PRODUCT INFORMATION PACKET

Model No: 213TTGND16001
Catalog No: C305B
Hazardous Duty® Explosion Proof Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 213TC Frame, EPFC

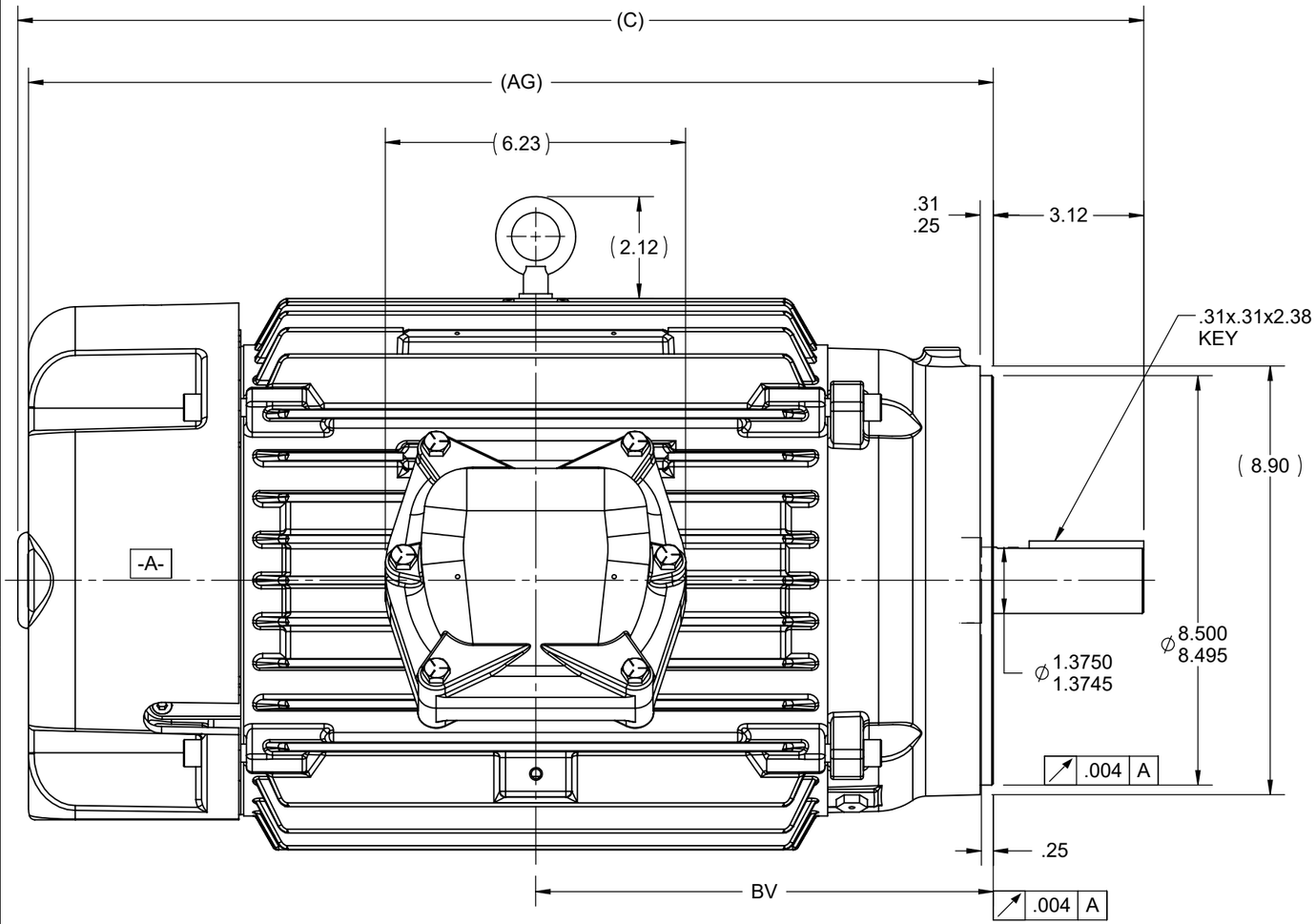
marathon® Motors

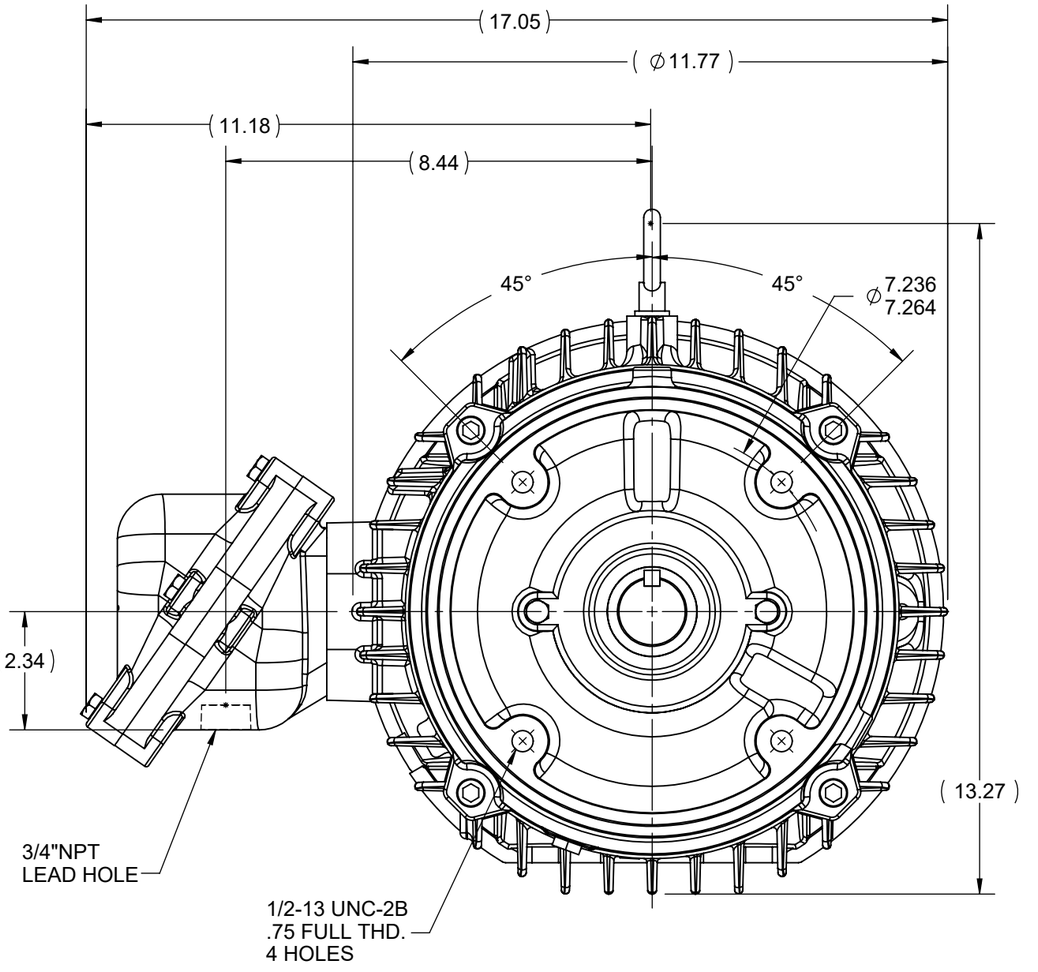
Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	230/460 V
Current	18.2/9.1 A	Speed	3525 rpm
Service Factor	1	Phase	3
Efficiency	89.5 %	Power Factor	86.2
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	213TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Hazardous Location	DIV 1 EXP PROOF CL I GR D CL II GR FG T3B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	1.823 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.45 in
Frame Length	12.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Outline Drawing	037703-1212	Connection Drawing	EE7308T





NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTOR AND ENERATORS,.REBUILT FOR USE IN HAZARDOUS LOCATION".
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1212	213/215	23.45	20.11	9.5
DASH	FRAME	C	AG	BV

DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	PB	05/30/2022
REQUEST NUMBER	APPROVED BY	DATE
NMR-0214266	PB	05/30/2022

REQUEST NUMBER DESCRIPTION
UPDATE THE DRAWING TEMPLATE

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 INCH / 5.1 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	VV
DATE	06/05/08
APPROVED BY	
DATE	
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Rexnord — Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
213T/215T FRAME- EPFC - C-FACE

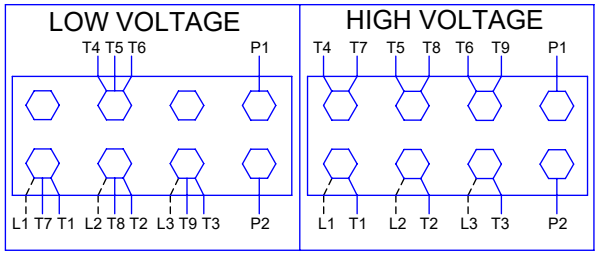
MATERIAL	PROCESS/FINISH
STANDARD WITH BASE	

SIZE	DRAWING NUMBER	SHEET
B	037703	1 OF 1

THREE PHASE DUAL VOLTAGE MOTOR

HIGH VOLTAGE

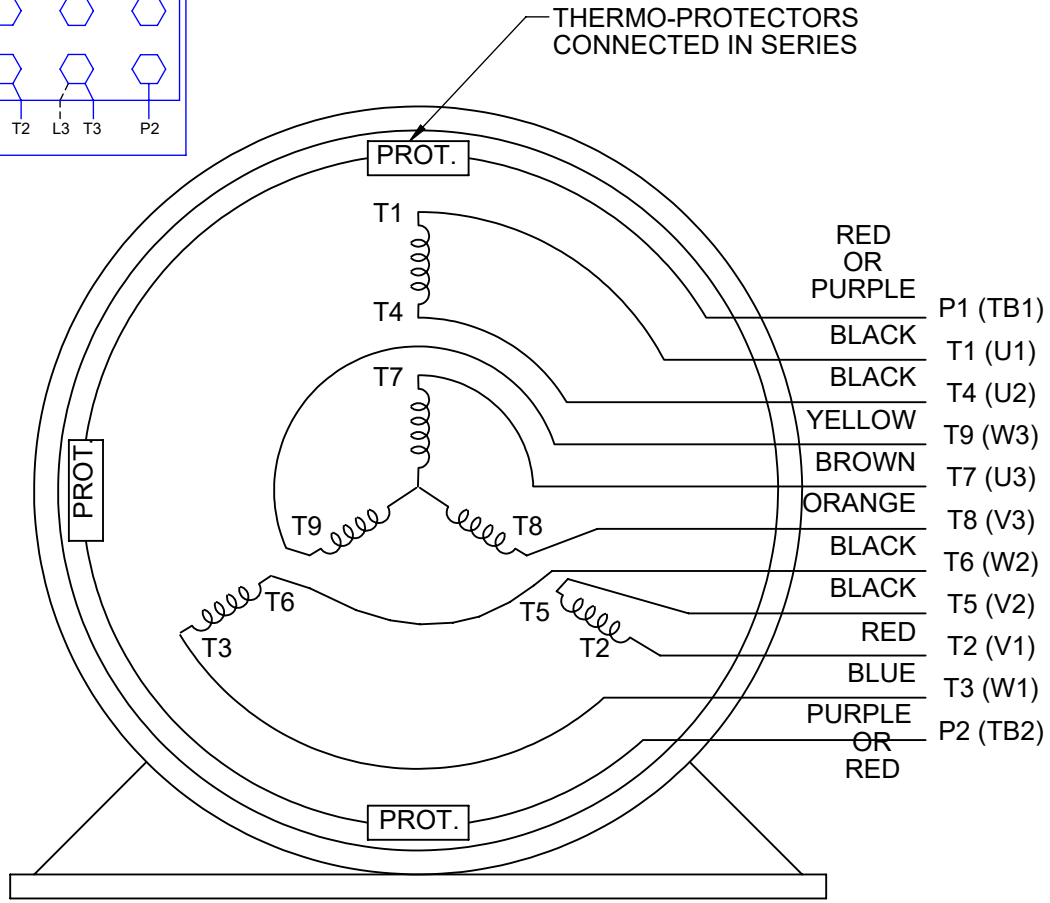
(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9



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

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



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	
			DATE: 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR	
			REFERENCE: EE7308/EE7300	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE: A	DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

CERTIFICATION DATA SHEET

Model#:	213TTGND16001 AA	**WINDING#:**	K2132125 NONE 2
CONN. DIAGRAM:	EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	037703-1212		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	3600	3525&2935	213TC	EPFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	18.2/9.1&15.4/7.7	LINE OR INVERTER	CONTINUOUS	B3	1.0/1.0	40	3300

FULL LOAD EFF: 89.5&88	3/4 LOAD EFF: 89.6	1/2 LOAD EFF: 88.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86.2&78	3/4 LOAD PF: 81.6	1/2 LOAD PF: 77	87.5	SQ CAGE INV RATED	7.2 / 3.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
11.2 LB-FT	110 / 55	20.6 LB-FT 184	30.8 LB-FT 275	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.45 LB-FT^2	12 LB-FT^2	15 SEC.	2	150 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	TRUE	EXP PROOF CL I GR D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6208	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 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/22/2017 06:45:56 AM
FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 6/20/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

213TTGND16001

Submittal

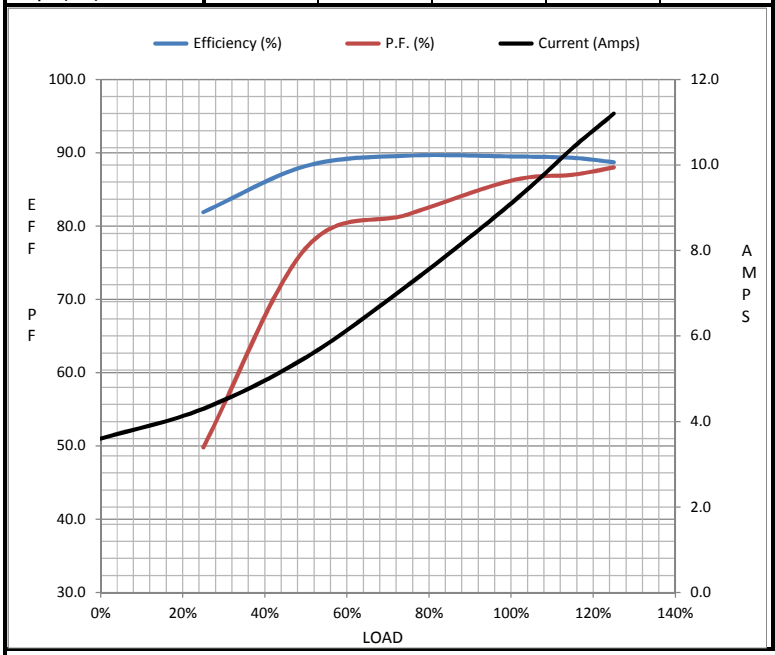
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.6	4.3	5.5	7.2	9.1	10.4	11.2	55.0	
Torque (ft-lb)	0.00	2.70	5.5	8.3	11.2	12.9	14.1	20.6	
RPM	3600	3580	3563	3544	3525	3,515	3500	0	
Efficiency (%)		81.9	88.2	89.6	89.5	89.3	88.7		
P.F. (%)	9.5	49.8	77.0	81.6	86.2	87.0	88.0	48.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	630	3043	3525	3600
Current (Amps)	55.0	54.9	35.6	9.1	3.6
Torque (ft-lb)	20.6	19.4	30.8	11.2	0.00



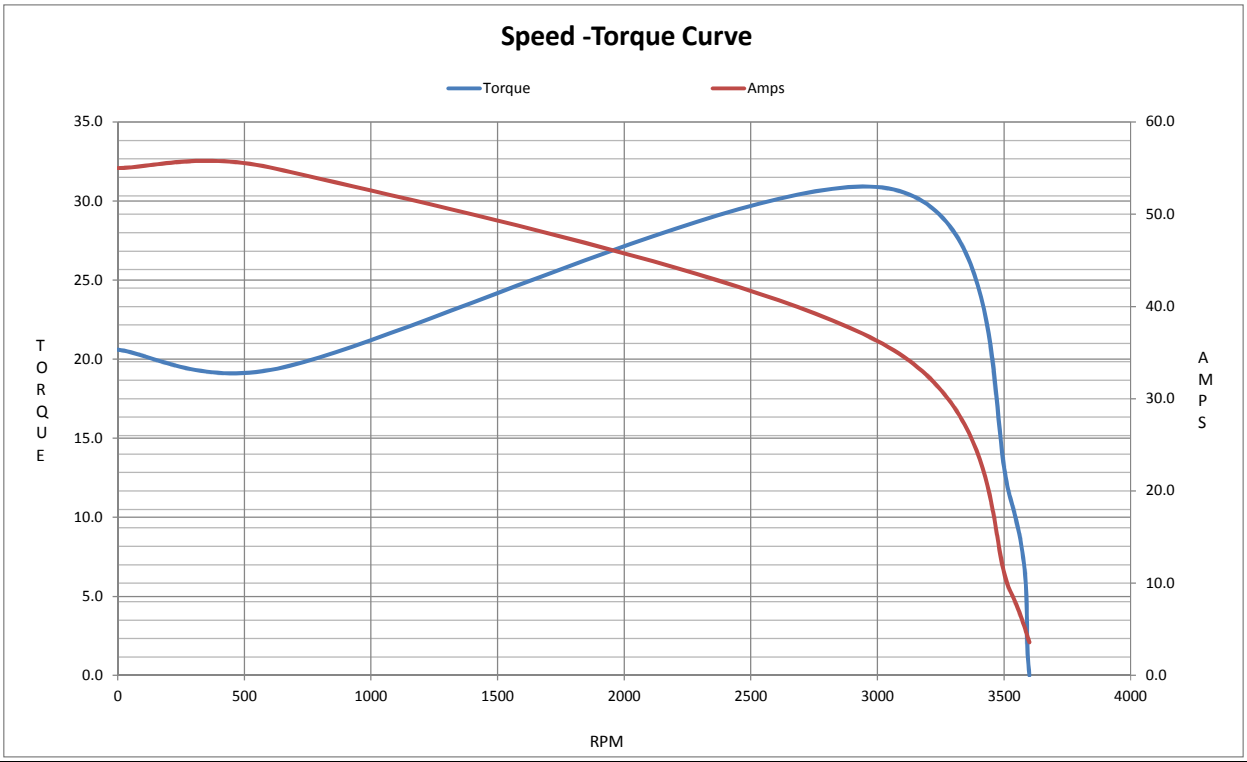
Information Block

HP	7.5
Sync. RPM	3600
Frame	213
Enclosure	TEFC
Construction	TFN
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	H
Service Factor	1.15
Temp Rise @ FL	50 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.45 Lb-Ft²
Ref Wdg	K2132125 NONE
Sound Pressure @ 1M	72 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	037703-1212
Conn. Diag	EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.0850	0.9530	2.7870	1.5810	67.0510

Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number	20220222- E12044
Report Reference	E12044-20090313
Issue Date	2022-FEBRUARY-22

Issued to: REGAL BELOIT AMERICA INC
1946 W COOK RD
FORT WAYNE IN 46818

Tradename: Marathon

This certificate confirms that representative samples of MOTORS FOR USE IN HAZARDOUS LOCATIONS

Electric motors for use in hazardous locations; Class I, Groups C and D; Class II, Groups F and G; Inclusive of Model Number 213TTGND16001 (may have prefix and/or suffix characters).

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 674 - Electric Motors and Generators for Use in Division 1 Hazardous (Classified) Locations,
CSA C22.2 No. 145, Electric Motors and Generators for Use in Hazardous (Classified) Locations

Additional Information: See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Bruce Mahrenholz, Director North American Certification Program

UL LLC