

PRODUCT INFORMATION PACKET

Model No: 445TSTGN16505

Catalog No: E584

Hazardous Duty® Explosion Proof Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 445TS Frame, EPFC



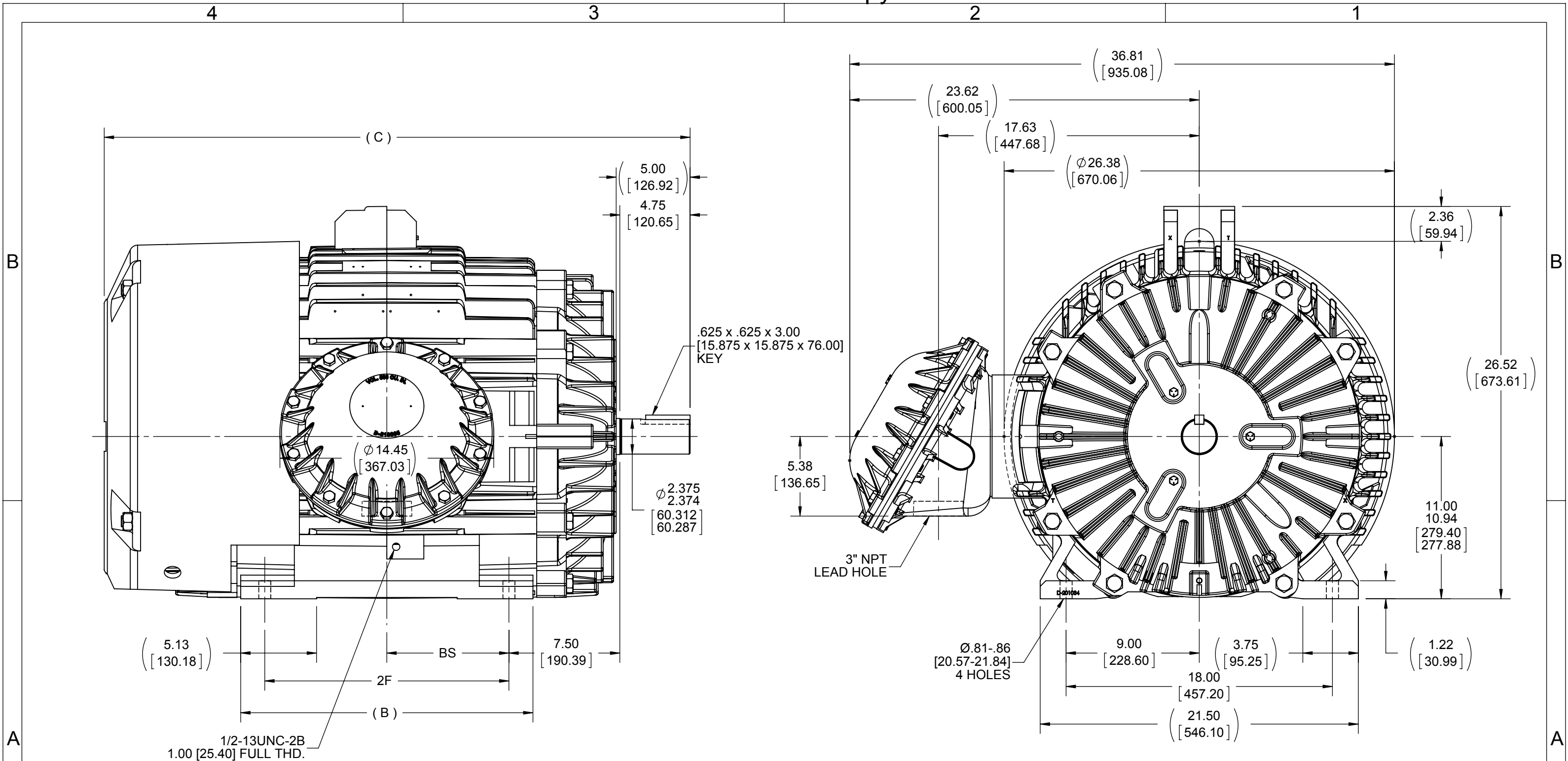
Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2024 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

Phase	3	Output HP	150 Hp
Output KW	112.0 kW	Voltage	460 V
Speed	3575 rpm	Service Factor	1.15
Frame	445TS	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	95.8 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	168.0 A	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Listed	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.018 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
Inverter Load	CONSTANT 10:1		
Outline Drawing	B-SS515918-2025	Connection Drawing	A-EE7300S



- 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 C	REVISION BY JJB	DATE 06-30-2014
ECO ECO-0054447	APPROVED BY TDB	DATE 06-30-2014
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.		

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]
 CORNER FILLETS: .02 [0.51]
 MACHINED SURFACES: 200 INCH 5.1 mm
 mm SHOWN IN [BRACKETS]

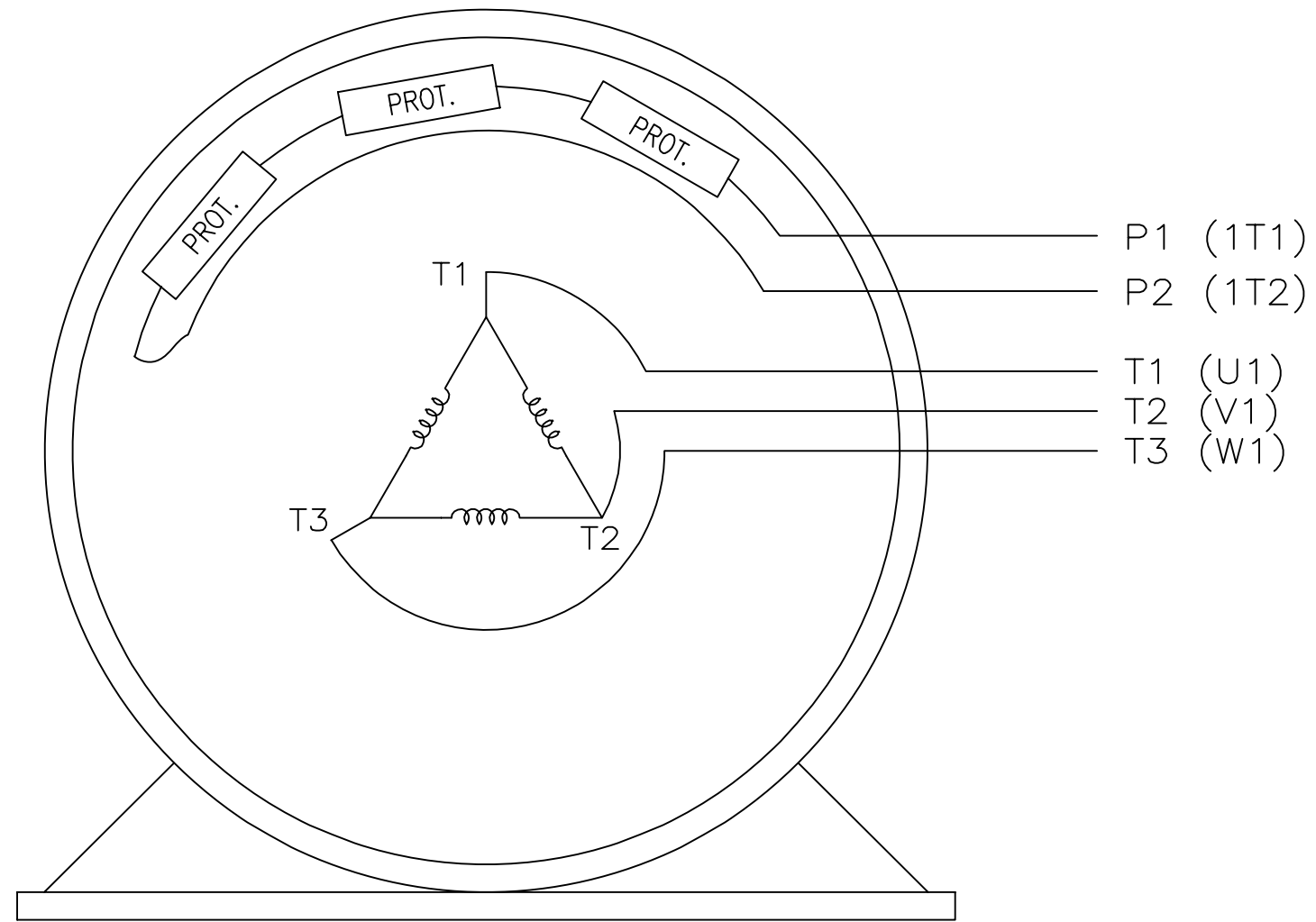
DRAWN BY MH
DATE 01-15-1997
APPROVED BY JL
DATE 02-06-1997
REFERENCE
THIRD ANGLE PROJECTION

REGAL ™ 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

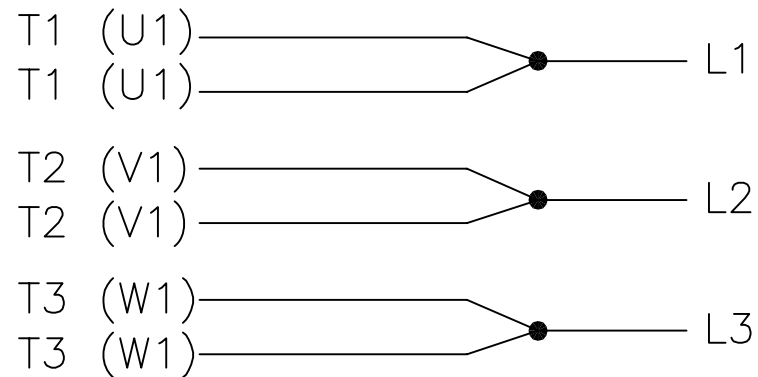
THREE PHASE – SINGLE VOLTAGE MOTOR

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	TOLERANCES UNLESS SPECIFIED			REGAL-BELOIT CORPORATION	DRAWN KL 12-15-1999
				DEC.	INCHES			
F	UPDATED TITLE BLOCK	HV 02-27-2014	EWB	.X	±	-	REGAL-BELOIT CORPORATION	CHK DJK 12-15-1999
3	REMOVED "N.C." FROM PROT.'S MU61770	JJB 08-02-2010		.XX	±	-	TITLE CONNECTION DIAGRAM – EXTERNAL SINGLE VOLTAGE 3Ø MOTOR	APPD DJK 12-15-1999
2	ADDED IEC MARKINGS MU61770	KL 09-16-2004	EAB	.XXX	±	-		SCALE 1=1
1	NEW DRAWING	KL 12-16-1999		.XXXX	±	-	MAT'L.	REF
				ANG	±	-	FINISH	FMF
			RFP				CAD FILE ee7300s	PREV
			DIST WA-LB-SB				SIZE A	DRAWING NO. EE7300S
								PAGE OF F

THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT
IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED
THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT

CERTIFICATION DATA SHEET

Model#: 445TSTGN16505 AA **WINDING#:** T445276 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
150	112	3600	3575	445TS	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	168	LINE OR INVERTER	CONTINUOU S	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88	3/4 LOAD PF: 85	1/2 LOAD PF: 78	95.4	SQ CAGE INV RATED	51

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1085	275 LB-FT 124	640 LB-FT 288	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	31 LB-FT^2	120 LB-FT^2	15 SEC.	2	2200 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	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6316						

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 2:1
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

*
N
O
T
E
S
*

DATE: 06/21/2017 05:35:16 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

445TSTGN16505

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

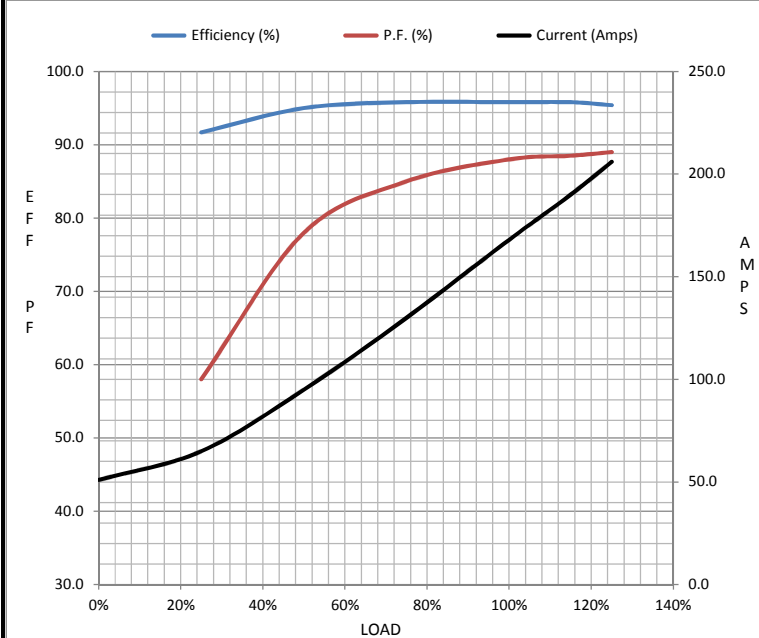
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	51.0	65.0	95.0	130	168	190	206	1,085
Torque (ft-lb)	0.00	55.0	110	165	221	254	276	275
RPM	3600	3595	3588	3582	3575	3,570	3568	0
Efficiency (%)		91.7	95.0	95.8	95.8	95.8	95.4	
P.F. (%)	5.0	58.0	78.0	85.0	88.0	88.5	89.0	21.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3300	3575	3600
Current (Amps)	1,085	977	700	168	51.0
Torque (ft-lb)	275	248	640	221	0.00

Information Block

HP	150.0			
Sync. RPM	3600			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	31.0 Lb-Ft ²			
Ref Wdg	T445276 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS515918-2025			
Conn. Diag	A-EE7300S			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0140	0.0130	0.1660	0.1400	5.1600



Speed -Torque Curve



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 445TSTGN16505 (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

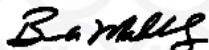
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

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

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

