

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 364THFS8046

Catalog No: Y515

Blue Max® Inverter Duty Encoder Motor, 60 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 364TC Frame,
TEBC-AXIAL



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RegalRexnord

Nameplate Specifications

Phase	3	Output HP	60 Hp
Output KW	45.0 kW	Voltage	230/460 V
Speed	1782 rpm	Service Factor	1.0
Frame	364TC	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Efficiency	92.4 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	146.0/73.0 A	Power Factor	83
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6312
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.087 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	42.67 in
Frame Length	13.50 in	Shaft Diameter	2.375 in
Shaft Extension	5.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS518551-1350

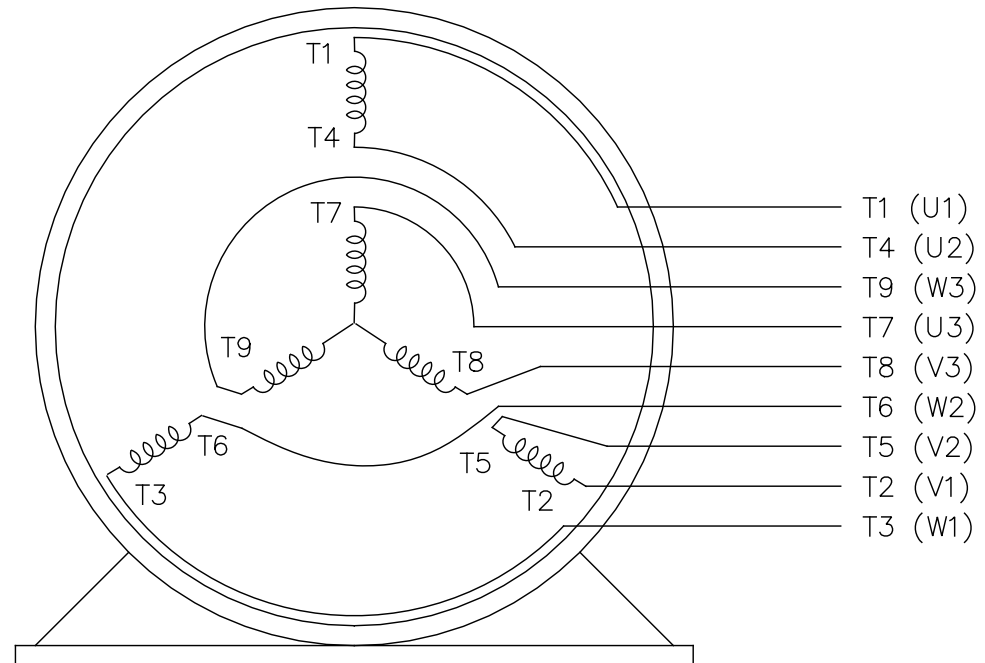
HIGH VOLTAGE

(U1) T1	_____●_____	L1
(V1) T2	_____●_____	L2
(W1) T3	_____●_____	L3
(U2) T4	_____●_____	
(U3) T7	_____●_____	
(V2) T5	_____●_____	
(V3) T8	_____●_____	
(W2) T6	_____●_____	
(W3) T9	_____●_____	

LOW VOLTAGE

(U1) T1	_____●_____	L1
(U3) T7	_____●_____	
(V1) T2	_____●_____	L2
(V3) T8	_____●_____	
(W1) T3	_____●_____	L3
(W3) T9	_____●_____	
(U2) T4	_____●_____	
(V2) T5	_____●_____	
(W2) T6	_____●_____	

THREE PHASE DUAL VOLTAGE MOTOR



REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION

L1 _____ WHITE _____
L2 _____ RED _____
L3 _____ BLACK _____

DRAWING REVISION	REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRAWN BY:		
ECO	APPROVED BY	DATE	DEC. mm INCH ANGLE .X ±2.5 [±0.1] ±0.5° .XX ±0.51 [±0.02] .XXX ±0.127 [±0.005] .XXXX ±0.0127 [±0.0005]	AS DATE: 02/20/2017		
ECO DESCRIPTION NEW DRAWING			REMOVE BURRS & BREAK SHARP EDGES .08/.38 [.003/.015] X 45° CORNER FILLETS R.51 [.02] MACHINED SURFACES INCH 125 mm 3.2	APPROVED BY: ST DATE: 02/20/2017	DESCRIPTION CONNECTION DIAGRA 3 PHASE - UAL VOLTAGE	
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			INCH SHOWN IN [BRACKETS]	THIRD ANGLE PROJECTION	SIZE DWG NO A EE7308TP	SHEET 1

CERTIFICATION DATA SHEET

Model#: 364THFS8046 BT
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS518551-1350

WINDING#: T3644131 R1 1
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
60	45	1800	1782	364TC	TEBC-AXIAL	J	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	147/73.5	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 92.4	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83	3/4 LOAD PF: 79.5	1/2 LOAD PF: 71	91	SQ CAGE INV DUTY	55 / 27.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
177 LB-FT	1080 / 540	445 LB-FT 251	525 LB-FT 297	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	14.8 LB-FT^2	- LB-FT^2	- SEC.	-	1062 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.062909	0.042097	0.337722	0.454553	8.8451

RM	ZREF	XR	TD	TD0
454.553	4.73	6	0.0278	0.588

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6314	6312	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

*
N
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E
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*

NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 07:30:39 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



364THFS8046

Submittal

Data @ 460 V

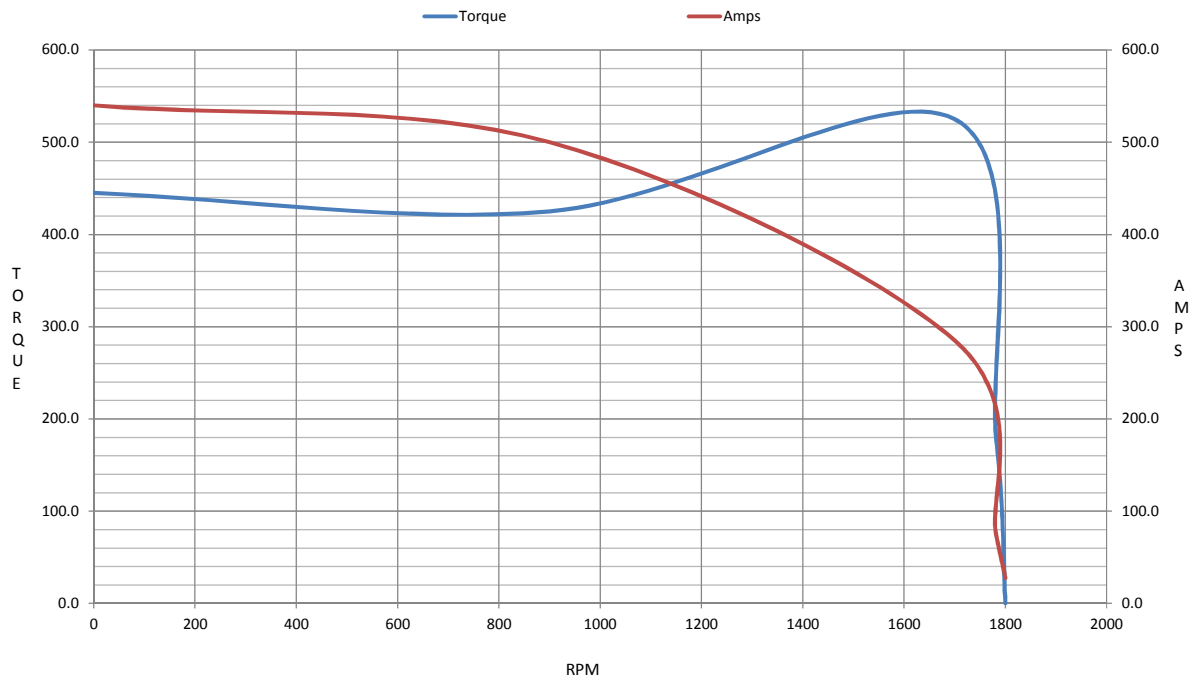
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	27.5	33.0	44.0	57.5	73.5	81.8	90.0	540	
Torque (ft-lb)	0.00	44.0	88.0	132	177	200	222	445	
RPM	1800	1795	1790	1786	1782	1,780	1776	0	
Efficiency (%)		85.5	90.2	91.7	92.4	92.4	92.4		
P.F. (%)	9.5	50.5	71.0	79.5	83.0	83.8	84.5	37.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																													
Speed (RPM)	0	900	1700	1782	1800																																													
Current (Amps)	540	500	285	73.5	27.5																																													
Torque (ft-lb)	445	425	525	177	0.00																																													
Efficiency (%) P.F. (%) Current (Amps) <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td></td><td></td><td>49</td></tr><tr><td>20%</td><td></td><td></td><td>52</td></tr><tr><td>25%</td><td>85</td><td>50</td><td>55</td></tr><tr><td>40%</td><td>88</td><td>65</td><td>58</td></tr><tr><td>60%</td><td>91</td><td>75</td><td>65</td></tr><tr><td>80%</td><td>92</td><td>80</td><td>72</td></tr><tr><td>100%</td><td>92</td><td>83</td><td>80</td></tr><tr><td>120%</td><td>92</td><td>84</td><td>88</td></tr><tr><td>125%</td><td>92</td><td>85</td><td>92</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			49	20%			52	25%	85	50	55	40%	88	65	58	60%	91	75	65	80%	92	80	72	100%	92	83	80	120%	92	84	88	125%	92	85	92	Information Block				
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						Construction			TBS																																									
						Voltage			230/460 V																																									
Frequency			60 Hz																																															
Design			A																																															
LR Code letter			J																																															
Service Factor			1.15																																															
Temp Rise @ FL			60 ° C																																															
Duty			CONT																																															
Ambient			40 ° C																																															
Elevation			1,000 feet																																															
Rotor/Shaft wk²			14.8 Lb-Ft²																																															
Ref Wdg			T3644131 R1																																															
Sound Pressure @ 1M			85 dBA																																															
VFD Rating			CONSTANT 2000:1																																															
Outline Dwg			B-SS518551-1350																																															
Conn. Diag			A-EE7308T																																															
Additional Specifications:																																																		
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EQUIV CKT (OHMS / PHASE)																																																		
R1		R2		X1		X2		Xm																																										
0.0630		0.0420		0.3380		0.4550		8.8450																																										

Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 364THFS8046

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y515

Rework No : N/A

Directives :

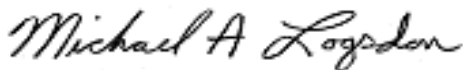
Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22