

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 256THTNA8071

Catalog No: Y993

Blue Max® Inverter Duty Brake Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256TC Frame, TENV



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RegalRexnord



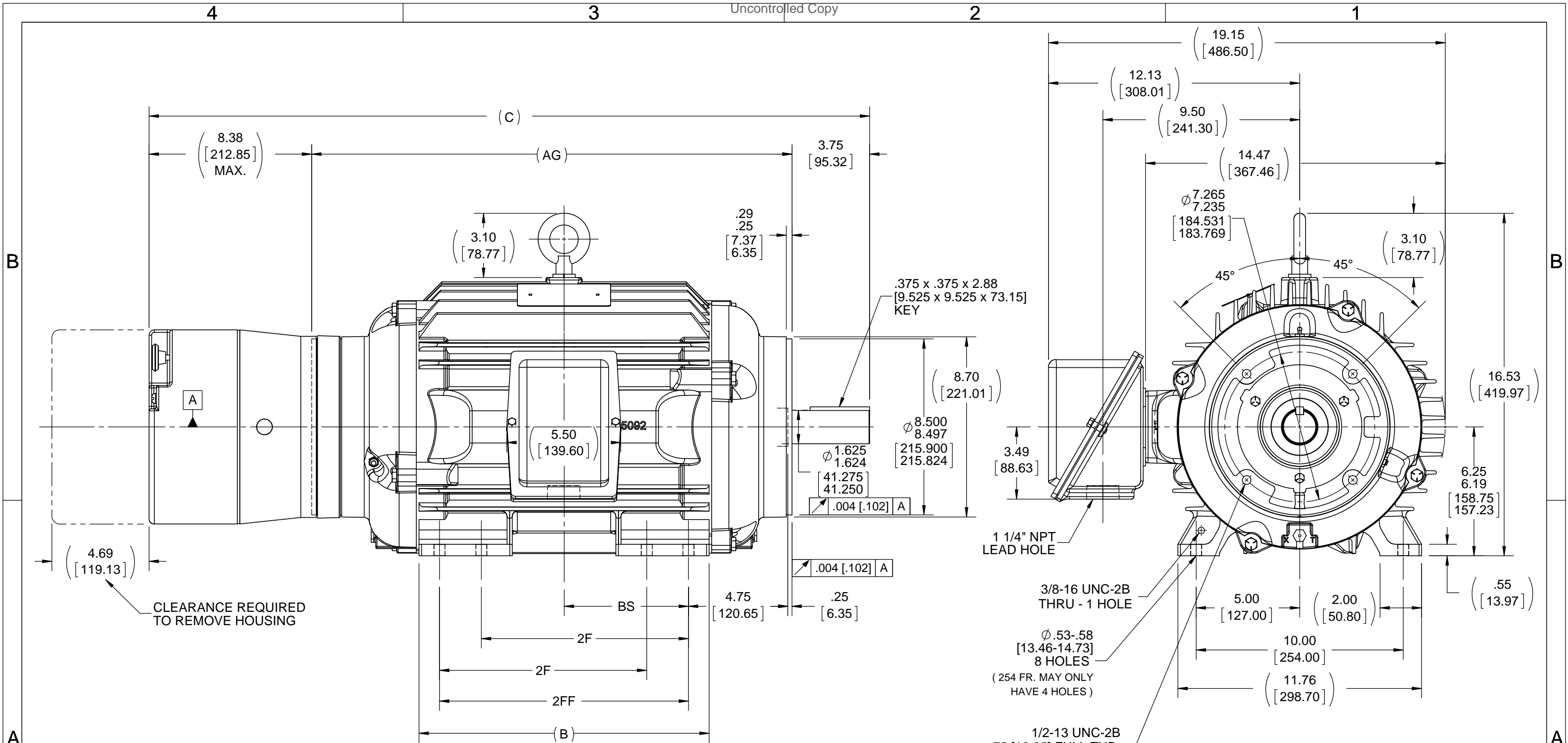
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	52.0/26.0 A	Speed	1770 rpm
Service Factor	1	Phase	3
Efficiency	93.6 %	Power Factor	77
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	N
Frame	256TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6309
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	.29 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	35.31 in
Frame Length	14.25 in	Shaft Diameter	1.625 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS203867-1425	Connection Drawing	A-EE7308T

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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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 4. DIMENSION IN [] DESIGNATE MILLIMETERS.

DASH	FRAME	B	C	AG	2F	2FF	BS
1050	254TC	10.25 [260.35]	31.56 [801.62]	19.43 [493.52]	---	8.25 [209.55]	4.12 [104.65]
1225	254/256TC	12.00 [304.80]	33.31 [846.07]	21.18 [537.97]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]
1425	256TC	14.00 [355.60]	35.31 [896.97]	23.18 [588.80]	10.00 [254.00]	---	6.01 [152.59]

DRAWING REVISION J	REVISION BY JJB	DATE 06-12-2017
ECO ECO-0124612	APPROVED BY T VUE	DATE 06-12-2017
ECO DESCRIPTION ADDED DASH 1050 & 1225 TO TABLE		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.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 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [51]
 MACHINED SURFACES: 200 INCH/mm 5.1

mm SHOWN IN [BRACKETS]

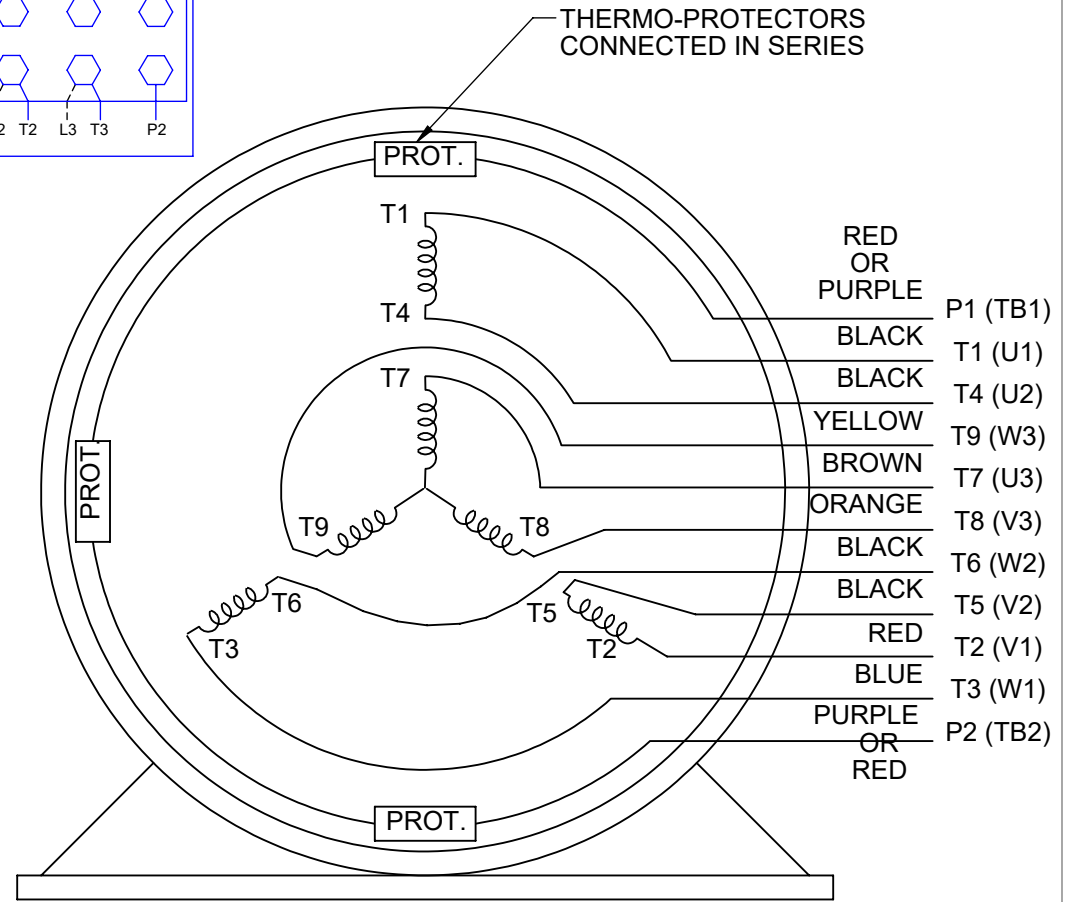
DRAWN BY RWR	DATE 04-30-2004
APPROVED BY TLB	DATE 05-10-2004
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 250TC FR. - STEARNS BRAKE - PROV. FOR TACH	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS203867
	SHEET 1 OF 1

HIGH VOLTAGE

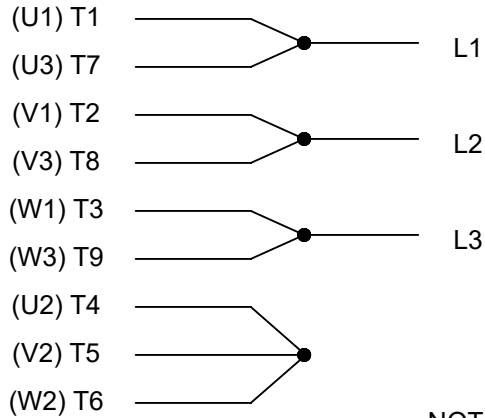


**THREE PHASE
DUAL VOLTAGE MOTOR**



**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



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		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T
			THIRD ANGLE PROJECTION		

CERTIFICATION DATA SHEET

Model#: 256HTNA8071 CB WINDING#: K2564267 NONE 1
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS203867-1425

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN		
20	14.9	1800	1770	256TC	TENV	N	INV		
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	52/26	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300
FULL LOAD EFF: 93.6	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF		ELEC. TYPE		NO LOAD AMPS		
FULL LOAD PF: 77	3/4 LOAD PF: 70	1/2 LOAD PF: 57	93		SQ CAGE INV DUTY		29 / 14.5		
F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE		F.L. RISE°C				
59.5 LB-FT	600 / 300	200 LB-FT 336	325 LB-FT 546		90				
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT			
62 dBA	72 dBA	3.7 LB-FT^2	- LB-FT^2	- SEC.	-	485 LBS.			

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.2201	0.1917	0.6745	0.68444	18.2044
RM	ZREF	XR	TD	TD0
1689.8	14.2	3.4	0.01	0.26

*** 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	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6309	6309						

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

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

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STEARNS	P/N 66378-22
87,000	NEMA 2
105 FT-LB	208-230/460-190/380 V
60/50 Hz	

DATE: 06/23/2017 04:59:45 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 6/29/2017

256THTNA8071

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

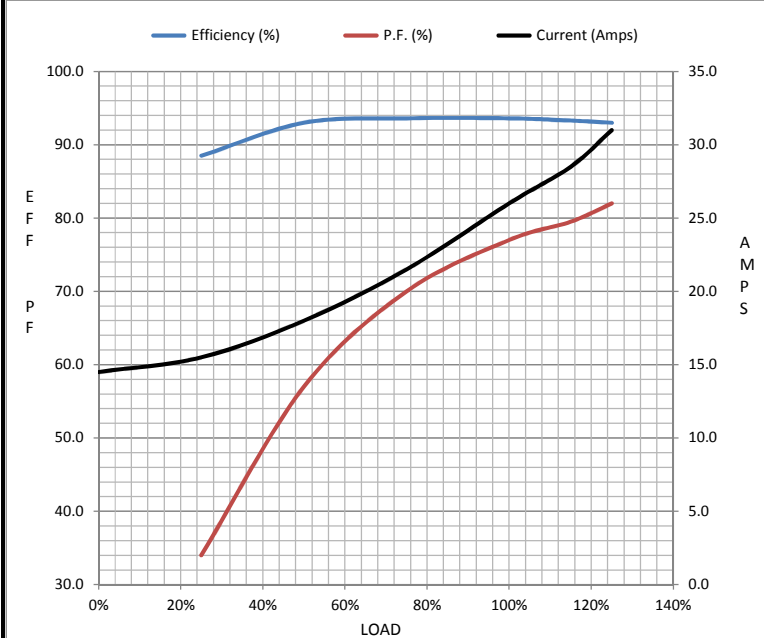
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.5	15.5	18.0	21.5	26.0	28.5	31.0	300
Torque (ft-lb)	0.00	14.6	29.5	44.5	59.5	67.0	74.5	200
RPM	1800	1792	1785	1778	1770	1,766	1760	0
Efficiency (%)		88.5	93.0	93.6	93.6	93.3	93.0	
P.F. (%)	3.5	34.0	57.0	70.0	77.0	79.5	82.0	41.0

Motor Speed Data

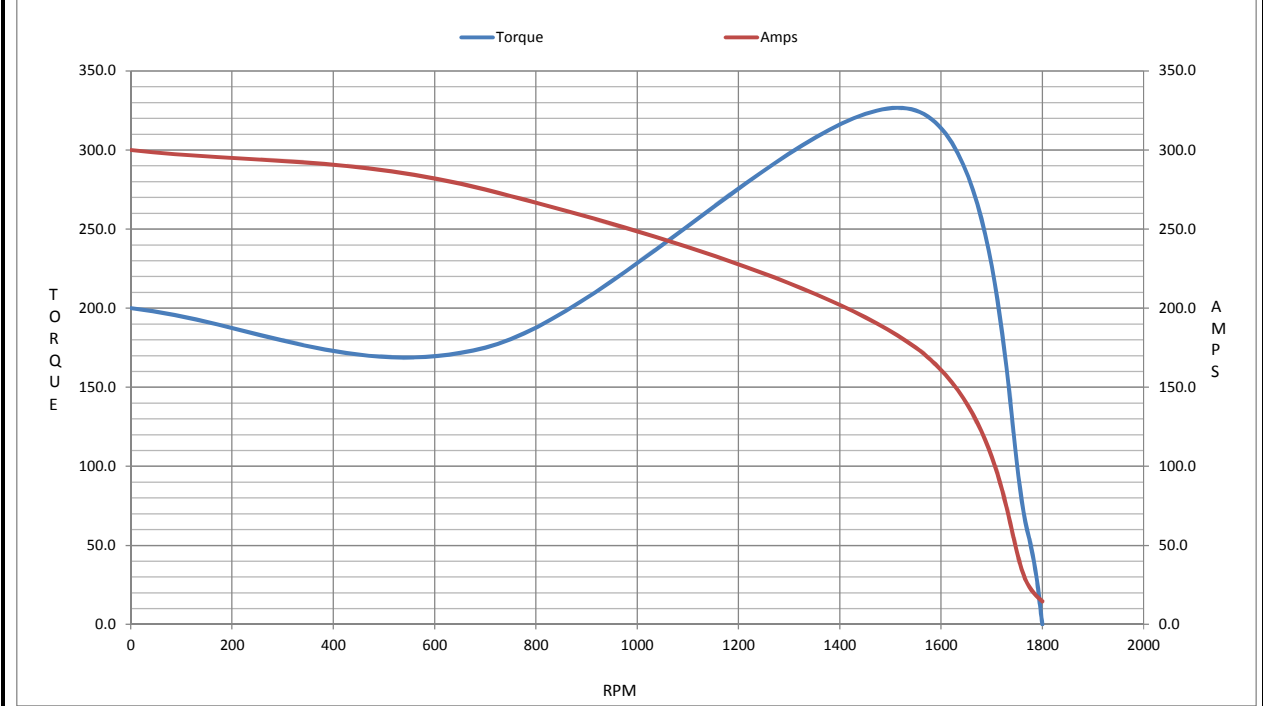
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1550	1770	1800
Current (Amps)	300	275	175	26.0	14.5
Torque (ft-lb)	200	175	325	59.5	0.00

Information Block

HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	N			
Service Factor	1.0			
Temp Rise @ FL	95 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.7 Lb-Ft ²			
Ref Wdg	K2564267 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS203867-1425			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2200	0.1920	0.6750	0.6840	18.2040



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 : 256THTNA8071

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

Catalog No : Y993

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