

# PRODUCT INFORMATION PACKET

Model No: 213THTS8071

Catalog No: Y990

Blue Max® Inverter Duty Brake Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TENV



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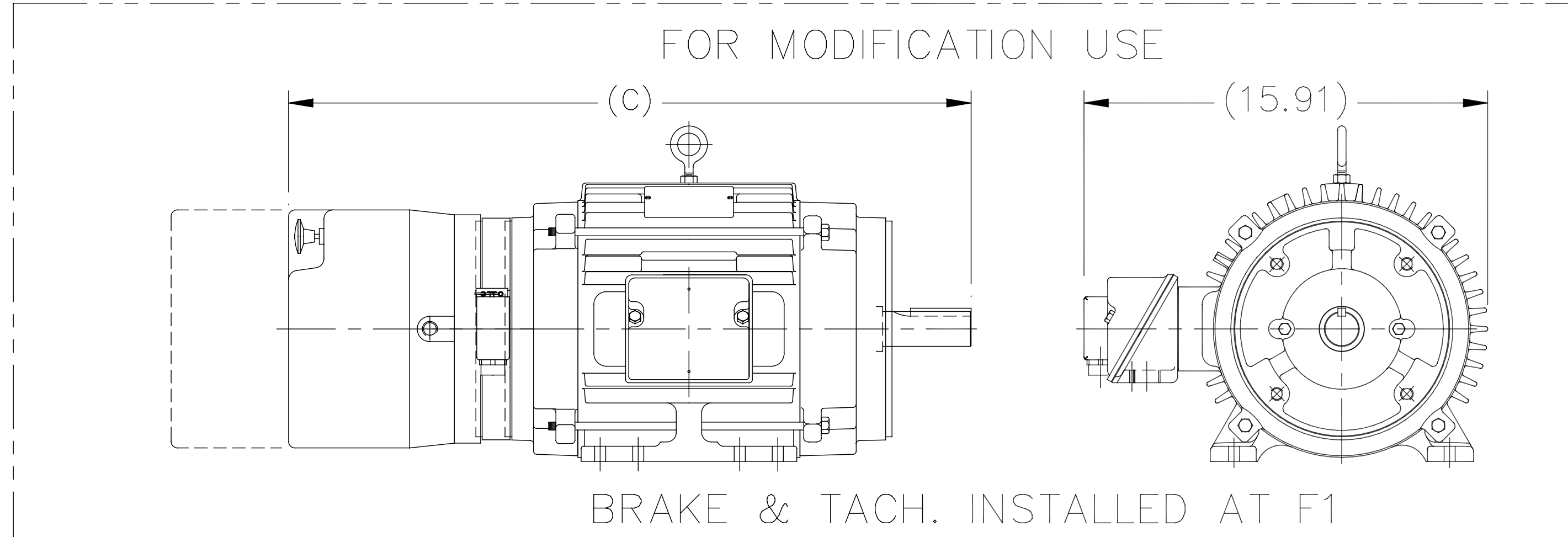
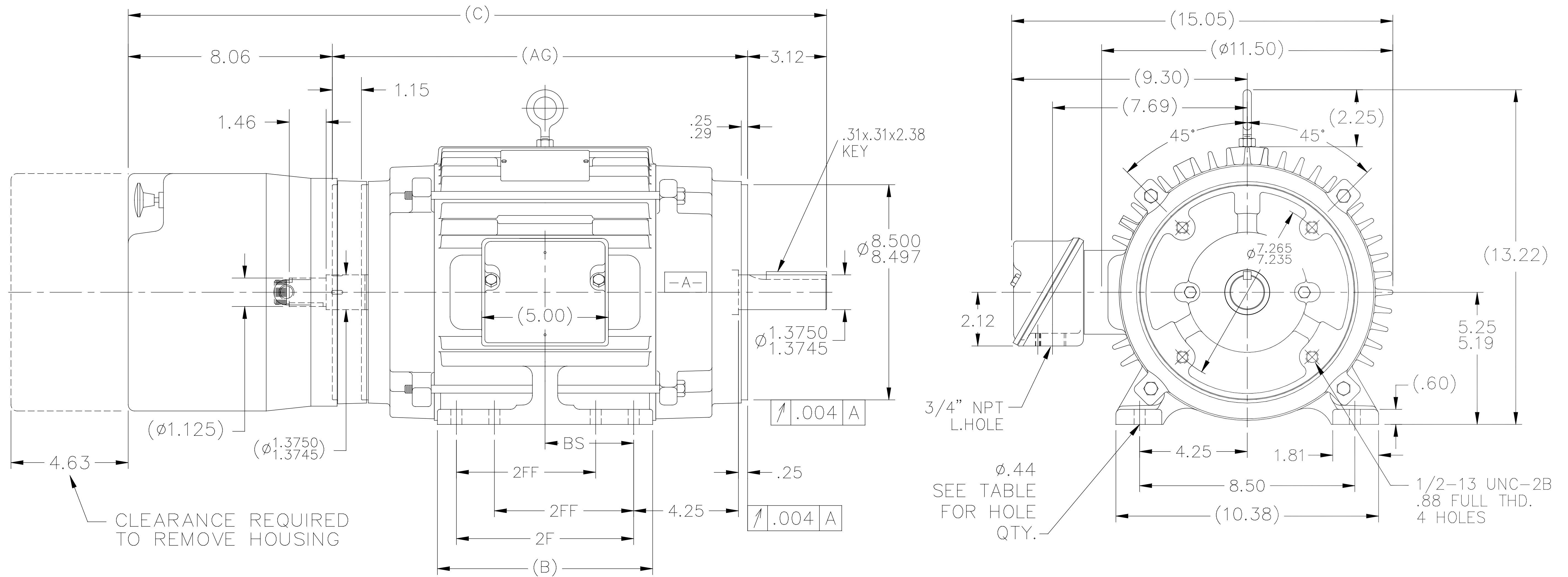
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>7.50 Hp</b>
Output KW	<b>5.6 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1775 rpm</b>	Service Factor	<b>1.00</b>
Frame	<b>213TC</b>	Enclosure	<b>Totally Enclosed Non Ventilated</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>90.2 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>21.0/10.5 A</b>	Power Factor	<b>75</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>INV</b>	KVA Code	<b>L</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6307</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>3.25 Ohms</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>27.58 in</b>
Frame Length	<b>8.75 in</b>	Shaft Diameter	<b>1.375 in</b>
Shaft Extension	<b>3.12/1.46 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2000:1</b>		
Outline Drawing	<b>B-SS88470-875</b>	Connection Drawing	<b>A-EE7308T</b>

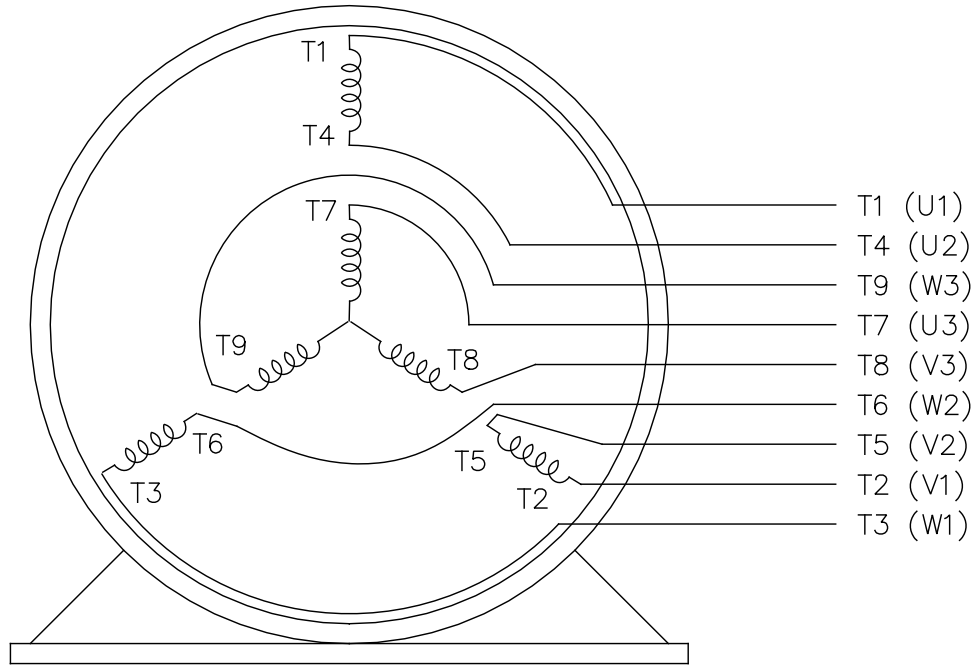
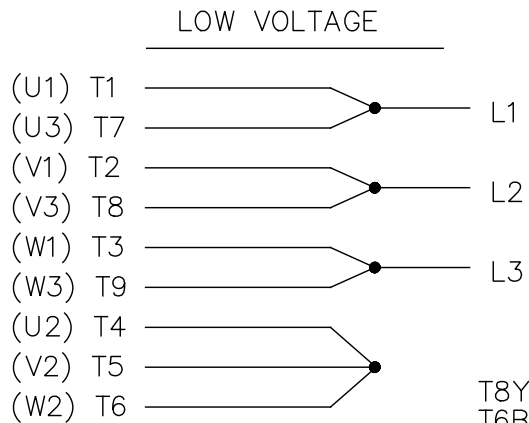
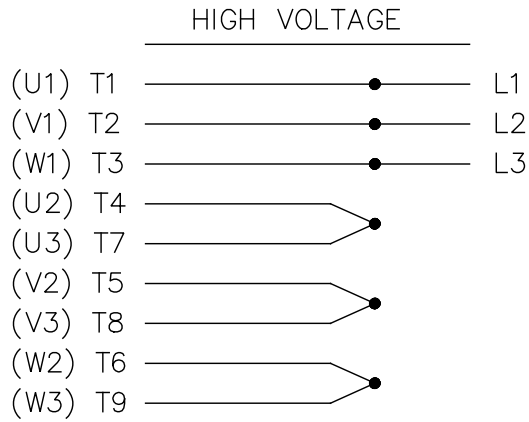
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- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
  2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
  3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

									9 NOTES UPDATED PER ECR# 0082550				SAJ 04/13/2015	GR	TOLERANCES UNLESS SPECIFIED			DRAWN DAH 06-18-2001			
									8 UPDATED DRAWING				TJW 05/04/2007		DEC.	INCHES		CHK	DRS 07-02-2001		
									7 REVISED DASH 1000-FOOTHOLE CN29100-4873				RJW 10-24-2005	ML	.X	±.1	APPD	CAV 07-02-2001			
									6 REVISED DASH TABLE & FOOT HOLE QTY. CN33822				RJW 05-12-2005	ML	.XX	±.03	TITLE OUTLINE - TENV - LAKESHORE TACH. 210TC FR. - STEARNS 87,000 BRAKE				
									5 ADDED NOTE NUMBER 4 CN32977				RJW 02-08-2005	ML	.XXX	±.005	SCALE	1=4			
									4 ADD NOTE TO DETAIL & SEPARATE CN33633				RWR 10-07-2004	ML	.XXXX	±.0005	REF				
									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	CAD FILE ss88470			SIZE	DRAWING NO.	PAGE 1 OF 1	REV.	
													DIST	LB				B	SS88470	9	
875	213/5TC	27.58	16.40	8.50	7.00	-	3.50	4													
875	213/5TC	27.58	16.40	8.50	7.00	5.50	3.50	8													
1000	213/5TC	28.83	17.65	9.75	8.25	7.00	4.75	8													
DASH	FRAME	C	AG	B	2F	2FF	BS	FOOT HOLE QTY.													

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

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

OPTIONAL CORD  
CONNECTION

L1 WHITE  
L2 RED  
L3 BLACK

DRAWING REVISION	REVISION BY	DATE
ECO	APPROVED BY	DATE
ECO DESCRIPTION NEW DRAWING		
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TOLERANCES UNLESS OTHERWISE SPECIFIED			
DEC.	mm	INCH	ANGLE
.X	±2.5	±0.11	±0.5°
.XX	±0.51	±0.021	
.XXX	±0.127	±0.0051	
.XXXX	±0.0127	±0.00051	
REMOVE BURRS & BREAK SHARP EDGES .08/.38 [003/.015] X 45°			
CORNER FILLETS R.51 [02]			
MACHINED SURFACES INCH $\sqrt[125]{mm}$ $\sqrt[3.2]{}$			
INCH SHOWN IN [BRACKETS]			

DRAWN BY: AS
DATE: 02/20/2017
APPROVED BY: ST
DATE: 02/20/2017
REFERENCE EE7308
THIRD ANGLE PROJECTION

<b>Trans-Power</b>	
DESCRIPTION CONNECTION DIAGRA 3 PHASE - UAL VOLTAGE	
MATERIAL	PROCESS/FINISH
SIZE DWG NO A EE7308TP	SHEET 1

CERTIFICATION DATA SHEET

Model#: 213THTS8071 AP WINDING#: K2134188 NONE 1  
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: B-SS88470-875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN				
7 1/2	5.60	1800	1775	213TC	TENV	L	INV				
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION		
3	60	230/460	21/10.5	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300		
FULL LOAD EFF: 90.2		3/4 LOAD EFF: 90.2		1/2 LOAD EFF: 88.5		GTD. EFF		ELEC. TYPE		NO LOAD AMPS	
FULL LOAD PF: 75		3/4 LOAD PF: 68		1/2 LOAD PF: 55.5		88.5		SQ CAGE INV DUTY		11.6 / 5.8	
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C			
22.2 LB-FT		182 / 91		80 LB-FT 360		94 LB-FT 423		85			
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT					
62 dBA	72 dBA	1.05 LB-FT^2	0 LB-FT^2	0 SEC.	0	256 LBS.					

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.57456	0.46116	1.94292	2.9862	43.848
RM	ZREF	XR	TD	TD0
1814.4	37.8	4.1	0.0145	0.27

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE AND 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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6307						

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: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR SL85 NONE NONE PPR
BRAKE: REGAL SUPPLIED AND MOUNT NONE

\*  
N  
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T  
E  
S  
\*

STEARNS	P/N 66378-34
87,000	NEMA 2
35 FT-LB	208-230/460-190/380 V
60/50 Hz	

DATE: 06/20/2017 08:56:04 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

**MARATHON ELECTRIC CORPORATION**

TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer CATALOG

Curve at

460

Volts

HP 7.50

PHASE 3

Model No 213THTS8071

60

HZ

VOLTS 230/460

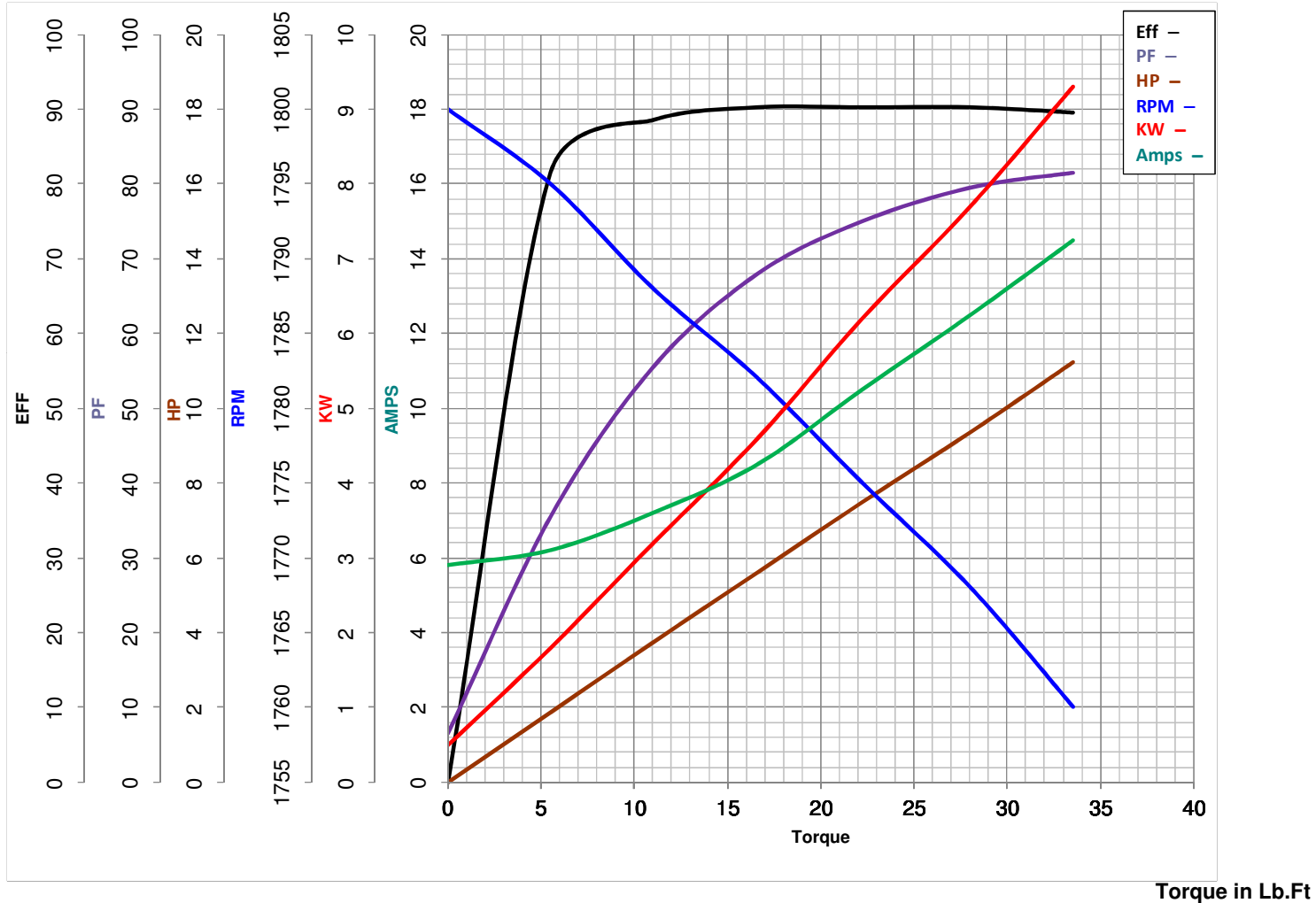
7.5

HP

Catalog No Y990

HZ 60

RPM 1775



Torque in Lb.Ft

FL TORQUE 22.2 Lb.Ft  
 BD TORQUE 94.0 Lb.Ft  
 LR TORQUE 80 Lb.Ft

FL AMPS 21/10.5  
 PU TORQUE 75.0 Lb.Ft  
 LR AMPS 91

WINDING K2134188-1

Prepared By SRIKANTH

Date 6/21/2017

## 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 : 213THTS8071

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

Catalog No : Y990

Rework No : N/A

Directives :

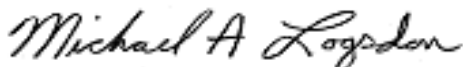
Low Voltage Directive 2014/35/EU

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**