

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213THTL7776

Catalog No: Y542

Black Max® Inverter Duty Speed Ratio Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 213TC Frame,
TENV



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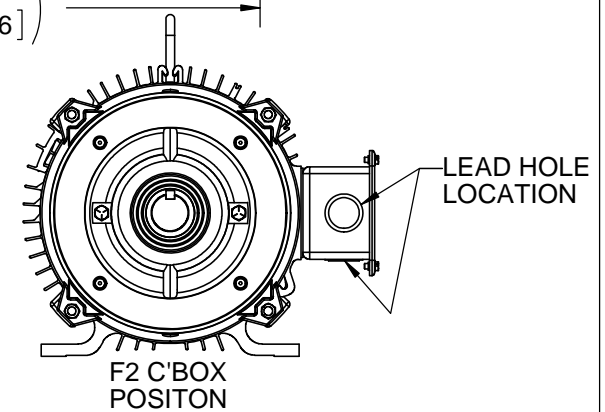
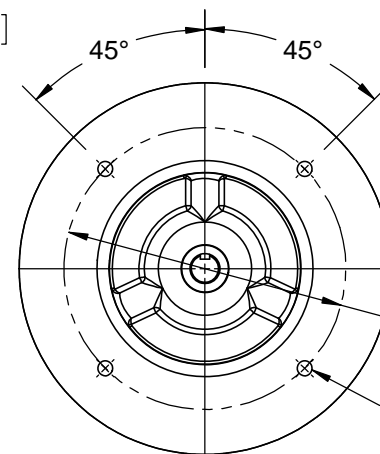
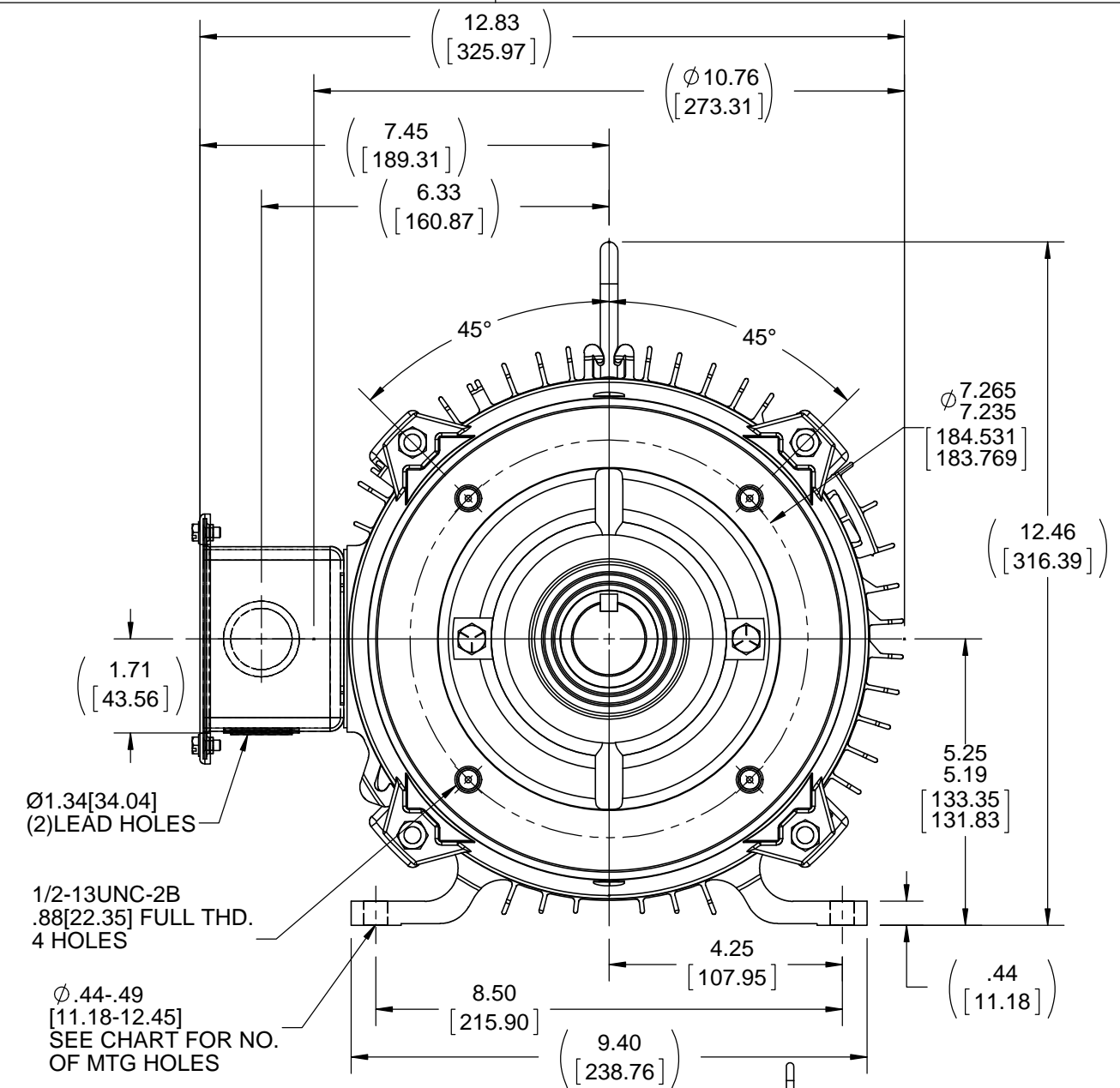
RegalRexnord

Nameplate Specifications

Output HP	3 Hp	Output KW	2.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	9.4/4.7 A	Speed	1160 rpm
Service Factor	1	Phase	3
Efficiency	82.5 %	Power Factor	72.5
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	K
Frame	213TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6206
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	6	Rotation	Reversible
Resistance Main	3.45 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	19.04 in
Frame Length	8.75 in	Shaft Diameter	1.375 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 1000:1		
Outline Drawing	B-SS330216-875	Connection Drawing	A-EE7308T



- NOTES:**
- 1. BOX CAN BE ROTATED IN 180° STEPS.**
 - 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.**
 - 3. SEE CHART FOR F2 CAPABILITY. IF YES, BOS CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°**

DASH	FRAME	B	C	AG	2F	BS	F2 CAPABLE	NO. OF MTG HOLES
875	213	8.87 [225.30]	19.04 [483.62]	13.75 [349.25]	5.50 [139.70]	4.08 [103.63]	YES	8

DRAWING REVISION D	REVISION BY W. JOERGER	DATE 05-24-2017
ECO ECO-0124253	APPROVED BY E. HEIL	DATE 05-24-2017
ECO DESCRIPTION CHANGED TO CORRECT DRAWING FORMAT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:



<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°

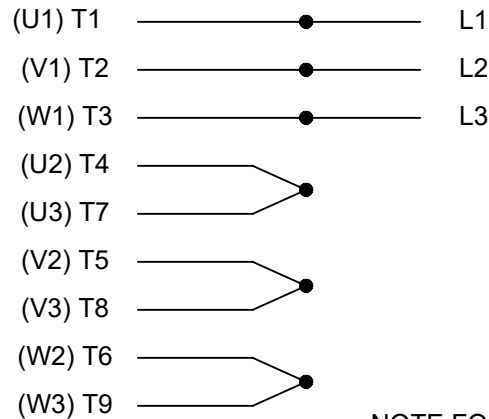
CORNER FILLETS: R.02 [.51]

MACHINED SURFACES: $\frac{200}{\text{INCH}}$ $\frac{5.1}{\text{mm}}$

mm SHOWN IN [BRACKETS]

DRAWN BY RWR		 Regal Beloit America, Inc.	
DATE 06-15-2007			
APPROVED BY GK		DESCRIPTION <div style="text-align: center;"> OUTLINE 210 FR.-TENV-DBL. C'FACE </div>	
DATE 06-15-2007			
REFERENCE		MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER <div style="text-align: center;"> SS330216 </div>	SHEET 1 OF 1

HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1

LOW VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

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DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
 3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1

CERTIFICATION DATA SHEET

Model#: 213THTL7776 CD
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS330216-875

WINDING#: K213667 NONE 6
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3	2.24	1200	1160	213TC	TENV	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	9.4/4.7	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 82.5	3/4 LOAD EFF: 81.5	1/2 LOAD EFF: 78.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 72.5	3/4 LOAD PF: 64	1/2 LOAD PF: 51	80	SQ CAGE INV DUTY	6 / 3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
13.6 LB-FT	66 / 33	34.5 LB-FT 254	49 LB-FT 360	90

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
60 dBA	70 dBA	0.6 LB-FT^2	0 LB-FT^2	0 SEC.	0	118 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
2.46906	2.30824	6.50848	4.12456	83.9102

RM	ZREF	XR	TD	TD0
4521.88	94.6	2.3	0.0775	0.101

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6206	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM

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 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE NONE P/N NONE

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NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

DATE: 06/22/2017 04:05:11 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

213THTL7776



Submittal

Data @ 460 V

Motor Load Data

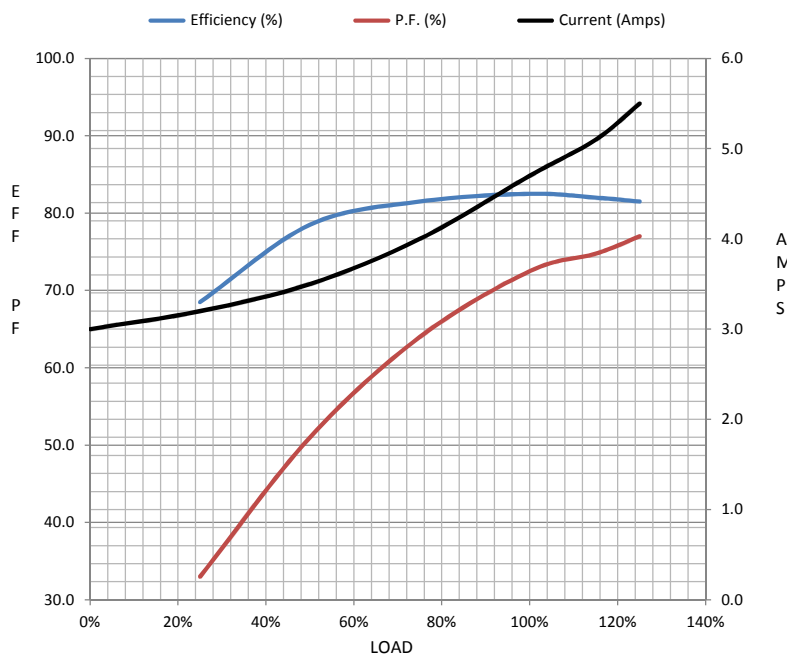
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.0	3.2	3.5	4.0	4.7	5.1	5.5	33.0	
Torque (ft-lb)	0.00	3.3	6.7	10.0	13.6	15.4	17.2	34.5	
RPM	1200	1188	1180	1170	1158	1,153	1145	0	
Efficiency (%)		68.5	78.5	81.5	82.5	82.0	81.5		
P.F. (%)	10.5	33.0	51.0	64.0	72.5	74.8	77.0	49.0	

Motor Speed Data

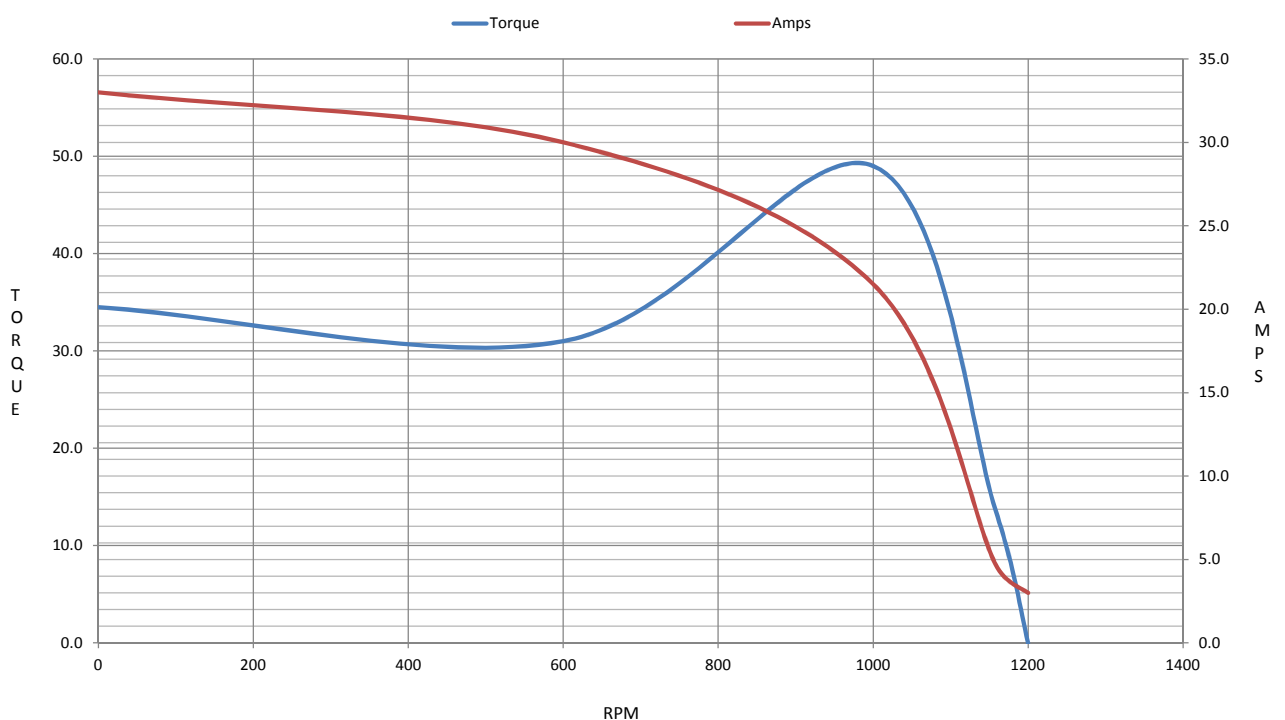
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1000	1158	1200
Current (Amps)	33.0	30.0	21.5	4.7	3.0
Torque (ft-lb)	34.5	31.0	49.0	13.6	0.00

Information Block

HP	3.0			
Sync. RPM	1200			
Frame	213			
Enclosure	TENV			
Construction	TTL			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.0			
Temp Rise @ FL	90 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.60 Lb-Ft²			
Ref Wdg	K213667 NONE			
Sound Pressure @ 1M	60 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-SS330216-875			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.4690	2.3080	6.5080	4.1250	83.9100



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 : 213THTL7776

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

Catalog No : Y542

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