

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 447TTDN16048  
Catalog No: U794  
400,1800,DP,447T,3/60/460PWS&YD  
Open Drip Proof (ODP)



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E

**REGAL**<sup>®</sup>



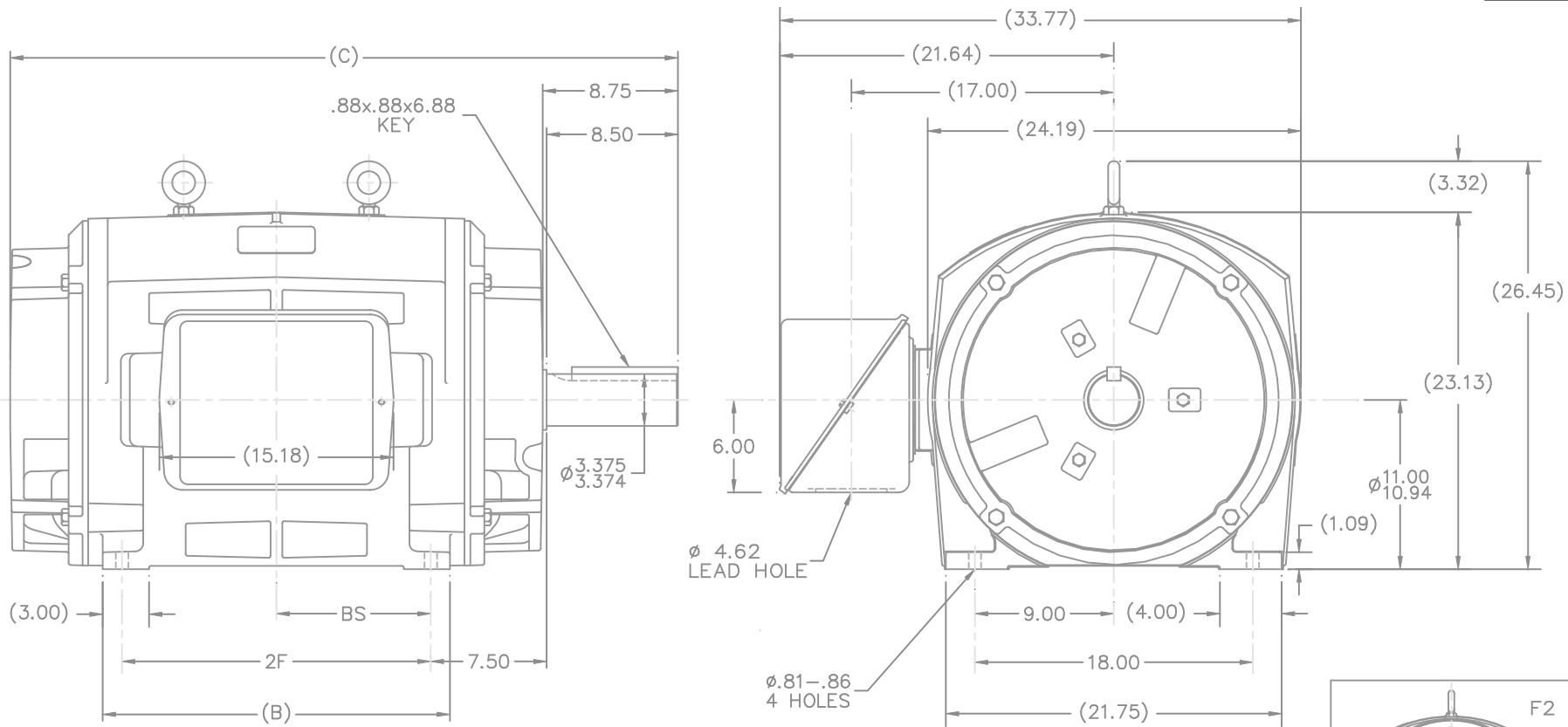
### Nameplate Specifications

Output HP	<b>400 Hp</b>	Output KW	<b>300.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>460.0 A</b>	Speed	<b>1785 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>95.8 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>447T</b>
Enclosure	<b>Drip Proof</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6318</b>
Opp Drive End Bearing Size	<b>6314</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>12</b>		

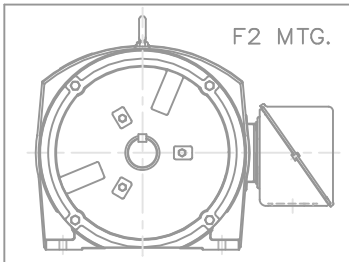
### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>43.25 in</b>	Frame Length	<b>24.38 in</b>
Shaft Diameter	<b>3.375 in</b>	Shaft Extension	<b>8.75 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS514252-2438</b>	Connection Diagram	<b>A-EE7300BH</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 06/29/2018

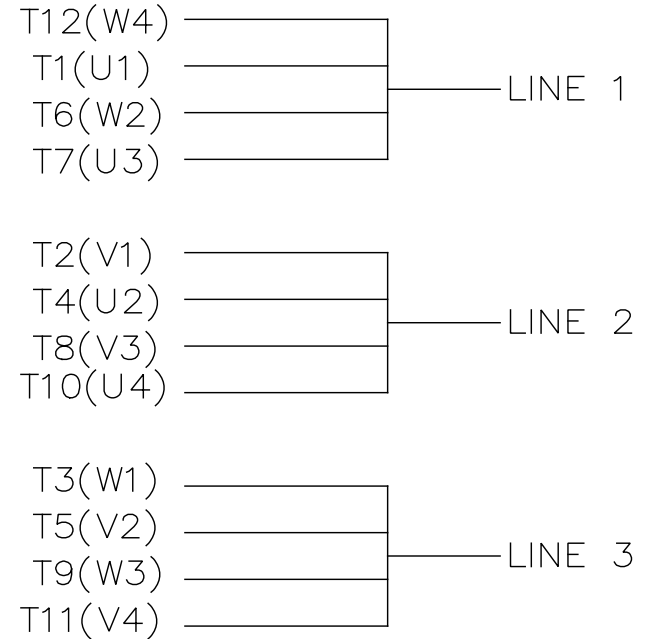
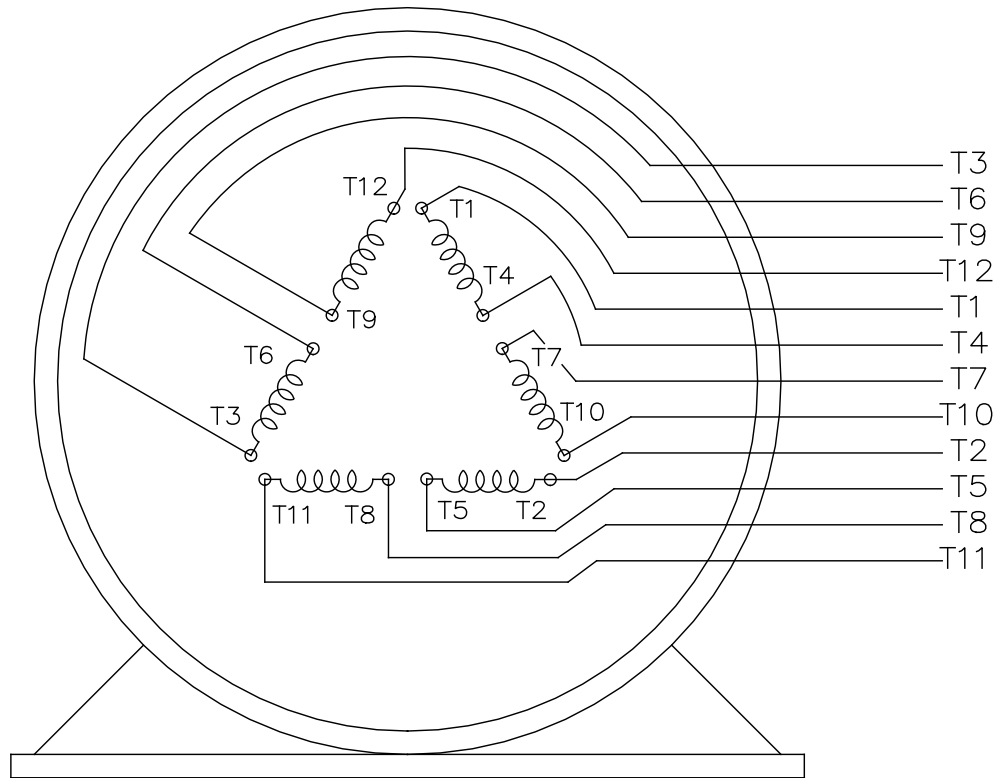


- NOTES:
1. C.BOX CAN BE ROTATED IN 90° STEPS.
  2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°.
  3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



2438	447T	43.25	---	22.50	20.00	---	---	10.00	
2938	449T	48.25	---	27.50	25.00	---	---	12.50	
DASH	FRAME	C	AG	B	2F	2FF	2FFF	BS	

7	UPDATED DE BRACKET GEOMETRY	CN 35521	DRS																
6	ADDED F2 MOUNTING VIEW	CN 29200-263	DRS	03-24-2000															
5	ADDED OVERALL DIMENSIONS	CN 27400-627	BJW	01-17-2000															
4	REVISED TO NEC CONDUIT BOX	CN 28405	BJW																
3	REMOVED 700 CU.IN. C'BOX NOTE	CN 16342	KL	10-07-1993															
2	'C' DIM. WAS 43.19 & 48.19	CN 15854	JL	06-09-1993															
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	MARATHON ELECTRIC			SCALE	1=7	REF	FMF	PREV					
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT										RFP	CAD FILE SS514252	SIZE	DRAWING NO.	PAGE OF	REV.				
										DIST	WA-SB	B	SS514252	7					



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005				
				DEC.	INCHES		CHK	ML	02-11-2005		
				.X	±.1		APPD	GK	02-11-2005		
				.XX	±.02	TITLE CONNECTION DIAGRAM		SCALE			
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE		REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.		FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH		PREV			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT						RFP 02-11-2005	CAD FILE ee7300bh	SIZE A	DRAWING NO. EE7300BH	PAGE OF	REV. C
						DIST LB					

CERTIFICATION DATA SHEET

Model#: 447TTDN16048 AA      WINDING#: T447435 NONE 1  
 CONN. DIAGRAM: A-EE7300BH      ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS514252-2438

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
400	300	1800	1785	447T	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	460	PWS & YDRUN	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85	3/4 LOAD PF: 82.5	1/2 LOAD PF: 75	95	SQ CAGE IND RUN	152

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1177 LB-FT	2900	2200 LB-FT 187	2950 LB-FT 251	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	72 LB-FT^2	- LB-FT^2	20 SEC.	-	2300 LBS.

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6314						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

\*  
N  
O  
T  
E  
S  
\*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

DATE: 06/21/2017 06:28:59 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 15-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



447TTDN16048

Submittal

Data @ 460 V

Motor Load Data

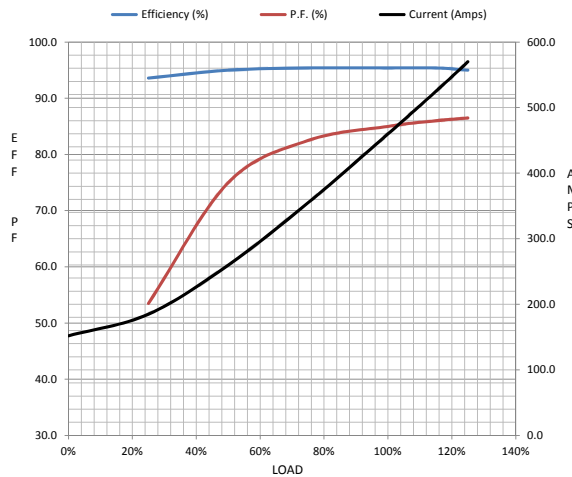
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	152	185	260	355	460	525	570	2,900
Torque (ft-lb)	0.00	292	585	880	1,177	1,355	1,475	2,200
RPM	1800	1795	1792	1788	1785	1,782	1780	0
Efficiency (%)		93.6	95.0	95.4	95.4	95.4	95.0	
P.F. (%)	3.5	53.5	75.0	82.5	85.0	86.0	86.5	30.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1710	1785	1800
Current (Amps)	2,900	2,750	1,600	460	152
Torque (ft-lb)	2,200	2,050	2,950	1,177	0.00

Information Block

HP	400.0			
Sync. RPM	1800			
Frame	447			
Enclosure	DP			
Construction	TDN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	72.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T447435 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS514252-2438			
Conn. Diag	A-EE7300BH			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0060	0.0050	0.0630	0.0700	1.7650



Speed -Torque Curve

