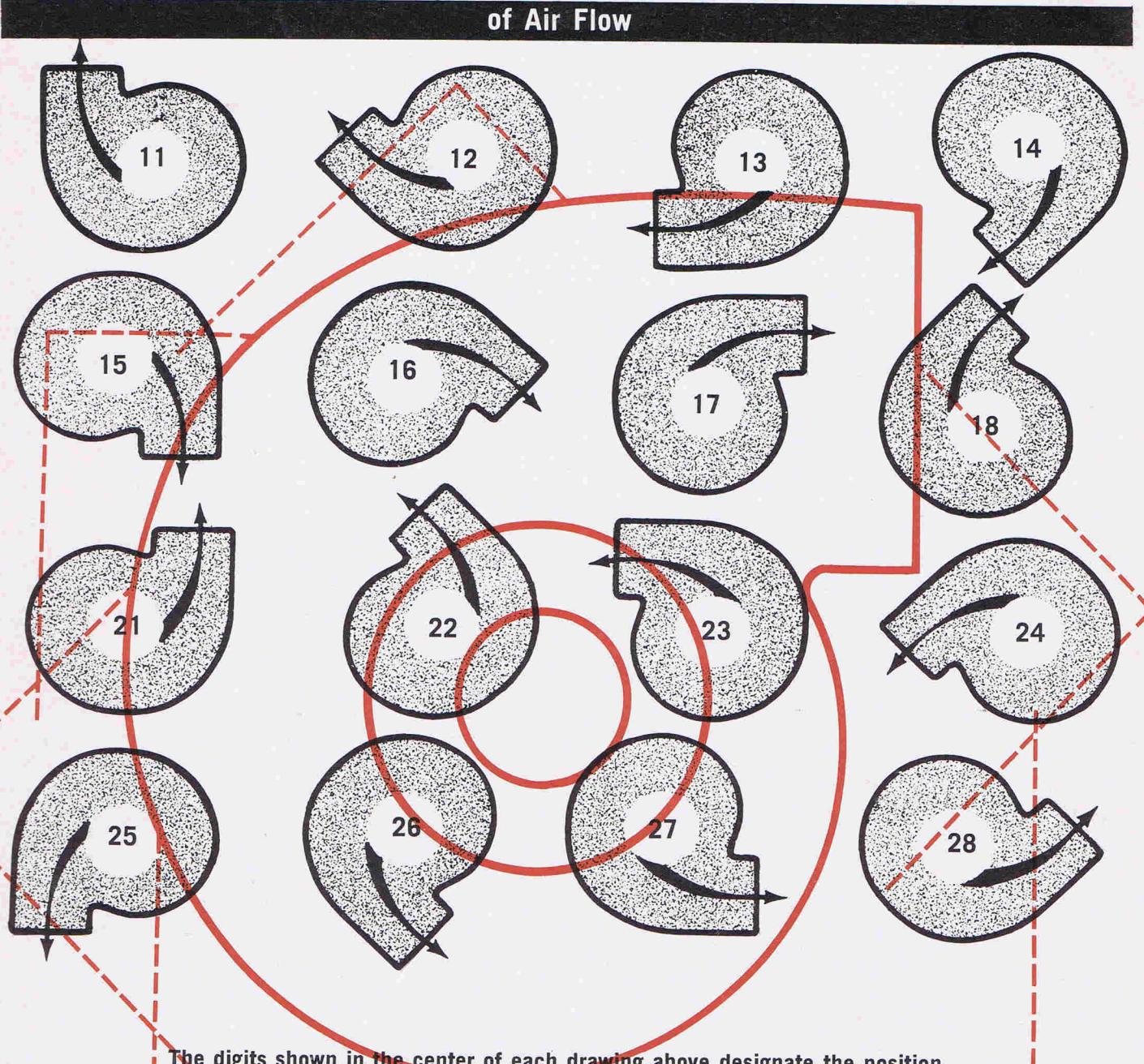
CFM — Rate of air flow in cubic feet per minute.

FM — Velocity of air in feet per minute.

SP — Resistance to air flow or static pressure in inches of water column.

## Angular Positions

### of Air Flow



The digits shown in the center of each drawing above designate the position or direction of air discharge of the blower viewed from the motor end of the unit. Thus in this catalog, for example, No. 6505-17 the 6505 designates the motor, the blower and the housing. The next digit "1" indicates CW (clockwise) rotation facing the motor side of the housing. To indicate CCW (counter clockwise) rotation the "1" would be "2".

The digit "7" designates the position or direction of air discharge of the blower.

All drawings shown in this catalog are CW rotation with air discharge above center and to the right: designation -17.

# Specifications

## and Nomenclature

The catalog numbers of blower and fan units listed in this catalog have two parts. The first set of digits cover the designation of the unit. For blowers, the last two digits cover the assembly arrangement. For example: catalog no. 6505-17, the 6505 designates the motor, the blower and the housing. The next digit "1" designates CW (clockwise) rotation facing the motor side of the housing. To designate CCW (counterclockwise) rotation the "1" digit would change to "2".

The "7" digit designates the position or direction of the air discharge of the blower. See page 3 for all directions of air discharge and positions of blower.

All frame dimension drawings shown in this catalog are CW rotation with air discharge above center and to the right: designation-17.

In the fan section of this catalog the second part of the catalog number is designated with a letter. The letter "D" indicates the direction of the flow of air over the motor and through the fan blade. The letter "R" indicates the flow of air (reversed) — through the blade and over the motor.

### Data Limitations

The data listed in this catalog are from production units. Performance may vary plus or minus 10% from listed ratings.

### Finish

Motor frames are anodized per army-navy specifications. Dichromate seal, finished in glossy black baked enamel.

Blower housings are moulded, glossy black high impact plastic, except steel is used where noted. Back plate is aluminum, finished same as motor housing. Steel housings are cadmium plated, dichromate seal, finished in glossy black to match motor.

Wheels are anodized aluminum.

### Insulation

All motors are wound with class "A" insulation and can operate continuously with the temperature of the winding. 105°C. ambient temperature is the temperature of the air surrounding the motor. The maximum ambient temperature permissible is equal to the maximum temperature of the winding (105°C.) minus the temperature rise as listed.

Motors to operate in higher ambient temperatures can be wound with class "H" insulation which will allow a maximum temperature of the winding of 180 °C. High temperature lubrication is used in the ball bearings. All motors are fitted with ball bearings.

### Mounting

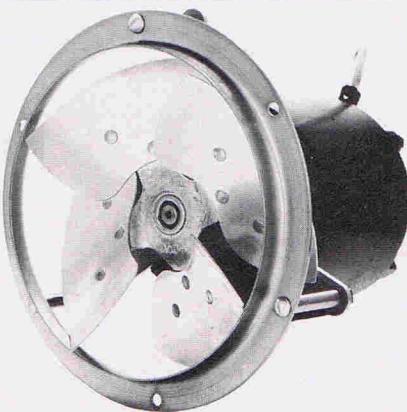
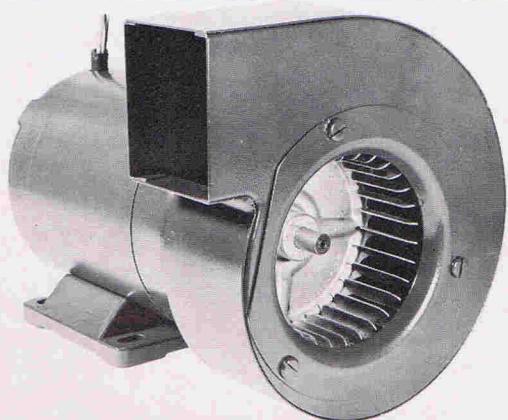
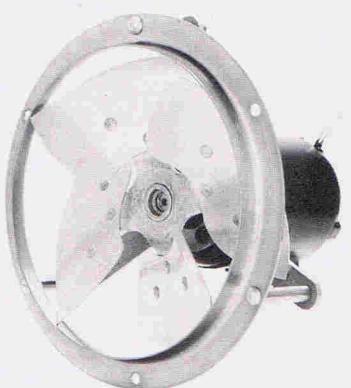
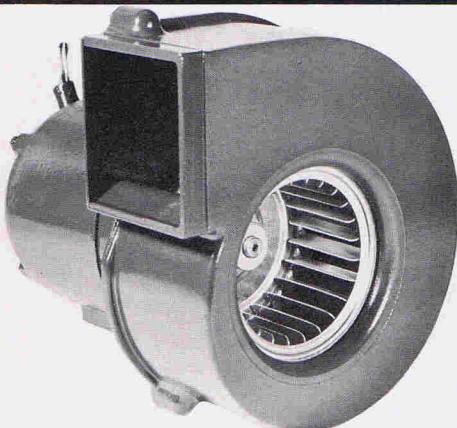
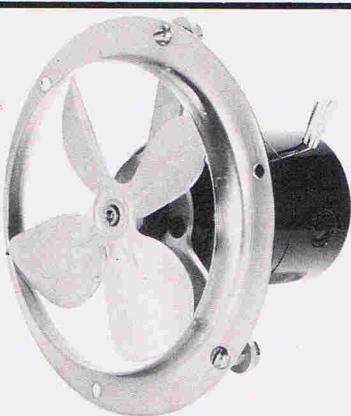
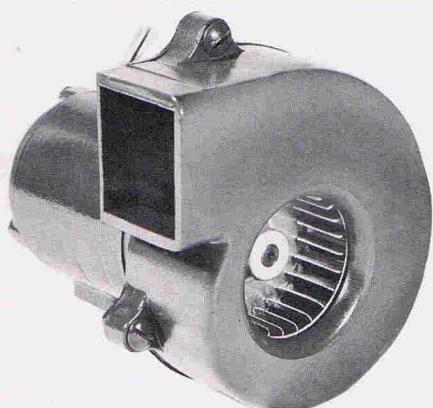
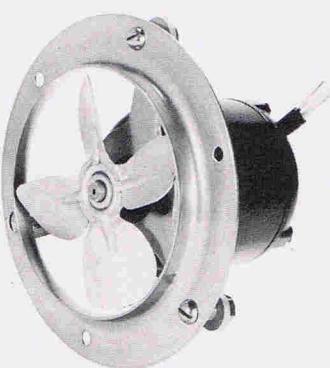
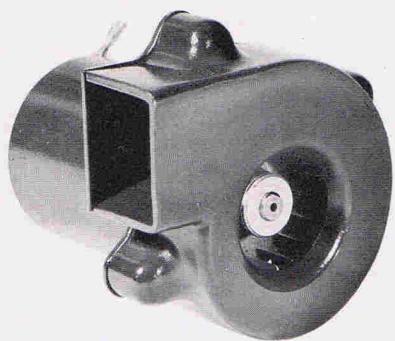
All motors have base mounting except the 1½" and 1¾" diameter frames. These frames must be band mounted.

### Capacitors

A.C. single phase motors utilize a single capacitor for starting and running. No starting switch is required. Capacitors are not supplied by ELINCO. MIL specifications can be furnished if required.

**Elinco**

**Blowers and Fans**

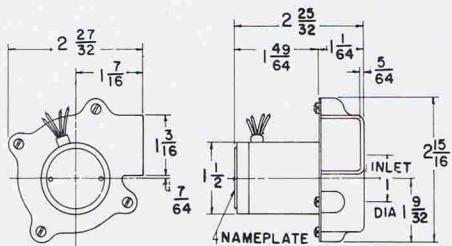


# Blower Units

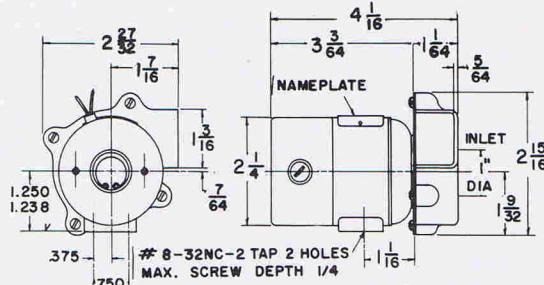
## with D.C. Motors

Catalogue Number	Air Max. C.F.M.	Air S.P. At No Del.	Electrical Characteristics				Type Of Winding	Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number	Curve Number
			Volts	Amps	Watts	RPM					
6001-17	5.5	.35	28	.13	4	3500	SERIES	30°C	9	C-6219	535
6002-17	10.5	1.4	28	.4	11	7200	SERIES	27°C	9	C-6219	530
6003-17	17	.2	28	.4	10.5	11000	SERIES	30°C	9	C-6219	531
6004-17	17	1.6	115	.09	22	11000	SHUNT	30°C	20	C-6210	520
6005-17	20	.3	28	.35	10	3500	SHUNT	12°C	23	C-6217	521

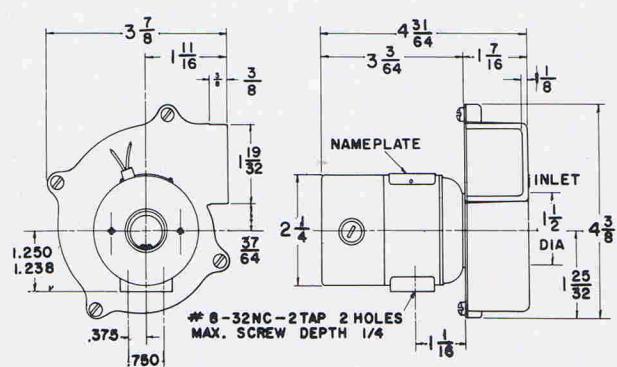
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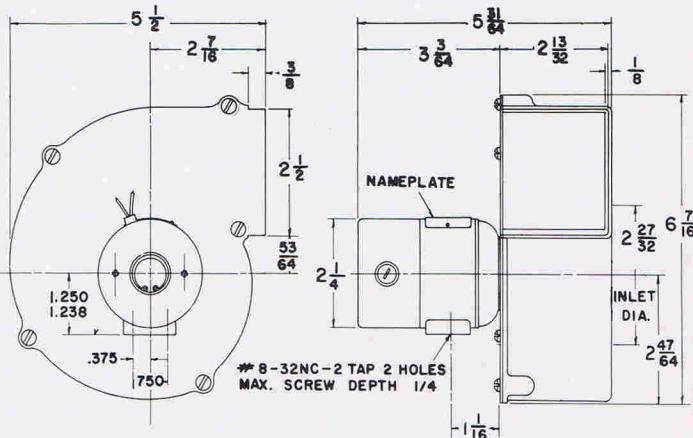
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DWG. No. C-6210



DWG. No. C-6217



DWG. No. C-6211

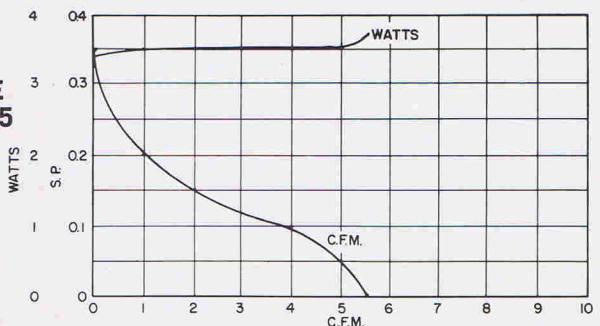
# Blower Units

## with D.C. Motors

Catalogue Number	Air Max. C.F.M.	Air S.P. At No Del.	Electrical Characteristics				Type Of Winding	Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number	Curve Number
			Volts	Amps	Watts	RPM					
6006-17	20	.3	115	.09	10.5	3500	SHUNT	12°C	23	C-6217	521
6007-17	42	1.5	28	1.	28	7200	SHUNT	32°C	23	C-6217	522
6008-17	42	1.5	115	.24	28	7200	SHUNT	32°C	23	C-6217	522
6009-17	43	.35	28	.35	10	1750	SHUNT	35°C	31	C-6211	510
6010-17	43	.35	115	.07	8	1750	SERIES	30°C	31	C-6211	505

Voltages listed are standard. Motors can be supplied for any desired voltage.

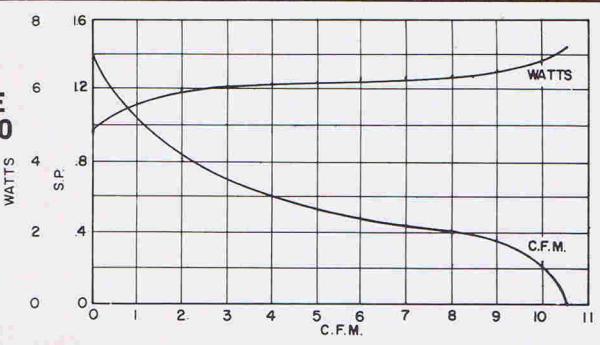
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No. 535**



**CURVE  
No. 521**



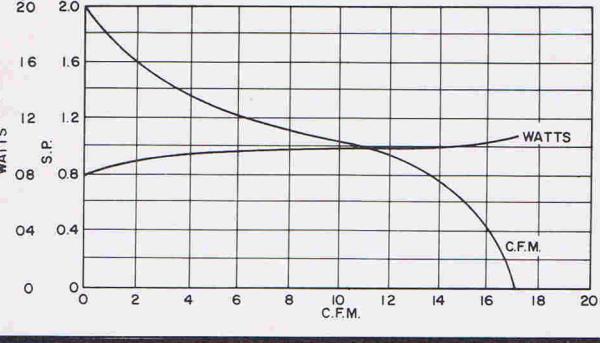
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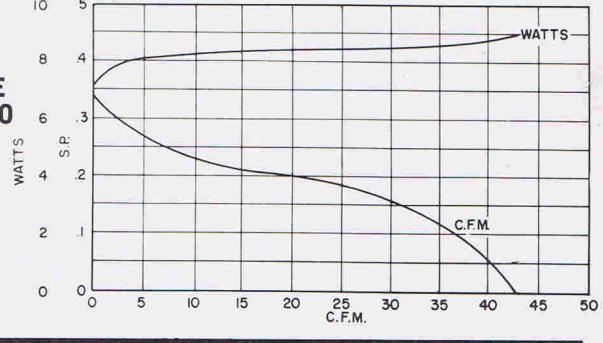
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**CURVE  
No. 531**



**CURVE  
No. 510**



**CURVE  
No. 520**



**CURVE  
No. 505**

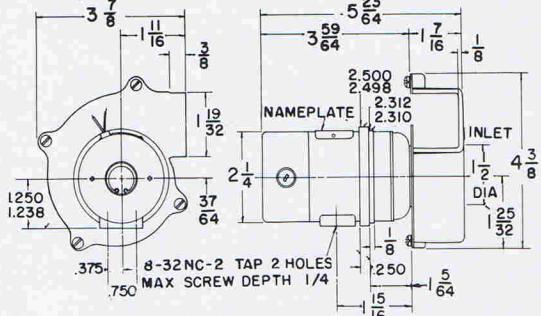


# Blower Units

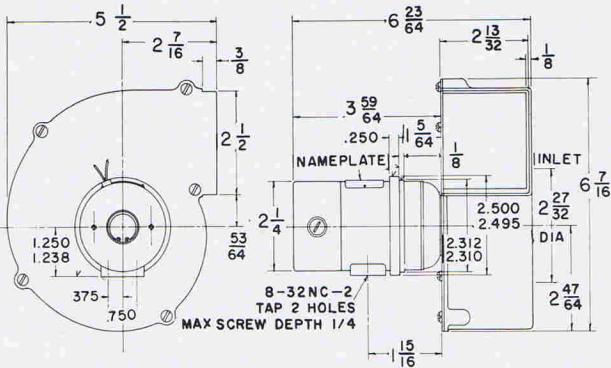
## with D.C. Motors

Catalogue Number	Air Max. C.F.M.	Air S.P. At No Del.	Electrical Characteristics				Type Of Winding	Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number	Curve Number
			Volts	Amps	Watts	RPM					
6011-17	62	2.6	28	3	85	11000	SHUNT	42°C	36	C-6255	532
6012-17	62	2.6	115	.725	85	11000	SHUNT	40°C	36	C-6255	532
6013-17	87	.7	28	1	28	3500	SHUNT	40°C	40	C-6213	501
6014-17	87	.7	115	.25	28	3500	SHUNT	35°C	40	C-6213	501
6015-17	135	1.45	28	3	85	5500	SHUNT	45°C	40	C-6223	509

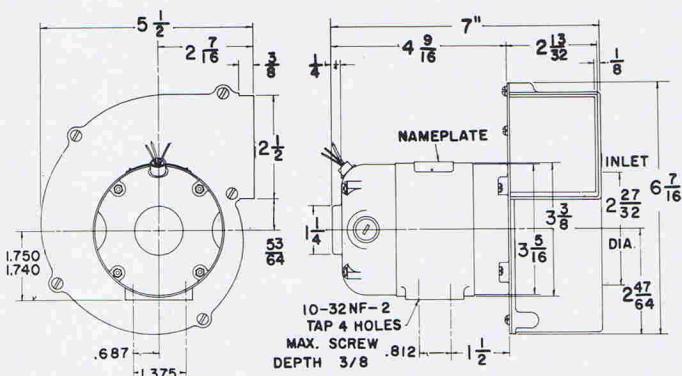
Voltages listed are standard. Motors can be supplied for any desired voltage.



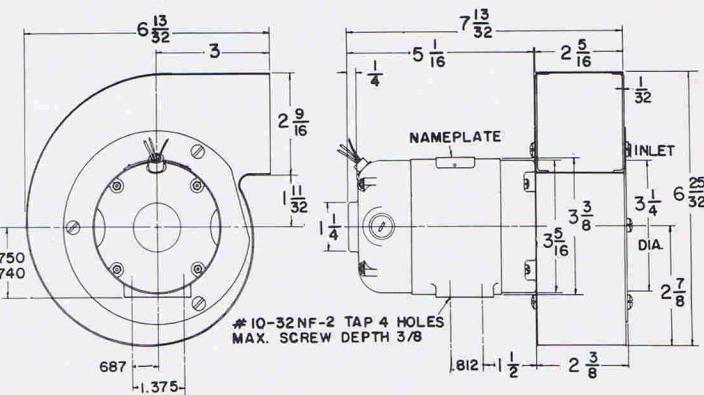
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DWG. No. C-6213



DWG. No. C-6223



DWG. No. C-6256

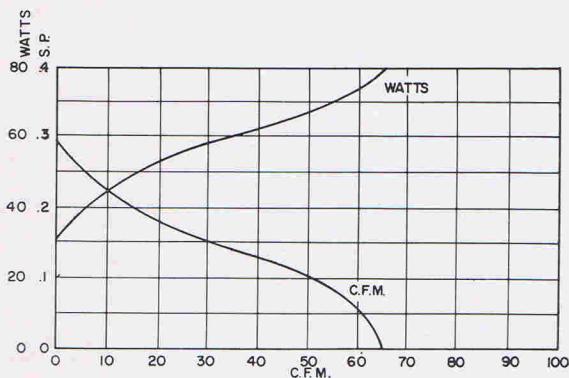
# Blower Units

## with D.C. Motors

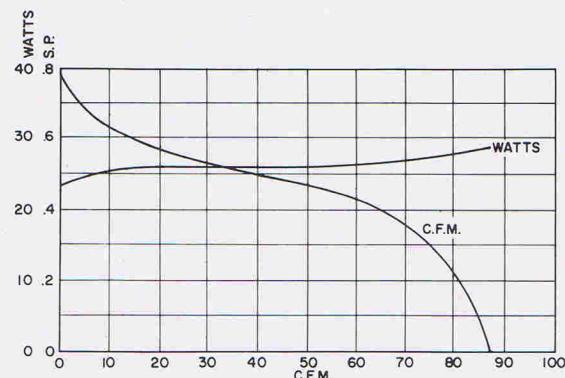
Catalogue Number	Air Max. C.F.M.	Air S.P. At No Del.	Electrical Characteristics				Type Of Winding	Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number	Curve Number
			Volts	Amps	Watts	RPM					
6016-17	135	1.45	115	.75	85	5500	SHUNT	40°C	72	C-6223	509
6017-17	165	1.15	28	2.5	70	3500	SHUNT	40°C	88	C-6256	508
6018-17	165	1.15	115	.62	74	3500	SHUNT	40°C	88	C-6256	508
*6019-17	260	3.2	115	1.75	200	5500	SHUNT	25°C	88	C-6256	525

\*Open Motor

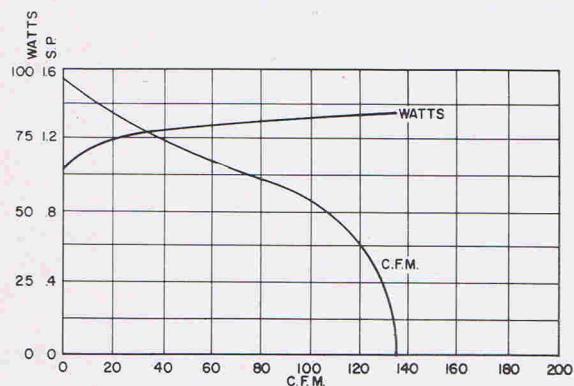
Voltages listed are standard. Motors can be supplied for any desired voltage.



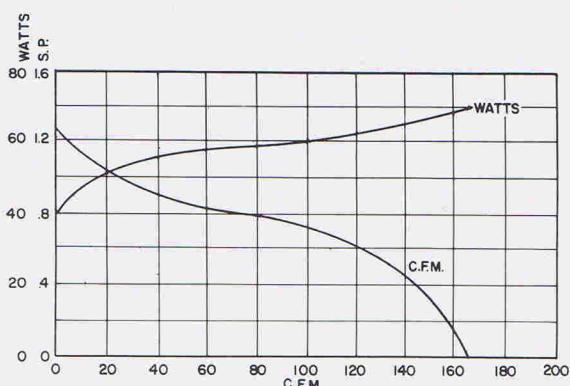
CURVE No. 532



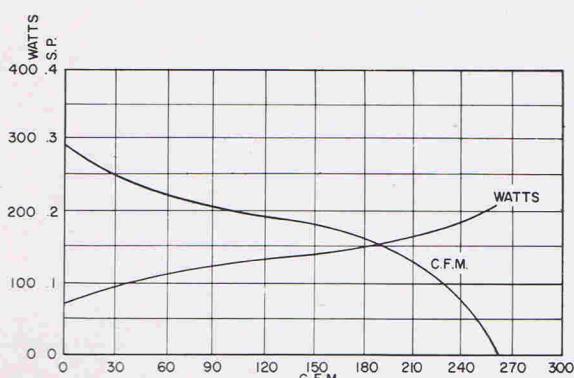
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CURVE No. 509



CURVE No. 508



CURVE No. 525

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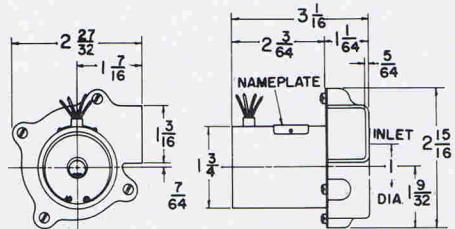
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## Blower Units

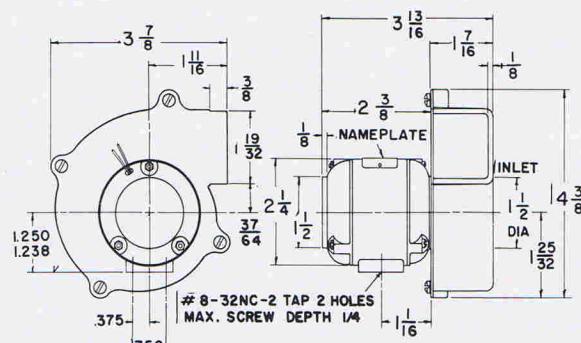
**with 60 Cycle, Single Phase, Capacitor Run Motors**

Catalogue Number	Air Max. C.F.M.	Air Max. S.P. At No Del.	Electrical Characteristics				Capacitor		Ounces Weight	Max. Temp. Rise Of Winding	Drawing Number	Curve Number
			Volts	Amps	Watts	R.P.M.	Mfd.	Volts				
6501-17	5.5	.2	115	.07	7	3450	.75	220	13	30°C	C-6218	514
6502-17	10	.075	115	.09	10	1750	1	220	24	28°C	C-6209	515
6503-17	20	.3	115	.1	10	3450	1	220	24	18°C	C-6209	517
6504-17	43	.35	115	.13	14	1750	1	220	30	26°C	C-6216	503
6505-17	87	.7	115	.25	25	3450	1.5	220	42	26°C	C-6214	512
6506-17	165	1.15	115	.9	75	3450	2	220	88	40°C	C-6222	513

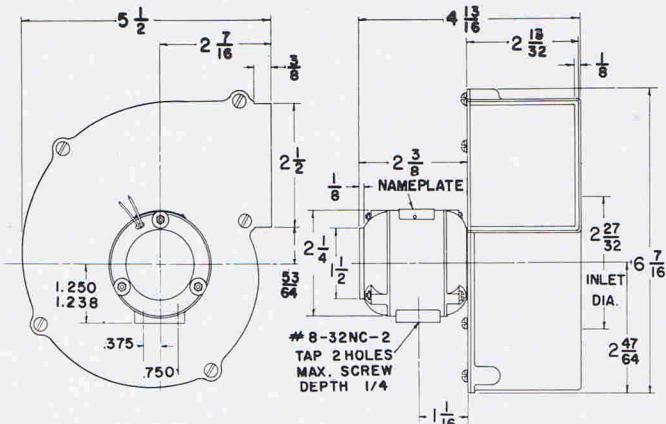
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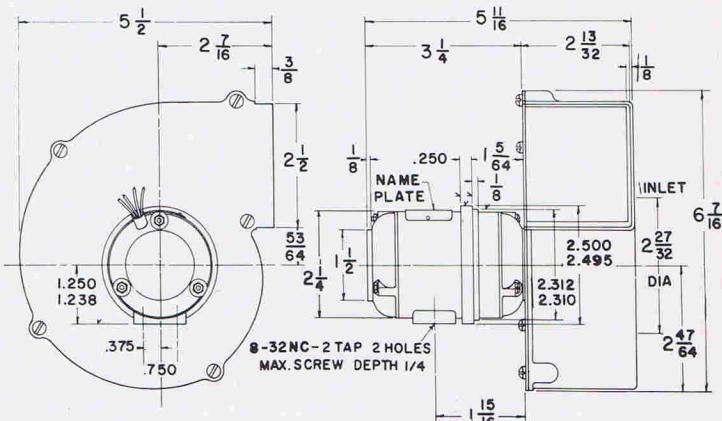
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DWG. No. C-6209



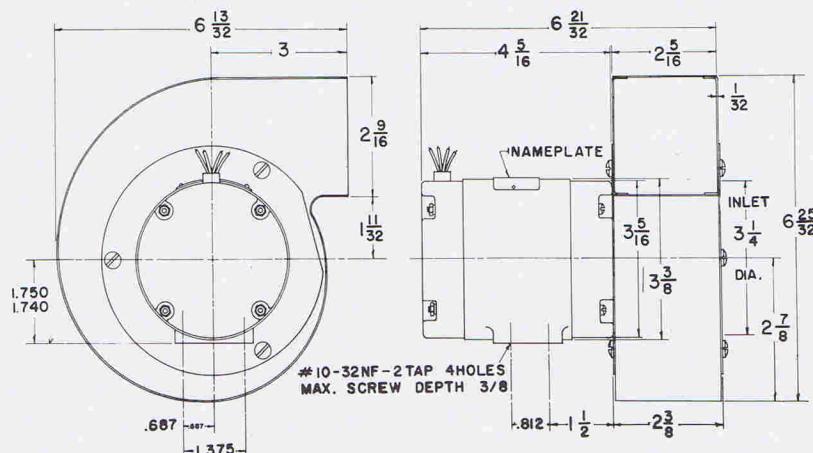
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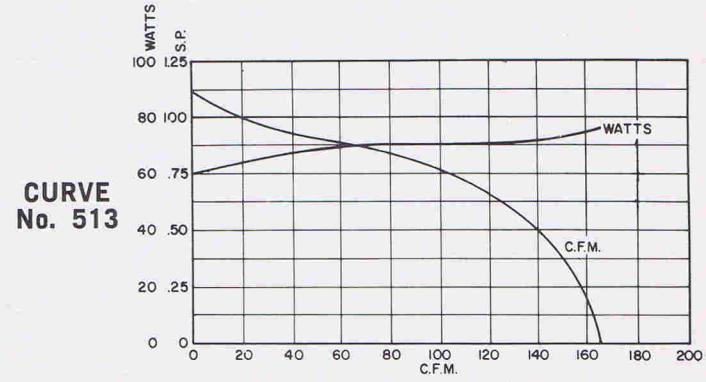
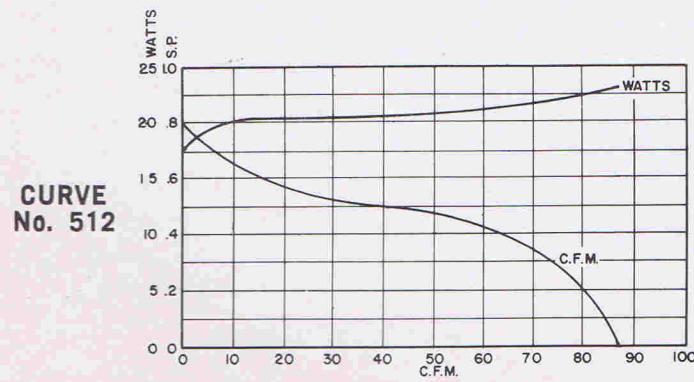
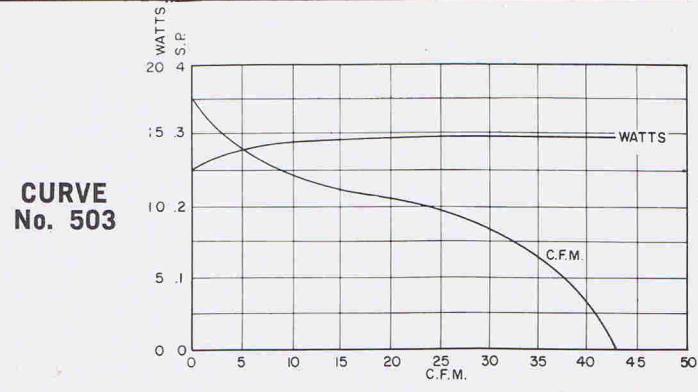
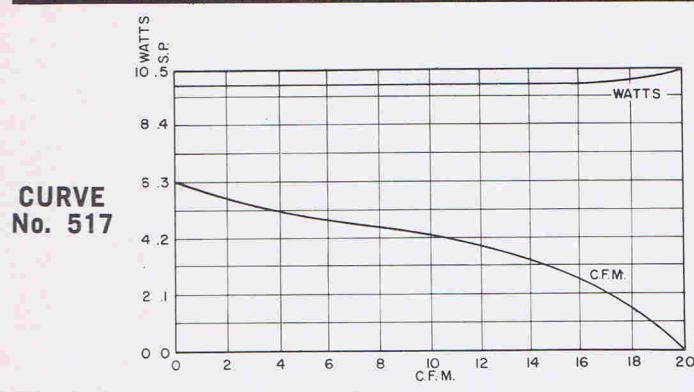
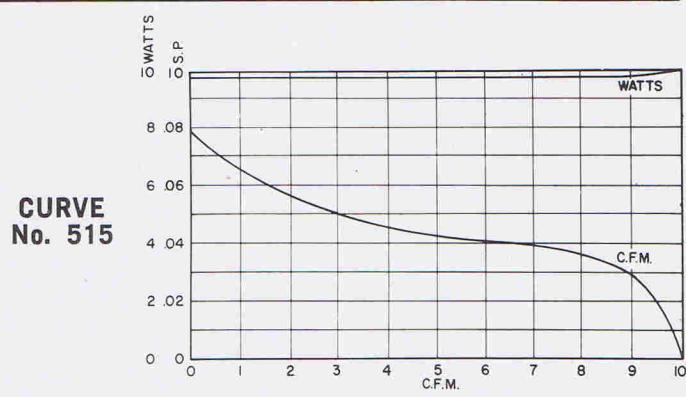
DWG. No. C-6214

# Blower Units

with 60 Cycle, Single Phase, Capacitor Run Motors



DWG. No. C-6222

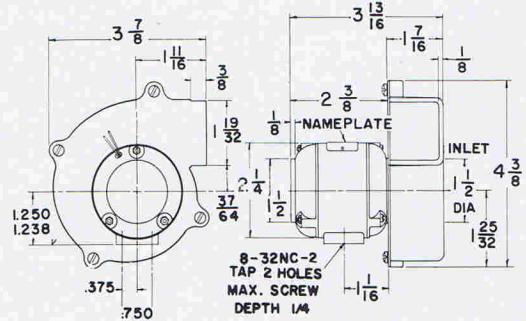


# Blower Units

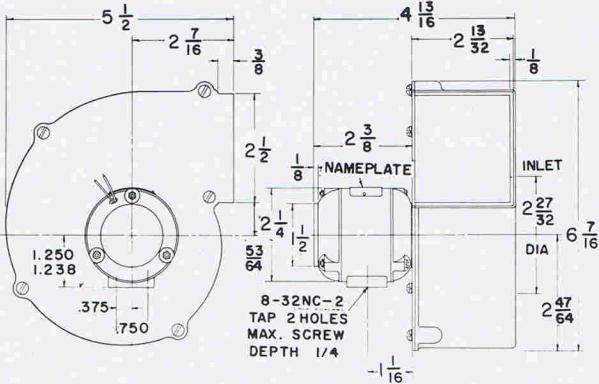
## with 60 Cycle, 3 Phase Motors

Catalogue Number	Air Max. C.F.M.	Air Max. S.P. At No Del.	Electrical Characteristics				Ounces Weight	Max. Temp. Rise Of Winding	Drawing Number	Curve Number
			Volts	Amps	Watts	R.P.M.				
6507-17	10	.075	115	.04	5	1750	24	8°C	C-6209	502
6508-17	20	.3	115	.06	6	3520	24	12°C	C-6209	516
6509-17	43	.35	115	.15	17	1750	30	37°C	C-6216	504
6510-17	87	.7	115	.31	31	3450	42	44°C	C-6214	500
6511-17	165	1.15	115	.6	60	3450	88	26°C	C-6222	506

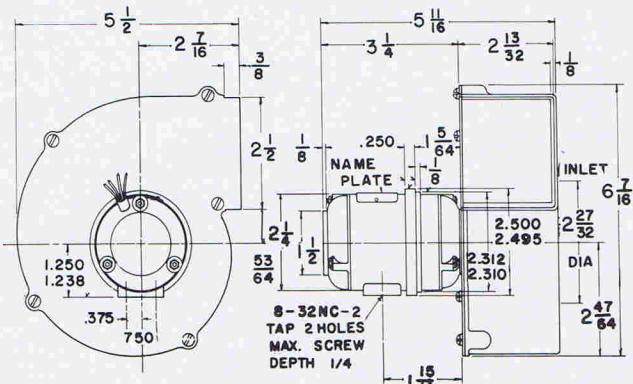
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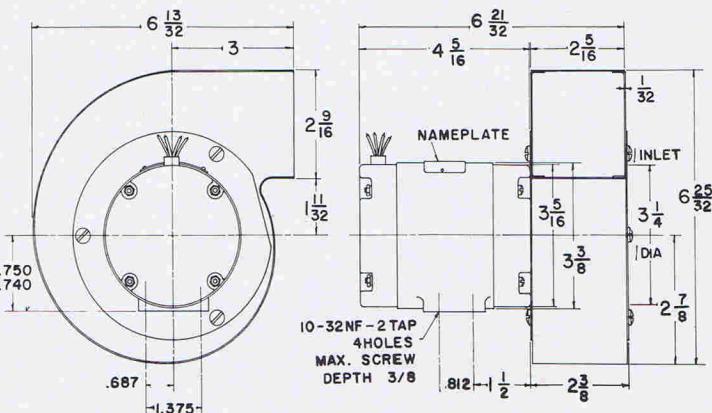
DWG. No. C-6209



DWG. No. C-6216



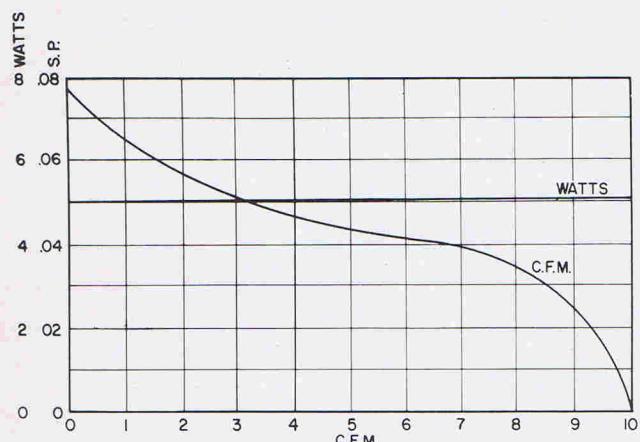
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DWG. No. C-6222

# Blower Units

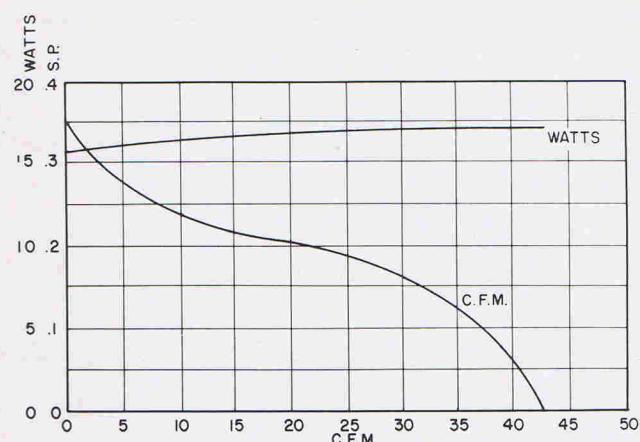
with 60 Cycle, 3 Phase Motors



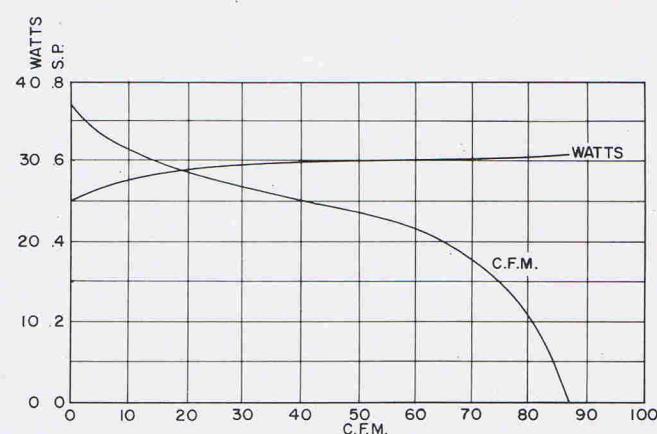
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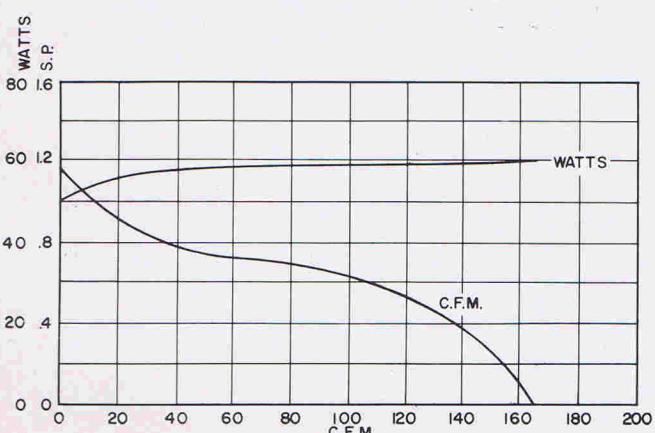
CURVE No. 516



CURVE No. 504



CURVE No. 500



CURVE No. 506

## DATA LIMITATION:

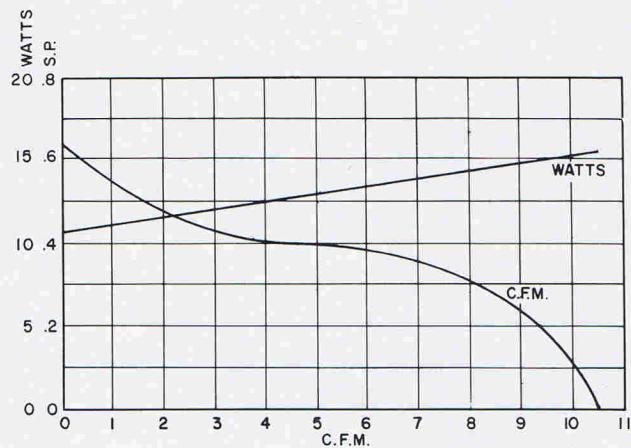
THE DATA LISTED IN THIS CATALOG  
ARE FROM PRODUCTION UNITS.  
PERFORMANCE MAY VARY PLUS  
OR MINUS 10% FROM THIS DATA.

# Blower Units

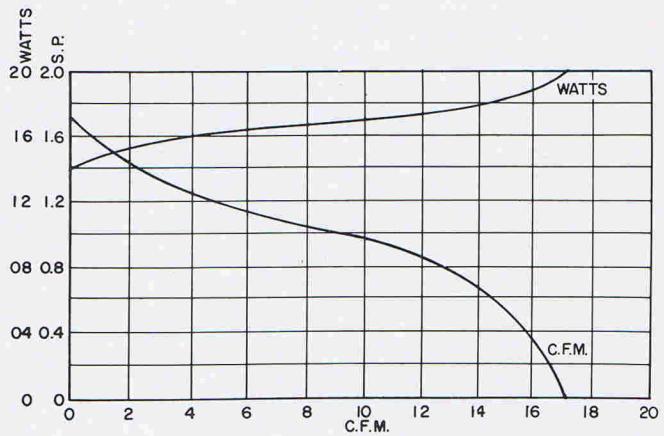
**with 400 Cycle, Single Phase, Capacitor Run Motors**

Catalogue Number	Air Max. C.F.M.	Air Max. S.P. At No Del.	Electrical Characteristics				Capacitor		Ounces Weight	Max. Temp. Rise Of Winding	Drawing Number	Curve Number
			Volts	Amps	Watts	R.P.M.	Mfd.	Volts				
7001-17	10.5	.58	115	.25	15	7200	.4	220	20	35°C	C-6215	507
7002-17	17	1.6	115	.25	15	11000	.1	220	20	40°C	C-6215	524
7003-17	20	.3	115	.2	15	3500	.2	220	48	20°C	C-6220	523
7004-17	42	1.2	115	.8	44	7200	1	220	34	35°C	C-6254	527

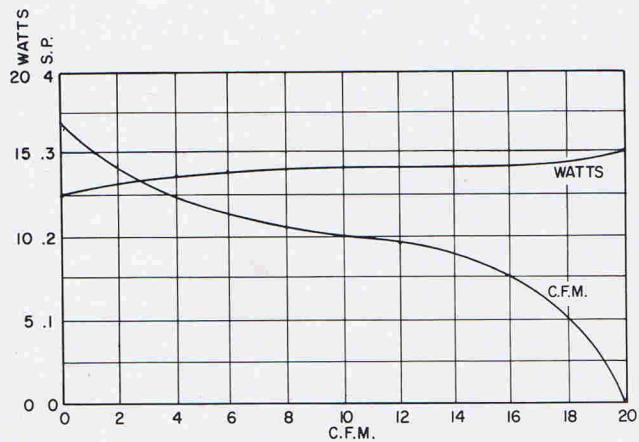
Voltages listed are standard. Motors can be supplied for any desired voltage.



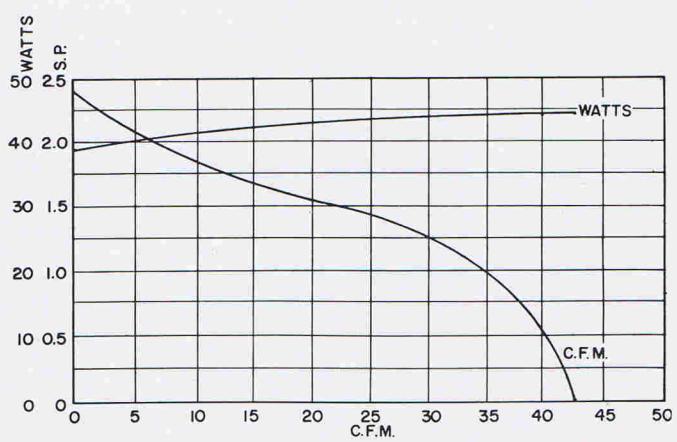
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**CURVE No. 524**



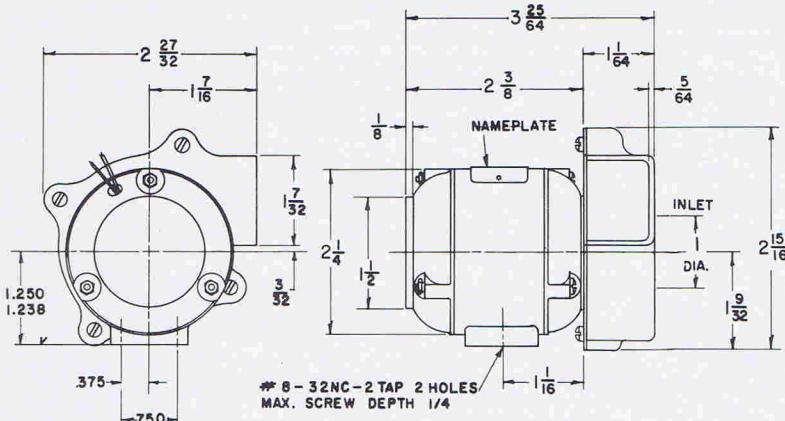
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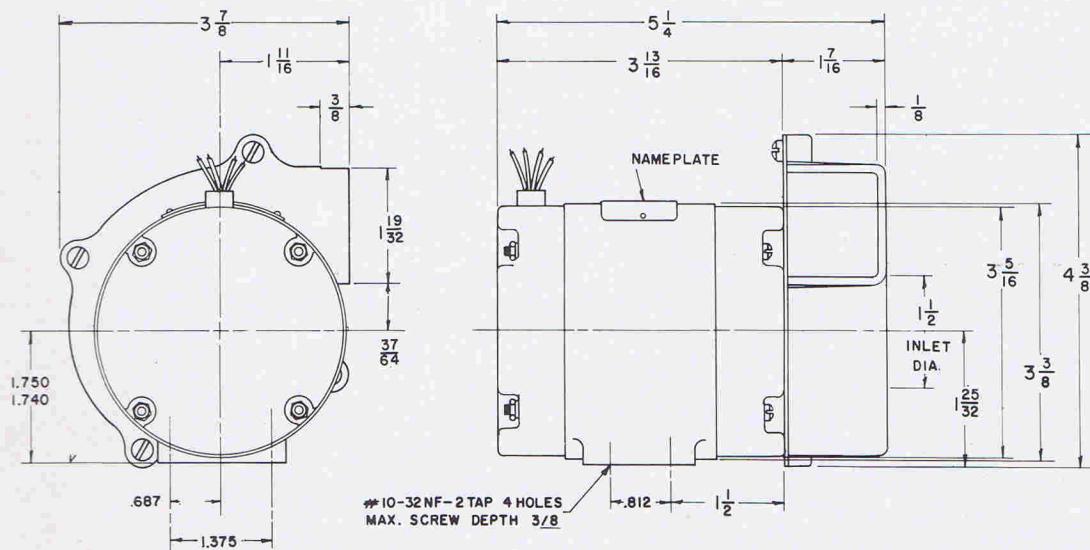
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# Blower Units

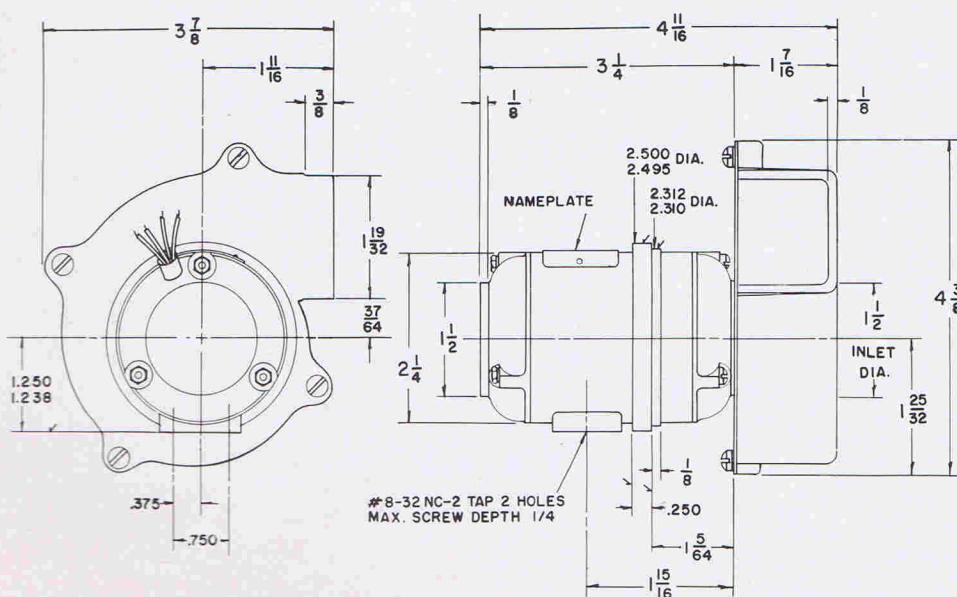
with 400 Cycle, Single Phase, Capacitor Run Motors



DWG. No. C-6215



DWG. No. C-6220



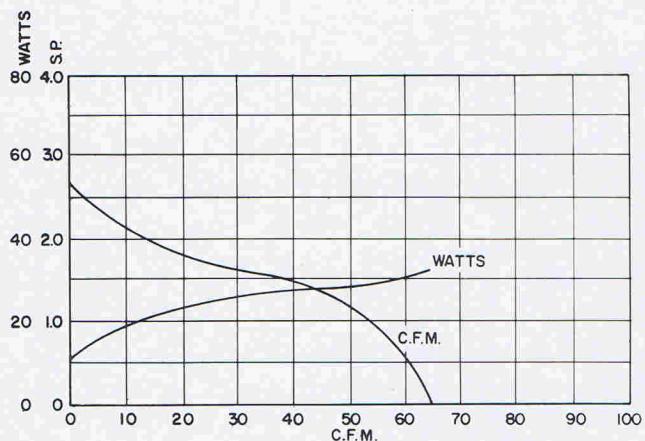
DWG. No. C-6254

# Blower Units

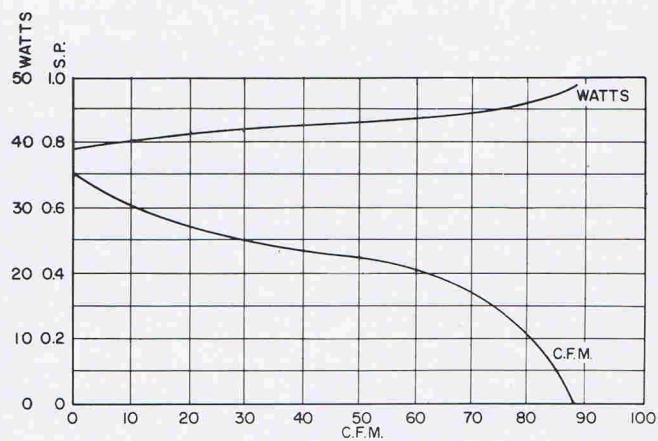
**with 400 Cycle, Single Phase, Capacitor Run Motors**

Catalogue Number	Air Max. C.F.M.	Air Max. S.P. At No Del.	Electrical Characteristics				Capacitor		Ounces Weight	Max. Temp. Rise Of Winding	Drawing Number	Curve Number
			Volts	Amps	Watts	R.P.M.	Mfd.	Volts				
7005-17	62	.2.6	115	.6	63	11000	.75	220	54	22°C	C-6220	534
7006-17	87	.7	115	.6	48	3425	1	220	77	40°C	C-6224	528
7007-17	135	1.45	115	.85	70	5500	.35	330	80	36°C	C-6224	529
7008-17	260	3	115	2.5	215	5500	2	220	200	40°C	C-6212	526

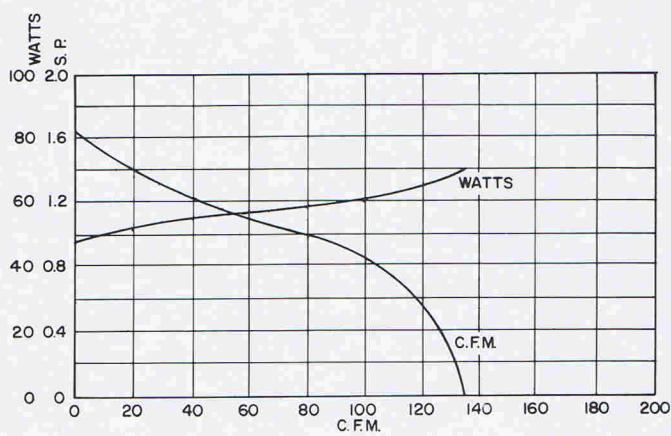
Voltages listed are standard. Motors can be supplied for any desired voltage.



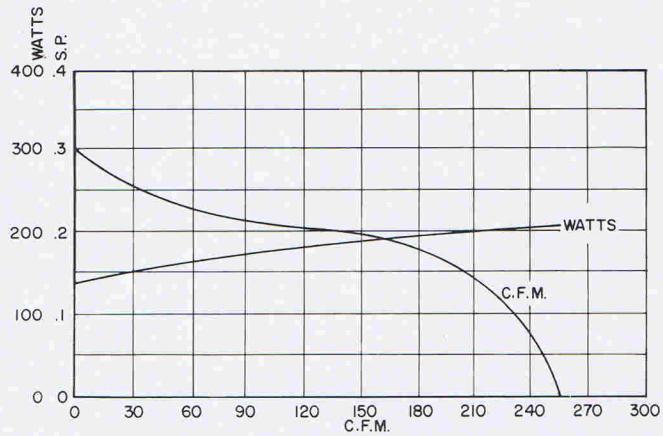
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**CURVE No. 528**



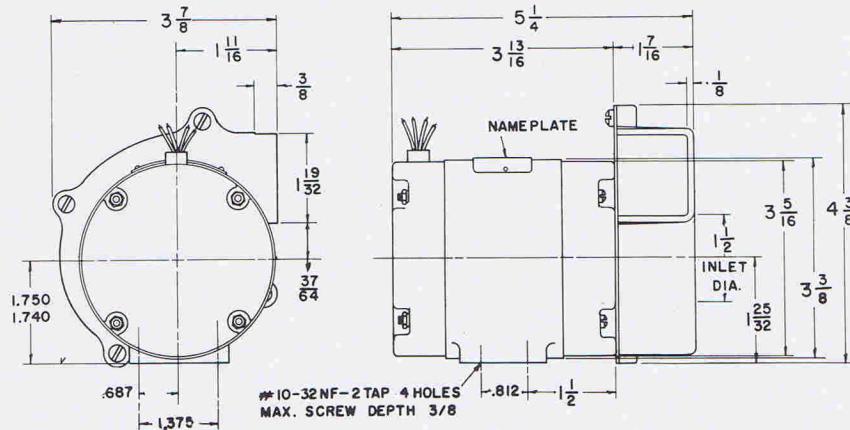
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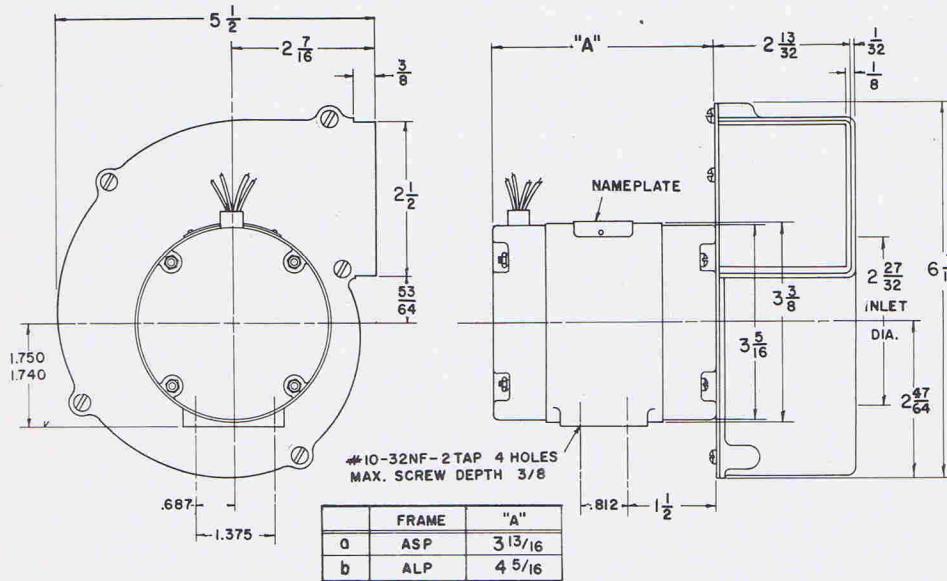
**CURVE No. 526**

# Blower Units

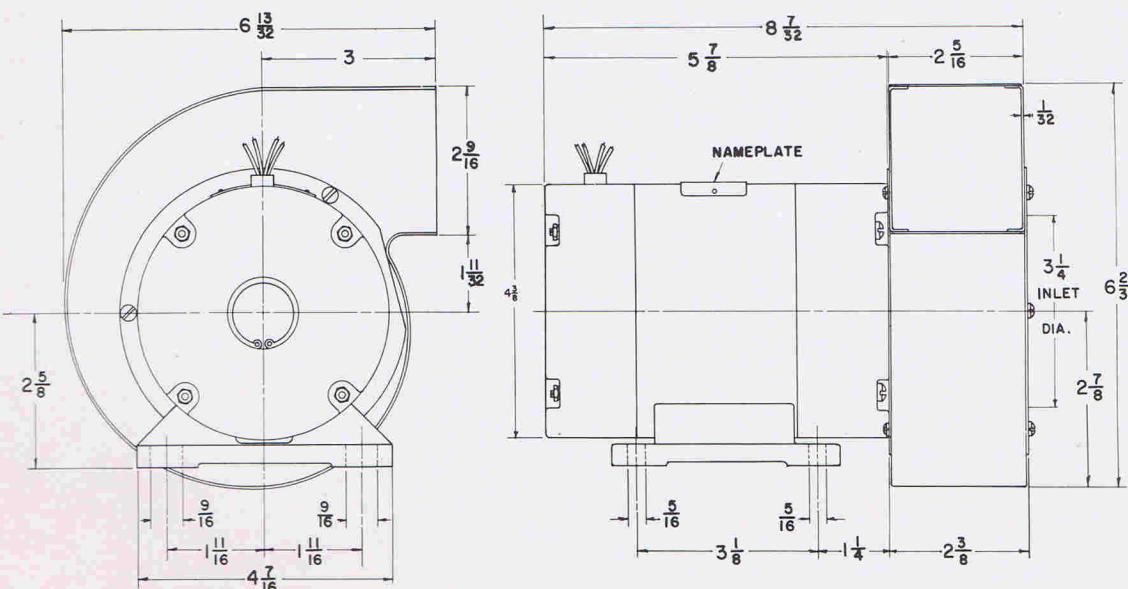
with 400 Cycle, Single Phase, Capacitor Run Motors



DWG. No. C-6220



DWG. No. C-6224



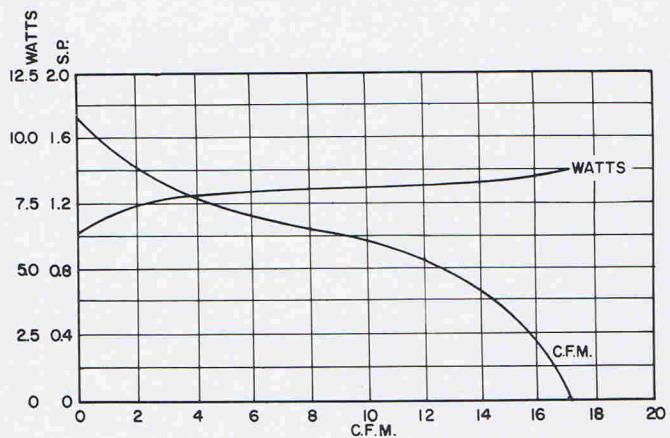
DWG. No. C-6212

# Blower Units

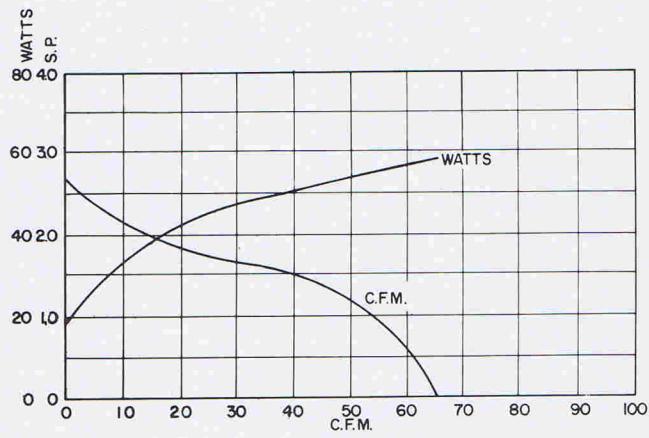
**with 400 Cycle, 3 Phase Motor**

Catalogue Number	Air Max. C.F.M.	Air Max. S.P. At No Del.	Electrical Characteristics				Ounces Weight	Max. Temp. Rise Of Winding	Drawing Number	Curve Number
			Volts	Amps	Watts	R.P.M.				
7009-17	17	1.6	115	.1	12	11000	20	16°C	C-6215	518
7010-17	62	2.6	115	.35	60	11000	54	23°C	C-6220	533
7011-17	135	1.45	115	.7	85	5500	64	36°C	C-6224	519
7012-17	260	3	115	2.4	225	5500	144	30°C	C-6212	511

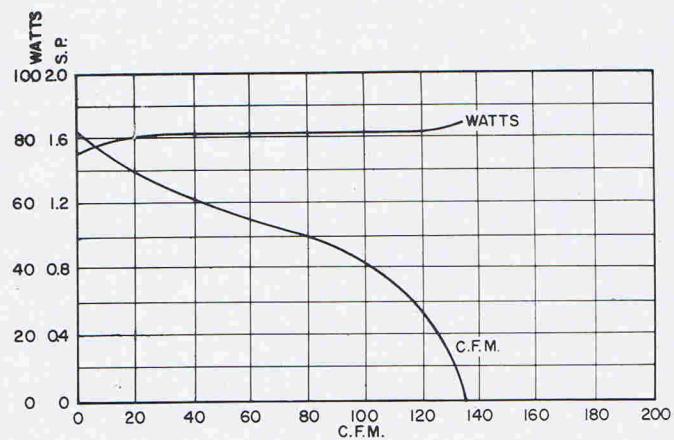
Voltages listed are standard. Motors can be supplied for any desired voltage.



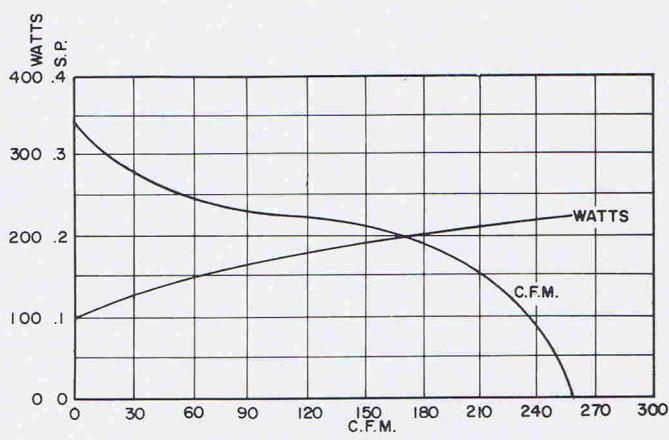
**CURVE No. 518**



**CURVE No. 533**



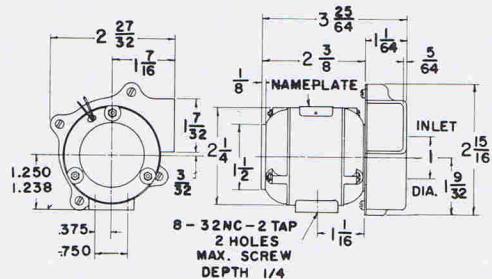
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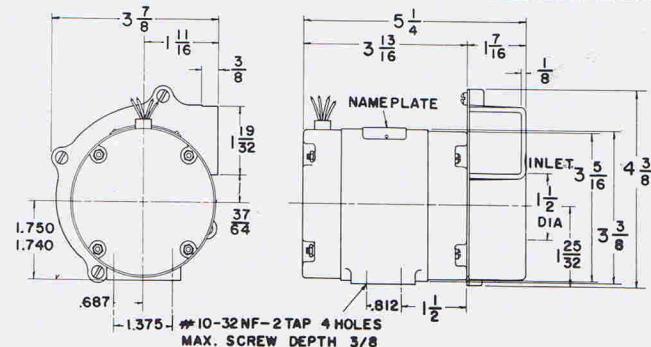
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# Blower Units

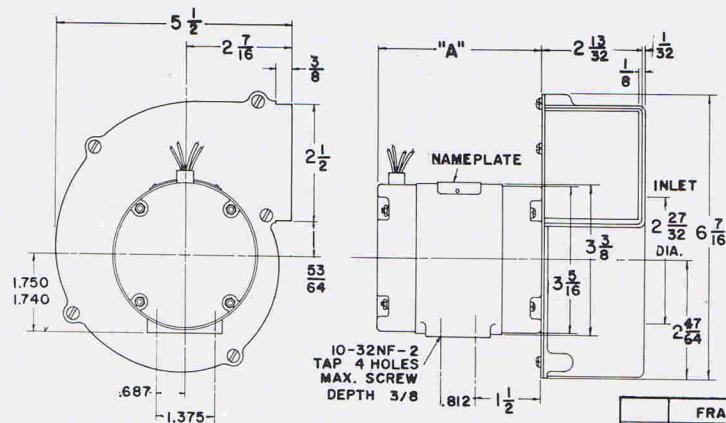
with 400 Cycle, 3 Phase Motor



DWG. No. C-6215

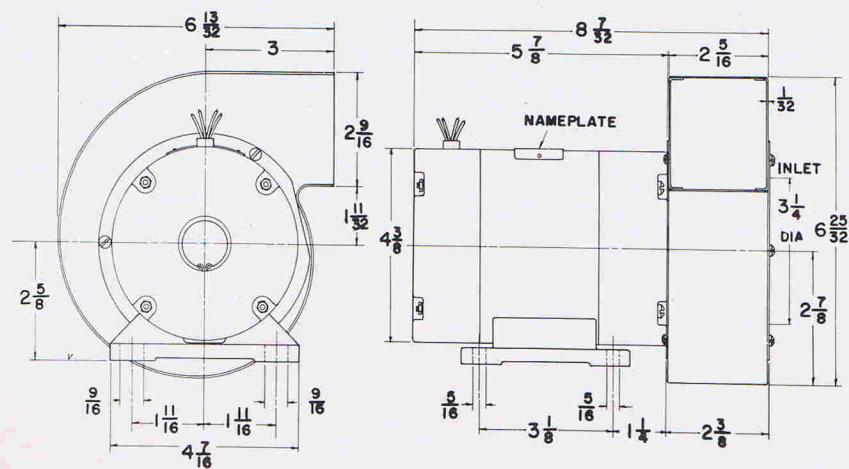


DWG. No. C-6220



DWG. No. C-6224

	FRAME	"A"
a	ASP	3 13/16
b	ALP	4 5/16



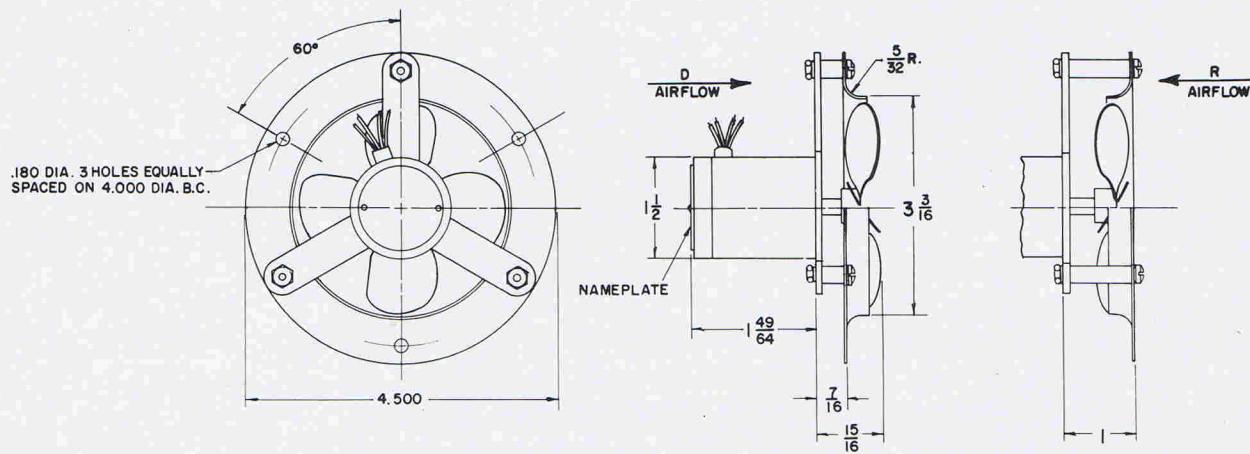
DWG. No. C-6212

# Propeller Fan Units

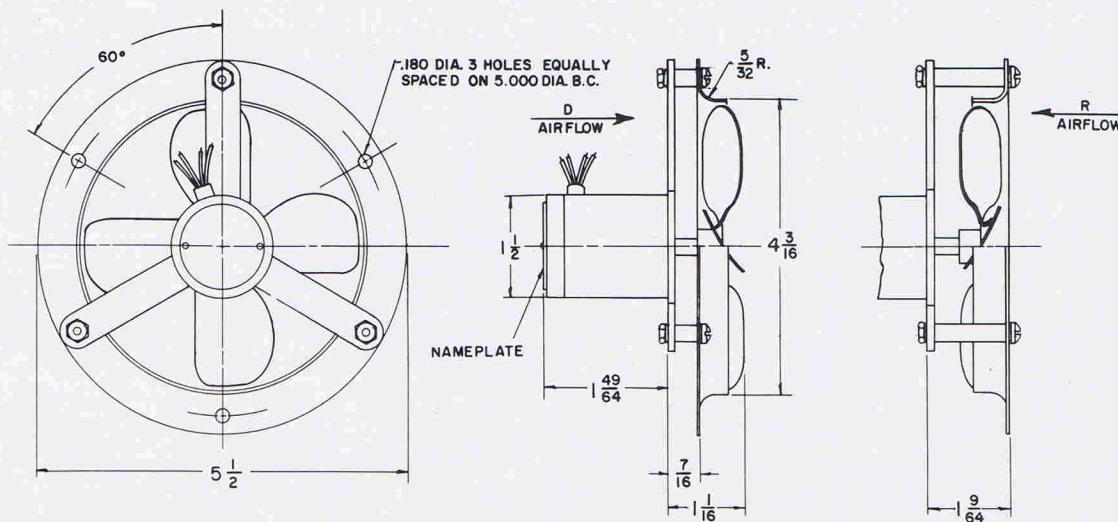
## with D.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics				Max. Temp. Rise Of Winding	Ounces Weight	Type Of Winding	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Volts	Amps	Watts	R.P.M.				
7501-D	55	39	3"	28	.26	7.5	5500	20°C	9	SERIES	C-6233
7502-D	70	60	3"	28	.43	12	7200	25°C	9	SERIES	C-6233
7503-D	40	—	4"	28	.107	3	1750	20°C	10	SERIES	C-6234
7504-D	82	52	4"	28	.34	9.5	3450	38°C	10	SERIES	C-6234
7505-D	125	110	4"	28	1.1	31	5500	48°C	21	SHUNT	C-6236
7506-D	82	52	4"	115	.12	14	3450	30°C	21	SERIES	C-6236
7507-D	125	110	4"	115	.27	31	5500	48°C	21	SHUNT	C-6236
7508-D	84	35	4¾"	28	.85	24	1750	48°C	25	SHUNT	C-6237

Voltages listed are standard. Motors can be supplied for any desired voltage.



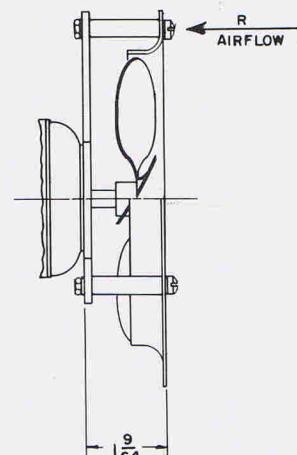
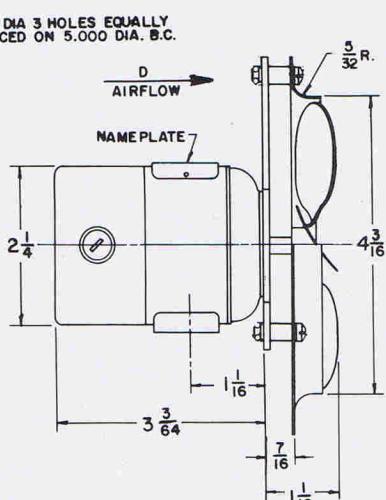
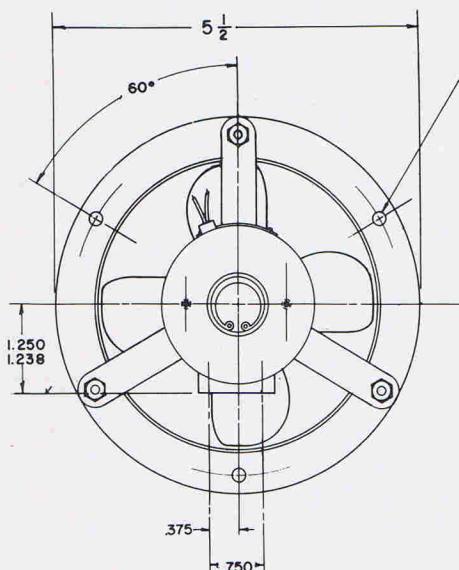
DWG. No. C-6233



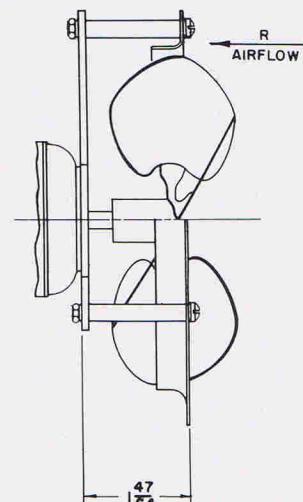
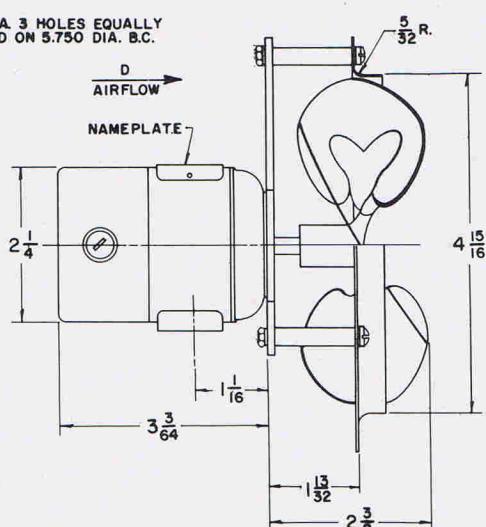
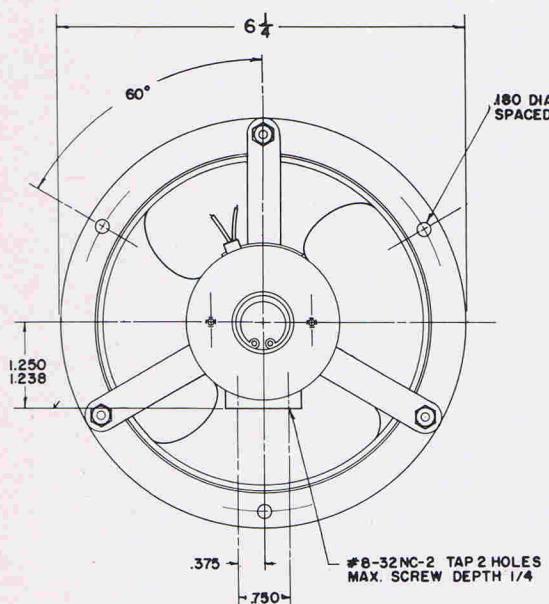
DWG. No. C-6234

# Propeller Fan Units

with D.C. Motors



DWG. No. C-6236



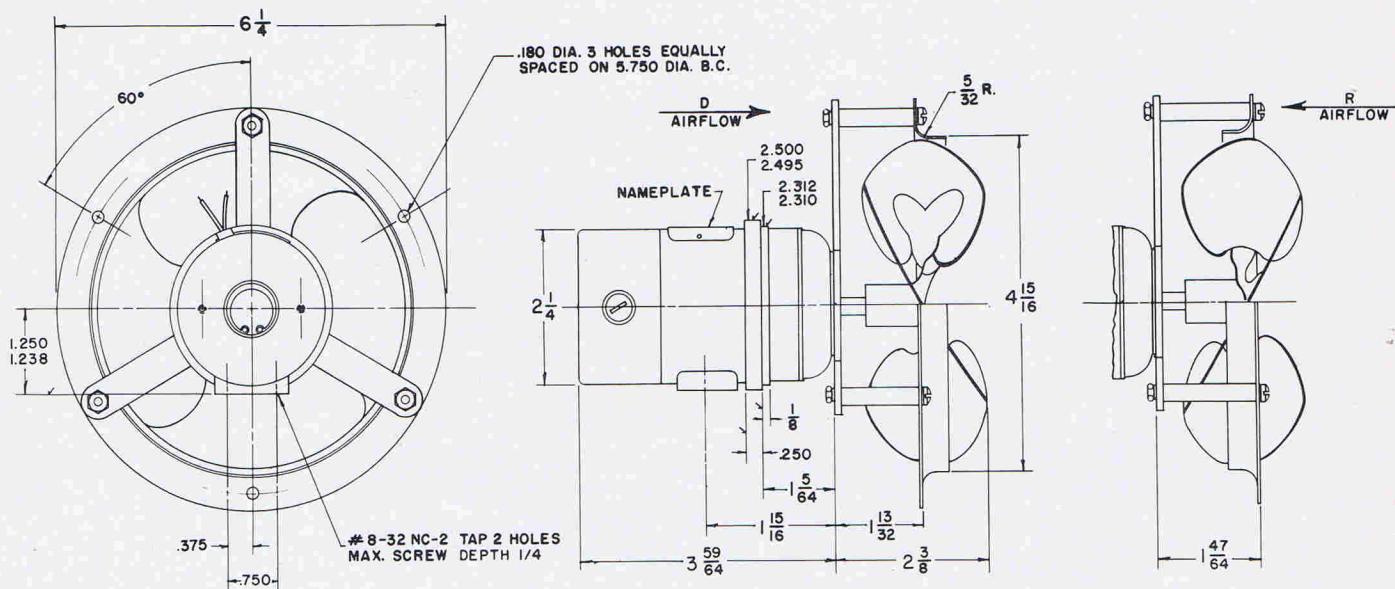
DWG. No. C-6237

# Propeller Fan Units

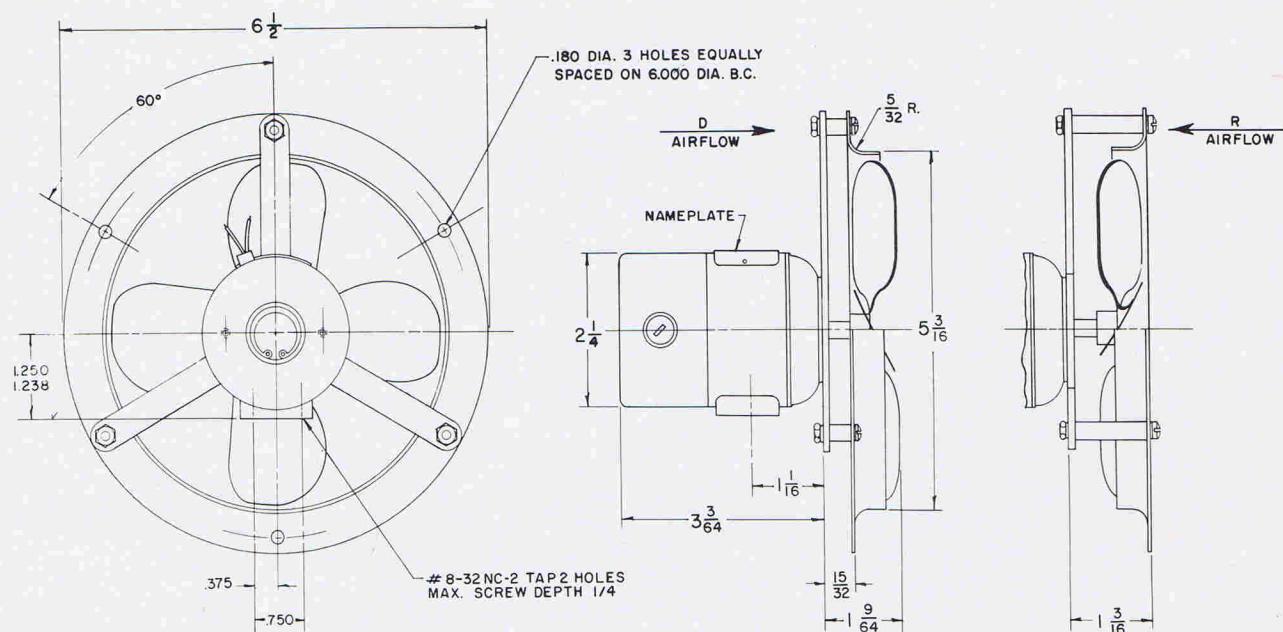
## with D.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics				Max. Temp. Rise Of Winding	Ounces Weight	Type Of Winding	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Volts	Amps	Watts	R.P.M.				
7509-D	165	138	4 $\frac{3}{4}$ "	28	.8	22	3450	30°C	36	SHUNT	C-6240
7510-D	84	35	4 $\frac{3}{4}$ "	115	.2	24	1750	48°C	25	SHUNT	C-6237
7511-D	165	138	4 $\frac{3}{4}$ "	115	.18	21	3450	30°C	36	SHUNT	C-6240
7512-D	140	105	5"	28	.44	12	3450	22°C	22	SHUNT	C-6238
7513-D	220	190	5"	28	.85	24	5500	27°C	22	SHUNT	C-6238
7514-D	140	105	5"	115	.12	14	3450	22°C	22	SHUNT	C-6238

Voltages listed are standard. Motors can be supplied for any desired voltage.



DWG. No. C-6240



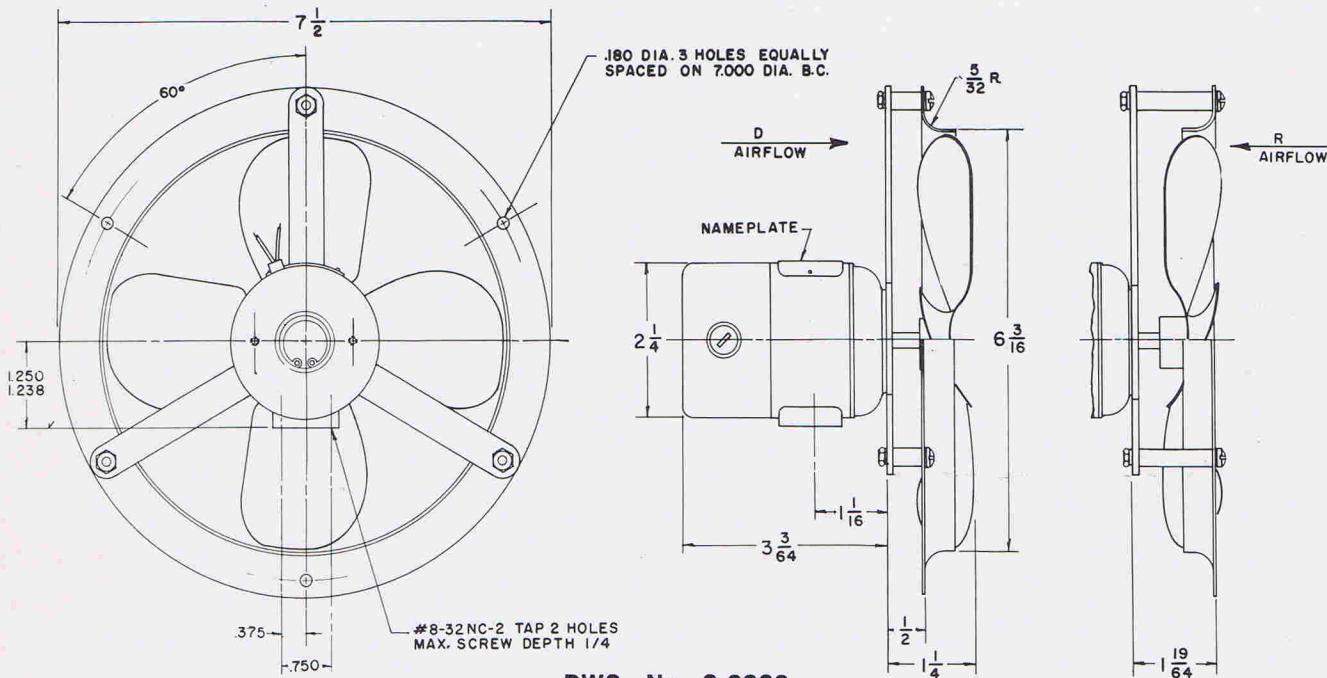
DWG. No. C-6238

# Propeller Fan Units

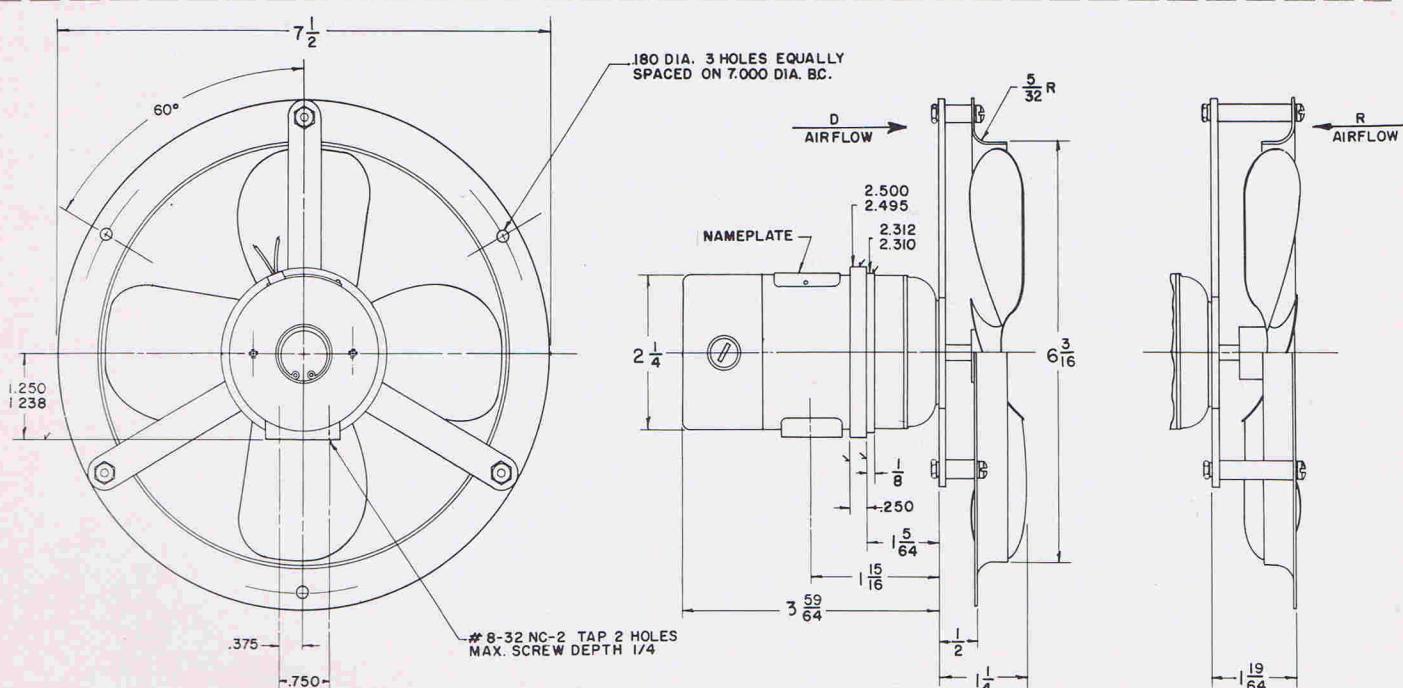
## with D.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics				Max. Temp. Rise Of Winding	Ounces Weight	Type Of Winding	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Volts	Amps	Watts	R.P.M.				
7515-D	220	190	5"	115	.25	27	5500	31°C	22	SHUNT	C-6238
7516-D	125	60	6"	28	.35	10	1750	15°C	24	SHUNT	C-6239
7517-D	250	220	6"	28	.9	26	3450	31°C	36	SHUNT	C-6241
7518-D	125	60	6"	115	.07	8	1750	12°C	24	SERIES	C-6239
7519-D	250	220	6"	115	.22	25	3450	31°C	36	SHUNT	C-6241

Voltages listed are standard. Motors can be supplied for any desired voltage.



DWG. No. C-6239



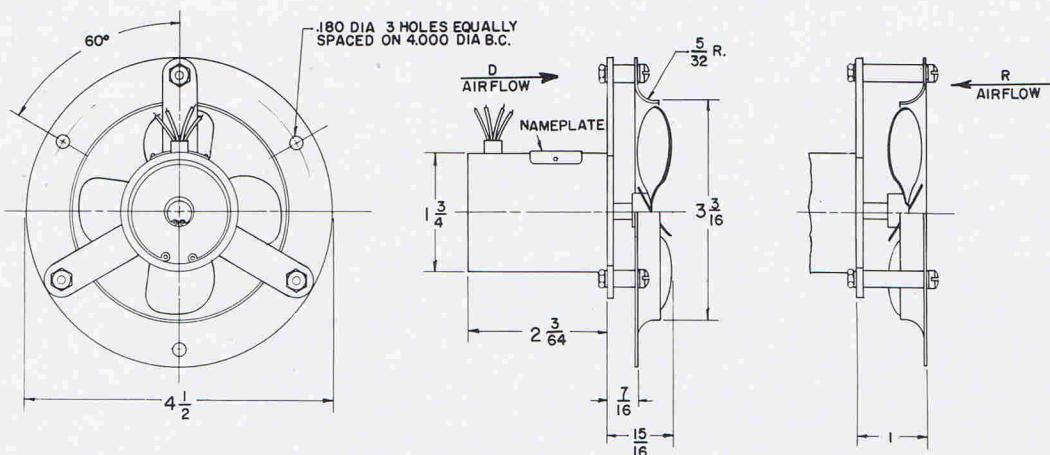
DWG. No. C-6241

# Propeller Fan Units

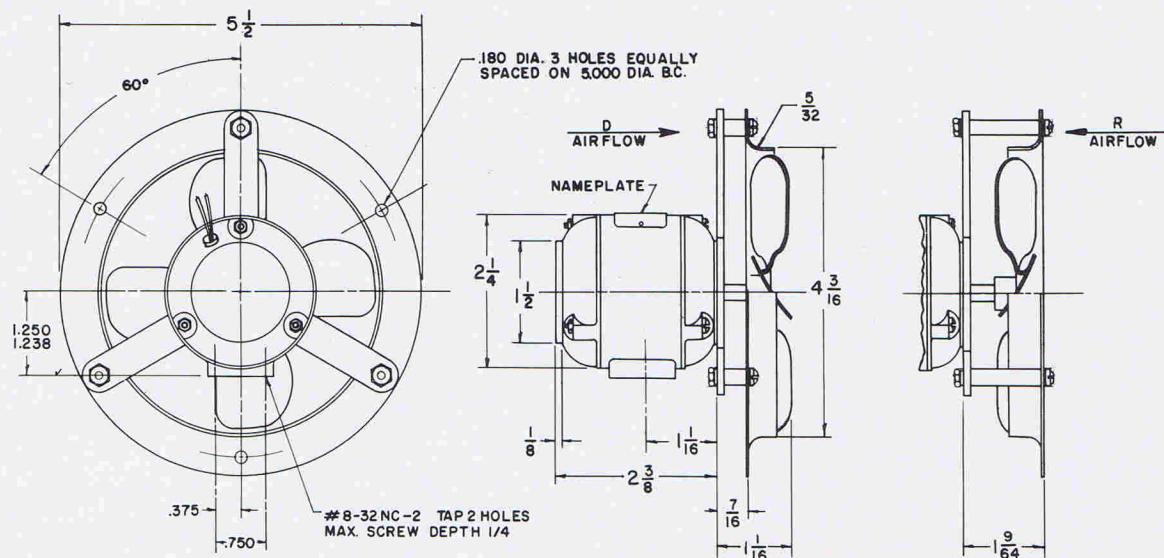
## with 60 Cycle A.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics					Capacitor		Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Phase	Volts	Amps	Watts	R.P.M.	Mfd.	Volts			
8001-D	32	13	3"	1	115	.09	10	3450	.75	220	39°C	13	C-6235
8002-D	82	52	4"	1	115	.085	8	3450	.5	220	16°C	21	C-6245
8003-D	82	52	4"	3	115	.05	7	3450	—	—	13°C	21	C-6245
8004-D	84	35	4¾"	1	115	.125	14	1750	1	220	20°C	25	C-6246
8005-D	84	35	4¾"	3	115	.065	6	1750	—	—	14°C	25	C-6246
8006-D	165	138	4¾"	1	115	.25	20	3450	1	220	19°C	36	C-6242
8007-D	165	138	4¾"	3	115	.3	32	3450	—	—	30°C	36	C-6242

Voltages listed are standard. Motors can be supplied for any desired voltage.



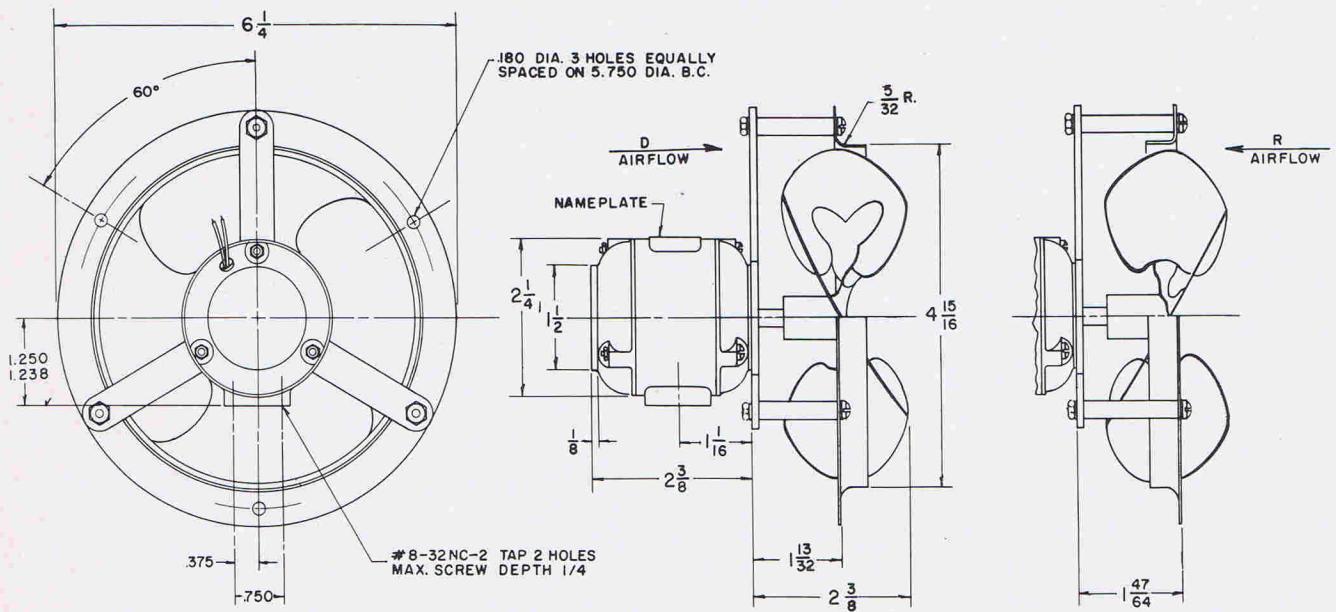
DWG. No. C-6235



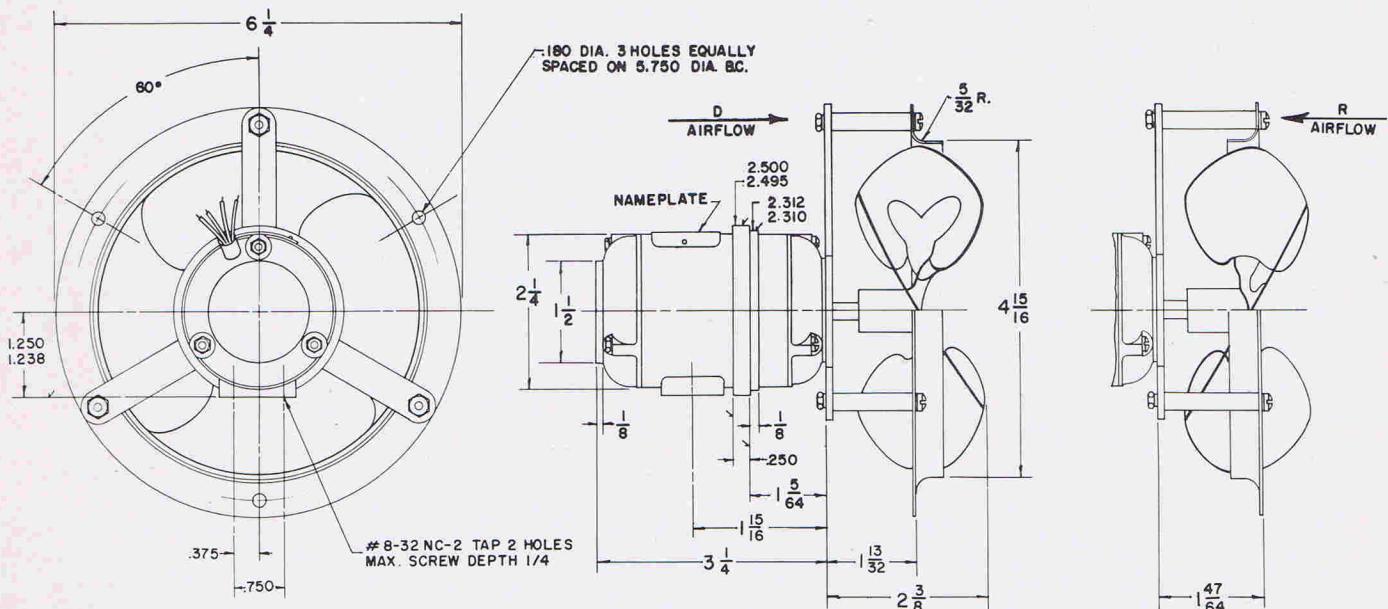
DWG. No. C-6245

# Propeller Fan Units

**with 60 Cycle A.C. Motors**



DWG. No. C-6246



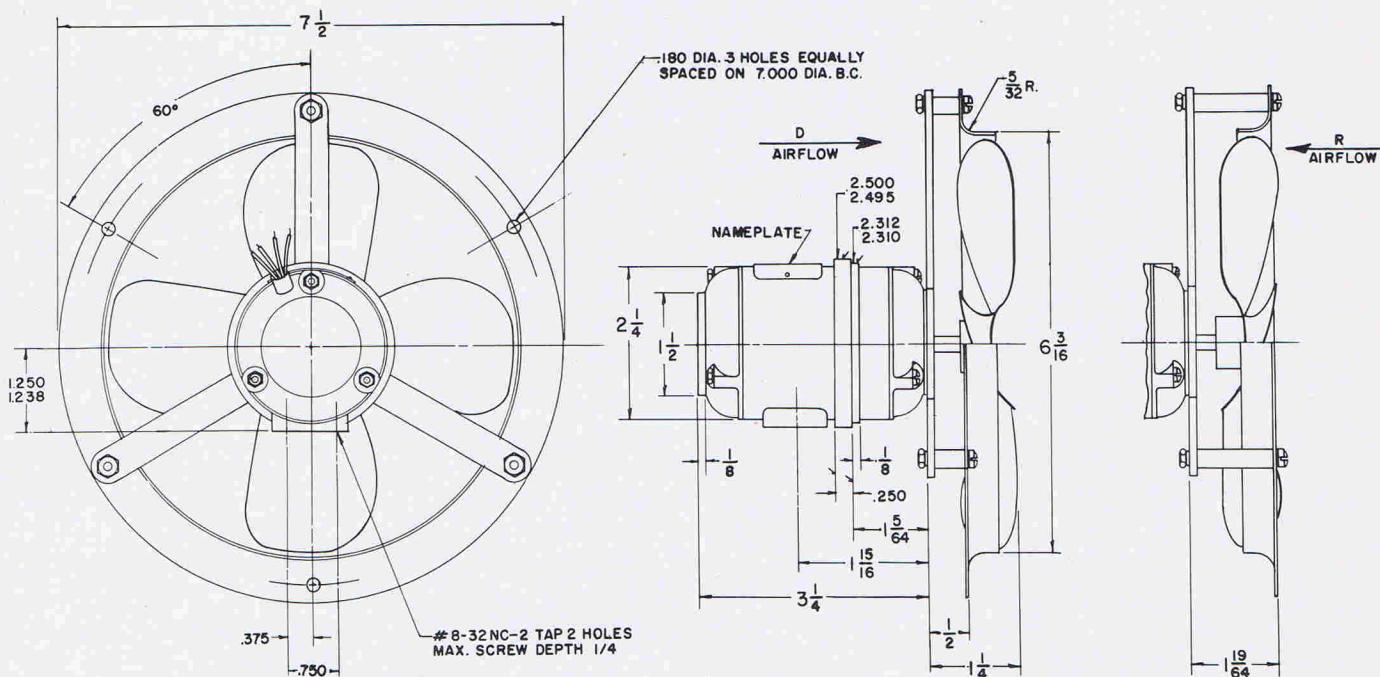
DWG. No. C-6242

# Propeller Fan Units

## with 60 Cycle A.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics					Capacitor		Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Phase	Volts	Amps	Watts	R.P.M.	Mfd.	Volts			
8008-D	70	50	5"	1	115	.123	11	1750	.5	220	16°C	22	C-6247
8009-D	140	105	5"	1	115	.084	10	3450	1	220	15°C	22	C-6247
8010-D	140	105	5"	3	115	.06	6	3450	—	—	12°C	22	C-6247
8011-D	125	60	6"	1	115	.12	13	1750	1	220	20°C	24	C-6248
8012-D	250	220	6"	1	115	.18	26	3450	1.5	220	23°C	36	C-6243
8013-D	125	60	6"	3	115	.06	7	1750	—	—	14°C	24	C-6248
8014-D	250	220	6"	3	115	.31	32	3450	—	—	32°C	36	C-6243

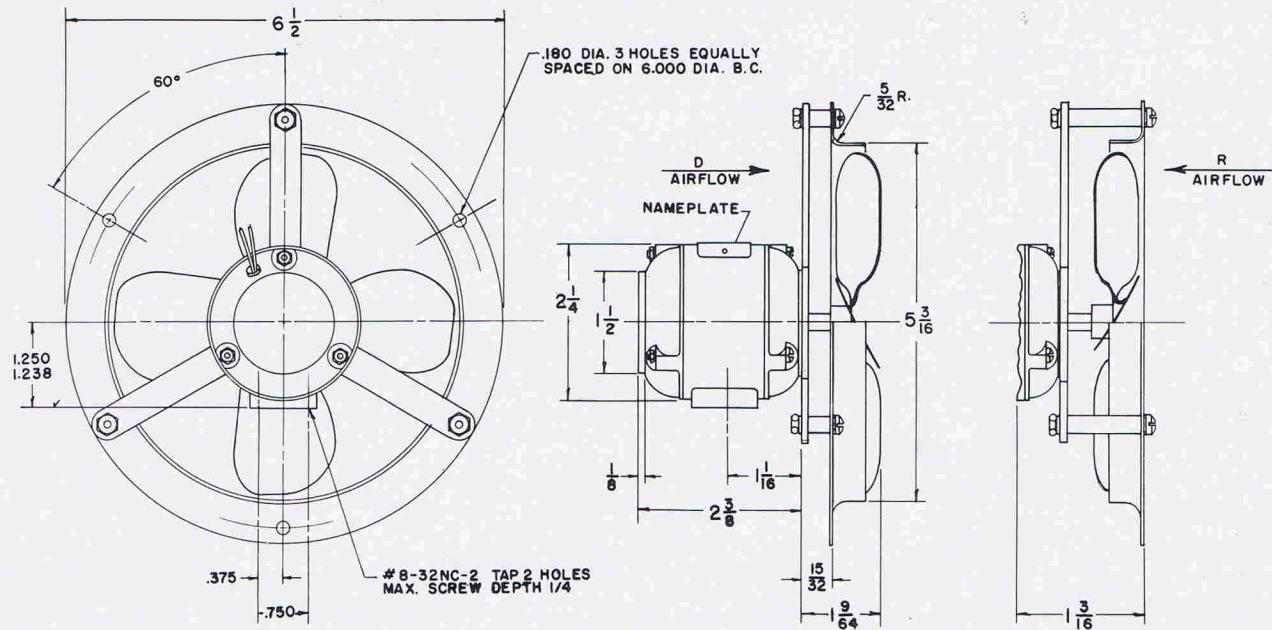
Voltages listed are standard. Motors can be supplied for any desired voltage.



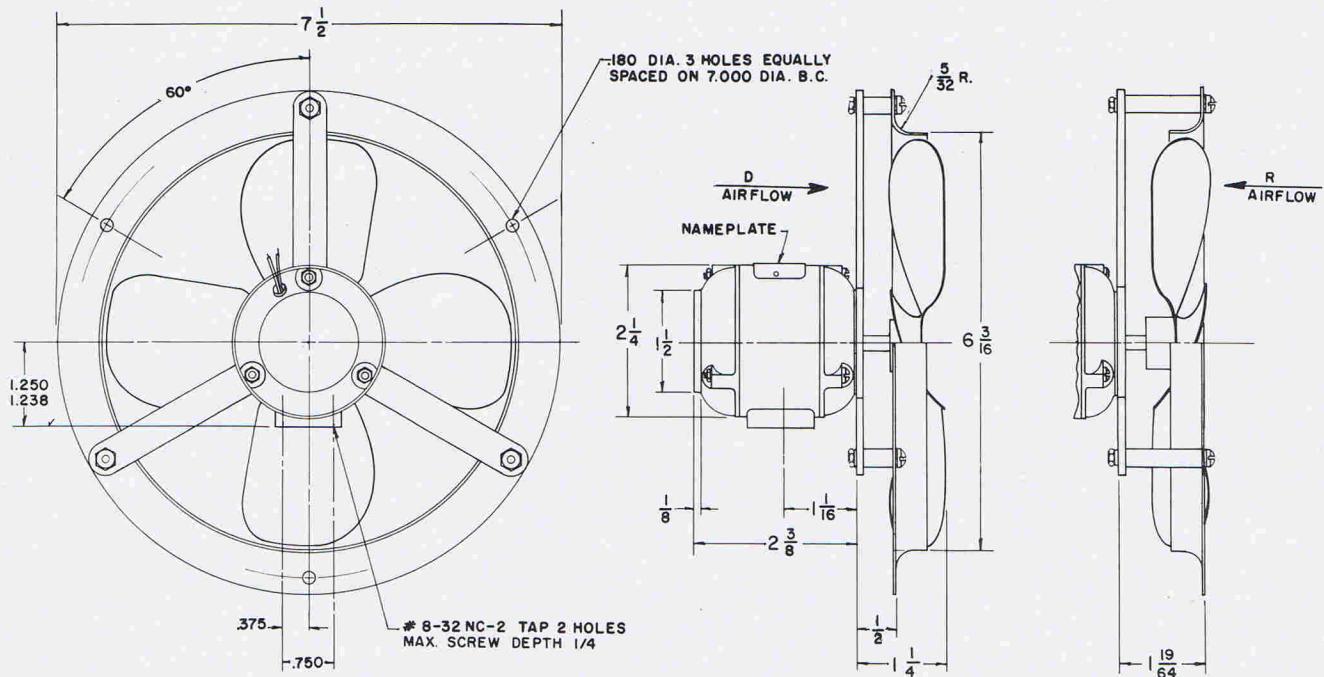
DWG. No. C-6243

# Propeller Fan Units

with 60 Cycle A.C. Motors



DWG. No. C-6247



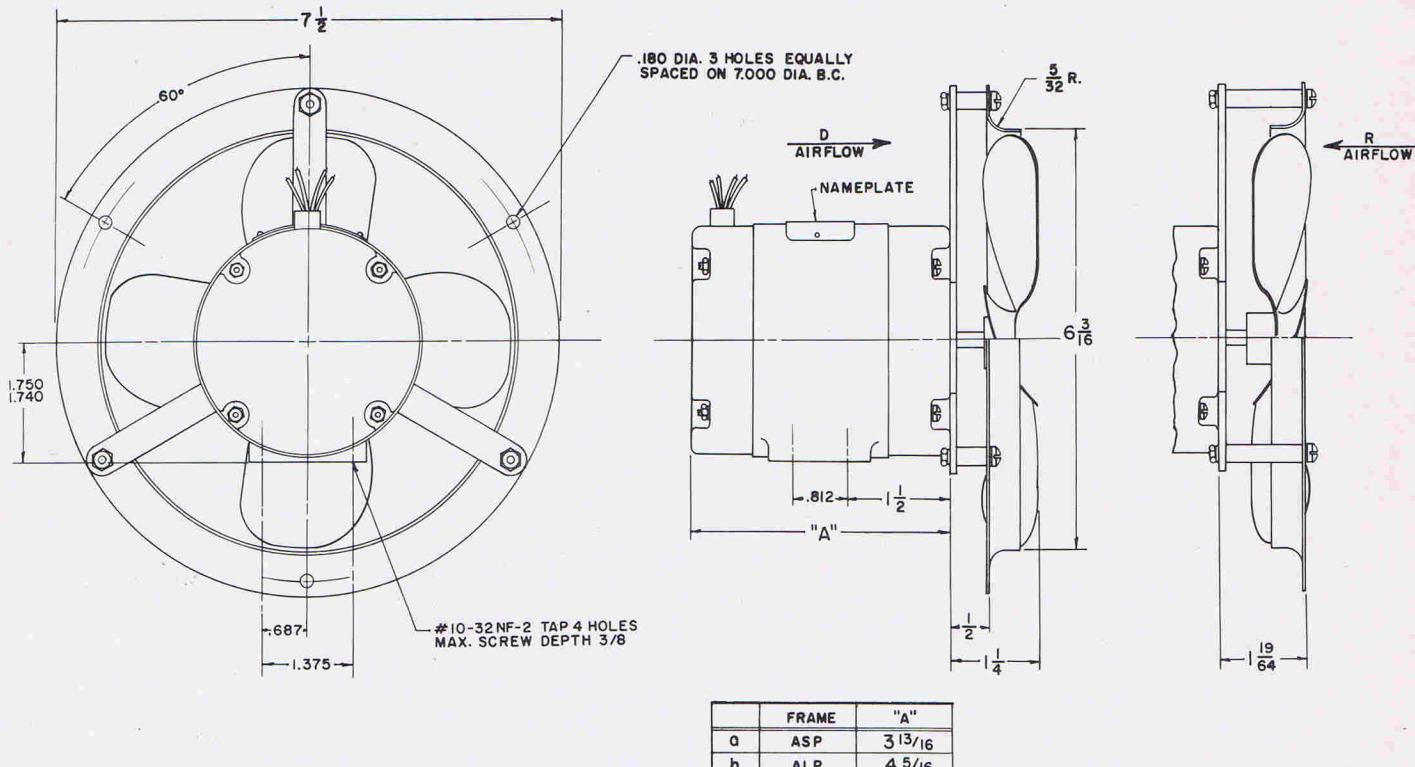
DWG. No. C-6248

# Propeller Fan Units

## with 400 Cycle A.C. Motors

Catalogue Number	Air Delivery		Fan Blade Diameter	Electrical Characteristics					Capacitor		Max. Temp. Rise Of Winding	Ounces Weight	Drawing Number
	Max. C.F.M. 0" S.P.	C.F.M. At .125 S.P.		Phase	Volts	Amps	Watts	R.P.M.	Mfd.	Volts			
8501-D	70	60	3"	1	115	.3	20	7200	.4	220	26°C	20	C-6244
8502-D	105	90	3"	1	115	.22	28	11000	.22	220	20°C	20	C-6244
8503-D	105	90	3"	3	115	.15	13	11000	—	—	18°C	20	C-6244
8504-D	165	138	4 $\frac{3}{4}$ "	1	115	.7	40	3450	.75	220	35°C	58	C-6250
8505-D	260	225	4 $\frac{3}{4}$ "	3	115	.68	55	5500	—	—	21°C	58	C-6250
8506-D	250	220	6"	1	115	.5	50	3450	.3	220	45°C	54	C-6251
8507-D	395	360	6"	3	115	.72	67	5500	—	—	22°C	58	C-6251

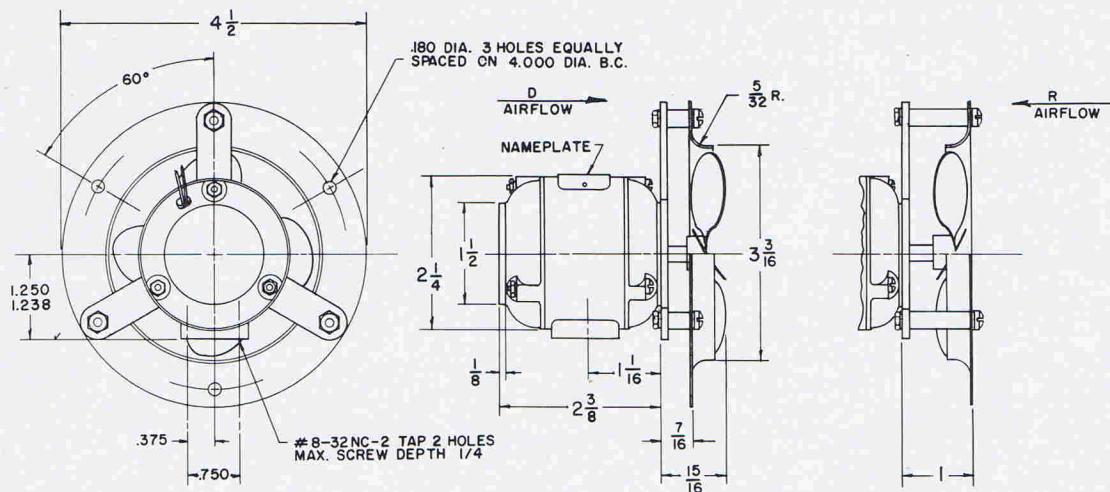
Voltages listed are standard. Motors can be supplied for any desired voltage.



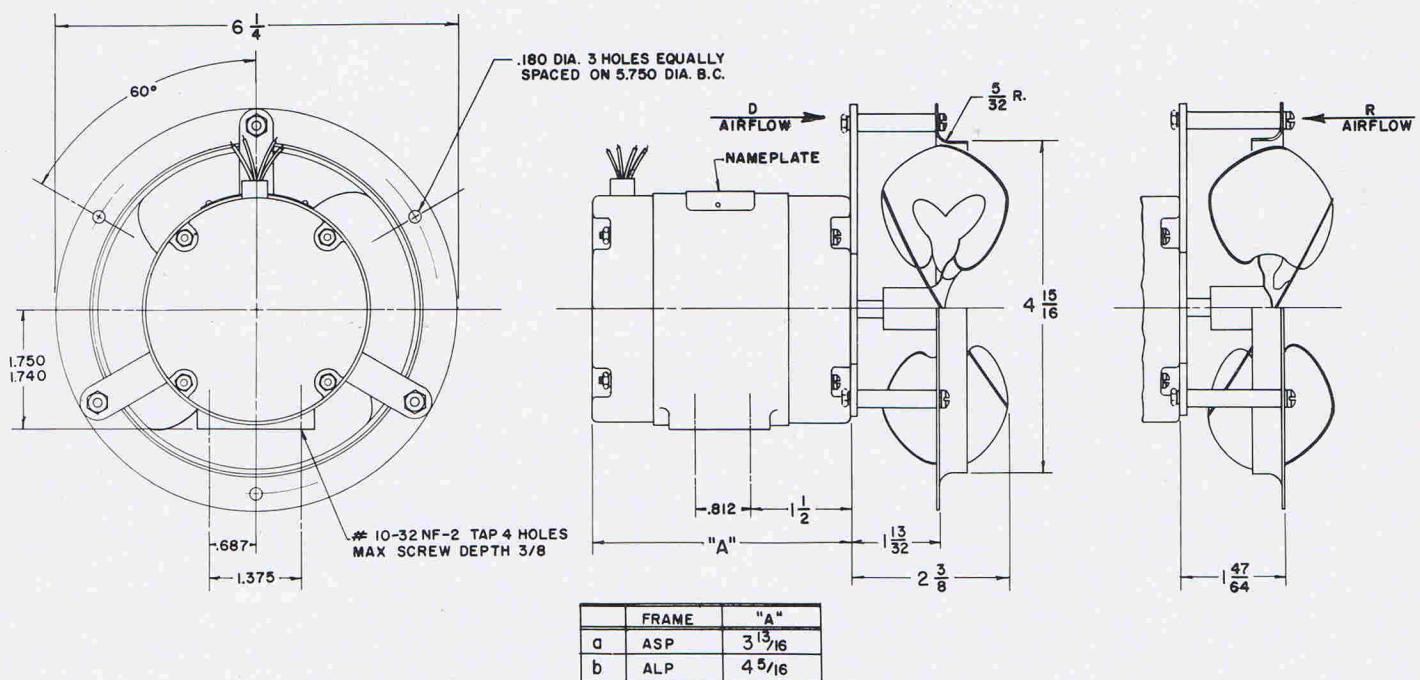
DWG. No. C-6251

# Propeller Fan Units

with 400 Cycle A.C. Motors



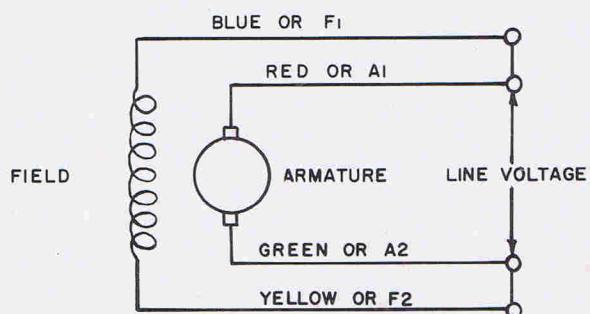
DWG. No. C-6244



DWG. No. C-6250

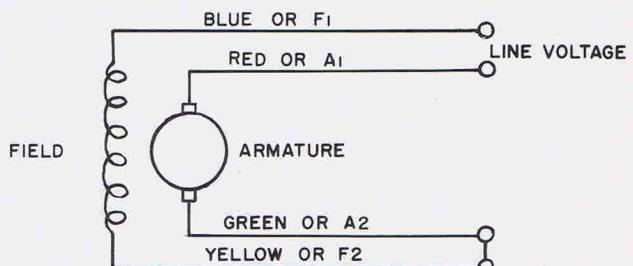
# Standard Connection Diagrams

## D.C. SHUNT MOTOR



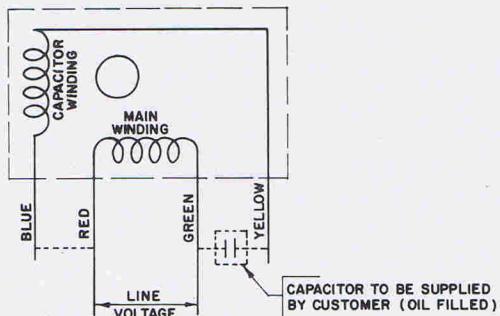
CLOCKWISE ROTATION FACING SHAFT END TO REVERSE ROTATION INTERCHANGE BLUE & YELLOW LEADS.

## D.C. SERIES OR UNIVERSAL MOTOR



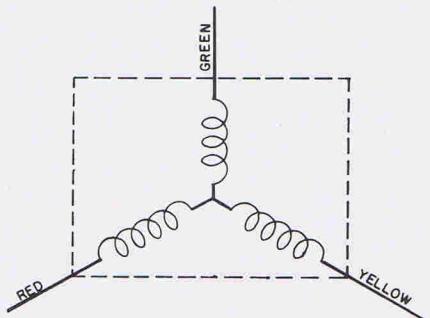
CLOCKWISE ROTATION FACING SHAFT END TO REVERSE ROTATION INTERCHANGE BLUE & YELLOW LEADS.

SINGLE SPEED MOTORS  
FOUR LEAD CAPACITOR TYPE CONNECTION DIAGRAM  
ROTATION REVERSIBLE



NOTE:  
CONNECTION SHOWN FOR CLOCKWISE ROTATION FACING SHAFT EXTENSION.  
TO REVERSE ROTATION INTERCHANGE RED AND GREEN LEADS.

SINGLE SPEED MOTORS  
THREE LEADS THREE PHASE CONNECTION DIAGRAM



NOTE:  
CLOCKWISE ROTATION FACING SHAFT OPPOSITE LEAD END  
THE PHASE SEQUENCE WILL BE RED - YELLOW - GREEN  
TO REVERSE ROTATION INTERCHANGE ANY TWO LEADS

# ELINCO ENGINEERING AVAILABLE

ELINCO's Engineering Staff maintains a constant development program which, during the past year alone, developed in excess of a hundred new units to meet difficult commercial and military specifications.

The ELINCO catalogues referred to below contain complete electrical characteristics and physical specifications on hundreds of representative motors and generators:

## A.C. AND D.C. GENERATORS CATALOG EI-1

More than 150 representative A.C. and D.C. Generators of the following types:

- A.C. Permanent Magnet Generators
- A.C. Sine Wave Generators
- D.C. Dual Field Generators
- D.C. Permanent Magnet Generators  
(Tachometers)
- D.C. Speed-Squared Generators
- D.C. Wound Field Generators

## SYNCHRONOUS MOTORS CATALOG EI-4

Nearly 200 Hysteresis and Salient Pole Induction Synchronous Motors are described. Hysteresis motors are available in single speed, dual speed, three, four and five speeds. Ratings are from 1/750 to 1/6 HP at speeds from 300 to 24000 RPM, frequencies from 15 to 400 cycles, voltages up to 440 volts, 1, 2 or 3 phase. Frame sizes are available from 2 1/4 in. in diameter by 2 1/2 in. long, to 4 3/8 in. in diameter by 8 1/2 in. long. Face, flange or base mountings can be supplied. All types can be supplied with ball bearings, some with sleeve bearings.

## A.C. AND D.C. COMMUTATOR MOTORS CATALOG EI-2

More than 200 representative Commutator Motors of the following types:

- A.C. and D.C. Universal Motors
- A.C. and D.C. Split Field Universal Motors
- D.C. Governor Motors
- D.C. Permanent Magnet Motors
- D.C. Series Motors
- D.C. Split Field Series Motors
- D.C. Separately Excited Shunt Motors
- D.C. Shunt Motors
- D.C. Split Field Shunt Motors

## A.C. SELF-SYNCHRONOUS MOTORS CATALOG EI-5

More than two dozen representative motors of the following types:

- A.C. Differential Motors
- A.C. Phase Shifting Rotary Transformers
- A.C. One and Three Phase Rotating Transformers
- A.C. Rotating Self-Synchronous Motors

## A.C. INDUCTION AND A.C. TORQUE MOTORS CATALOG EI-3

Approximately 100 representative Induction Motors from 15 to 400 cycles, available in one, two or three phase, single or dual speeds, single or dual voltages. Data is included on single phase A.C. Induction Brake Motors.

Also included is complete data on approximately 50 Torque Motors for continuous or intermittent duty, single or multiphase, 60 cycle or odd frequency, and 115 or odd voltage.

## A.C. AND D.C. SERVO COMPONENTS CATALOG EI-6

Nearly 100 representative Motors and Generators of the following types:

- A.C. Low Inertia Induction Servo Motors
- A.C. Induction Generators
- A.C. Motor-Driven Induction Generators
- A.C. Motor-Generator Sets
- D.C. Motor-Generator Sets

ELINCO's Engineering Staff, with over 30 years experience in the specialized field of sub-fractional electrical rotary equipment, is available to tackle the toughest problems of heat, humidity, shock, vibration, torque, acceleration, weight, mounting and special design. Fast delivery on proto-type units — forward complete electrical and mechanical requirements to:



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