

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284TTFNA7240

Catalog No: Y385

XRI®-SD Cooling Tower Motor, 20 & 5 HP, 3 Ph, 60 & 60 Hz, 460 & 460 V, 1800 & 1800 RPM, 284T Frame,
TEFC



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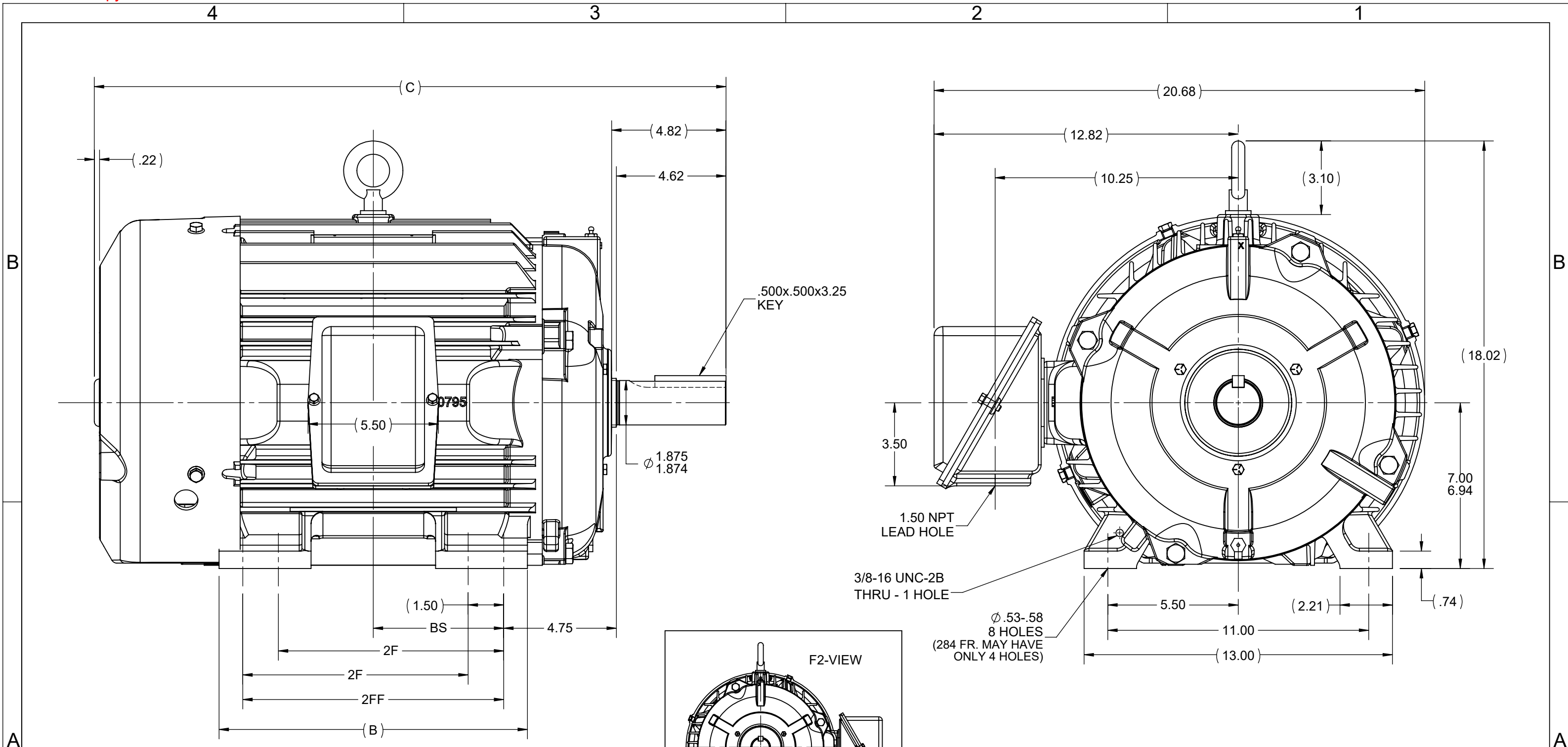
RegalRexnord

Nameplate Specifications

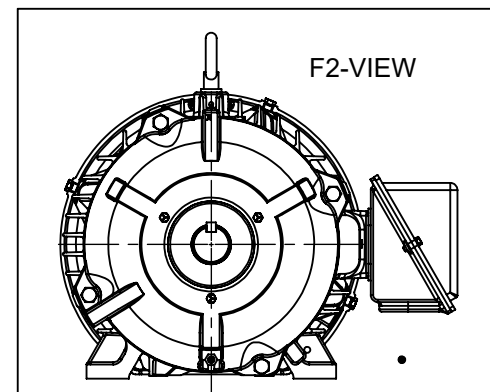
Phase	3	Output HP	20 & 5 Hp
Output KW	14.9 & 3.7 kW	Voltage	460 & 460 V
Speed	1775 & 880 rpm	Service Factor	1.15 & 1.15
Frame	284T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 87.5 %
Ambient Temperature	40 °C	Frequency	60 & 60 Hz
Current	24 & 8.5 A	Power Factor	84.5
Duty	Continuous	Insulation Class	F
Design Code	1VT	KVA Code	J
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	2		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4/8	Rotation	Reversible
Resistance Main	.505 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	26.21 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.82 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7322	Outline Drawing	B-SS311057-1275



- 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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.



DASH	FRAME	C	B	2F	2FF	BS
1275	284T	26.63	12.50	9.50	---	4.75
1425	284/286T	28.13	13.00	9.50	11.00	5.50

DRAWING REVISION E	REVISION BY VS	REV DATE/© DATE 14th-June-2022
REQUEST NUMBER NMR-0214673	APPROVED BY VS	DATE 14th-June-2022
REQUEST NUMBER DESCRIPTION RIB PLUG ADDED		
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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7° 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
 CORNER FILLETS: R.02 [.5]
 MACHINED SURFACES: 200/5.1 INCH/mm
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY CAV
DATE 10-18-2000
APPROVED BY BW
DATE 10-18-2000
REFERENCE
THIRD ANGLE PROJECTION

Regal Rexnord Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
280T FR. - BB - STD 12.50 LAM

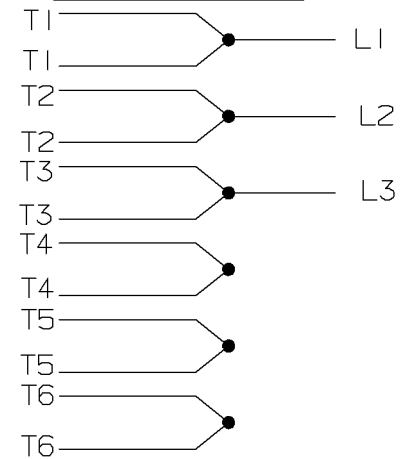
MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **SS311057** SHEET 1 OF 1

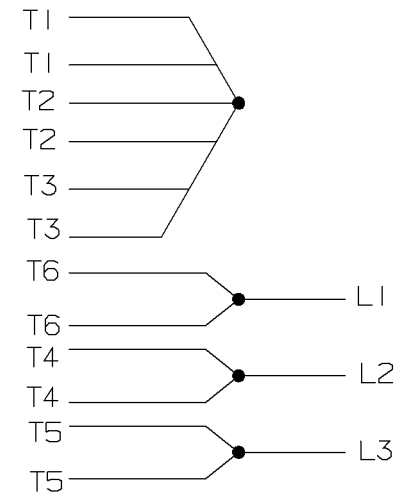
A- EE7322

FOR DUAL LEADS

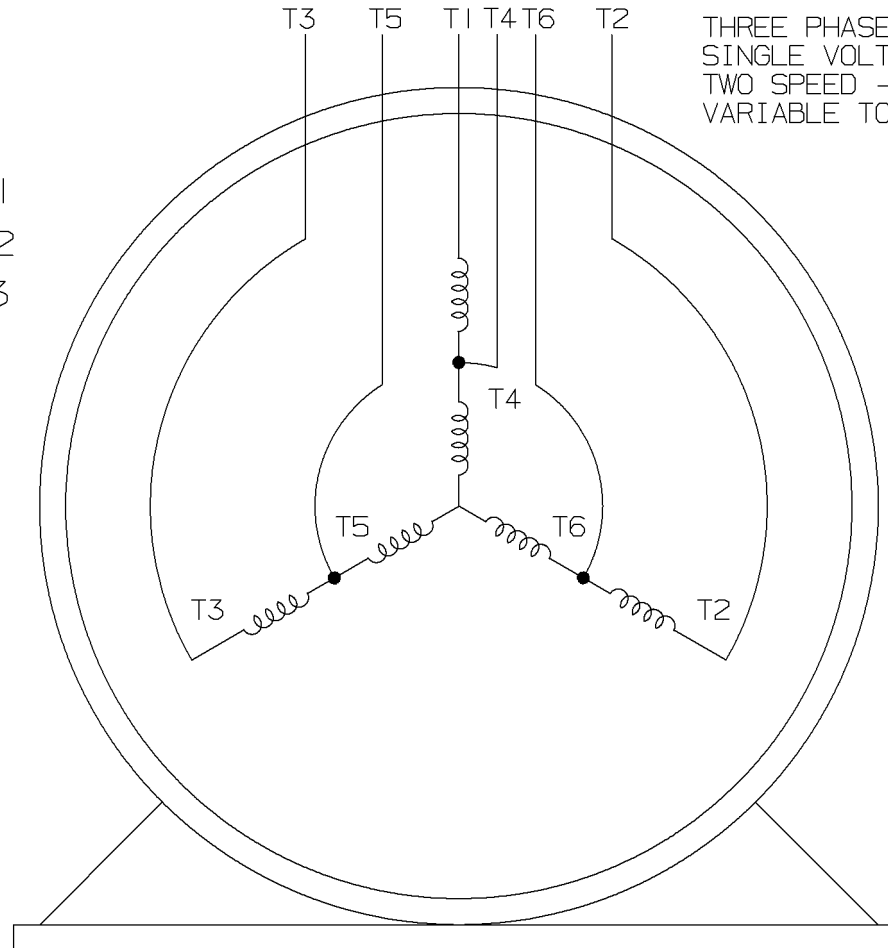
LOW SPEED



HIGH SPEED

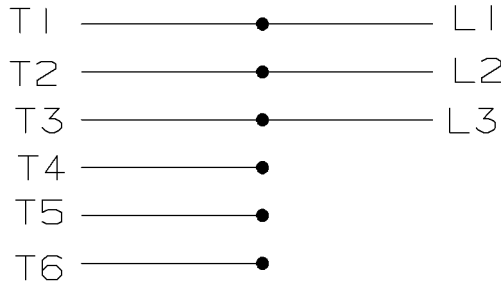


THREE PHASE MOTOR
SINGLE VOLTAGE
TWO SPEED - SGL. WDG.
VARIABLE TORQUE

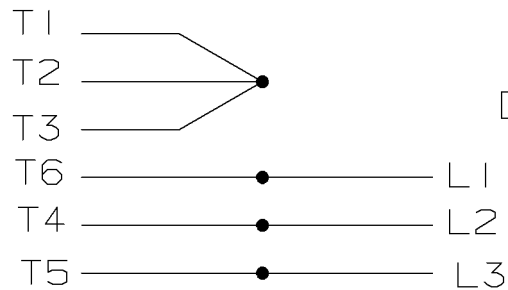


VIEW OF TERMINAL END

LOW SPEED



HIGH SPEED



T612C

T48B

				<input checked="" type="checkbox"/> MAX. SURFACE ROUGHNESS UNLESS NOTED OTHERWISE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
				MATL SPEC	TOL. ON XX±	XXX±.005	XXXX±.0005	ANGLES±
				FINISH	MARATHON ELECTRIC WAUSAU, WISCONSIN 54401			DRAWN BY PGK 12-26-1996
				REFERENCE DRW.				CHKD BY ML 01-07-1997
7	01-08-1997	REDRAWN ON CADD	CN 24000-27	PGK	APPD BY TB 01-07-1997			DRWG NO A-EE7322
REV	DATE	CHANGE	NAME	PART NAME CONNECTION DIAGRAM 3Ø - SINGLE VOLTAGE - 2 SPEED				

SHOP BOOK

PURCHASED

DISTRIBUTION - WA - LB - WP - LM - BR

CADD FILE NO.

EE7322

CERTIFICATION DATA SHEET

Model#: 284TTFNA7240 AA
CONN. DIAGRAM: A-EE7322
OUTLINE: B-SS311057-1275

WINDING#: K284(4-8)48 NONE 7
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&5	14.9&3.7	900	1775&880	284T	TEFC	J	1VT

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/60	460	24&8.5	ACROSS THE LINE	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&87.5	3/4 LOAD EFF: 87.5	1/2 LOAD EFF: 84	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84.5&63	3/4 LOAD PF: 56	1/2 LOAD PF: 45	85	SQ CAGE IND RUN	5.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	35	39 LB-FT 130	66 LB-FT 220	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
54 dBA	64 dBA	4.2 LB-FT^2	- LB-FT^2	20 SEC.	-	475 LBS.

***** SUPPLEMENTAL INFORMATION *****

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

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
6311	6210						

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
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E
S
*

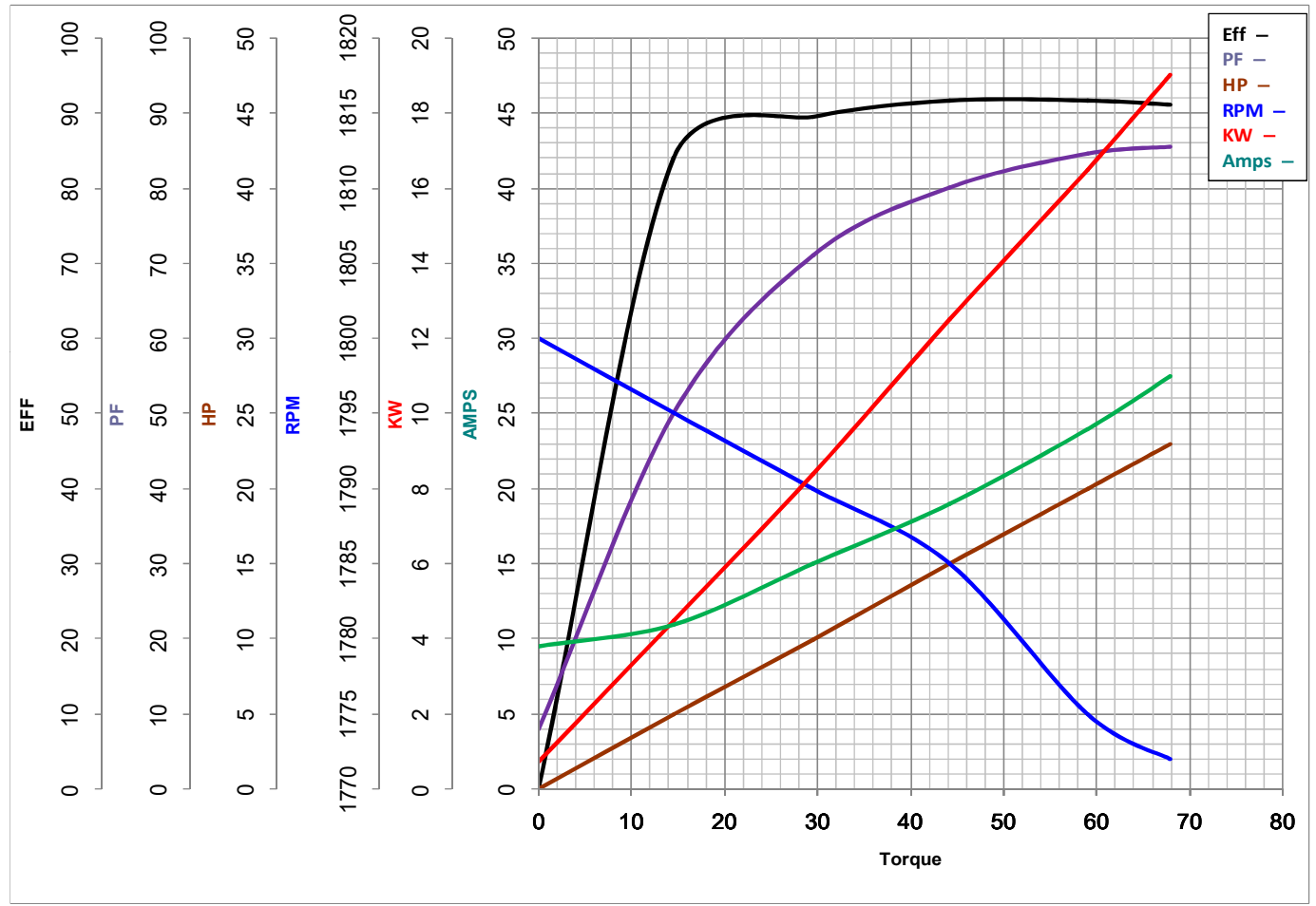
INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

DATE: 06/21/2017 10:16:47 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.



MARATHON ELECTRIC CORPORATION
TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer _____ Curve at 460 Volts HP 20&5 PHASE 3
 Model No 284TTFNA7240 60 HZ 20 HP VOLTS 460&460
 Catalog No Y385 HZ 60&60 RPM 1775&880



Torque in LB-FT

FL TORQUE	<u>59</u>	LB-FT	FL AMPS	<u>24</u>
BD TORQUE	<u>180.0</u>	LB-FT	PU TORQUE	<u>95.0</u>
LR TORQUE	<u>105</u>	LB-FT	LR AMPS	<u>180</u>
WINDING	K284(4-8)48-7		Date	1/17/2019

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 : 284TTFNA7240

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

Catalog No : Y385

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