

GENERAL PURPOSE AC MOTORS

56C FLANGE, SINGLE PHASE FRACTIONAL AND INTEGRAL HP

OMT Series



OMT13-18-56CB
shown smaller
than actual size.



- **Rolled Steel AC Motors:**
0.33 to 2 HP
- **NEMA 56C Frame**
- **NEMA Design B**
- **115/208 to 230 Volt**
- **TEFC (Totally Enclosed Fan Cooled)**
- **Single-Phase**
- **Class F Insulation**
- **Premium-Grade Quality**
- **1.15 Service Factor**
- **Heavy Gauge Bolt-On, Bolt-Off NEMA 56-Frame Removable Base**
- **Motor Slide Base for Adjustable Mounting**
- **Replacement Start/Run Capacitors Available**

Omegamation™ general purpose AC motors are made by one of the leading motor manufacturers for over 45 years, a world-class accredited supplier with a long history of quality testing procedures and standards performed by the finest independent testing laboratories in the world. Our motors are made in high quality ISO9001-certified facilities using only the highest quality material and manufacturing processes. All motors are electrically tested in sub-assembly production and again after final assembly, and come with an ironclad 2-year warranty.

Features and Benefits of AC Motors from Omegamation

Following are a few of the many reasons why our AC motors provide the best combination of quality and performance at the lowest prices.

Bearings

There are no sleeve bearings in our entire line of general purpose motors. We use nothing but heavy-duty oversized ball bearings on both the DE (drive end) and the ODE (opposite drive end). It is exactly for this reason that we can mount our motors in the “shaft up” or “shaft down” position with no derating. A shaft slinger keeps moisture and contaminants from the drive end bearing. And all of our AC motors have a high tensile strength steel shaft.

Windings/Insulations

All of our motors have copper windings and are manufactured with Class F insulation.

End Bells and Fan Covers

All of our end bells are heavy duty burnished (polished) aluminum. Our fan covers are steel, not plastic.

Junction Boxes

Our large, easy-to-wire junction boxes have rubber dust curtains designed to keep foreign particles from entry. These covers are designed to come apart at an angle to permit ease of wiring. Most motors are convertible F1 to F2 and all are rotatable at 90 degree intervals. Conduit holes are provided per NPT standards.

Motor Leads

All of our leads are both color coded and numbered per NEMA MG1 Standards.

Capacitor Covers

Each motor comes equipped with a large steel capacitor cover with a protective rubber gasket and oversized capacitors. The oversized start capacitor gives the motor a much higher starting torque and voltage range.

Nameplates

Nameplates are said to be the “Window Of Quality” of a motor. Our AC motor nameplates are stainless steel to reduce corrosion and laser etched to provide permanent markings, and include an easy-to-read wiring diagram.

Paint

We use an electrostatically applied, rust proof and scratch resistant paint. The paint almost seems to become part of the steel enclosure itself.

Certification

Our motors are cCSA_{US} Certified. Note the US stamp. It means that our motor has not only passed the Canadian Standard Association requirements, but also the USA's UL and ANSI standards, thus giving them the highest certification standards you can have for North America. Our certifications also include CE, CC006A, and of course ISO9001.

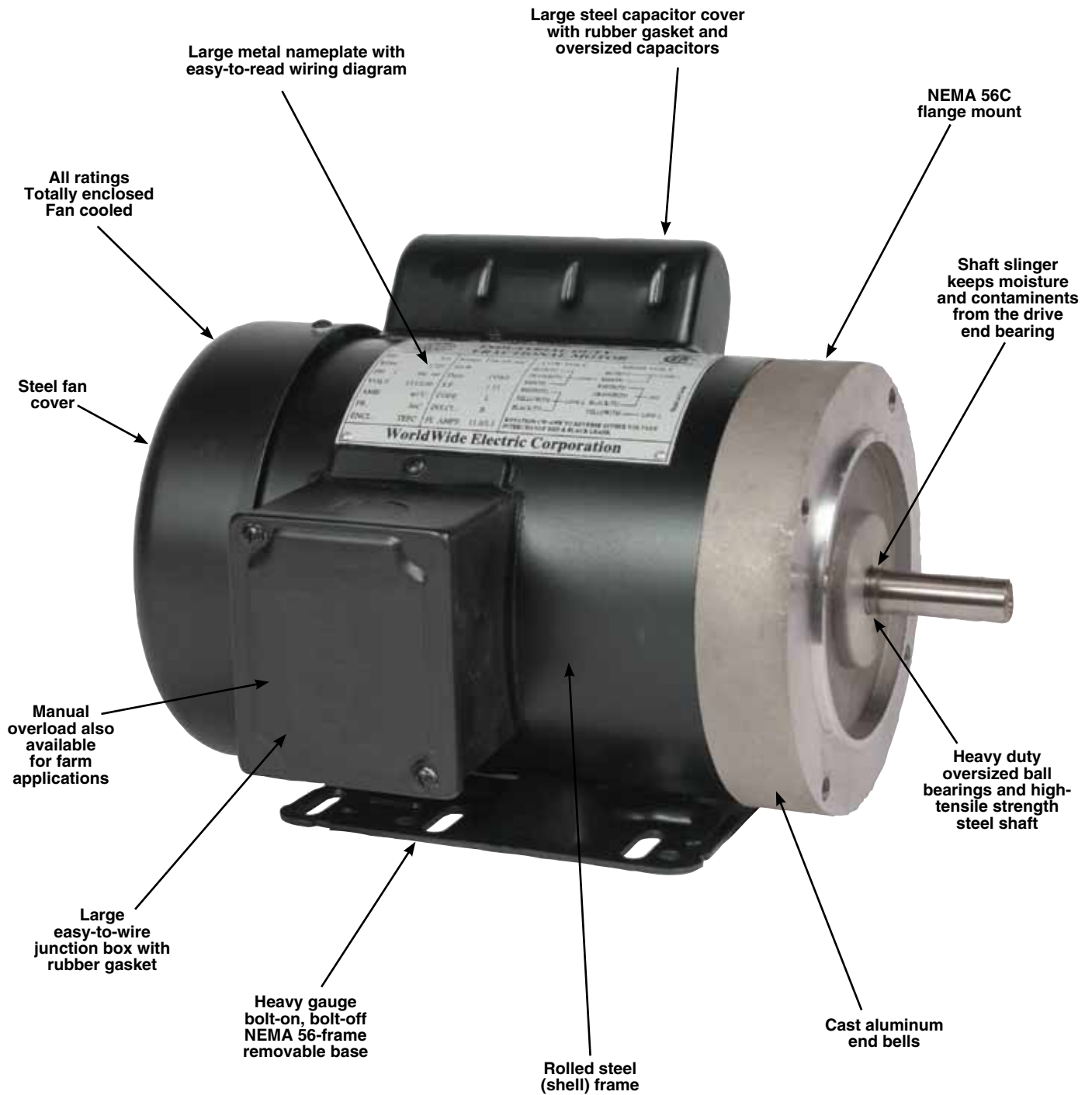
Warranty

Our warranty matches the motors quality in that it leads the industry in guaranteeing customer satisfaction. All of our AC motors have an ironclad two-year warranty and it is a nameplate-only warranty. That is to say, the customer sends us the nameplate and we send him a new motor. No paperwork—no delay—no waiting for credit based on a factory inspection—and no questions asked! Simply call our customer service department to obtain an AR number for the nameplate return.

56C FLANGE MOTORS

SINGLE PHASE—115/208 TO 230 VOLT

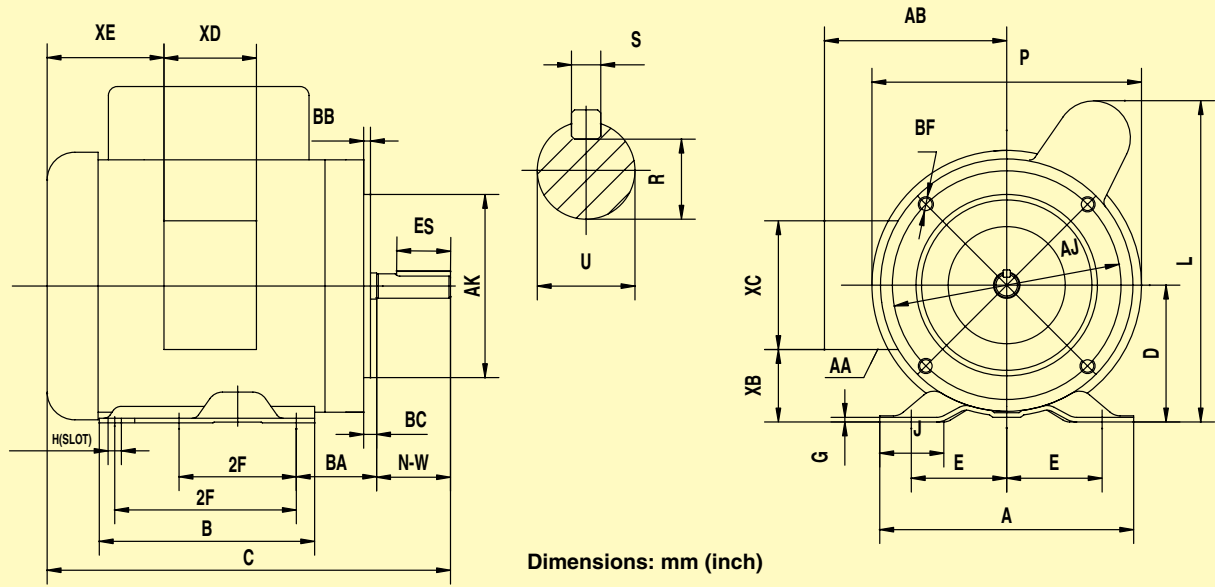
INVERTER DUTY WITH CLASS "F" INSULATION



OMT13-18-56CB shown smaller than actual size.

56C FRAME MOTORS—1 PHASE

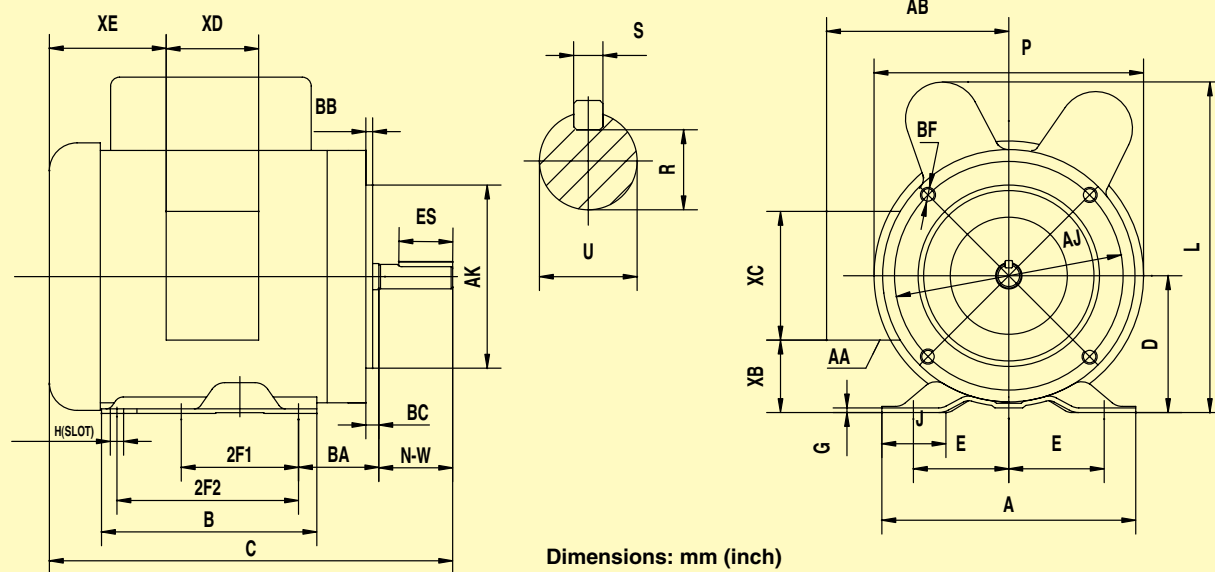
OMT1-18-56CB



Dimensions: mm (inch)

A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	330 (13)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	208 (8.19)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	1/2" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

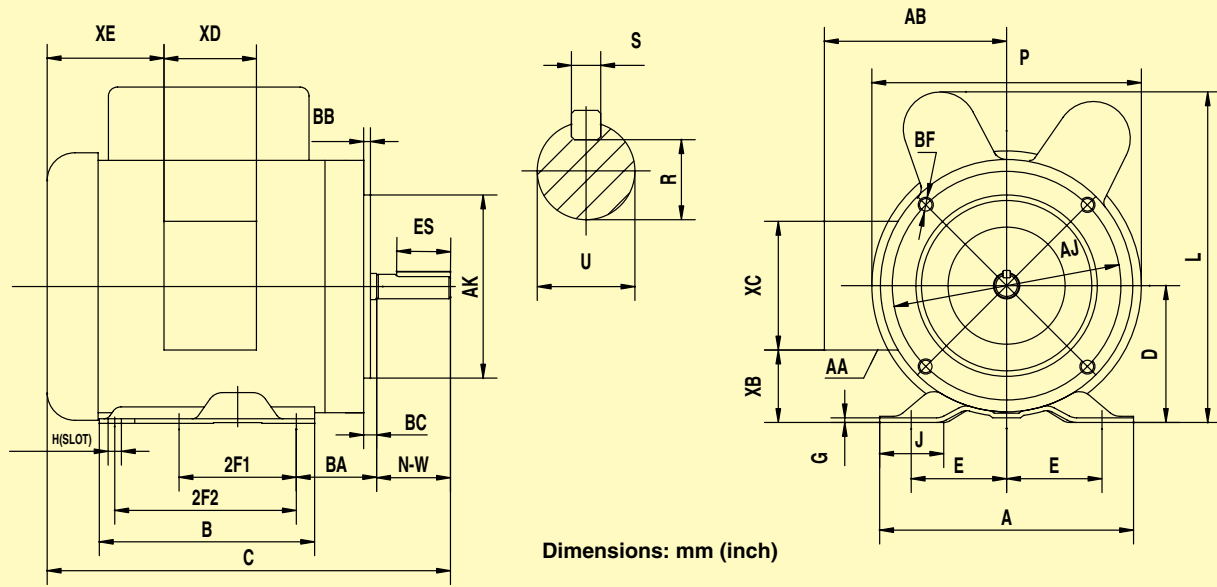
OMT1.5-18-56CB



Dimensions: mm (inch)

A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	351 (13.8)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	216 (8.5)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	1/2" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

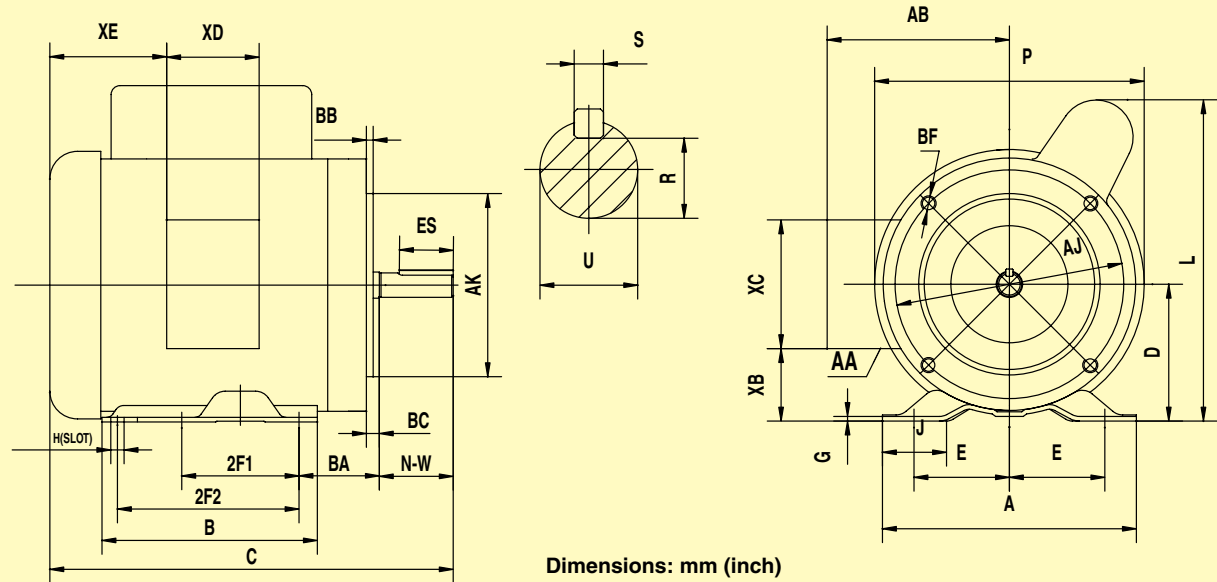
OMT2-18-56CB



Dimensions: mm (inch)

A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	371 (14.6)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	216 (8.5)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	½" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

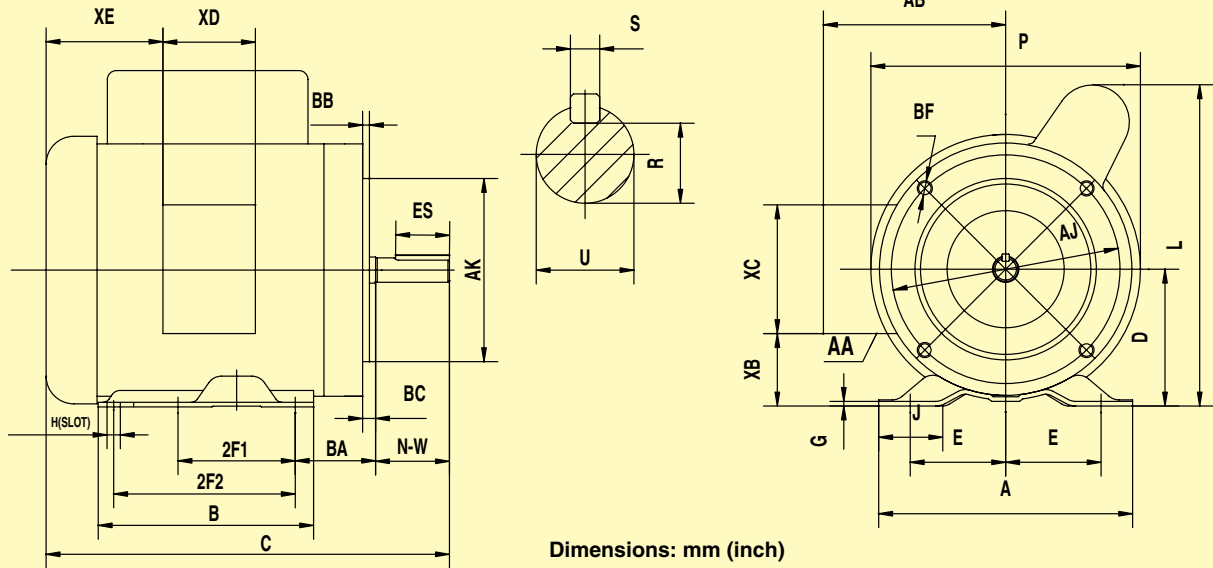
OMT12-18-56CB



Dimensions: mm (inch)

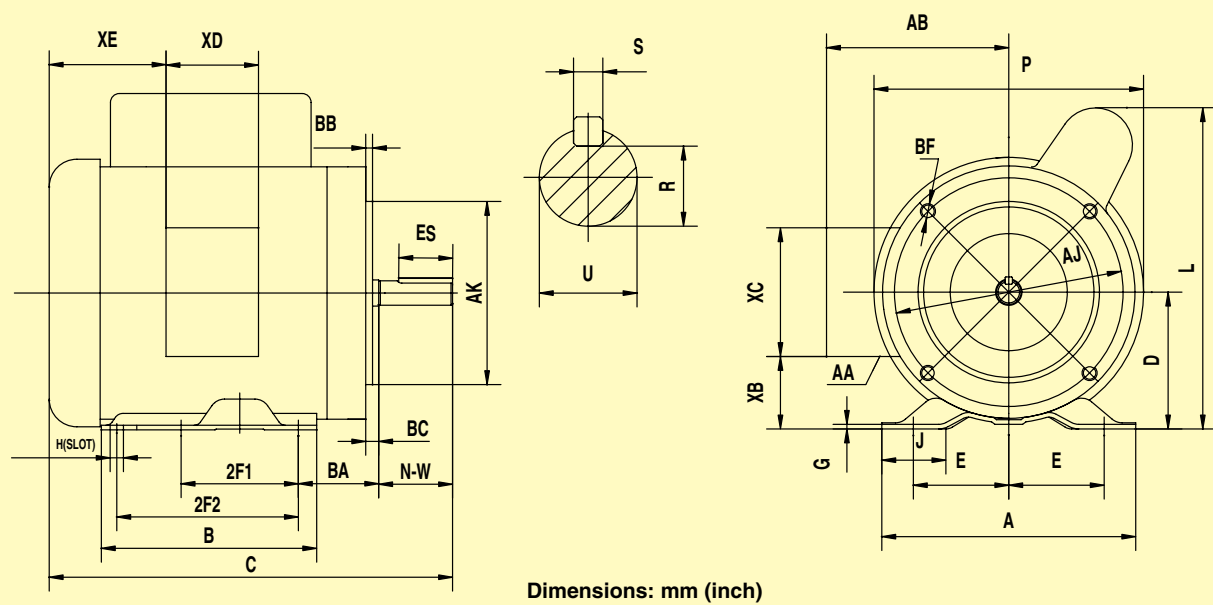
A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	315 (12.4)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	208 (8.19)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	½" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

OMT13-18-56CB



A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	315 (12.4)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	208 (8.19)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	1/2" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

OMT34-18-56CB



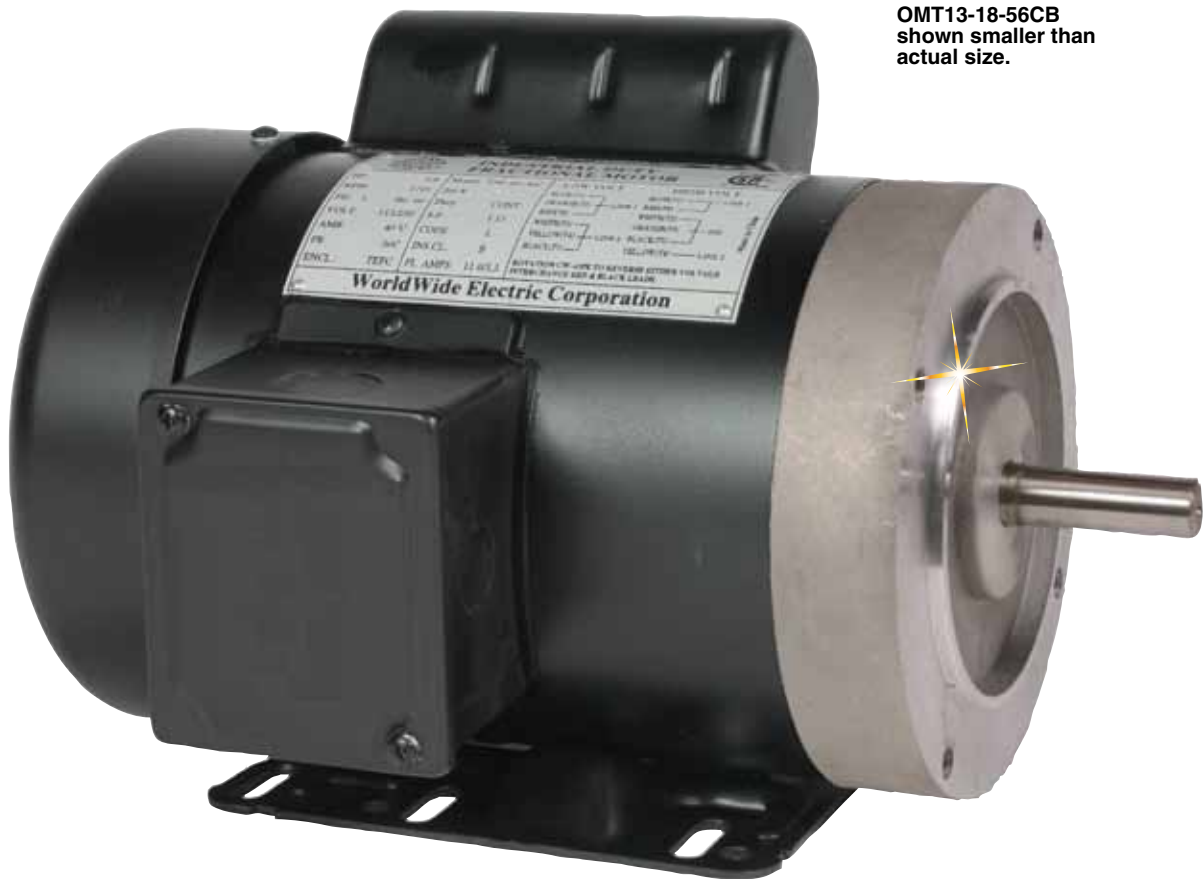
A	B	C	D	E	2F1	2F2	G	H	J	L	P	R	S	U
165 (6.5)	165 (6.5)	315 (12.4)	89 (3.5)	62 (2.44)	76 (3)	127 (5)	3 (0.12)	9 (0.34)	44 (1.73)	208 (8.19)	175 (6.9)	13 (0.517)	5 (0.188)	16 (0.625)
ES	AA	AB	AH	AJ	AK	BA	BB	BC	BF	XB	XC	XD	XE	
36 (1.41)	1/2" NPT	136 (5.35)	49 (1.91)	149 (5.875)	114 (4.5)	70 (2.75)	4 (0.16)	5 (0.19)	10 (%16)	42 (1.65)	94 (3.7)	82 (3.23)	72 (2.85)	

56C FRAME MOTORS—1 PHASE

	OMT13-18-56CB	OMT12-18-56CB	OMT34-18-56CB
HP	1/3	1/2	3/4
RPM/POLES	1800/4	1800/4	1800/4
VOLTAGE/PHASE	115/208 to 230V 1	115/208 to 230V 1	115/208 to 230V 1
FRAME	56C	56C	56C
FREQUENCY	60 HZ	60 HZ	60 HZ
RATED SPEED	1725 RPM	1725 RPM	1725 RPM
DUTY CYCLE	Continuous	Continuous	Continuous
SERVICE FACTOR	1.15	1.15	1.15
AMBIENT TEMP	40°C	40°C	40°C
ALTITUDE	3300' ASL	3300' ASL	3300' ASL
INSULATION CLASS	F	F	F
FULL LOAD AMPS	6.6/3.3 A	8.8/4.4 A	11.0/5.5 A
TEMP RISE @ FULL LOAD	80K at SF 1.15	80K at SF 1.15	100K at SF 1.15
OVERLOAD	None	None	None
DESIGN	B	B	B
RATED TORQUE	1.02 ft-lb	1.52 ft-lb	2.29 ft-lb
LOCKED ROTOR TORQUE	300%	300%	275%
BREAKDOWN TORQUE	275%	275%	250%
LOCKED ROTOR AMPS (STARTING)	31/18 A	37/21 A	55/32 A
SLIP	4.17% at full load	4.17% at full load	4.17% at full load
NO LOAD CURRENT	4.82 A	7.23 A	8.67 A
BEARINGS	Ball	Ball	Ball
DE BEARING	6203-ZZ	6203-ZZ	6203-ZZ
ODE BEARING	6203-ZZ	6203-ZZ	6203-ZZ
ENCLOSURE	TEFC	TEFC	TEFC
MOUNTING	F-1	F-1	F-1
ROTATION	CW/CCW	CW/CCW	CW/CCW
MOMENT OF INERTIA (lb-ft ²)	0.07458	0.07956	0.09505
CONNECTION DIAGRAM	115/208 to 230V—6 leads	115/208 to 230V—6 leads	115/208 to 230V—6 leads
TYPE WIRING	Loose wire	Loose wire	Loose wire
WIRE/HOUSING	Junction box	Junction box	Junction box
SHAFT	Keyed	Keyed	Keyed
CAPACITOR(S)	1	1	1
CAPACITOR SIZE	Ø42 x 80 mm ²	Ø42 x 80 mm ²	Ø42 x 80 mm ²
CAPACITOR INFO	200µF/125V	250µF/125V	250µF/125V
BASE/TYPE	Rigid removable	Rigid removable	Rigid removable
PAINT COLOR	Black	Black	Black
APPROX WEIGHT	26 lb	27 lb	31 lb
POWER FACTOR	0.62	0.63	0.65
EFFICIENCY (%)	56.0 at full load	57.0 at full load	65.0 at full load

OMT1-18-56CB	OMT1.5-18-56CB	OMT2-18-56CB
1	1.5	2
1800/4	1800/4	1800/4
115/208 to 230V 1	115/208 to 230V 1	115/208 to 230V 1
56C	56C	56C
60 HZ	60 HZ	60 HZ
1725 RPM	1725 RPM	1725 RPM
Continuous	Continuous	Continuous
1.15	1.15	1.15
40°C	40°C	40°C
3300' ASL	3300' ASL	3300' ASL
F	F	F
13.6/6.8 A	15.2/7.6 A	20.0/10.0 A
100K at SF 1.15	110K at SF 1.15	110K at SF 1.15
None	None	None
B	B	B
3.04 ft-lb	4.57 ft-lb	6.09 ft-lb
275%	250%	250%
250%	225%	225%
75/43 A	120/65 A	150/86 A
4.17% at full load	4.17% at full load	4.17% at full load
10.84 A	12.40 A	14.21 A
Ball	Ball	Ball
6203-ZZ	6203-ZZ	6203-ZZ
6203-ZZ	6203-ZZ	6203-ZZ
TEFC	TEFC	TEFC
F-1	F-1	F-1
CW/CCW	CW/CCW	CW/CCW
0.1195	0.1418	0.1823
115/208 to 230V—6 leads	115/208 to 230V—6 leads	115/208 to 230V—6 leads
Loose wire	Loose wire	Loose wire
Junction box	Junction box	Junction box
Keyed	Keyed	Keyed
1	2	2
Ø42 x 80 mm ²	Ø42 x 80 mm ² to Ø45 x 90 mm ²	Ø42 x 80 mm ² to Ø45 x 90 mm ²
300µF/125V	250µF/165V, 40µF/450V	200µF/165V, 40µF/450V
Rigid removable	Rigid removable	Rigid removable
Black	Black	Black
34 lb	37 lb	43 lb
0.66	0.75	0.77
68.0 at full load	71.0 at full load	73.0 at full load

OMT13-18-56CB
shown smaller than
actual size.



To Order

MODEL NO.	DESCRIPTION
OMT13-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 1/3 HP, 1800 RPM
OMT12-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 1/2 HP, 1800 RPM
OMT34-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 3/4 HP, 1800 RPM
OMT1-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 1 HP, 1800 RPM
OMT1.5-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 1.5 HP, 1800 RPM
OMT2-18-56CB	56C flange rolled steel motor, 115/208-230 V, single-phase, 2 HP, 1800 RPM

Ordering Example: OMT13-18-56CB, 56C flange rolled steel motor, 115/208 to 230 V single-phase, 1/3 HP, 1800 RPM.

ACCESSORIES

MODEL NO.	DESCRIPTION
OMSCFM13	Start capacitor, for OMT13-18-56CB
OMSCFM12	Start capacitor, for OMT12-18-56CB
OMSCFM34	Start capacitor, for OMT34-18-56CB
OMSCFM1	Start capacitor, for OMT1-18-56CB
OMSCFM1.5	Start capacitor, for OMT1.5-18-56CB
OMSCFM2	Start capacitor, for OMT2-18-56CB
OMRCFM1.5	Run capacitor, for OMT1.5-18-56CB
OMRCFM2	Run capacitor, for OMT2-18-56CB
OMW56	Motor slide base, 56 frame
OMCSWITCHFM	Centrifugal switch, single-phase motors

Ordering Example: OMW56, motor slide base for 56 frame.