Westinghouse Electric Corporation
Small Motor Division
Lima, Ohio, U.S.A. 45802

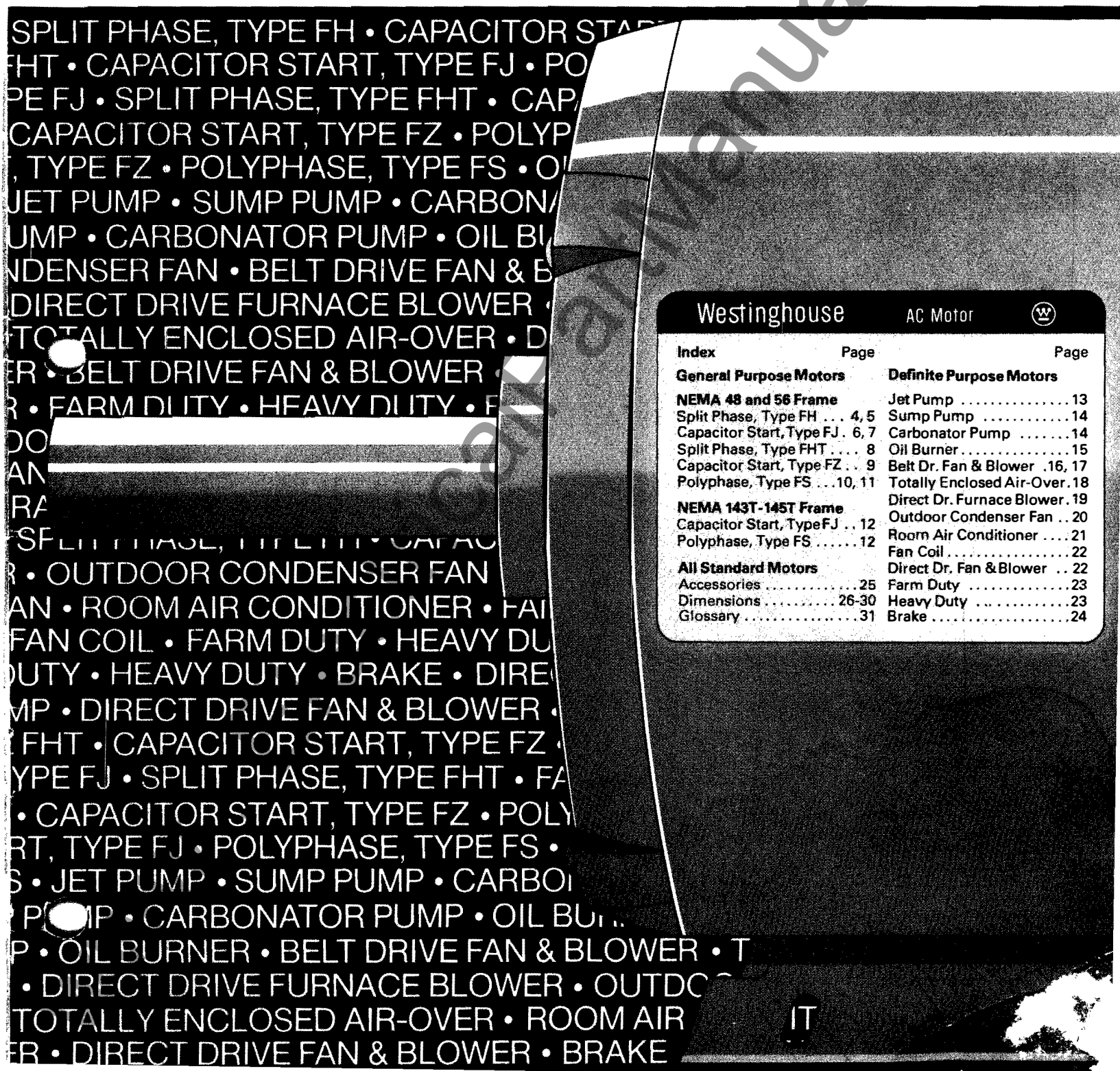
Catalog
2820

Page 1

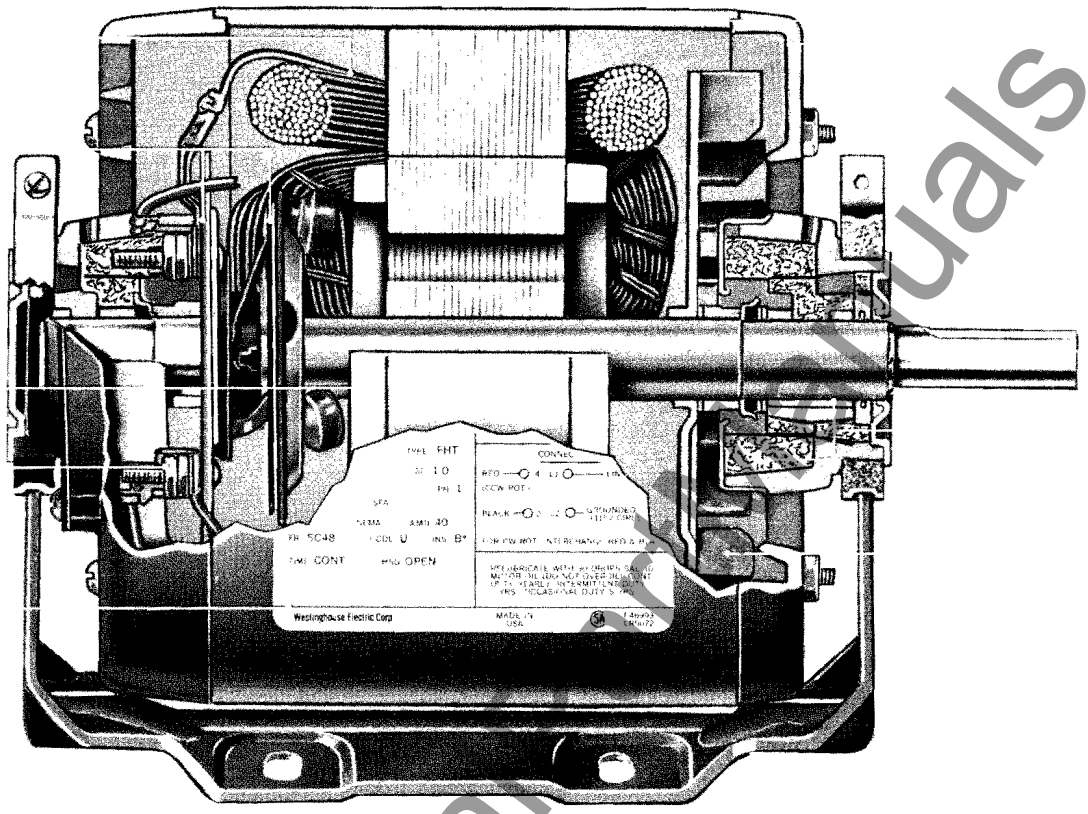
October 5, 1976
New Information
Prices effective October 5, 1976
Subject to change without notice.
(Refer to Selling Policy 2700)
Mailed to: E, D, C/1703/PL

Small Motors:
NEMA 42, 48 and 56 Frames, 1/20 to 5 Hp
Integral Motors:
NEMA 143T and 145T Frame, 1-3 Hp

Small Motors Standard and Stock Ratings



General Purpose Motor Design and Construction Features



(1) Frame and End Brackets
Frames on Westinghouse fractional horsepower motors are of rolled steel construction with both ends precision machined to assure accurate end bracket fits. Both end brackets are made of sturdy reinforced die cast aluminum. All motors conform to NEMA dripproof standards when mounted horizontally.

(2) Corrosion Resistant Shaft
To combat the harmful effects of excessive moisture present on many applications, standard 48 and 56 frame motor shafts are treated to resist corrosion. This treatment reduces the possibility of couplings, pulleys and direct-mounted pump impellers rusting to the shaft.

(3) Lubrication and Bearings
The most advanced sleeve bearing system available is provided by coordinating bearings, lubricant system, and thrust system. Steel backed, wear resistant bronze bearings are used to increase bearing life under stresses such as unbalanced loads, or on applications with unusual vibrations, such as compressors. A high oil flow rate is achieved by coordination of a unique reservoir material in contact with a felt wick. Clean oil is continuously fed to the bearing window by the high density felt contactor wick, assuring positive lubrication. Special bearing grooves provide even oil distribution throughout the bearing. Oil is returned to the reservoir by cupped oil flingers, through a low density felt filter. This assures positive return of clean oil for reuse. Thrust capability has been dramatically improved by use of a tempered steel thrust plate, thrust plate lubricating felt washer, molydisulfide impregnated thrust washer, and locked thrust washer. The molydisulfide impregnated washer is used for its superior thrust handling capabilities over standard nylon washers. This total system combines to provide the necessary oil flow rate for superior radial load and thrust capability, which means increased motor life.

The sleeve bearing lubrication system is designed to operate on light duty applications for years without re-lubrication as long as the belt pull is not against the bearing window.

Standard and general purpose ball bearing motors are factory lubricated, and under normal operating conditions, will require no additional lubrication for ten years. Some definite purpose ball bearing motors, such as jet pump motors, have permanently lubricated bearings. Motors equipped with the latter type bearing have "Permanently Lubricated Ball Bearings" on the nameplate.

(4) Ventilation
A high volume, low pressure, straight through ventilation system maintains a flow of air all the way through the motor. The air enters the motor through the vent holes around the rear bearing hub, is evenly dispersed throughout the motor by an efficient fan and exhausts out the vent holes in the front bracket. This air flow eliminates "hot spots" in the windings and the resulting reduction in motor life.

(5) Nameplate
Mylar nameplate includes all motor specifications as well as lubrication and connection information.

(6) Terminal Board and Conduit Box
The polyester terminal board is easily accessible through the large conduit box in the front end bell. Polyester is moisture and warp resistant, so, the correct spacing between the rotating and stationary portion of the starting switch is maintained.

Combination ¼" spade and stud terminals are utilized for line connections on all standard and general purpose motors. To change voltage or rotation on all standard and general purpose motors (except the rotation on dual voltage 48 frame ratings) merely switch the proper plug-in connectors by following the instructions supplied with the motor.

For adaptability on applications using a cord for connection to the power supply, a strain relief is built into the conduit box on all 48 and 56 frame motors. In addition, a drilled and tapped hole for ½" pipe is provided, should this type of connection be desired.

(7) Dynamically Balanced Rotor
The rotor assembly consists of a rotating governor, a die cast aluminum rotor core and a fan, all accurately positioned on a centerless ground shaft. The entire assembly is then dynamically balanced. This operation reduces vibration and excessive bearing wear due to rotor unbalance, and the motor runs longer, quieter.

(8) Rotating Governors and Stationary Switches
Two types of reliable, positive-action rotating governors are utilized in Westinghouse single phase motors. One type governor operates with a modified Belleville coned disc spring, while the second governor utilizes a basic pivoted-weight design. With each governor, a properly matched terminal board mounted stationary switch is used to obtain the correct switching function required for each particular motor design. The combination of governor and stationary switch assures the starting winding is positively switched out at the proper motor rpm.

All single phase ratings ¾ hp and larger have two stationary switches connected in series for greater reliability.

(9) Moisture Resistant Insulation
Polyester resin film slot insulation, more moisture resistant and with higher dielectric and physical strength than conventional paper insulation, is inserted in all stator slots. After the windings are positioned in the slots, all electrical connections are welded or mechanically spliced, and then insulated for electrical and mechanical strength. The stator windings are tested for early detection of any "shorts" or "grounds", impregnated with thermosetting varnish and baked for high bonding strength and additional resistance to the harmful effects of moisture.

These materials and methods combine in the complete stator assembly the qualities of high moisture resistance, increased physical strength and uniform heat dissipation, all of which directly add to the life expectancy of the motor.

Voltage
All dual voltage, single phase ratings, ⅓ hp and below are connected for lower voltage. Larger ratings are connected for higher voltage, unless otherwise indicated. All three phase ratings are connected for lower voltage. Breakdown and locked rotor torques are reduced approximately 19% when 208-230 volt motors are operated on 208 volts.

Rotation
Standard rotation, unless otherwise noted, is counterclockwise facing the lead or conduit box end. All motors can be reconnected externally for opposite rotation, unless otherwise indicated.

Safety Feastures

Vent Holes
The ventilating openings are located and sized so that foreign matter is restricted from entering the motor.

Grounding
All motors are provided with a green grounding screw located in the conduit box.

Warning Labels
Warning labels are affixed to the motor frame to identify safety operational features.

Motor Burn-Out Protection
A thermally protected motor has a device connected in series with the line which operates to break the line current when overheating occurs in the motor. This overheating could result from rotor jamming, continuous or frequent overloads or obstruction of the ventilation openings. To meet various application requirements, either manual or automatic reset is available.

Westinghouse motor and thermal protector combinations have been tested and recognized under the Component Recognition Program of Underwriters Laboratories, File E-3021, Guide XEWR2, assuring effective reduction of possible motor burnouts.

UL Component Recognition For Motors
All motors listed in this bulletin have Underwriters Laboratories component motor recognition under File E-46993, Guide PRGY2.

Legend for Motor Tables
Bearings
B —Ball bearing
S —Sleeve bearing

Enclosure
OP —Open drip-proof
EN —Enclosed non-ventilated
EX —Explosion proof:
Class I, Group D
Class II, Groups E, F and G

OA —Open air-over
EA —Totally enclosed air-over
FC —Totally enclosed fan cooled, conduit box on frame

Mounting
NF —NEMA 56C flange, round frame
RG —Rigid base
RS —Resilient base
RX —Round frame with resilient rings and extended studs one-half inch beyond nut
ES —Extended studs one-half inch beyond nut
RR —Resilient base with extended studs one-half inch beyond nut
RF —Round frame, no resilient rings
FF —Nema 56C flange with rigid foot

Prices
List prices are suggested only, and are normally subject to discount. Check your discount with your distributor, or your local Westinghouse office.

NEMA 48, 56 and 143T-145T Frame Motors
For standard discounts and conditions of sale, refer to Selling Policy 2700.

Note: Motors listed in Catalog 2820 and designated with Ⓢ are normally stocked and may be purchased in any quantity.

Motors listed in Catalog 2820, which are not designated with Ⓢ may be ordered in quantities of 10 or more. Smaller quantities should be referred to Westinghouse or your local distributor for availability.

Prices are subject to change without notice.

Renewal Parts
Westinghouse renewal parts are available from Authorized Renewal Parts Distributors listed on Page 7 of Selling Policy 2700. Contact your distributor or your local Westinghouse sales office for the Renewal Parts Distributor nearest you.

Further Information
Discounts and Multipliers:
Selling Policy 2700

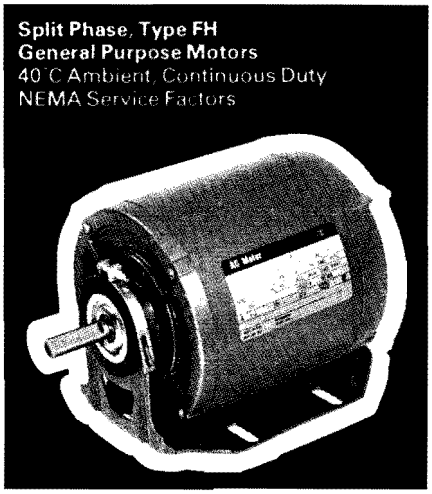
Selector Guide: B350 WE A J73

Replacement Motors: SA 741 WE A I75

Design and Construction Features:
General Purpose Motors
48 Frame Motors, SA 756 WE A J75
56 Frame Motors, SA 10533 WE A I76

Specialty Motors
42 Frame Motors, SA 10534 WE A I76

For any other information, refer to your distributor or to your local Westinghouse sales office.



These standard split phase motors have moderate starting torque with low starting current, and are therefore ideal for a wide variety of applications where the starting load is moderate and where there is frequent starting with relatively long operating periods. The NEMA service factors shown in the table below for open motors enables them to carry small overloads continuously. Enclosed motors have a service factor of 1.0.

Rigid and resilient mountings are available for most standard applications and NEMA C flange motors are available for close coupled centrifugal pumps and other applications requiring open end-mounted ball bearing motors.

Typical Applications
Direct driven fans and blowers
Belt driven fans and blowers
Centrifugal pumps
Business machines

NEMA Service Factors
Open Motors Only

Hp	Service Factor	Hp	Service Factor
1/12	1.40	1/3	1.35
1/8	1.40	1/2	1.25
1/6	1.35	3/4	1.25
1/4	1.35		

Note: Enclosed motors have 1.0 service factor.

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Open, Sleeve Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/8	1725	115	48	RS	2	..	2.4	316P029⑤	$ 48.80	12	.....
1/6	1725	115	48	RG	1	..	4.0	316P346	47.00	12	.....
	1725	115	48	RS	2	..	4.0	316P347⑤	49.00	12	.....
	1725	115	48	RS	2	Ⓐ	4.0	316P258⑤	52.00	12	.....
	1140	115	D48	RG	1	..	4.2	309P337	74.00	18	.....
	1140	115	D48	RS	2	..	4.2	309P266⑤	76.00	18	.....
	1140	115	D48	RS	2	Ⓐ	4.2	314P517	79.00	18	.....
1/4	1725	115	A48	RG	1	..	5.1	316P348⑤	51.00	14	.....
	1725	115	A48	RS	2	..	5.1	316P349⑤	53.00	14	.....
	1725	115	A48	RS	2	Ⓐ	5.1	316P261⑤	56.00	14	.....
	1725	115	SC56	RS	4	Ⓐ	5.1	317P002⑤	56.00	14	.....
	1725	208-230	B48	RS	2	Ⓐ	2.2	316P729⑤	60.00	16	⑦⑧
	1140	115	B56	RG	3	..	5.3	311P079	100.00	25	.....
	1725/1140	115	F48	RS	2	Ⓐ	4.6	309P408	89.00	21	③
	1725/1140	230	F48	RS	2	Ⓐ	2.3	309P608⑤	93.00	21	⑤
1/3	3450	115	B48	RG	1	Ⓐ	4.8	309P514	57.00	16	.....
	1725	115	B48	RS	2	..	5.9	316P350⑤	62.00	16	.....
	1725	115	B48	RS	2	Ⓐ	5.9	316P308⑤	65.00	16	⑦
	1725	115	B48	RS	2	Ⓐ	5.9	316P309⑤	65.00	16	.....
	1725	115	SB56	RS	4	Ⓐ	5.9	317P003⑤	65.00	16	.....
	1725	208-230	D48	RS	2	Ⓐ	2.7	316P294⑤	89.00	18	⑤
	1725	208-230	B48	RS	2	Ⓐ	3.4	316P730⑤	89.00	16	⑦⑧
	1725/1140	230	D56	RS	4	Ⓐ	2.7	311P756⑤	115.00	28	⑤
1/2	3450	208-230	F48	RS	2	Ⓐ	3.5	314P205	79.00	21	⑦⑧
	1725	115	D48	RS	2	Ⓐ	7.2	316P302⑤	91.00	18	.....
	1725	115	56	RS	4	Ⓐ	7.2	317P004⑤	91.00	21	.....
	1725	208-230	D48	RS	2	Ⓐ	3.9	316P731⑤	95.00	18	⑦⑧
	1725	115/208-230	56	RS	4	Ⓐ	9.0	312P491⑤	96.00	21	⑤
	1725/1140	230	D56	RS	4	Ⓐ	3.9	311P316⑤	143.00	28	⑤
3/4	3450	115	F48	RS	2	Ⓐ	9.3	314P209	84.00	21	●
	3450	208-230	F48	RS	2	Ⓐ	4.8	314P163	88.00	21	⑦⑧
	1725	115	B56	RS	4	Ⓐ	11.0	312P615⑤	118.00	25	.....
	1725	115/230	B56	RS	4	Ⓐ	11.0	312P629⑤	123.00	25	⑤
	1725/1140	230	K56	RS	4	Ⓐ	5.1	311P317	184.00	41	⑤
Open, Ball Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/6	1725	115	48	RR	2	..	4.0	316P344⑤	57.00	12	
	1140	115	D48	RS	2	..	4.2	309P436⑤	84.00	18	⑦
1/4	1725	115	A48	RR	2	..	5.1	316P341⑤	61.00	14	⑦
	1725	115	B48	RS	2	Ⓐ	4.2	316P299⑤	84.00	16	.....
	1725/1140	115	F48	RS	2	..	4.6	309P568	94.00	21	⑤⑦
	1140	115	B56	RS	4	..	5.3	311P482⑤	110.00	25	.....
	1725	115	A48	RG	1	..	5.1	316P345⑤	59.00	14	⑦
1/3	1725	115	B48	RR	2	..	5.9	316P342⑤	70.00	16	⑦
	1725/1140	115	D56	RS	4	..	5.3	311P460	116.00	28	⑤
	1725/1140	230	D56	RG	3	..	2.7	312P689	118.00	28	⑤
1/2	1725	115	56	RS	4	..	8.8	312P505⑤	96.00	21	⑦
	1725	115/230	56	RR	4	..	8.8	312P510⑤	100.00	21	②●
	1725/1140	115	D56	RG	3	..	7.7	312P648⑤	142.00	28	⑤
	1725/1140	230	D56	RG	3	..	3.9	312P691	146.00	28	⑤

⑥ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for higher voltage; may be reconnected for lower voltage.

③ These 2-speed motors are variable torque, 2 winding designs for fan application. The following HP ratings are indicated on the nameplate:

1725 Rpm	1140 Rpm
1/6	1/20
1/4	1/12
1/3	1/10

1725 Rpm	1140 Rpm
1/2	1/6
3/4	1/4
1	1/3

⑤ NF=NEMA 56C flange, round frame
RG=Rigid base
RS=Resilient base
RR=Resilient base with extended studs ½" beyond nut.

⑥ Approximate weight in pounds.

⑦ Clockwise rotation when facing end opposite shaft extension.

⑧ Breakdown and locked rotor torques are reduced approximately 19% when motors connected for 230 volts are operated on 208 volts.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Totally Enclosed Non-Ventilated, Ball Bearing, Base Mounted, 60 Hertz, CCW – Reversible											
1/6	1725	115	D48	RG	1	..	2.9	309P494	$ 67.00	18	.....
1/4	1725	115	B56	RS	4	..	3.8	311P472⑤	73.00	25	.....
	1725	230	56	RG	3	⑧	1.9	317P127⑤	78.00	22	.....
1/3	1725	115	F56	RG	3	..	4.6	312P117	88.00	31	.....
Explosion Proof, Totally Enclosed Fan Cooled, Ball Bearing, Base Mounted, 60 Hertz, CCW – Reversible For Class I, Group D; Class II, Groups E, F and G Hazardous Locations											
1/4	1725	115	ZF56	RG	18	Ⓐ	3.5	308P614⑤	143.00	35	④
1/3	1725	115	ZA56	RG	20	Ⓐ	6.6	308P616	158.00	35	.....
Explosion Proof, Totally Enclosed Fan Cooled, NEMA 56C Flange, Ball Bearing, 60 Hertz, CCW – Reversible For Class I, Group D; Class II, Groups E, F and G Hazardous Locations											
1/4	1725	115	ZF56C	NF	19	Ⓐ	3.5	308P640⑤	148.00	35	④
1/3	1725	115	ZA56C	NF	21	Ⓐ	6.6	308P642	163.00	35	.....
NEMA 56C Flange Mounting, Open, Ball Bearing, 60 Hertz, CCW – Reversible											
1/8	1140	115	SB56C	NF	7	..	3.6	309P743	78.00	16	②
	1140	230	SB56C	NF	7	..	1.8	314P523	82.00	16	②
1/6	1140	115	56C	NF	7	..	4.0	309P744⑤	87.00	16	④
1/4	1725	115	SC56C	NF	7	..	5.1	317P128⑤	64.00	16	②
	1140	115	B56C	NF	8	..	5.3	311P084⑤	113.00	23	.....
	1140	230	B56C	NF	8	..	2.7	312P681	117.00	23	.....
1/3	1725	115	SB56C	NF	7	..	5.9	317P129⑤	73.00	20	②
	1725	230	56C	NF	7	..	2.7	314P533	77.00	18	②
	1725/1140	115	D56C	NF	8	..	5.5	311P968⑤	119.00	26	③
	1725/1140	230	D56C	NF	8	..	2.7	312P690	123.00	26	③
1/2	1725	115	56C	NF	8	..	8.8	312P506	99.00	20	.....
	1725/1140	115	D56C	NF	8	..	7.7	311P461⑤	147.00	26	③
50 Hertz, Open, Sleeve Bearing, Base Mounted, CCW – Reversible											
1/4	1425	220	B48	RS	2	Ⓐ	2.7	316P768	72.00	18	.....
1/3	1425	220	B48	RS	2	Ⓐ	3.2	316P769	81.00	21	.....
1/2	1425	220	D56	RS	4	Ⓣ	4.1	311P905⑤	107.00	28	.....

⑥ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② This motor has NEMA 56C flange with 48 frame motor diameter.

③ These 2-speed motors are variable torque, 2 winding designs for fan application. The following HP ratings are indicated on the nameplate:

1725 Rpm	1140 Rpm
1/6	1/20
1/4	1/12
1/3	1/10

1725 Rpm	1140 Rpm
1/2	1/6
3/4	1/4
1	1/3

④ These ratings are totally enclosed non-ventilated.

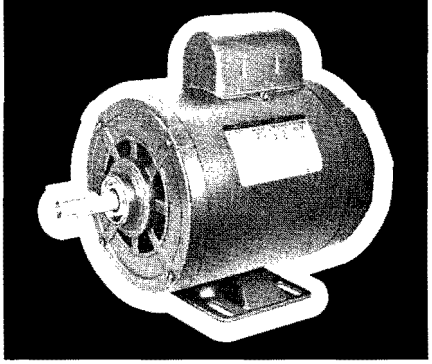
⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

⑥ Approximate weight in pounds.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓣ Type T automatic reset thermal protection, locked and running – not recognized by UL.

Capacitor Start, Type FJ
General Purpose Motors
40°C Ambient, Continuous Duty
NEMA Service Factors



These motors have high starting torque, low starting current, high efficiency, and a high power factor. They operate quietly and the NEMA service factors, shown in the table below, for open motors enables them to carry small overloads continuously. Enclosed motors have a service factor of 1.0.

Rigid and resilient mountings are available for most standard applications; and NEMA C flange motors are available for close coupled centrifugal pumps and other applications requiring open, end mounted ball bearing motors.

The totally enclosed, fan cooled motors listed are designed for relatively hard to start applications that operate in atmospheres of extreme dust, dirt, or airborne abrasives. The totally enclosed construction prevents the entry of any foreign particles and the shroud covered outboard fan blows a stream of air over the outer surfaces of the motor to provide effective cooling.

Typical Applications
Compressors, Pumps, Central Air conditioning equipment, Farm equipment, Business Machines, High pressure sprayer, Gear reducers.

NEMA Service Factors
Open Motors Only

Hp	Service Factor	Hp	Service Factor
1/6	1.35	3/4	1.25
1/4	1.35	1	1.15*
1/3	1.35	1-1/2	1.15
1/2	1.25	2	1.15

* 1 hp, open motor at 3450 rpm has 1.25 service factor.

Note: Enclosed motors have 1.0 service factors.

See page 7 for footnotes.

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Open, Sleeve Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/4	1725	115	SB56	RG	3	..	5.1	317P012⑤	$ 69.00	16	.....
	1725	115/230	B48	RG	1	..	5.1	316P767	73.00	16	②
	1725	115	B48	RS	2	..	5.1	316P271⑤	71.00	16	.....
	1725	115	SB56	RS	4	..	5.1	317P013	71.00	16	.....
	1725	115	B48	RG	1	Ⓐ	5.1	316P267⑤	72.00	16	.....
	1725	115/230	B48	RS	2	Ⓐ	5.0	316P715⑤	79.00	16	⑤
	1140	115/230	B56	RS	4	..	6.3	311P067	126.00	25	③
1/3	1725	115/230	SB56	RG	3	..	5.8	317P017⑤	90.00	16	⑤
	1725	115/230	SB56	RS	4	..	5.8	317P014⑤	92.00	16	⑤
	1725	115/230	SB56	RG	3	Ⓐ	5.8	317P019	94.00	16	⑤
	1725	115/230	SB56	RS	4	Ⓐ	5.8	317P015⑤	96.00	16	⑤
	1140	115/230	D56	RG	3	..	7.8	311P024	142.00	28	⑤
	1140	115/230	D56	RS	4	..	7.8	311P166⑤	144.00	28	⑤
1/2	1725	115/230	B56	RG	3	..	8.8	312P416⑤	108.00	25	②
	1725	115/230	B56	RS	4	..	8.8	312P414⑤	110.00	25	②
	1725	115/230	B56	RG	3	Ⓐ	8.8	312P415⑤	112.00	25	②
	1725	115/230	B56	RS	4	Ⓐ	8.8	312P417⑤	114.00	25	②
3/4	3450	115/230-208	F48	RS	2	Ⓐ	10.2	314P351⑤	99.00	21	②⑬
	1725	115/230	D56	RG	3	..	13.0	312P437⑤	135.00	28	②
	1725	115/230	D56	RS	4	..	13.0	312P440⑤	137.00	28	②
	1725	115/230	D56	RG	3	Ⓐ	13.0	312P438⑤	139.00	28	②
	1725	115/230	D56	RS	4	Ⓐ	13.0	312P436⑤	141.00	28	②
1	3450	115/230	F56	RS	4	Ⓐ	11.8	311P356⑤	115.00	31	②⑦
	1725	115/230	F56	RS	4	Ⓐ	15.4	312P459⑤	156.00	31	⑤
	1725	115/230-208	H56	RS	4	Ⓐ	14.0	311P089⑤	156.00	37	②⑬
Open, Ball Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/4	1725	115/230	B48	RG	1	..	5.4	316P808⑤	81.00	16	.....
	1725	115/230	B48	RS	2	..	4.9	309P381	83.00	16	⑦
1/3	1725	115/230	SB56	RG	3	..	5.8	317P018⑤	98.00	16	⑤
	1725	115/230	SB56	RS	4	..	5.8	317P016⑤	100.00	16	⑦
1/2	1725	115/230	B56	RG	3	..	8.8	312P419⑤	116.00	25	.....
	1725	115/230	B56	RG	3	⑭	8.8	327P007	123.00	25	.....
	1725	115/230	B56	RS	4	..	8.8	312P421⑤	118.00	25	⑤⑦
	1725	115/230	B56	RS	4	Ⓐ	8.8	312P418⑤	122.00	25	.....
	1140	115/230	H56H	RG	14	..	9.4	311P047	188.00	35	.....
	1140	115/230	H56	RS	4	..	9.4	311P206⑤	190.00	37	.....
3/4	3450	115/230	D56	RG	3	..	10.0	311P028⑤	101.00	28	.....
	1725	115/230	D56	RG	3	..	13.0	312P439⑤	143.00	28	.....
	1725	115/230	D56	RG	3	⑭	13.0	327P008	150.00	28	.....
	1725	115/230	D56	RS	4	..	13.0	312P441⑤	145.00	28	⑦
	1725/1140	115	H56	RG	3	..	10.7	312P662	209.00	37	④
1	3450	115/230	F56	RG	3	..	11.8	311P026⑤	117.00	31	.....
	1725	115/230	F56	RG	3	..	15.4	312P455⑤	158.00	31	.....
	1725	115/230	F56	RS	4	..	15.4	312P458⑤	160.00	31	.....
	1725	115/230	F56	RG	3	Ⓐ	15.4	312P457⑤	162.00	31	.....
	1725	115/230	F56	RG	3	⑭	15.4	327P009	165.00	31	.....
	1725	115/230	F56	RS	4	Ⓐ	15.4	312P460⑤	164.00	31	.....
1-1/2	3450	115/230	H56H	RG	14	..	16.4	311P242	153.00	35	.....
	3450	115/230	H56	RS	4	Ⓐ	16.4	311P230⑤	159.00	37	⑦
	1725	115/230	K56H	RG	14	..	20.0	312P463	200.00	39	.....
	1725	115/230	M56H	RG	14	Ⓐ	20.0	312P892⑤	204.00	45	.....
	1725	115/230	K56	RS	4	Ⓐ	16.4	311P337⑤	206.00	41	⑤
2	3450	115/230	K56H	RG	14	..	19.8	311P250⑤	189.00	39	⑤
	3450	208-230	K56	RS	4	Ⓐ	10.9	312P848	194.00	41	⑬
	1725	115/230	TM56H	RG	12	..	26.0	312P472⑤	242.00	44	⑭
	1725	230	TM56H	RG	12	Ⓐ	12.3	312P185⑤	245.00	44	⑤⑩
NEMA 56C Flange Mounting, Open, Ball Bearing, 60 Hertz, CCW – Reversible											
1/4	31725	115	SB56C	NF	7	..	4.9	309P533⑤	82.00	16	⑪
	1725	115/230	SB56C	NF	7	..	4.9	309P439⑤	86.00	16	⑪
	1725	115/230	SB56C	NF	7	Ⓐ	4.9	309P545⑤	90.00	16	⑪
1/3	1725	115/230	56C	NF	8	..	7.2	312P400⑤	103.00	20	⑤
	1725	115/230	56C	NF	8	Ⓐ	7.2	312P401⑤	107.00	20	⑤
1/2	1725	115/230	B56C	NF	8	..	8.8	312P420⑤	121.00	23	⑤
	1725	115/230	B56C	NF	8	Ⓐ	8.8	312P422⑤	125.00	23	⑤
	1140	115/230	H56C	NF	8	..	9.4	311P837⑤	193.00	35	⑤
3/4	1725	115/230	D56C	NF	8	..	13.0	312P442⑤	148.00	26	.....
	1725	115/230	D56C	NF	8	Ⓐ	13.0	312P443⑤	152.00	26	.....
1	1725	115/230	F56C	NF	8	..	15.4	312P456	163.00	29	.....
1-1/2	1725	115/230	K56C	NF	8	..	20.0	312P464	205.00	38	.....

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑤	Notes
NEMA 56C Flange Mounting, Totally Enclosed Fan Cooled, Ball Bearing, 60 Hertz, CCW – Reversible											
1/4	1725	115	B56C	NF	8	..	3.6	311P371⑤	**$122.00**	23	⑫
1/3	1725	115/230	T56C	NF	13	..	6.6	312P802⑤	**115.00**	23	③
1/2	1725	115/230	TB56C	NF	13	..	8.7	312P797⑤	**133.00**	26	.....
3/4	1725	115/230	TD56C	NF	13	..	11.2	312P819⑤	**160.00**	31	.....
1	1725	115/230	TF56C	NF	13	..	14.0	312P793⑤	**175.00**	34	.....
1-1/2	1725	115/230	TK56C	NF	13	..	16.4	311P383	**217.00**	43	⑤
Totally Enclosed Fan Cooled, Ball Bearing, Base Mounted, 60 Hertz, CCW – Reversible											
1/4	1725	115	B56	RG	3	..	3.6	311P150⑤	**117.00**	25	⑫
	1725	115/230	B56	RG	3	..	3.6	311P441	**121.00**	25	③⑫
1/3	1725	115/230	F56	RG	3	..	4.6	311P158⑤	**138.00**	31	③⑫
	1725	115/230	T56	RG	12	..	6.6	312P799⑤	**110.00**	23	③
	1725	115/230	T56	RG	12	Ⓐ	6.6	312P798⑤	**114.00**	23	③
	1725	115/230	TD56	RG	12	Ⓜ	6.6	312P804	**117.00**	28	③
1/2	1725	115/230	TB56	RG	12	..	8.7	312P796	**128.00**	26	.....
	1725	115/230	TB56	RG	12	Ⓐ	8.7	312P795⑤	**132.00**	26	.....
	1725	115/230	TF56	RG	12	Ⓜ	8.7	312P815⑤	**135.00**	32	.....
3/4	1725	115/230	TD56	RG	12	..	11.2	312P789⑤	**155.00**	28	.....
	1725	115/230	TD56	RG	12	Ⓐ	11.2	312P788⑤	**159.00**	28	.....
	1725	115/230	TH56	RG	12	Ⓜ	11.2	312P820⑤	**162.00**	35	.....
1	1725	115/230	TH56H	RG	12	..	14.0	312P792⑤	**170.00**	43	.....
	1725	115/230	TH56H	RG	12	Ⓐ	14.0	312P791⑤	**174.00**	43	.....
	1725	115/230	TK56H	RG	12	Ⓜ	14.0	312P843⑤	**177.00**	43	.....
1-1/2	1725	115/230	TK56H	RG	12	..	16.4	312P584⑤	**212.00**	43	⑤
	1725	115/230	TK56H	RG	12	Ⓣ	16.4	311P402⑤	**216.00**	43	⑤
	1725	115/230	TK56HY	RG	12	⑭	16.4	312P198⑤	**219.00**	43	⑤⑤
50 Hertz, Open, Sleeve Bearing, Base Mounted, CCW – Reversible											
1/4	1425	110/220	D48	RS	2	..	4.6	309P335	**87.00**	18	③
	1425	110/220	D48	RS	2	Ⓐ	4.6	309P367	**91.00**	18	③
1/3	1425	110/220	B56	RG	3	Ⓐ	7.2	312P830	**106.00**	25	③
	1425	110/220	B56	RS	4	..	7.2	312P658	**104.00**	25	③
	1425	110/220	B56	RS	4	Ⓐ	7.2	312P831	**108.00**	25	③
1/2	1425	110/220	D56	RG	3	Ⓐ	8.6	312P833	**124.00**	28	③
	1425	110/220	D56	RS	4	..	8.6	312P659	**122.00**	31	.....
	1425	110/220	D56	RS	4	Ⓐ	8.6	312P834⑤	**126.00**	28	.....
3/4	1425	110/220	F56H	RG	14	Ⓐ	11.4	312P838	**151.00**	31	.....
	1425	110/220	F56	RS	4	..	11.4	312P660	**149.00**	31	.....
	1425	110/220	F56	RS	4	Ⓐ	11.4	312P835⑤	**153.00**	31	.....
Explosion Proof, Totally Enclosed Fan Cooled, Ball Bearing, Base Mounted, 60 Hertz, CCW – Reversible For Class I, Group D; Class II, Groups E, F and G Hazardous Locations											
1/4	1725	115/230	ZF56	RG	18	Ⓐ	3.6	308P615	**165.00**	35	③⑫
1/3	1725	115/230	ZA56	RG	20	Ⓐ	6.6	308P617	**190.00**	35	③
1/2	1725	115/230	ZD56	RG	20	Ⓐ	8.4	308P618	**208.00**	41	.....
3/4	1725	115/230	ZJ56	RG	20	Ⓐ	11.0	308P619	**235.00**	46	.....
1	1725	115/230	ZJ56	RG	20	Ⓐ	14.0	308P620	**250.00**	46	.....
Explosion Proof, Totally Enclosed Fan Cooled, NEMA 56C Flange, Ball Bearing, 60 Hertz, CCW – Reversible For Class I, Group D; Class II, Groups E, F and G Hazardous Locations											
1/4	1725	115/230	ZF56C	NF	19	Ⓐ	3.6	308P641	**170.00**	35	③⑫
1/3	1725	115/230	ZA56C	NF	21	Ⓐ	6.6	308P643	**195.00**	35	③
1/2	1725	115/230	ZD56C	NF	21	Ⓐ	8.4	308P644	**213.00**	41	.....
3/4	1725	115/230	ZJ56C	NF	21	Ⓐ	11.0	308P645	**240.00**	46	.....
1	1725	115/230	ZJ56C	NF	21	Ⓐ	14.0	308P646	**255.00**	46	.....

⑤ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for higher voltage; may be reconnected for lower voltage.

③ Dual voltage motors – connected for lower voltage; may be reconnected for higher voltage.

④ These 2-speed motors are variable torque, 2 winding designs for fan application. The following HP ratings are indicated on the nameplate:

1725 Rpm	1140 Rpm
1/6	1/20
1/4	1/12
1/3	1/10

1725 Rpm	1140 Rpm
1/2	1/6
3/4	1/4
1	1/3

⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

⑥ Approximate weight in pounds.

⑦ Clockwise rotation when facing end opposite shaft extension.

⑧ Shaft out fan end. Centerline of foot mounting hole nearest to limit line for mounting pulley, coupling, etc., is 3.0 inch.

⑨ Type FT two capacitor motors.

⑩ Open with shrouded external fan.

⑪ This motor has NEMA 56C flange with 48 frame motor diameter.

⑫ These ratings are totally enclosed nonventilated.

⑬ Breakdown and locked rotor torques are reduced approximately 19% when motors connected for 230 volts are operated on 208 volts.

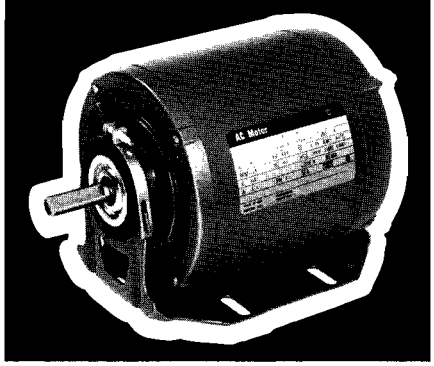
⑭ Type J manual reset thermal protection, locked and running – not recognized by UL.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓜ Type M manual reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓣ Type T automatic reset thermal protection, locked and running – not recognized by UL.

Split Phase, Type FHT
General Purpose Motors
40°C Ambient, Continuous Duty
Service Factor 1.00



These motors are generally used on applications requiring a motor with higher starting torque than the general purpose split phase motors listed in Section A. They are typically used on applications requiring continuous or intermittent duty where operation is infrequent. Starting currents of type FHT motors are in accordance with NEMA standards for Design "O" motors. The high starting current may cause complaints of excessive light flicker. Type FHT motors have a Service Factor of 1.0 and are not suitable for applications where the load will continuously exceed the nameplate rating. Rigid or resilient mounting available.

Typical Applications
Evaporative coolers,
Air circulating fans, Attic fans,
Farm and home workshop tools

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑤	Notes
Open, Sleeve Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/6	1725	115	48	RS	2	..	4.3	316P045⑤	$ 48.80	12	.....
1/4	1725	115	48	RG	1	..	5.8	316P558⑤	48.80	12	.....
	1725	115	48	RS	2	..	5.8	316P559⑤	50.80	12	.....
	1725	115	48	RS	2	Ⓐ	5.8	316P561⑤	53.80	12	.....
	1725	115	SB56Z	RG	3	..	5.8	317P020⑤	48.80	16	③
	1725	115	SD56Z	RS	4	..	5.8	317P021⑤	50.80	13	③
	1725	115	SD56Z	RS	4	Ⓐ	5.8	317P022	53.80	13	③
	1725	115	SD56Z	RS	4	Ⓐ	6.0	317P023⑤	53.80	13	③⑧
1/3	1725	115	B48	RG	1	..	6.2	316P566⑤	54.00	16	.....
	1725	115	B48	RG	1	Ⓐ	6.2	316P174	57.00	16	⑦
	1725	115	B48	RS	2	..	6.2	318P567⑤	56.00	16	.....
	1725	115	B48	RS	2	Ⓐ	6.2	316P571⑤	59.00	16	.....
	1725	230	B48	RS	2	..	3.4	316P293	60.00	16	.....
	1725	115	SB56Z	RG	3	..	6.2	317P024⑤	54.00	16	③
	1725	115	SB56Z	RG	3	Ⓜ	6.2	317P025⑤	60.60	16	③
	1725	115	SB56Z	RS	4	..	6.2	317P026⑤	56.00	16	③
	1725	115	SB56Z	RS	4	Ⓐ	6.2	317P027⑤	59.00	16	③
	1725	115	SB56Z	RS	4	Ⓐ	6.2	317P028⑤	59.00	16	③⑧
	1725	115	SB56Z	RS	4	..	6.2	317P030⑤	59.00	16	③⑧
	1725	230	SB56Z	RS	4	..	3.3	317P032	60.00	16	③
1/2	1725	115	56	RG	3	..	9.0	317P033⑤	68.60	18	.....
	1725	115	56	RS	4	..	7.6	317P039⑤	70.60	18	.....
	1725	115	56	RS	4	Ⓐ	7.6	317P036⑤	73.60	18	⑤
	1725	115	56	RS	4	Ⓜ	7.6	317P098⑤	77.10	21	.....
	1725/1140	115	56	RS	4	..	9.8	312P849	108.00	21	④
	1725/1140	115	56	RS	4	Ⓐ	9.8	312P850	111.00	21	④
Open, Ball Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/4	1725	115	48	RS	2	..	5.8	316P245⑤	58.80	12	.....
1/3	1725	115	B48	RS	2	..	6.2	316P246⑤	64.00	16	.....
	1725	115	SB56Z	RS	4	..	6.2	317P031⑤	64.00	16	③
	1725/1140	115	F48	RS	2	..	6.5	309P383⑤	94.00	21	③④⑦
1/2	1725	115	56	RS	4	..	7.6	317P037⑤	78.60	18	.....
50 Hertz, Open, Sleeve Bearing, Base Mounted, CCW Rotation – Reversible											
1/4	1425	220	B48	RS	2	..	2.5	316P790	66.80	16	.....
1/3	1425	220	F48	RS	2	..	3.0	316P791	72.00	21	.....

⑤ Normally in factory stock.

① Approximate full load amperes.

② Extended through bolts for attaching fan guard.

③ 1/2" diameter shaft with flat.

④ These 2-speed motors are variable torque, 2 winding designs for fan application. The following HP ratings are indicated on the nameplate:

1725 Rpm	1140 Rpm
1/6	1/20
1/4	1/12
1/3	1/10

1725 Rpm	1140 Rpm
1/2	1/6
3/4	1/4
1	1/3

⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

⑤ Approximate weight in pounds.

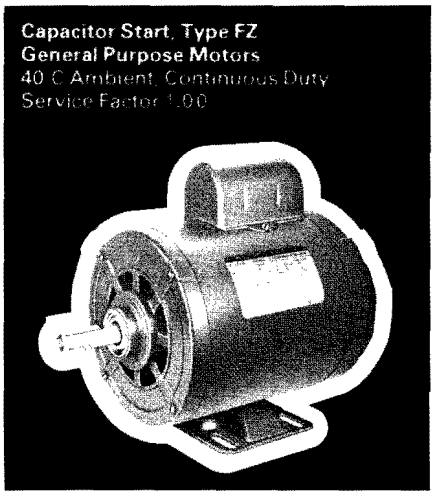
⑦ Clockwise rotation when facing end opposite shaft extension.

⑧ Double shaft extension – same diameter.

⑤ Reduced starting torque for fan and blower applications.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓜ Type M manual reset thermal protection, locked and running – recognized by UL, File E-3021.



For use on applications where only a moderately high starting torque is required. The fundamental design of the Type FZ capacitor-start motor is essentially the same as the Type FJ – the difference being in their electrical performance. Type FZ motors have a Service Factor of 1.0 and are not suitable for applications where the load will continuously exceed the nameplate rating. Rigid and resilient mounting available.

Typical Applications
Attic fans
Evaporative coolers
Farm and home workshop tools

Hp	Rpm	Volts	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Open, Sleeve Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/4	1725	115	A48	RG	1	..	6.1	316P295	$ 65.00	14	.....
	1725	115	A48	RS	2	..	6.1	316P296	67.00	14	.....
1/3	1725	115	B48	RG	1	..	7.0	316P297	69.00	16	.....
	1725	115	SB56	RG	3	..	7.0	317P053⑧	69.00	16	.....
	1725	115/230	SB56	RG	3	..	7.0	317P055⑧	73.00	16	②
	1725	115	SB56	RS	4	..	7.0	317P054⑧	71.00	16	.....
	1725	115/230	SB56	RS	4	..	7.0	317P056⑧	75.00	16	③
1/2	1725	115	56	RG	3	..	9.0	317P057⑧	86.00	18	.....
	1725	115/230	56	RG	3	..	9.0	317P060⑧	90.00	18	②
	1725	115	56	RS	4	..	9.0	317P059⑧	86.00	18	.....
	1725	115/230	56	RS	4	..	9.0	317P061⑧	92.00	18	②
	1725	115	56	RG	3	Ⓐ	9.0	317P058⑧	89.00	18	⑦
3/4	1725	115/230	B56	RG	3	..	13.0	312P483⑧	108.00	25	②
	1725	115/230	B56	RS	4	..	13.0	312P484⑧	110.00	25	②
	1725	115/230	B56	RG	3	Ⓜ	13.0	312P485⑧	112.00	25	②
	1725	115/230	B56	RS	4	Ⓜ	13.0	312P488⑧	114.00	25	②
	1725/1140	115	H56	RS	4	..	10.7	311P182	171.00	37	④
	1725/1140	115	H56	RS	4	Ⓐ	10.7	311P473⑧	175.00	37	④
1	1725	115/230	D56	RG	3	..	15.8	312P499⑧	145.00	28	②
	1725	115/230	D56	RS	4	..	15.8	312P498⑧	147.00	28	②
	1725	115/230	D56	RS	4	Ⓐ	15.8	312P502⑧	151.00	28	②
	1725	115/230	D56	RG	3	Ⓜ	15.8	312P500	152.00	28	②
	1725/1140	230	K56	RS	4	..	6.7	311P397	206.00	41	④
Open, Ball Bearing, Base Mounted, 60 Hertz, CCW Rotation – Reversible											
1/2	1725	115	56Z	RG	3	Ⓜ	9.8	312P480	103.50	21	⑤⑥
	1725	115/230	56	RG	3	Ⓜ	9.0	317P062⑧	105.00	18	②
	1725	115/230	56	RS	4	..	9.0	317P063⑧	100.00	18	②
3/4	1725	115/230	B56	RG	3	Ⓜ	13.0	312P929⑧	123.00	25	②
1	3450	115/230	D56Z	RG	3	Ⓜ	12.5	311P069	129.00	28	②⑧⑨
	1725	115/230	D56	RG	3	Ⓜ	15.8	327P032	160.00	28	②

⑧ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for higher voltage; may be reconnected for lower voltage.

⑧ Dual voltage motors – connected for lower voltage; may be reconnected for higher voltage.

④ These 2-speed motors are variable torque, 2 winding designs for fan application. The following HP ratings are indicated on the nameplate:

1725 Rpm	1140 Rpm
1/6	1/20
1/4	1/12
1/3	1/10

1725 Rpm	1140 Rpm
1/2	1/6
3/4	1/4
1	1/3

⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

⑥ Approximate weight in pounds.

⑦ Clockwise rotation when facing end opposite shaft extension.

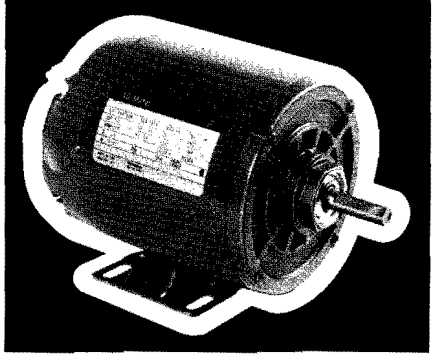
⑧ Double shaft extension – same diameter.

⑨ 5/8" diameter shaft with keyway.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓜ Type M manual reset thermal protection, locked and running – recognized by UL, File E-3021.

Polyphase, Type FS
General Purpose Motors
40°C Ambient, Continuous Duty
NEMA Service Factors



For all continuous duty applications where polyphase circuits are available. These are squirrel cage induction motors with high starting torque and extra high breakdown torque. They are suitable for across-the-line starting and can be reversed while in motion with the proper external control. The NEMA service factors, shown in the table below, for open motors enables them to carry small overloads continuously. Enclosed motors have a service factor of 1.0.

Standard rigid and resilient mountings are available, and so are NEMA C flange mountings for close coupled centrifugal pumps and other applications requiring open, end mounted ball bearing motors. The totally enclosed, fan cooled motors listed are designed for applications that operate in atmospheres of extreme dust, dirt, or airborne abrasives. The totally enclosed construction prevents the entry of any foreign particles and the shroud covered, outboard fan blows a stream of air over the outer surfaces of the motor to provide effective cooling.

Typical Applications
Pumps, Compressors, Machine tools, Industrial fans and blowers, Gear reducers

NEMA Service Factors
Open Motors Only

Hp	Service Factor	Hp	Service Factor
1/6	1.35	1	1.15*
1/4	1.35	1-1/2	1.15
1/3	1.35	2	1.15
1/2	1.25	3	1.15
3/4	1.25	5	1.15

* 1 hp. open motor at 3450 rpm has 1.25 service factor.

Note: Enclosed motors have 1.0 service factor.

Hp	Rpm	Volts ②	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Open, Sleeve Bearing, Base Mounted, 60 Hertz											
1/4	1725	230/460	D48	RG	1	..	1.2	309P420⑤	$ 76.00	18	.....
1/3	1725	230/460	B56	RG	3	..	1.9	311P063⑤	90.00	25	.....
	1725	230/460	B56	RS	4	Ⓐ	1.9	312P237⑤	112.00	25	⑦
1/2	1725	230/460	B56	RG	3	..	2.8	311P037⑤	103.00	25	.....
	1725	230/460	B56	RS	4	..	2.8	311P209⑤	105.00	25	.....
	1725	230/460	B56	RS	4	Ⓐ	2.8	312P238⑤	125.00	25	⑦
3/4	1725	230/460	D56	RG	3	..	3.6	311P041⑤	116.00	28	.....
	1725	230/460	D56	RS	4	..	3.6	311P211⑤	118.00	25	.....
	1725	230/460	D56	RS	4	Ⓐ	3.6	311P717	138.00	28	⑦
1	1725	230/460	F56	RS	4	Ⓐ	3.2	311P413⑤	141.00	31	⑦
Open, Ball Bearing, Base Mounted, 60 Hertz											
1/4	1725	200	D48	RG	1	..	1.2	314P065	84.00	18	.....
	1725	230/460	D48	RG	1	..	1.2	309P421⑤	84.00	18	.....
1/3	1725	200	B56	RG	3	..	1.8	311P143	98.00	25	.....
	1725	230/460	B56	RG	3	..	1.9	311P064⑤	98.00	25	.....
1/2	1725	200	B56	RG	3	..	3.0	312P105⑤	111.00	25	.....
	1725	230/460	B56	RG	3	..	2.8	311P038⑤	111.00	25	.....
	1725	575	B56	RG	3	..	.9	312P664	111.00	25	.....
	1725	230/460	B56	RS	4	..	2.8	311P104⑤	113.00	25	.....
	1140	230/460	H56H	RG	14	..	2.3	311P039⑤	148.00	35	.....
3/4	3450	230/460	B56	RG	3	..	2.6	311P040	100.00	25	.....
	1725	200	D56	RG	3	..	3.6	312P106⑤	124.00	28	.....
	1725	230/460	D56	RG	3	..	3.6	311P042⑤	124.00	28	.....
	1725	575	D56	RG	3	..	1.4	311P218⑤	124.00	28	.....
	1725	230/460	D56	RS	4	..	3.6	311P105⑤	126.00	28	.....
1	3450	230/460	D56	RG	3	..	3.0	311P043⑤	114.00	28	.....
	1725	200	F56	RG	3	..	4.1	312P107⑤	127.00	31	.....
	1725	230/460	F56	RG	3	..	3.6	311P240⑤	127.00	31	.....
	1725	230/460	F56	RS	4	..	3.6	311P355⑤	129.00	31	.....
	1725	230/460	F56	RS	4	Ⓐ	3.2	311P776⑤	149.00	31	⑦
1-1/2	3450	230/460	H56H	RG	14	..	4.8	311P246	140.00	35	.....
	3450	230/460	H56	RS	4	Ⓐ	4.8	312P225	162.00	37	⑦
	1725	200	K56H	RG	14	..	6.0	312P108	141.00	39	.....
	1725	230/480	F56H	RG	14	..	6.0	312P812⑤	141.00	31	.....
	1725	230/460	F56	RS	4	..	6.0	312P814⑤	143.00	31	.....
	1725	230/460	K56	RS	4	Ⓐ	4.3	311P414⑤	163.00	41	⑦
2	3450	230/460	K56H	RG	14	..	5.7	311P252	185.00	39	.....
	3450	230/460	K56	RS	4	Ⓐ	5.7	312P239⑤	187.00	41	⑦
	1725	200	K56H	RG	14	..	6.8	312P109	155.00	39	.....
	1725	230/460	K56H	RG	14	..	6.8	311P299⑤	155.00	39	.....
	1725	575	K56H	RG	14	..	2.5	311P743	155.00	39	◑
	1725	230/460	K56	RS	4	..	6.8	311P339⑤	157.00	41	.....
	1725	230/460	M56H	RG	14	Ⓐ	5.8	312P184	175.00	39	.....
	1725	230/460	K56	RS	4	Ⓐ	5.8	311P415⑧	177.00	41	⑦
3	3450	230/460	K56	RS	4	..	8.2	311P720⑤	188.00	41	⑦
	1725	230/460	TM56HZ	RG	12	..	9.5	311P393⑤	162.00	43	⑤④⑦
5	3450	200	TM56HZ	RG	12	⑨	15.5	312P039	204.00	44	③④⑦
	3450	230/460	TM56HZ	RG	12	⑨	13.8	311P719	204.00	44	③④⑦
NEMA 56C Flange Mounting, Open, Ball Bearing, 60 Hertz											
1/3	1725	230/460	B56C	NF	8	..	1.9	311P167	102.00	23	.....
1/2	1725	200	B56C	NF	8	..	3.0	312P121	107.00	23	.....
	1725	230/460	B56C	NF	8	..	2.8	311P168⑤	107.00	23	.....
3/4	1725	200	D56C	NF	8	..	3.6	312P122	127.00	26	.....
	1725	230/460	D56C	NF	8	..	3.6	311P169⑤	127.00	26	.....
1	1725	200	F56C	NF	8	..	4.1	312P123	132.00	29	.....
	1725	230/460	F56C	NF	8	..	3.6	311P241⑤	132.00	29	.....
1-1/2	1725	200	K56C	NF	8	..	6.0	312P148	146.00	38	.....
	1725	230/460	F56C	NF	8	..	6.0	312P813⑤	146.00	29	.....
2	1725	230/460	K56C	NF	8	..	6.8	311P385	160.00	38	⑦

⑥ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for lower voltage; may be reconnected for higher voltage.

③ ¾" diameter shaft with keyway.

④ Open with shrouded external fan.

⑤ NF = NEMA 56C Flange, Round Frame.
RG = Rigid Base
RS = Resilient Base

⑥ Approximateweight in pounds.

⑦ Conduit box on frame.

⑧ Type S thermal protection, running protection only – not recognized. Two leads brought out from thermal sensing device for connection to external control.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Hp	Rpm	Volts ⑤	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
NEMA 56C Flange Mounting, Totally Enclosed Fan Cooled, Ball Bearing, 60 Hertz											
1/4	725	230/460	56C	NF	8	..	1.1	311P088⑤	$101.00	20	⑧
1/3	1725	230/460	B56C	NF	8	..	1.4	312P111⑤	115.00	23	⑧
1/2	1725	230/460	T56C	NF	13	..	2.8	311P378⑤	128.00	23	⑦
	1140	230/460	TF56C	NF	13	..	2.3	311P466⑧	165.00	34	⑦
3/4	1725	230/460	TB56C	NF	13	..	3.6	311P380⑤	139.00	26	⑦
1	1725	230/460	TD56C	NF	13	..	3.6	311P382⑤	144.00	31	⑦
1-1/2	1725	230/460	TH56C	NF	13	..	4.3	311P384⑤	158.00	38	⑦
Totally Enclosed Fan Cooled, Ball Bearing, Base Mounted, 60 Hertz											
1/4	1725	230/460	56	RG	3	..	1.1	311P129⑤	96.00	21	⑧
	1725	230/460	56	RS	4	..	1.1	311P130⑤	98.00	21	⑧
	1140	230/460	D56	RG	3	..	1.3	311P186⑤	138.00	28	⑧
1/3	1725	230/460	B56	RG	3	..	1.4	311P187⑤	110.00	25	⑧
	1725	575	B56	RG	3	..	.6	311P340	110.00	25	⑧
1/2	1725	230/460	F56	RG	3	..	1.9	311P133⑤	123.00	31	⑧
	1725	575	F56	RG	3	..	.8	311P135	123.00	31	⑧
	1725	230/460	T56	RG	12	..	2.8	311P327⑤	123.00	23	⑦
3/4	1725	230/460	K56H	RG	14	..	2.4	311P771⑤	136.00	39	⑧
	1725	230/460	TB56	RG	12	..	3.6	311P328⑧	136.00	26	⑦
1	1725	230/460	TD56	RG	12	..	3.6	311P329⑤	139.00	28	⑦
1-1/2	1725	230/460	TH56H	RG	12	..	4.3	311P370⑤	153.00	35	⑦
50/60 Hertz, Open, Ball Bearing, Base Mounted											
1/2	1425/1725	206-220/440	B56	RG	3	..	3.2/2.26	312P050	133.30	25	.....
3/4	1425/1725	208-220/440	D56	RG	3	..	3.2/2.92	312P054	149.00	28	.....
1	1425/1725	208-220/440	F56	RG	3	..	3.8/3.6	312P291	151.70	31	.....
	1425/1725	208-220/440	F56	RS	4	..	3.8/3.6	312P298	173.70	31	.....
1-1/2	1425/1725	208-220/440	K56H	RG	14	..	4.8/4.7	312P293	167.10	39	.....
	1425/1725	208-220/440	K56	RS	4	..	4.8/4.7	312P300	189.10	41	.....
50 Hertz, Open, Ball Bearing, Base Mounted											
1/2	1425	220/380	B56	RG	3	..	3.15	312P052⑤	123.00	25	.....
3/4	1425	220/380	D56	RG	3	..	3.0	312P056	136.00	28	.....
1	1425	220/380	F56	RG	3	..	3.7	312P290	139.00	31	.....
1-1/2	1425	220/380	K56H	RG	14	..	4.8	312P295	153.00	39	.....

⑧ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for lower voltage; may be reconnected for higher voltage.

③ ¾" diameter shaft with keyway.

④ Open with shrouded external fan.

⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

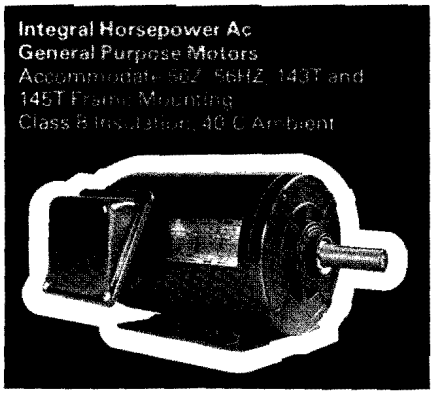
⑥ Approximate weight in pounds.

⑦ Conduit box on frame.

⑧ These ratings are totally enclosed non-ventilated.

⑨ Type S thermal protection, running protection only – not recognized by UL. Two leads brought out from thermal sensing device for connection to external control.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.



The Westinghouse 56/140 frame single and three phase integral horsepower general purpose motors are designed to serve a broad spectrum of markets. These motors have such outstanding features as a heavy rolled steel frame, large ⅞" diameter shaft extension, Class B insulation for long life, and permanently lubricated double-shielded ball bearings. The single phase ratings have a synchro-snap centrifugal switch and two stationary switches connected in series for greater reliability. In addition, the fan cooled single phase and all three phase ratings have frame mounted conduit boxes for easy accessibility in making connections.

Typical Applications
Pumps, Compressor, Fans, Blowers, Farm Machinery

Note: Frame sizes shown are as marked on motor nameplate. However, all motors have special heavy duty rigid base which accommodates 56Z, 56HZ, 143T and 145T frame mounting dimensions.

Hp	Rpm	Volts ②	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Single Phase, Type FJ, Capacitor Start, Open Drip-proof, Ball Bearing 60 Hertz, 1.15 Service Factor, CCW Rotation – Reversible											
1	1800	115/230	H143T	RG	10	..	15.4	313P150⑤	**$162.00**	37	.....
	1800	115/230	H143T	RG	10	Ⓐ	15.4	313P151⑤	**166.00**	37	.....
1-1/2	1800	115/230	K145T	RG	10	..	20.0	313P153⑤	**204.00**	41	.....
	1800	115/230	M145T	RG	10	Ⓐ	20.0	313P254⑤	**208.00**	45	.....
2	1800	115/230	TP145T	RG	11	..	26.0	313P156⑤	**246.00**	48	⑦
Single Phase, Type FJ, Capacitor Start, Totally Enclosed Fan Cooled, Ball Bearing 60 Hertz, 1.00 Service Factor, CCW Rotation – Reversible											
1	1800	115/230	TK143T	RG	11	..	13.5	313P152	**178.00**	43	.....
1-1/2	1800	115/230	TM145T	RG	11	..	16.4	313P155	**220.00**	46	④
2	3600	115/230	TK145T	RG	11	..	19.8	313P199	**209.00**	43	④

Hp	Rpm	Volts ③	Frame	Mtg. ⑤	Dimen. Diag.	Thermal Prot.	Amps ①	Style Number	List Price	Wt. ⑥	Notes
Three Phase, Type FS, Open Drip-proof, Ball Bearing 60 Hertz, 1.15 Service Factor											
3/4	1200	230/460	K143T	RG	10	..	3.2	313P157	**$157.00**	41	.....
1	1800	230/460	F143T	RG	10	..	3.6	313P161	**131.00**	33	.....
	1800	200	F143T	RG	10	..	4.1	313P159	**131.00**	33	.....
	1200	230/460	K145T	RG	10	..	3.7	313P165	**169.00**	41	.....
1-1/2	3600	230/460	F143T	RG	10	..	3.8	313P169	**144.00**	33	.....
	1800	230/460	F145T	RG	10	..	6.0	313P246⑤	**145.00**	33	.....
	1800	200	K145T	RG	10	..	6.0	313P171	**145.00**	41	.....
2	3600	230/460	K145T	RG	10	..	5.5	313P177	**169.00**	41	.....
	1800	230/460	K145T	RG	10	..	6.8	313P181⑤	**159.00**	41	.....
	1800	200	K145T	RG	10	..	6.8	313P179⑤	**159.00**	41	.....
3	3600	230/460	K145T	RG	10	..	8.2	313P185	**190.00**	41	.....
	1800	230/460	TM145T	RG	11	..	9.5	313P193⑤	**166.00**	43	⑦
	1800	200	TM145T	RG	11	..	9.8	313P192	**166.00**	43	⑦
Three Phase, Type FS, Totally Enclosed Fan Cooled, Ball Bearing 60 Hertz, 1.00 Service Factor											
3/4	1200	230/460	TK143T	RG	11	..	3.2	313P158	**173.00**	43	.....
1	1800	230/460	TH143T	RG	11	..	3.6	313P162⑤	**147.00**	39	.....
	1200	230/460	TK145T	RG	11	..	3.7	313P166	**185.00**	43	.....
1-1/2	3600	230/460	TH143T	RG	11	..	3.8	313P170	**161.00**	39	.....
	1800	230/460	TK145T	RG	11	..	4.3	313P174⑤	**161.00**	43	.....
2	3600	230/460	TK145T	RG	11	..	5.5	313P178	**185.00**	43	.....
	1800	230/460	TM145T	RG	11	..	5.8	313P182⑤	**175.00**	46	.....

⑤ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to low voltage, divide by two for the high voltage amperes.

② Dual voltage motors – connected for higher voltage; may be reconnected for lower voltage.

③ Dual voltage motors – connected for lower voltage; may be reconnected for higher voltage.

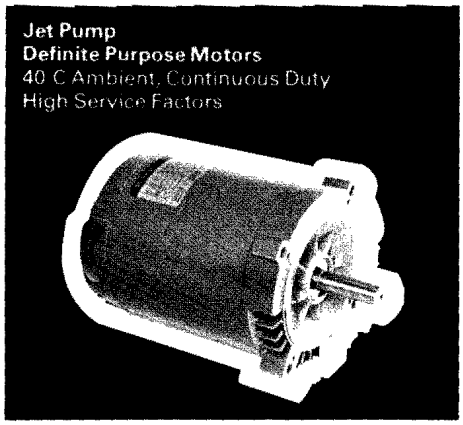
④ Type FT two capacitor motors.

⑤ NF = NEMA 56C Flange, Round Frame
RG = Rigid Base
RS = Resilient Base

⑥ Approximate weight in pounds.

⑦ Open with shrouded external fan.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.



For direct-drive ejector centrifugal pumping. All motors have NEMA 56C flange for vertical or horizontal mounting on standard pumps.

Design Features
NEMA 56C flange rear end bell is die cast aluminum construction for minimum weight and is chemically treated by a special process followed by a zinc chromate primer for maximum protection against alkaline or chlorinated water.

All machined surfaces of the rotor are zinc chromate coated for maximum protection.

Stator windings are given a special impregnation treatment assuring maximum moisture protection and extra long life.

High service factors for all single and three phase jet pumps for high full load rpm.

Jet Pump Service Factors

Hp	Service Factor	Hp	Service Factor
1/3	1.75	1-1/2	1.30
1/2	1.60	2	1.20
3/4	1.50	3	1.15
1	1.40		

Hp	Rpm	Volts②	Frame	Dimen. Diag.	Thermal Prot.	Amps ①	Bearing	Shaft	Style Number①	List Price	Wt. ④	Notes
Open, C Flange, Single Phase, Split Phase, 60 Hertz, Type FH, CW Rotation③												
1/3	3450	115	56C	7	Ⓐ	6.7	SLV/Ball	Keyed	314P425⑤	$ 61.80	15	⑥
	3450	115	56J	7, 9	Ⓐ	6.7	SLV/Ball	Threaded	314P426	64.80	15	⑥
Open, C Flange, Single Phase, Capacitor Start, 60 Hertz, Type FJ, CW Rotation③												
1/3	3450	115/230	56C	7	Ⓐ	7.2	SLV/Ball	Keyed	314P427⑤	69.10	15	⑥
	3450	115/230	56J	7, 9	Ⓐ	7.2	SLV/Ball	Threaded	314P428	73.20	15	⑥
	3450	115/230	56C	7	Ⓐ	7.2	Ball-Ball	Keyed	314P431⑤	74.10	15	⑥
	3450	115/230	56J	7, 9	Ⓐ	7.2	Ball-Ball	Threaded	314P432⑤	76.30	15	⑥
1/2	3450	115/230	B56C	7	●	8.8	SLV/Ball	Keyed	314P429	75.60	18	⑥
	3450	115/230	B56J	7, 9	Ⓐ	8.8	SLV/Ball	Threaded	314P430	78.60	18	⑥
	3450	115/230	B56C	7	Ⓐ	8.8	Ball-Ball	Keyed	314P433⑤	79.60	18	⑥
	3450	115/230	B56J	7, 9	Ⓐ	8.8	Ball-Ball	Threaded	314P434⑤	82.60	18	⑥
3/4	3450	115/230	B56C	7	Ⓐ	11.2	SLV/Ball	Keyed	314P270	89.40	18	⑥
	3450	115/230	B56J	7, 9	Ⓐ	11.2	SLV/Ball	Threaded	314P271	92.40	18	⑥
	3450	115/230	B56C	7	Ⓐ	11.2	Ball-Ball	Keyed	314P278⑤	91.60	18	⑥
	3450	115/230	B56J	7, 9	Ⓐ	11.2	Ball-Ball	Threaded	314P279⑤	96.40	18	⑥
1	3450	115/230	D56C	7	Ⓐ	13.4	SLV/Ball	Keyed	314P272⑤	101.00	22	⑥
	3450	115/230	D56J	7, 9	Ⓐ	13.4	SLV/Ball	Threaded	314P273	104.00	22	⑥
	3450	115/230	D56C	7	Ⓐ	13.4	Ball-Ball	Keyed	314P280⑤	105.00	22	⑥
	3450	115/230	D56J	7, 9	Ⓐ	13.4	Ball-Ball	Threaded	314P281⑤	108.00	22	⑥
1-1/2	3450	115/230	F56C	8	Ⓐ	18.4	Ball-Ball	Keyed	312P364⑤	146.50	29	.....
	3450	115/230	F56J	8, 9	●	18.4	Ball-Ball	Threaded	312P365⑤	153.50	29	.....
2	3450	115/230	K56C	8	Ⓐ	22.4	Ball-Ball	Keyed	312P366⑤	182.80	38	.....
	3450	115/230	K56J	8, 9	●	22.4	Ball-Ball	Threaded	312P367⑤	189.80	38	.....
3	3450	230	TM56C	8	Ⓐ	15.0	Ball-Ball	Keyed	312P368	266.00	43	⑤⑦
	3450	230	TM56J	8, 9	Ⓐ	15.0	Ball-Ball	Threaded	312P369	278.00	43	⑤⑦
Open, C Flange, Single Phase, Capacitor Start, 50 Hertz, Type FJ, CW Rotation③												
1/3	2850	110/220	B56J	7, 9	●	7.7	SLV/Ball	Threaded	314P316	95.00	18	⑥
1/2	2850	110/220	B56J	7, 9	◑	8.4	SLV/Ball	Threaded	314P317⑥	100.00	18	⑥
3/4	2850	110/220	D56J	7, 9	Ⓣ	10.4	SLV/Ball	Threaded	314P332	113.00	22	⑥
Open, C Flange, Three Phase, 60 Hertz, Type FS												
1/2	3450	230/460	56C	7	..	1.6	Ball-Ball	Keyed	314P282⑤	91.80	15	④
	3450	230/460	56J	7, 9	..	1.6	Ball-Ball	Threaded	314P283⑤	95.80	15	⑤
3/4	3450	230/460	B56C	7	..	2.6	Ball-Ball	Keyed	314P573⑥	107.90	18	④
	3450	230/460	B56J	7, 9	..	2.6	Ball-Ball	Threaded	314P574⑥	111.90	18	⑥
1	3450	230/460	D56C	7	..	3.0	Ball-Ball	Keyed	314P575	122.00	24	⑤
	3450	230/460	D56J	7, 9	..	3.0	Ball-Ball	Threaded	314P576	126.00	24	⑥
1-1/2	3450	230/460	D56C	8	..	4.2	Ball-Ball	Keyed	312P782	143.40	26	.....
	3450	230/460	D56J	8, 9	..	4.2	Ball-Ball	Threaded	312P783⑤	150.40	26	.....
2	3450	230/460	H56C	8	..	5.4	Ball-Ball	Keyed	312P784③	171.60	35	.....
	3450	230/460	H56J	8, 9	..	5.4	Ball-Ball	Threaded	312P785	178.60	35	.....
3	3450	230/460	H56C	8	..	9.0	Ball-Ball	Keyed	311P852⑤	202.00	35	.....
	3450	230/460	H56J	8, 9	..	9.0	Ball-Ball	Threaded	312P781	203.00	35	.....

⑤ Normally in factory stock.

① Approximate full load amperes – current values listed for dual voltage motors apply to the low voltage; divide by two for the high voltage amperes.

③ Dual voltage, single phase ratings ½ hp and below are connected for lower voltage. Larger ratings are connected for higher voltage, unless otherwise indicated. All three phase ratings are connected for lower voltage.

③ Rotation viewed from end opposite shaft extension.

④ Approximate weight in pounds.

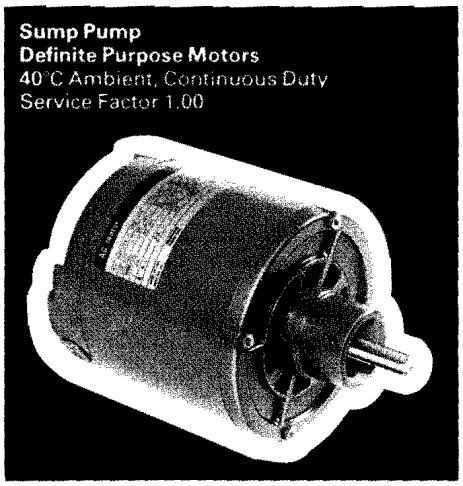
⑤ Fan cooled design, add .35 inch to overall length.

⑥ This motor has NEMA 56C flange with 48 frame motor diameter.

⑦ Type FT two capacitor motor.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Ⓣ Type T automatic reset thermal protection, locked and running – not recognized by UL.



Sump Pump
Definite Purpose Motors
40°C Ambient, Continuous Duty
Service Factor 1.00

Motor has extended hub cast as part of rear bracket for direct mounting to stand pipe, inside or outside fit. Vent holes in frame and enclosed top bracket eliminate need for canopy.

Design Features
The motor is designed for prolonged life in moist atmospheres with such features as:
Syncro-snap switch, baked enamel finish, moisture resistant terminal board, corrosion resistant shaft and baked varnished stator.

The sleeve bearings are permanently lubricated.

Hp	Rpm	Volts	Frame	Dimen. Diag.	Thermal Protection	Amps①	Extended Hub Dimensions Inches		Style Number	List Price	Wt. ④	Notes
Open, Sleeve Bearing, Single Phase, 60 Hertz, Type FHT, CW Rotation②												
1/3	1725	115	48Y	6	Ⓐ	6.2	I.D.	1.507	316P200⑤	$51.10	12	③
	1725	115	48Y	6	Ⓐ	6.2	O.D.	1.632	316P229⑤	51.10	12	③
	1725	115	48Y	6	..	6.2	I.D.	1.507	316P226⑤	47.80	12	③
	1725	115	48Y	6	..	6.2	O.D.	1.632	316P228⑤	47.80	12	③

③ Normally in factory stock.

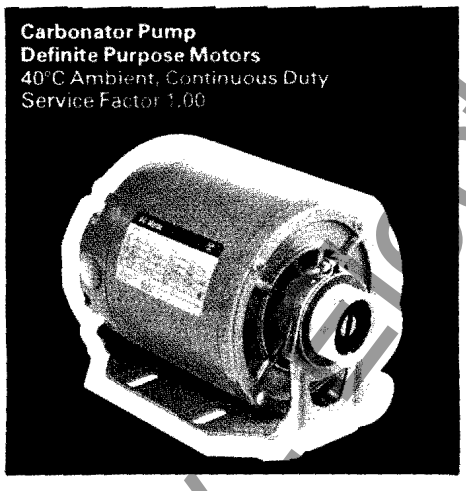
① Approximate full load amperes.

② Rotation viewed from end opposite shaft extension. Can be reconnected at terminal board for opposite direction of rotation.

③ Accessories such as float type or weight type switches and 3 conductor cord and plugs can be mounted on sump pump motors in minimum lots of 500. Refer to Westinghouse for details.

④ Approximate weight in pounds.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.



Carbonator Pump
Definite Purpose Motors
40°C Ambient, Continuous Duty
Service Factor 1.00

Specially designed machined hub and short shaft for close coupling of carbonator pump to motor, eliminates need for pump mounting brackets and shaft couplings. Used on vending machines, under counter beverage dispensers, and ice making machines.

Type FH motors have moderate starting torque with low starting current and are ideal for use where there is frequent starting with relatively long operating periods.

Type FHT motors have higher starting torque and higher starting current which may cause complaints of excessive light flicker. They are typically used on applications requiring continuous or intermittent duty where operation is infrequent. Type FHT motors have a service Factor of 1.00 and are not suitable for applications where the load will continuously exceed the nameplate rating.

The lubrication system for the sleeve bearing construction offers permanent lubrication with positive contact. A flinger ring prevents moisture flowing along shaft to lubrication system.

Hp	Rpm	Volts	Frame	Mounting ②	Dimen. Diag.	Thermal Protection	Amps①	Style Number	List Price	Wt. ④	Notes
Open, Sleeve Bearing, Single Phase, Split Phase, 60 Hertz, Type FHT, CCW Rotation⑤											
1/4	1725	115	48Y	RS	5	Ⓐ	5.8	316P496⑥	$56.80	12	.....
	1725	115	A48Y	RS	5	Ⓐ	5.1	316P498	59.00	14	⑥
1/3	1725	115	B48Y	RS	5	Ⓐ	6.2	316P497⑤	62.00	16	.....

③ Normally in factory stock.

① Approximate full load amperes.

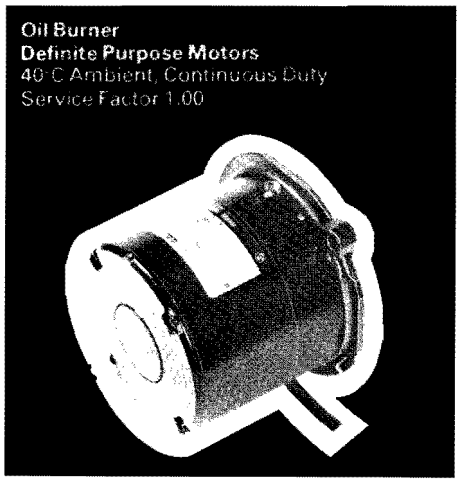
Resilient base.

③ Rotation viewed from end opposite shaft extension.

④ Approximate weight in pounds.

⑤ Type FH split phase motor; service factor = 1.35

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.



These motors are designed especially for both high and low pressure domestic oil burners. They are highly efficient motors with low starting current and moderate starting torque to provide quiet, economical operation. The standardized type N and type M flange mounting assures easy application to all types of burners. Enclosure and all mounting dimensions such as location of ears, diameter or rabbet fit and shaft size are all in accordance with NEMA standards and will fit either 48 or 56 frame mountings.

All motors are equipped with sleeve bearings and manual reset Thermoguard® protection which guards against dangers of high temperature conditions while eliminating the hazards of automatic restarting. Various directions of rotation and several lead lengths and locations are offered to meet all types of requirements.

The attractive black finish of these motors complements the design features of standard burner units and also serves as an excellent primer to match other oil burner components.

Hp	Rpm	Volts	Frame	Mounting ②	Dimen. Diag.	Thermal Protection	Amps ①	Enclosure	Leads⑤	Style Number	List Price	Wt. ④	Notes
Sleeve Bearing, Single Phase, Split Phase, 60 Hertz, Type FH, CW Rotation③													
1/8	1725	115	SE48N	N-Flg.	15	Ⓜ	2.8	OP	20" Leads@3:00	316P359⑥	$48.00	10	.....
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.8	OP	20" Leads@3:00	316P794⑥	48.00	10	⑥⑦
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.8	OP	10" Cable@5:00	316P404⑥	48.00	10	⑦
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.5	EN	10" Cable@5:00	316P825⑥	48.00	10	⑦
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.8	OP	8.5" Cable@10:00	316P413⑥	48.00	10	.....
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.5	EN	20" Leads@3:00	316P687⑥	48.00	10	⑥⑦
	1725	115	SE48N	N-Flg.	15	Ⓜ	2.8	OP	20" Leads@3:00	316P401⑥	48.00	10	⑤
1/7	3450	115	SD48M	M-Flg.	15	Ⓜ	2.8	OP	20" Cable@3:00	316P905⑥	59.00	11	⑦⑧
	3450	115	SD48M	M-Flg.	15	Ⓜ	2.8	EN	20" Cable@3:00	316P928⑥	59.00	11	⑦⑧
1/6	1725	115	SC48N	N-Flg.	15	Ⓜ	3.2	OP	20" Leads@3:00	316P409⑥	52.00	12	⑥⑦
	1725	115	SC48N	N-Flg.	15	Ⓜ	3.2	EN	20" Leads@3:00	316P717⑥	52.00	12	⑥⑦
1/4	3450	115	A48N	N-Flg.	15	Ⓜ	3.5	OP	20" Leads@3:00	316P912	70.50	15	⑥⑦
	1725	115	A48N	N-Flg.	15	Ⓜ	3.7	EN	20" Leads@3:00	316P699⑥	62.00	15	⑥⑦
Sleeve Bearing, Single Phase, Split Phase, 50 Hertz, Type FH, CW Rotation													
1/6	1425	220	SB48N	N-Flg.	15	Ⓜ	1.7	OP	20" Cable@3.00	316P709	72.00	13	⑥⑦

⑤ Normally in factory stock.

① Approximate full load amperes.

② Mounting ears at 1:30-7:30, when viewing end opposite shaft extension.

③ Viewed from end opposite shaft extension.

④ Approximate weight in pounds.

⑤ CCW rotation.

⑥ Equipped with provision for mounting a 4 x 4 conduit box.

⑦ Can be reconnected at terminal board for opposite direction of rotation. Terminal board located in shaft extension bracket.

⑥ Equipped with provision for mounting a 2 x 4 conduit box.

Ⓜ Type M manual reset thermal protection, locked and running – recognized by UL, File E-3021.

For belt driven furnace fans and blowers. FH type motors have low starting current and are therefore ideal for applications of frequent starting with relatively long operating periods. FJ type motors in addition to low starting current also have high efficiency and a high power factor.

NEMA Service Factors

Hp	Service Factor	Hp	Service Factor
1/6	1.35	3/4	1.25
1/4	1.35	1	1.15
1/3	1.35	1-1/2	1.15
1/2	1.25	2	1.15

Special Features
All of the motors have the following special benefits:

Dynamic balancing of rotor assembly to reduce vibration.

Rubber ring resilient mounting dampens residual vibration and electrical noise.

Starting torque designed to bring blower to speed at a uniform rate.

Hp	Rpm	Volts①	Frame	Mounting ②	Dimen. Diag.	Thermal Protection	Amps ③	Bearing	Style Number Rotation⑤ CW	Style Number Rotation⑤ CCW	List Price	Wt. ④	Notes
Open, Single Phase, Split Phase, 60 Hertz, Type FH													
1/6	1725	115	48	RS	2	Ⓐ	4.0	S	316P257⑤	316P258⑤	$ 52.00	12	.....
	1725	208/230	A48	RS	2	Ⓐ	1.65	S	316P728	.....	56.00	14	.....
1/4	1725	115	A48	RS	2	Ⓐ	5.1	S	316P260⑤	316P261⑤	56.00	14	.....
	1725	115	A48	RS	2	Ⓐ	5.1	S	.....	316P758⑤	56.00	14	⑤
	1725	115	SC56	RS	4	Ⓐ	5.1	S	317P070	317P002⑤	56.00	14	.....
	1725	208/230	B48	RS	2	Ⓐ	2.2	S	316P729⑤	.....	60.00	16	.....
1/3	1725	115	B48	RS	2	Ⓐ	5.9	S	316P308⑤	316P309⑤	65.00	16	.....
	1725	115	B48	RS	2	Ⓐ	5.9	S	.....	316P759⑤	65.00	16	⑤
	1725	115	SB56	RS	4	Ⓐ	5.9	S	317P071⑤	317P003⑤	65.00	16	.....
	1725	208-230	B48	RS	2	Ⓐ	3.4	S	316P730⑤	.....	69.00	16	.....
	1725	208-230	D48	RS	2	Ⓐ	2.7	S	.....	316P294⑤	69.00	18	.....
1/3-1/10	1725/1140	115	D56	RS	4	Ⓐ	5.3/3.6	S	.....	311P086	111.00	28	.....
	1725/1140	230	D56	RS	4	Ⓐ	2.7/1.8	S	.....	311P756⑤	115.00	28	.....
1/2	3450	115	F48	RS	2	Ⓐ	6.4	S	314P249	.....	75.00	21	.....
	3450	208-230	F48	RS	2	Ⓐ	3.5	S	314P205	.....	79.00	21	.....
	1725	115	D48	RS	2	Ⓐ	7.2	S	316P301⑤	316P302⑤	91.00	18	.....
	1725	115	D48	RS	2	Ⓐ	7.2	S	.....	316P760⑤	91.00	18	⑤
	1725	115	56	RS	4	Ⓐ	7.2	S	317P005⑤	317P004⑤	91.00	21	.....
	1725	208-230	D48	RS	2	Ⓐ	3.9	S	316P731⑤	.....	95.00	18	.....
	1725	115/208-230	56	RS	4	Ⓐ	9.0	S	312P492⑤	312P491⑤	96.00	21	.....
1/2-1/4	1725/1140	115	B56	RS	4	Ⓐ	9.0/6.3	S	.....	312P880⑤	139.00	25	.....
1/2-1/6	1725/1140	230	D56	RS	4	Ⓐ	9.0/6.3	S	.....	311P316⑤	143.00	28	.....
3/4	3450	115	F48	RS	2	Ⓐ	9.3	S	314P209	.....	84.00	21	.....
	3450	208/230	F48	RS	2	Ⓐ	4.8	S	314P163	.....	88.00	21	.....
	1725	115	B56	RS	4	Ⓐ	11.0	S	312P621⑤	312P615⑤	118.00	25	.....
	1725	115/230	B56	RS	4	Ⓐ	11.0	S	312P630	312P629⑤	123.00	25	.....
3/4-1/4	1725/1140	115	K56	RS	4	Ⓐ	10.8/5.9	S	.....	312P552	170.00	41	.....
	1725/1140	230	K56	RS	4	Ⓐ	5.1/2.9	S	.....	311P317	184.00	41	.....
1	1725	115/230	F56	RS	4	Ⓐ	13.0	S	.....	311P297⑤	150.00	31	.....

⑤ Normally in factory stock.

① All dual voltage and single phase ratings 1/3 hp and below are connected for lower voltage. All three phase ratings are connected for lower voltage. Larger ratings are connected for higher voltage, unless otherwise indicated. Breakdown and locked rotor torques are reduced approximately 19% when 208-230 volt motors are operated on 208 volts.

② RS = Resilient base.

③ Approximate full load amperes – current values listed for dual voltage motors apply to the low voltage; divide by two for the high voltage amperes.

④ Approximate weight in pounds.

⑤ Rotation viewed from end opposite shaft extension. May be reversed at the terminal board.

⑤ This motor base has mounting holes adaptable for either 48 or 56 Fr. mounting and 5/8" shaft adapter and key. See configuration on following page.

Ⓐ Type A automatic reset thermal protection, locked and running – recognized by UL, File E-3021.

Hp	Rpm	Volts①	Frame	Mounting ②	Dimen. Diag.	Thermal Protection	Amps ③	Bearing	Style Number Rotation⑤ CW	Style Number Rotation⑤ CCW	List Price	Wt. ④	Notes
Open, Single Phase, Capacitor Start, 60 Hertz, Type FJ													
1/2	3450	115/208-230	F48	RS	2	Ⓐ	6.6	S	.....	314P050⑤	$ 76.00	21	.....
	1725	115/208-230	B56	RS	4	●	8.8	S	312P435	312P433⑤	114.00	25	⑤
3/4	3450	115/208-230	F48	RS	2	●	10.2	S	.....	314P351⑤	99.00	21	.....
	3450	115/230	D56	RS	4	Ⓐ	10.0	S	311P448⑤	.....	99.00	28	.....
	1725	115	D56	RS	4	Ⓐ	13.0	S	312P454⑤	.....	136.00	28	.....
	1725	115/208-230	D56	RS	4	Ⓣ	13.0	S	.....	312P452⑤	141.00	28	.....
1	3450	115/230	F56	RS	4	Ⓐ	11.8	S	311P356⑤	.....	115.00	31	.....
	1725	115/208-230	H56	RS	4	Ⓐ	14.0	S	.....	311P089⑤	156.00	37	.....
	1725	115/230	F56	RS	4	●	15.4	B	.....	312P460⑤	164.00	31	.....
1-1/2	3450	115/230	H56	RS	4	Ⓣ	16.4	B	311P230⑤	.....	159.00	37	.....
	1725	115/230	K56	RS	4	Ⓐ	16.4	B	311P726	311P337⑤	206.00	41	⑤
2	3450	208-230	K56	RS	4	Ⓐ	11.0	B	.....	312P848	194.00	41	.....
Open, Single Phase, Split Phase, 50 Hertz, Type FH													
1/4	1425	220	D48	RS	2	Ⓐ	2.3	S	.....	316P768	72.00	18	.....
1/3	1425	220	F48	RS	2	Ⓐ	2.6	S	.....	316P769	81.00	21	.....
1/2	1425	220	D56	RS	4	Ⓣ	4.1	S	.....	311P905⑤	107.00	28	.....
Open, Single Phase, Capacitor Start, 50 Hertz, Type FJ													
1/4	1425	110/220	D48	RS	2	Ⓐ	4.6	S	.....	309P367⑤	91.00	18	.....
1/3	1425	110/220	B56	RS	4	Ⓐ	7.2	S	.....	312P831⑤	108.00	25	.....
1/2	1425	110/220	D56	RS	4	Ⓐ	8.6	S	.....	312P834⑤	126.00	28	.....
3/4	1425	110/220	F56	RS	4	Ⓐ	11.4	S	.....	312P835⑤	153.00	31	.....
Open, Three Phase, 60 Hertz, Type FS													
1/3	1725	230/460	B56	RS	4	Ⓐ	1.9	S		312P237⑤	112.00	25	⑦
1/2	1725	230/460	B56	RS	4	Ⓐ	2.8	S		312P238⑤	125.00	25	⑦
3/4	1725	230/460	D56	RS	4	Ⓐ	3.6	S		311P717	138.00	28	⑦
1	1725	230/460	F56	RS	4	Ⓐ	3.2	S		311P413⑤	141.00	31	⑦
	1725	230/460	F56	RS	4	Ⓐ	3.2	B		311P776⑤	149.00	31	⑦
1-1/2	3450	230/460	H56	RS	4	Ⓐ	4.8	B		312P225	162.00	37	⑦
	1725	230/460	K56	RS	4	●	4.3	B		311P414⑤	163.00	41	⑦
2	3450	230/460	K56	RS	4	●	5.7	B		312P239⑤	187.00	41	⑦
	1725	230/460	K56	RS	4	Ⓐ	5.8	B		311P415⑤	177.00	41	⑦

⑤ Normally in factory stock.

① All dual voltage and single phase ratings ⅓ hp and below are connected for lower voltage. All three phase ratings are connected for lower voltage. Larger ratings are connected for higher voltage, unless otherwise indicated. Breakdown and locked rotor torques are reduced approximately 19% when 208-230 volt motors are operated on 208 volts.

② RS = Resilient base.

③ Approximate full load amperes – current values listed for dual voltage motors apply to the low voltage; divide by two for the high voltage amperes.

④ Approximate weight in pounds.

⑤ Rotation viewed from end opposite shaft extension. May be reversed at the terminal board.

⑥ Connected for 115 volts – may be connected for 230 volts at terminal board.

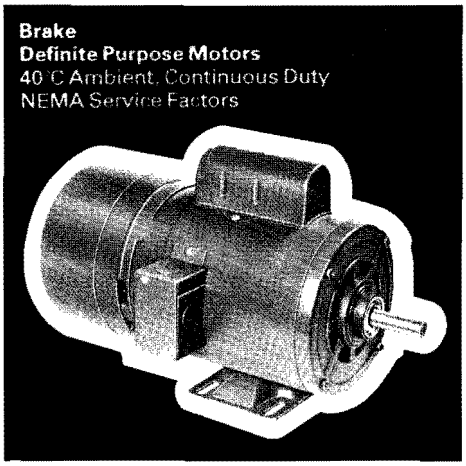
⑦ Conduit box on frame.

⑧ Type FT – two capacitor motor.

Ⓐ Type A automatic reset thermal protection, locked and running recognized by UL, File E-3021.

Ⓣ Type T automatic reset thermal protection, locked and running – not recognized by UL.

Combination 48/56 Frame Base



A line of single phase and polyphase motors equipped with a magnetic brake. The brake torque on each rating is three pound-feet continuous. Motors are available as rigid mounted or round frame with NEMA C flange mounting. The NEMA service factors, shown in the table below, for open motors enables them to carry small overloads continuously. Enclosed motors have a service factor of 1.00.

The brake is internally wired so that proper voltage is always applied to the brake coil regardless of voltage connection.

Typical Applications
Overhead doors, machine tools, index mechanisms, hoists, conveyors and many other installations where quick stops and positive holding are required.

NEMA Service Factors
Open Motors Only

Hp	Service Factor	Hp	Service Factor
1/3	1.35	3/4	1.25
1/2	1.25	1	1.15

Note: Enclosed motors have 1.00 service factor.

Hp	Rpm	Volts ③	Frame	Mounting ②	Dimen. Diag.	Thermal Protection	Amps ①	Enclosure ⑤	Style Number	List Price	Wt. ④	Notes
Ball Bearing, Single Phase, Capacitor Start, 60 Hertz, Type FJ, CCW Rotation ⑥												
1/3	1725	115/230	56C	NF	23	..	7.2	OP	312P403	**$267.00**	33	⑦
	1725	115/230	F56C	NF	23	..	4.6	EN	311P703	**279.00**	50	⑦
1/2	1725	115/230	B56C	NF	23	..	8.8	OP	312P423	**285.00**	40	⑦
	1725	115/230	F56C	NF	23	..	6.4	EN	311P995	**305.00**	50	⑦
3/4	1725	115/230	D56	RG	22	..	13.0	OP	312P444	**307.00**	39	⑦
	1725	115/230	D56C	NF	23	..	13.0	OP	312P445	**312.00**	46	⑦
Ball Bearing, Three Phase, 60 Hertz, Type FS												
1/3	1725	230/460	B56C	NF	23	..	1.9	OP	311P710	**267.00**	40	⑦
	1725	230/460	B56	RG	22	..	1.4	EN	311P709	**274.00**	34	⑦
	1725	230/460	B56C	NF	23	..	1.4	EN	311P711	**279.00**	40	⑦
1/2	1725	230/460	B56	RG	22	..	2.8	OP	311P406	**275.00**	34	⑦
	1725	230/460	F56	RG	22	..	1.9	EN	311P712	**287.00**	44	⑦
	1725	230/460	B56C	NF	23	..	2.8	OP	311P713	**280.00**	40	⑦
	1725	230/460	F56C	NF	23	..	1.9	EN	311P714	**292.00**	50	⑦
3/4	1725	230/460	D56	RG	22	..	3.6	OP	311P715	**288.00**	39	⑦
	1725	230/460	D56C	NF	23	..	3.6	OP	311P716	**293.00**	46	⑦
	1725	230/460	F56	RG	22	..	2.5	EN	311P997	**300.00**	44	⑦
	1725	230/460	F56C	NF	23	..	2.5	EN	311P998	**305.00**	50	⑦
1	1725	230/460	F56	RG	22	..	3.6	OP	311P811	**291.00**	44	⑦
	1725	230/460	F56C	NF	23	..	3.6	OP	311P996	**296.00**	50	⑦

① Approximate full load amperes – current values listed for dual voltage motors apply to the low voltage; divide by two for the high voltage amperes.

② RG = Rigid Base.
NF = NEMA 56C flange, round frame.

③ All dual voltage, single phase ratings, ⅓ hp and below are connected for lower voltage. Larger ratings are connected for higher voltage, unless otherwise indicated. All three phase ratings are connected for lower voltage.

④ Approximate weight in pounds.

⑤ OP = Open.
EN = Enclosed, non-ventilated.

⑥ Rotation viewed from end opposite shaft extension.

⑦ These motors are for horizontal floor or side wall mounting. For other mountings, refer to Westinghouse.