PRODUCT INFORMATION PACKET

Model No: 254TTGN6507
Catalog No: E502
Hazardous Duty® Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 254T Frame, EPFC

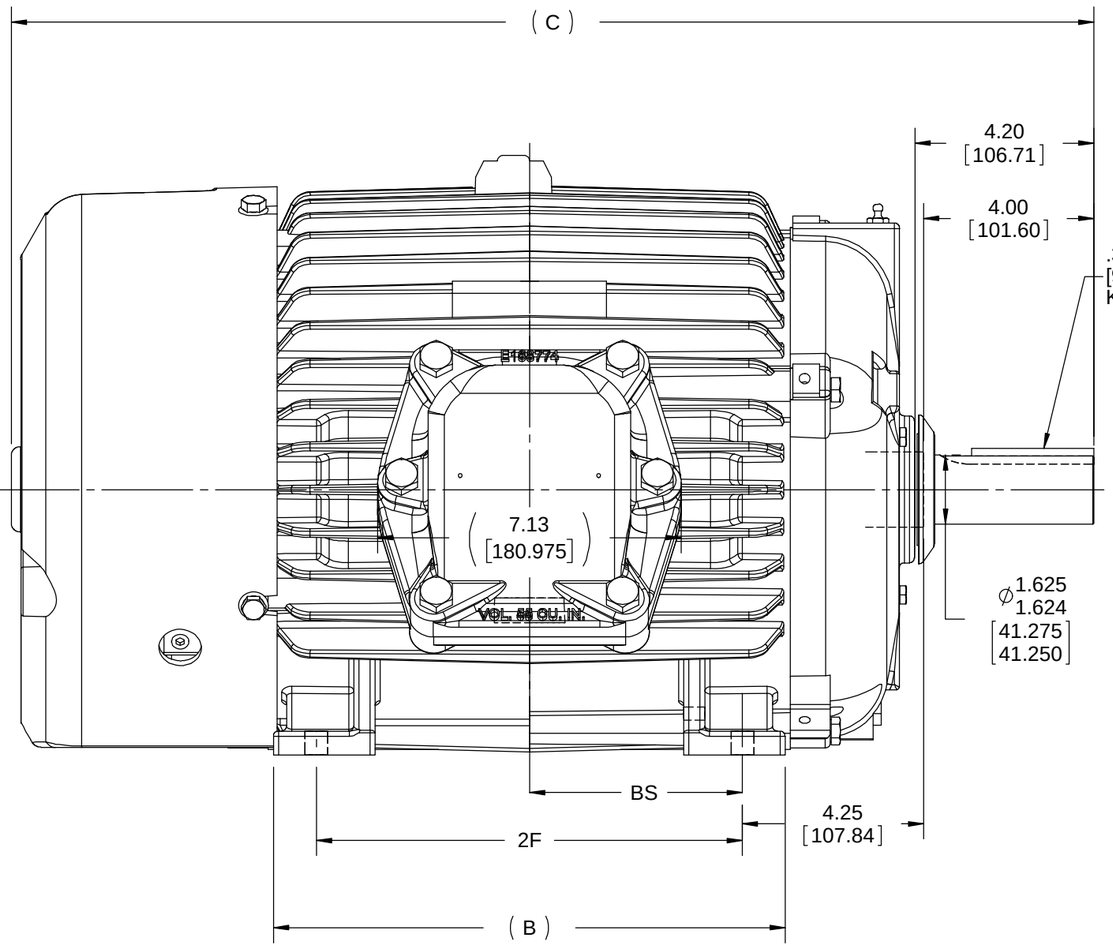
marathon® Motors

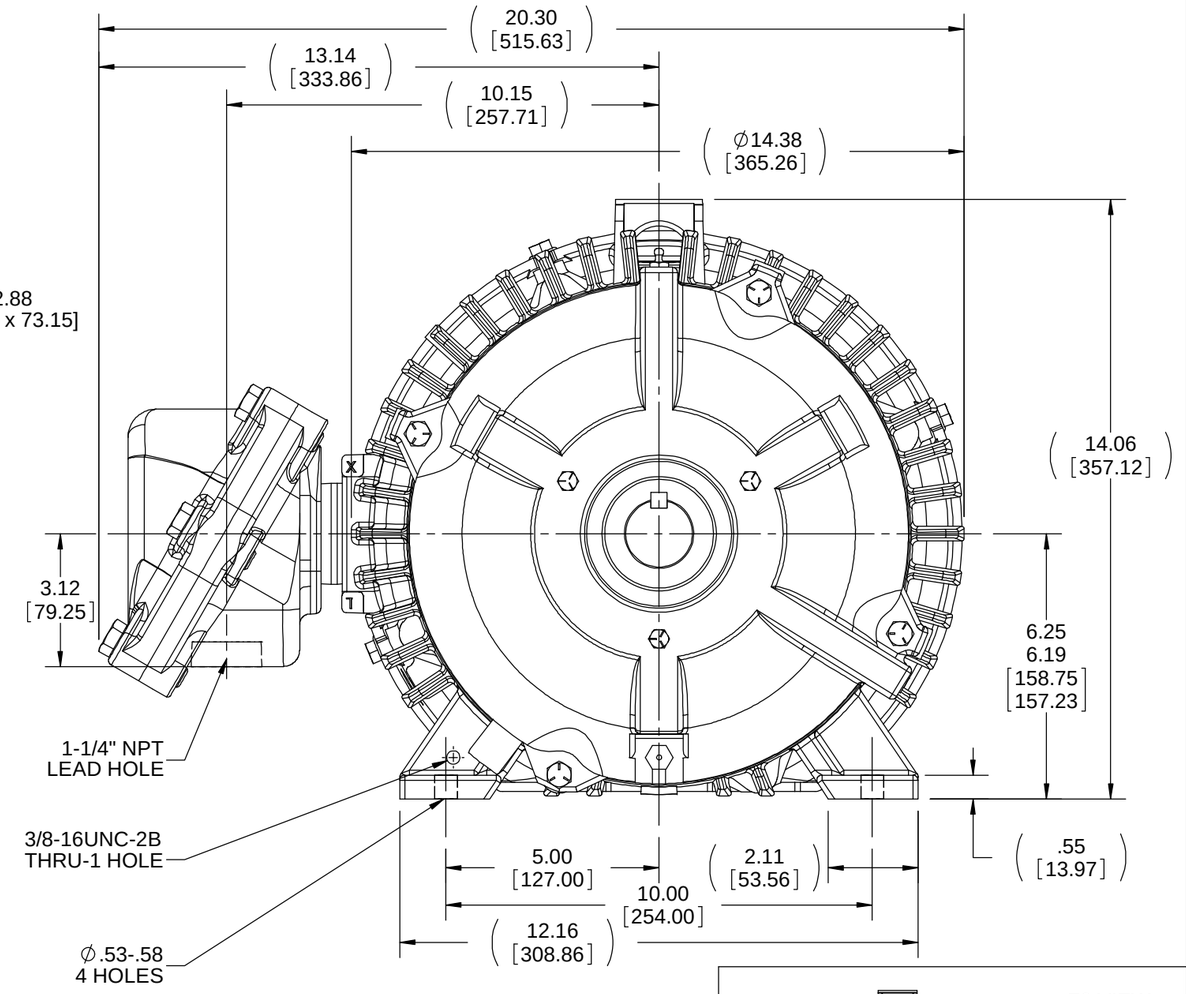
Nameplate Specifications

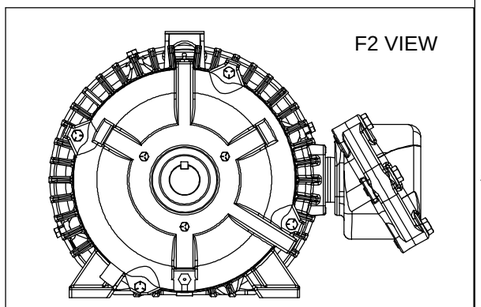
Phase	3	Output HP	15 & 10 Hp
Output KW	11.2 & 7.5 kW	Voltage	230/460 & 190/380 V
Speed	3550 & 2955 rpm	Service Factor	1.15 & 1.15
Frame	254T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 92 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	35/17.5 & 29/14.5 A	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.603 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	23.52 in
Frame Length	10.50 in	Shaft Diameter	1.625 in
Shaft Extension	4.2 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Connection Drawing	A-EE7308AD	Outline Drawing	B-SS203001-1050







NOTES:
1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270 ° FROM ITS ORIGINAL POSITION.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.65 [600.71]	---	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.40 [645.16]	---	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION: F	REVISION BY: SD	DATE: 11/18/2019
ECO: ECO-0177002	APPROVED BY: VMR	DATE: 11/18/2019

ECO DESCRIPTION: OULTLINE DESCRIPTION AND C DIMENSION UPDATED

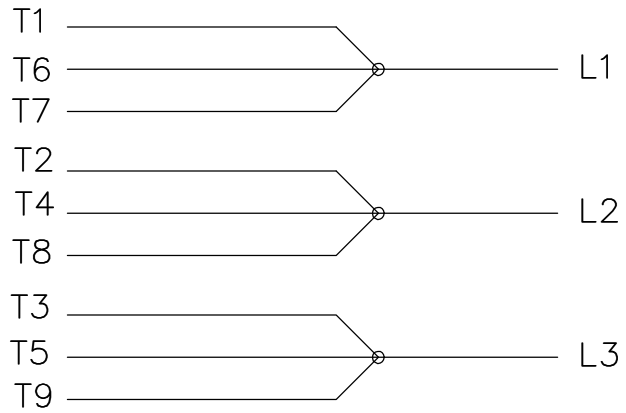
TOLERANCES UNLESS OTHERWISE SPECIFIED:

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]	

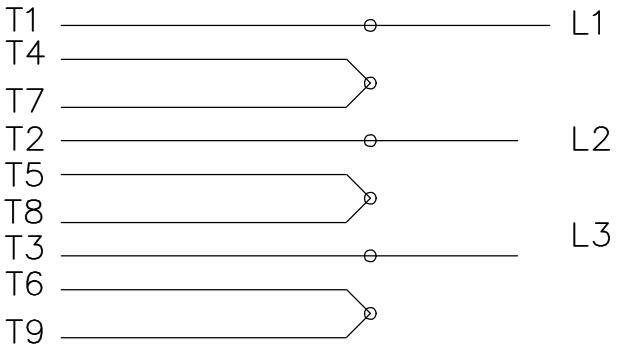
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381]
CORNER FILLETS: .02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

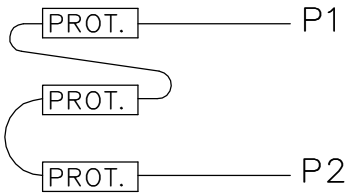
DRAWN BY: RM	Regal Beloit America, Inc.
DATE: 12-14-1993	
APPROVED BY: FG	DESCRIPTION: OUTLINE
DATE: 12-15-1993	250T FR. EXP. PR. - BB - T - STD.
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS203001 / SHEET: 1 OF 1

LOW VOLTAGE

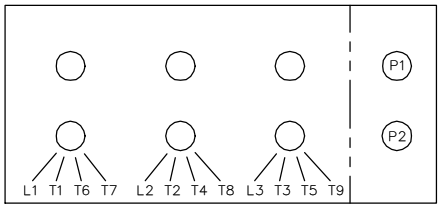


HIGH VOLTAGE

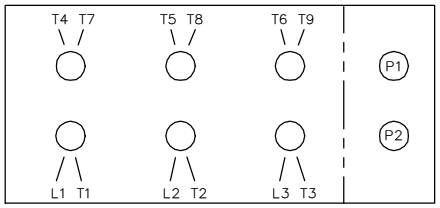


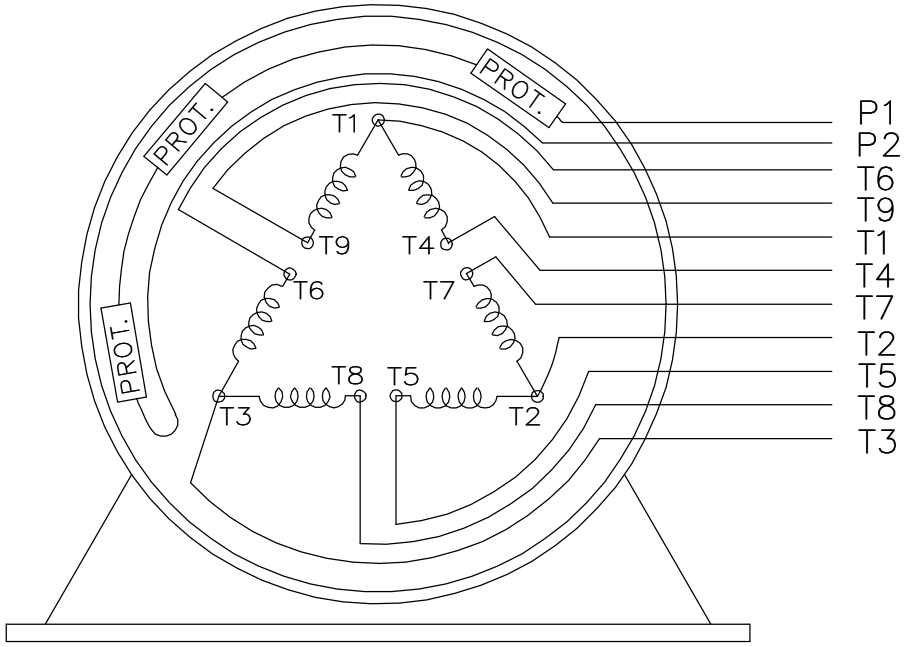


LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

DRAWING REVISION: L	REVISION BY: JP	REV DATE/© DATE: 06-21-2019
ECO: ECO-0168744	APPROVED BY: MH	DATE: 06-21-2019
ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS		

TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.02	[±0.5]	
.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: MJD	
DATE: 12-19-1997	
APPROVED BY: GK	
DATE: 01-07-1998	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7308AD / SHEET: 1 OF 1

Regal Beloit America, Inc.

DESCRIPTION: CONN DIAGRAM-EXTERNAL

CERTIFICATION DATA SHEET

Model#:	254TTGN6507 AE	**WINDING#:**	K256289 NONE 6
CONN. DIAGRAM:	A-EE7308AD	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-SS203001-1050		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	3600	3550&2955	254T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	35/17.5&29/14.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&92	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85&85	3/4 LOAD PF: 83.5	1/2 LOAD PF: 75.5	91	SQ CAGE INV RATED	12 / 6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.2 LB-FT	232 / 116	41 LB-FT 185	65 LB-FT 293	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	1.1 LB-FT^2	22 LB-FT^2	20 SEC.	2	310 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	EXP PROOF CL I GR C&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 6210	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: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

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

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DATE: 06/23/2017 04:33:18 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

254TTGN6507

Submittal

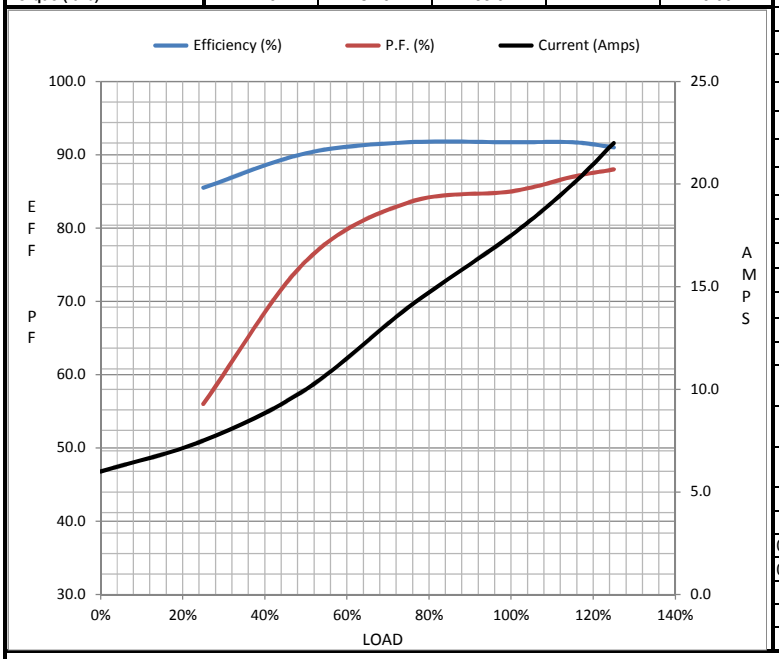
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.0	7.5	10.0	14.0	17.5	20.0	22.0	116	
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.2	25.0	28.0	41.0	
RPM	3600	3585	3570	3560	3550	3,540	3525	0	
Efficiency (%)		85.5	90.2	91.7	91.7	91.7	91.0		
P.F. (%)	10.5	56.0	75.5	83.5	85.0	87.0	88.0	38.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3175	3550	3600
Current (Amps)	116	103	75.0	17.5	6.0
Torque (ft-lb)	41.0	37.0	65.0	22.2	0.00



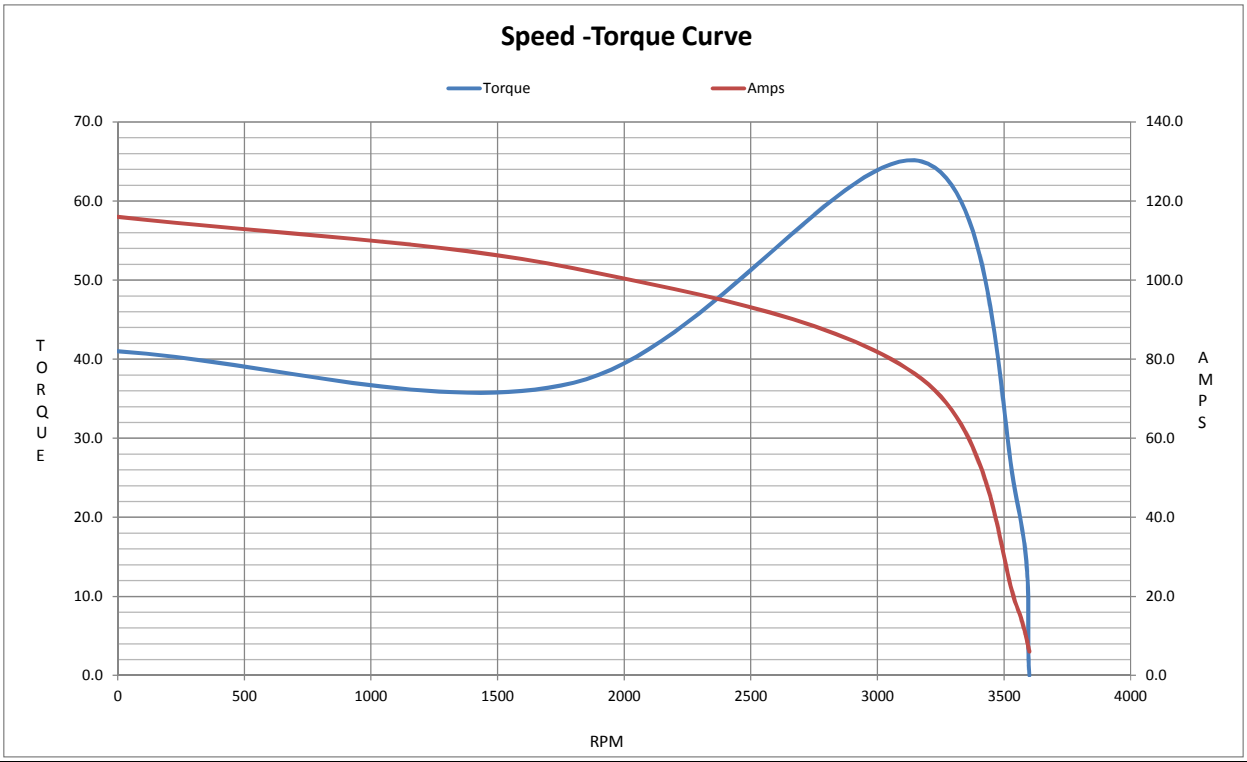
Information Block

HP	15.0
Sync. RPM	3600
Frame	254
Enclosure	TEFC
Construction	TFN
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	50 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	1.10 Lb-Ft²
Ref Wdg	K256289 NONE
Sound Pressure @ 1M	72 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	B-SS203001-1050
Conn. Diag	A-EE7308AD
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3870	0.2760	1.4040	1.2980	42.3360

Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number	20220311- E12044
Report Reference	E12044-19950413
Issue Date	2022-MARCH-11
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 254TTGN6507 (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