PRODUCT INFORMATION PACKET

Model No: 445TSTGN16506
Catalog No: U075A
Hazardous Duty® Explosion Proof Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 3600 & 3000 RPM, 445TS Frame, EPFC

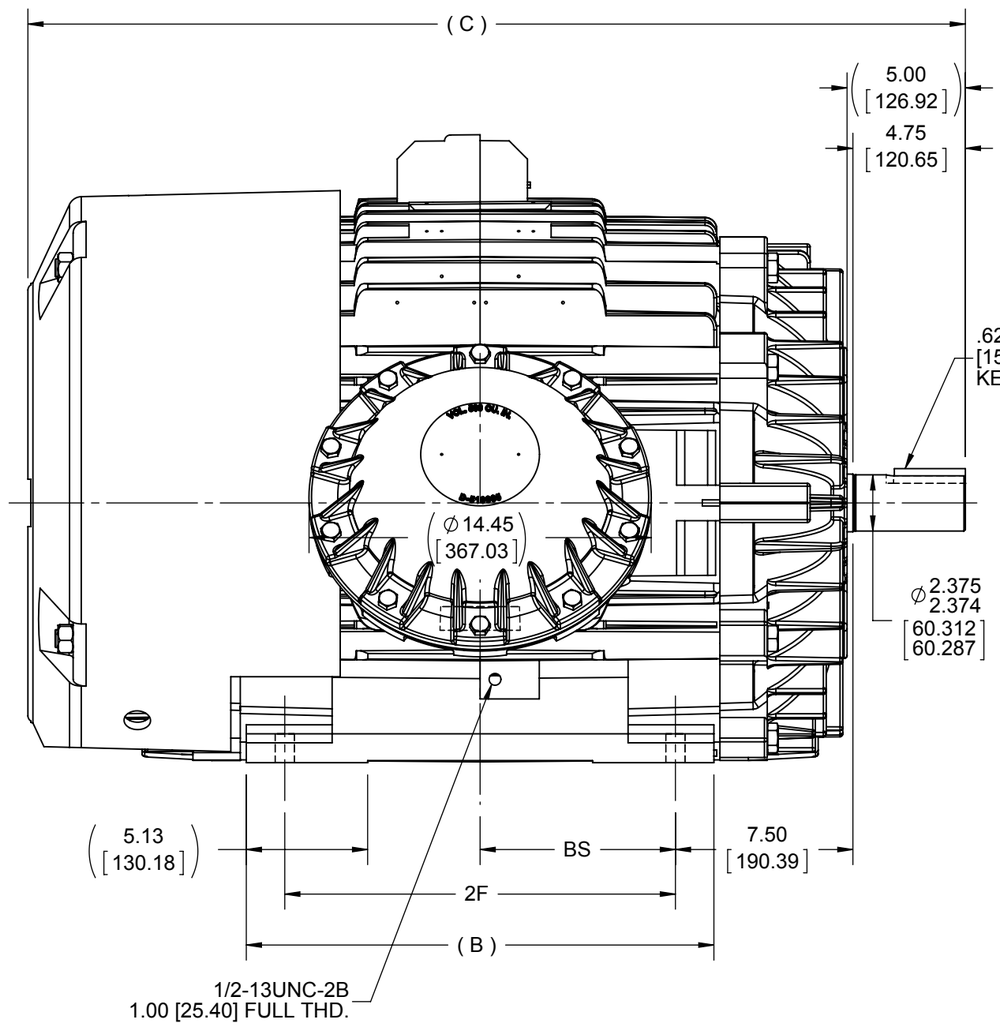
marathon® Motors

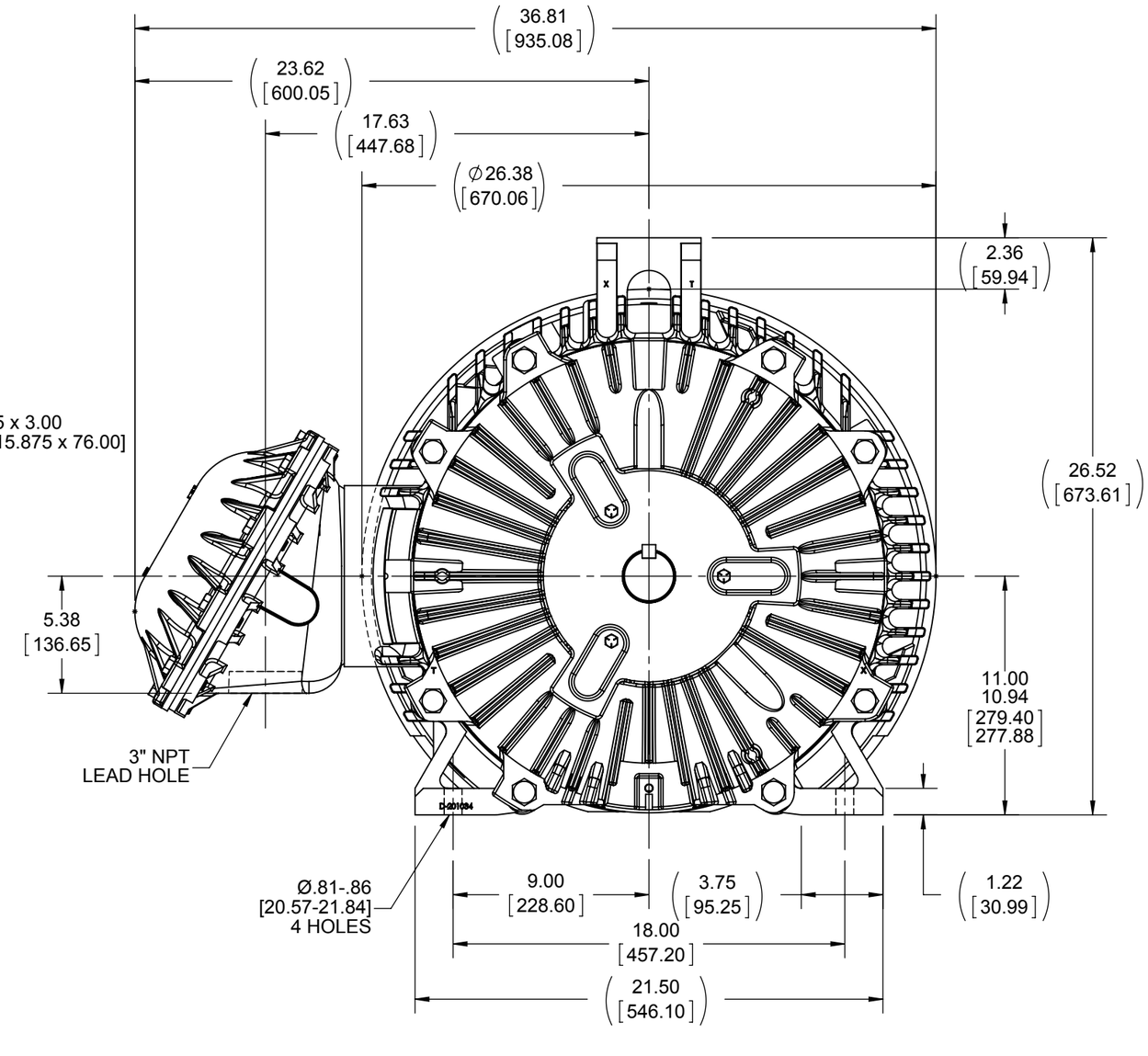
Nameplate Specifications

Phase	3	Output HP	200 & 150 Hp
Output KW	149.0 & 112.0 kW	Voltage	460 & 380 V
Speed	3575 & 2978 rpm	Service Factor	1.15 & 1.15
Frame	445TS	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	95.4 & 95 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	224 & 205 A	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
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 Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.0125 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	39.59 in
Frame Length	20.25 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	A-EE7300S	Outline Drawing	B-SS515918-2025





NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
3. DIMENSION IN [ ] DESIGNATE MILLIMETERS.

DASH	FRAME	B	C	2F	BS	
1825	444TS	17.75 [450.85]	37.59 [954.79]	14.50 [368.30]	7.25 [184.15]	
2025	445TS	19.75 [501.65]	39.59 [1005.59]	16.50 [419.10]	8.25 [209.55]	

DRAWING REVISION	REVISION BY	DATE
C	JJB	06-30-2014
ECO	APPROVED BY	DATE
ECO-0054447	TDB	06-30-2014

ECO DESCRIPTION
UPDATED TO CURRENT STANDARDS

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	
MH	
DATE	
01-15-1997	
APPROVED BY	
JL	
DATE	
02-06-1997	
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
444/445TS FR. - EXP PR - STD. - TEFC - TGN

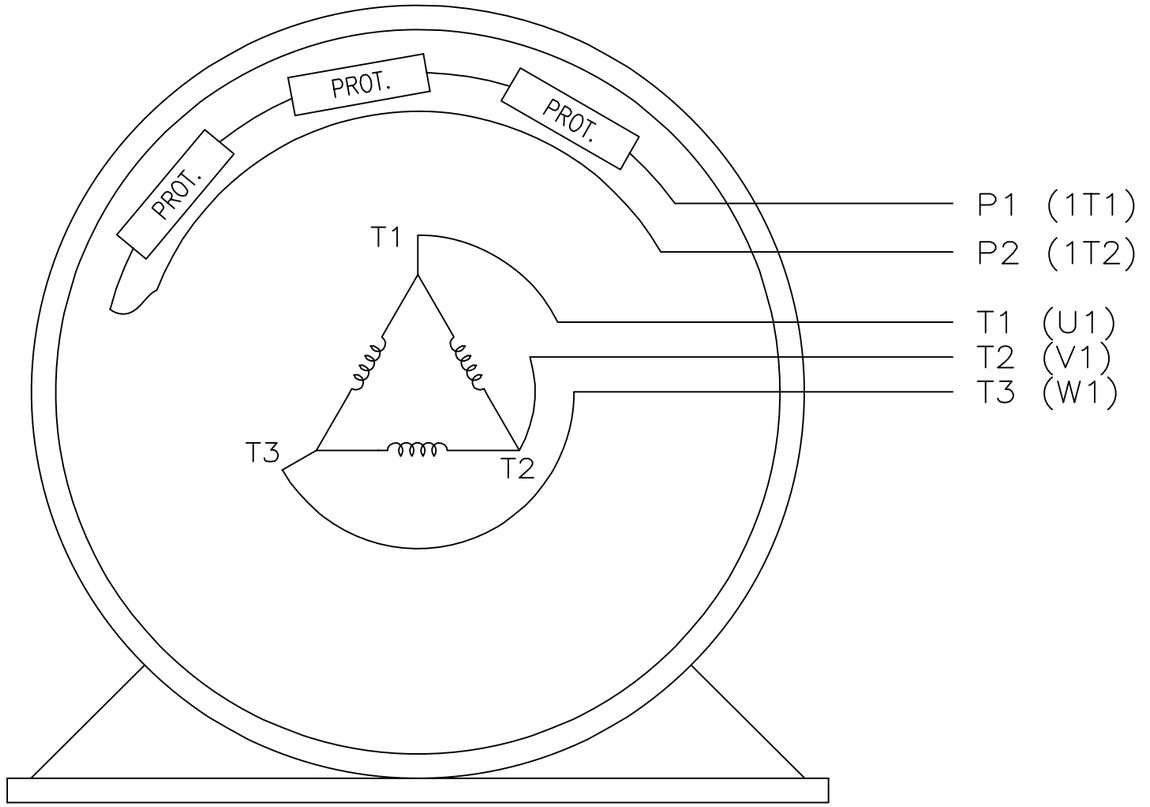
MATERIAL | PROCESS/FINISH

SIZE B | DRAWING NUMBER SS515918 | SHEET 1 OF 1

EE7300S

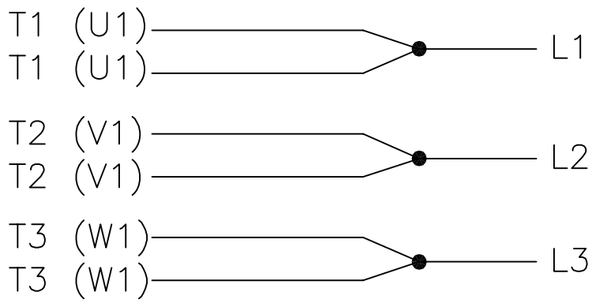
THREE PHASE – SINGLE VOLTAGE MOTOR

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



VIEW OF TERMINAL END

IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A–9806 DECAL

NO.	REVISION	BY & DATE	CHK
F	UPDATED TITLE BLOCK	HV 02-27-2014	EWH
3	REMOVED "N.C." FROM PROT.'S MU61770	JJB 08-02-2010	
2	ADDED IEC MARKINGS MU61770	KL 09-16-2004	EAB
1	NEW DRAWING	KL 12-16-1999	

TOLERANCES UNLESS SPECIFIED
DEC. INCHES
.X ± –
.XX ± –
.XXX ± –
.XXXX ± –
ANG ± –

REGAL BELOIT REGAL-BELOIT CORPORATION

TITLE CONNECTION DIAGRAM – EXTERNAL SINGLE VOLTAGE 3Ø MOTOR

DRAWN KL 12–15–1999
CHK DJK 12–15–1999
APPD DJK 12–15–1999
SCALE 1=1
REF
FMF
PREV
MAT'L.
FINISH

RFP
DIST WA–LB–SB
CAD FILE ee7300s

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7300S	F

CERTIFICATION DATA SHEET

Model#:	445TSTGN16506 AA	**WINDING#:**	T445280 NONE 1
CONN. DIAGRAM:	A-EE7300S	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-SS515918-2025		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200&150	149&112	3600	3575&2978	445TS	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	224&205	ACROSS THE LINE	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 95.4&95	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88&87	3/4 LOAD PF: 85.5	1/2 LOAD PF: 78.5	95	SQ CAGE IND RUN	69.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
294 LB-FT	1450	475 LB-FT 162	900 LB-FT 306	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	33.5 LB-FT^2	160 LB-FT^2	15 SEC.	2	2300 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 6318	BALL 6316	POLYREX EM	TS	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: 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

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DATE: 06/21/2017 05:36:19 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

445TSTGN16506

Submittal

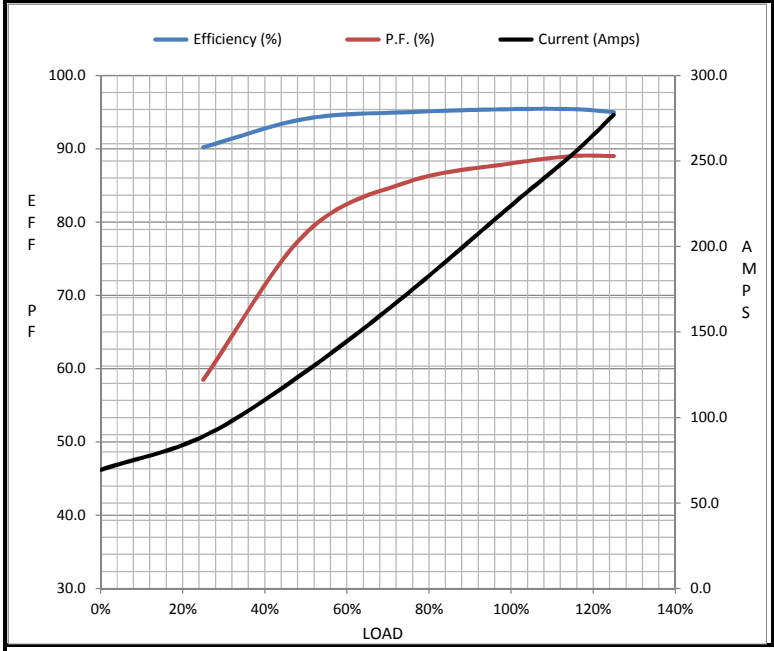
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	69.5	89.0	127	173	224	254	277	1,450	
Torque (ft-lb)	0.00	73.0	147	220	294	338	368	500	
RPM	3600	3595	3590	3580	3575	3,570	3565	0	
Efficiency (%)		90.2	94.1	95.0	95.4	95.4	95.0		
P.F. (%)	6.8	58.5	78.5	85.5	88.0	89.0	89.0	25.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3430	3575	3600
Current (Amps)	1,450	1,210	950	224	69.5
Torque (ft-lb)	500	415	870	294	0.00

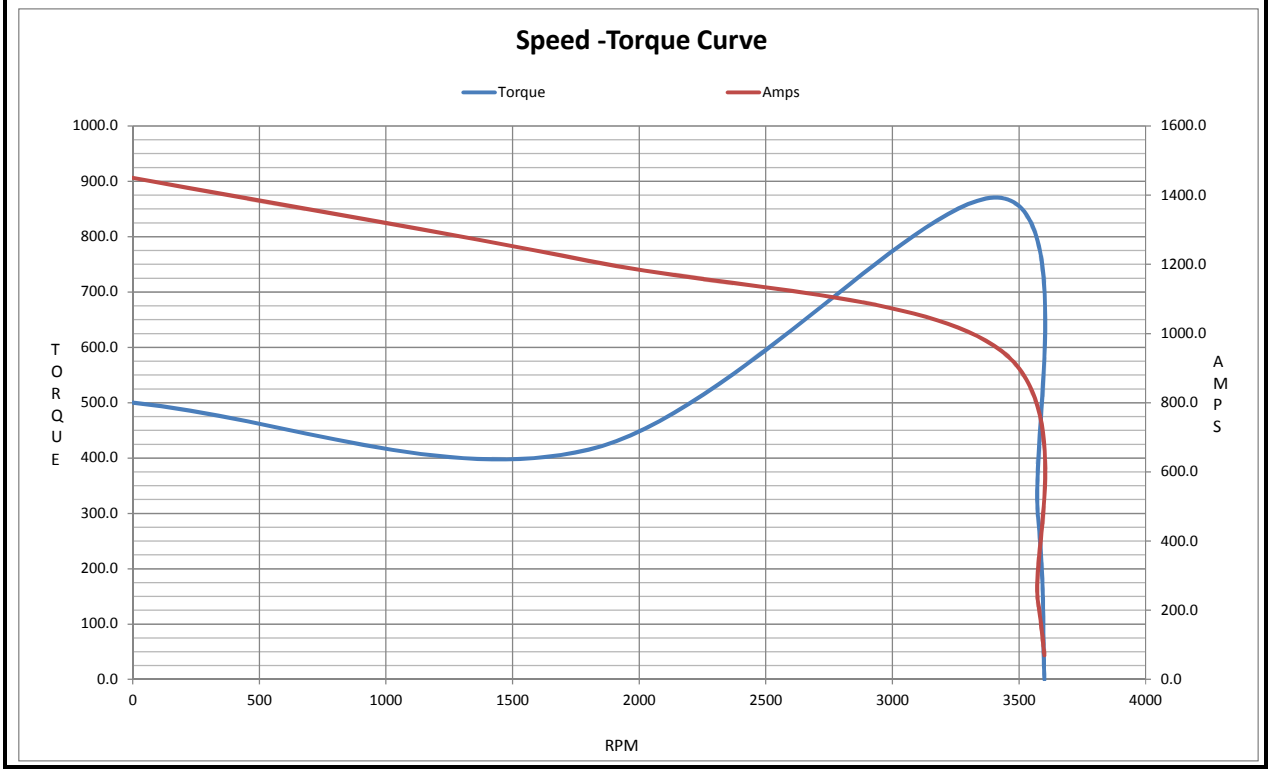


Information Block

HP	200.0
Sync. RPM	3600
Frame	445
Enclosure	TEFC
Construction	TFN
Voltage	460#380 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	75 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	33.5 Lb-Ft²
Ref Wdg	T445280 NONE
Sound Pressure @ 1M	80 dBA
VFD Rating	NONE
Outline Dwg	B-SS515918-2025
Conn. Diag	A-EE7300S
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0100	0.0090	0.1210	0.0920	3.8340



CERTIFICATE OF COMPLIANCE

Certificate Number	20220524- E12044
Report Reference	E12044-19970314
Issue Date	2022-MAY-24

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 445TSTGN16506 (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