PRODUCT INFORMATION PACKET

Model No: 445TTGN6542
Catalog No: E585
Explosion Proof Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445T Frame, EPFC

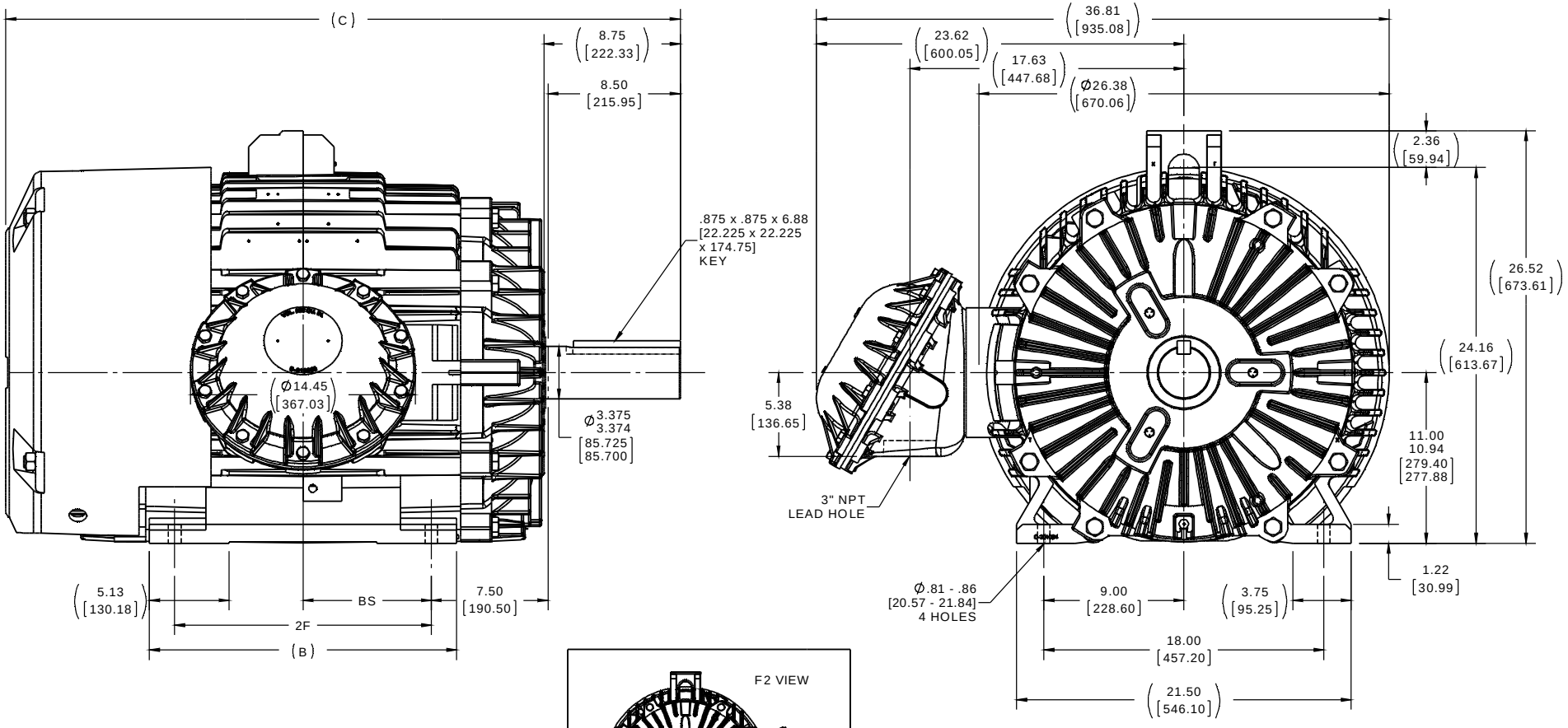
RegalRexnord

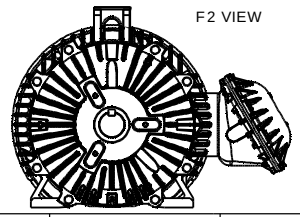
Nameplate Specifications

Output HP	**150 Hp**	Output KW	**112.0 kW**
Frequency	**60 Hz**	Voltage	**460 V**
Current	**172.0 A**	Speed	**1785 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**95.8 %**	Power Factor	**85**
Duty	**Continuous**	Insulation Class	**F**
Design Code	**B**	KVA Code	**G**
Frame	**445T**	Enclosure	**Explosion Proof Fan cooled**
Thermal Protection	**Thermostat**	Ambient Temperature	**40 °C**
Drive End Bearing Size	**6318**	Opp Drive End Bearing Size	**6316**
UL	**UL Listed And CSA Certified**	CSA	**Y**
CE	**N**	IP Code	**54**
Hazardous Location	**DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B**	Number of Speeds	**1**

Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.0275 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	**43.35 in**
Frame Length	**20.25 in**	Shaft Diameter	**3.375 in**
Shaft Extension	**8.75 in**	Assembly/Box Mounting	**F1 ONLY**
Inverter Load	**CONSTANT 2:1**		
Outline Drawing	**B-SS515577-2025**	Connection Drawing	**A-EE7300S**





NOTES:
1. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	BS	
1825	444T	17.75 [450.85]	41.35 [1050.29]	14.50 [368.30]	7.25 [184.15]	
2025	445T	19.75 [501.65]	43.35 [1101.09]	16.50 [419.10]	8.25 [209.55]	

DRAWING REVISION: E	REVISION BY: JHA	DATE: 03-02-2015
ECO: ECO-0072728	APPROVED BY: TDB	DATE: 03-03-2015

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]	

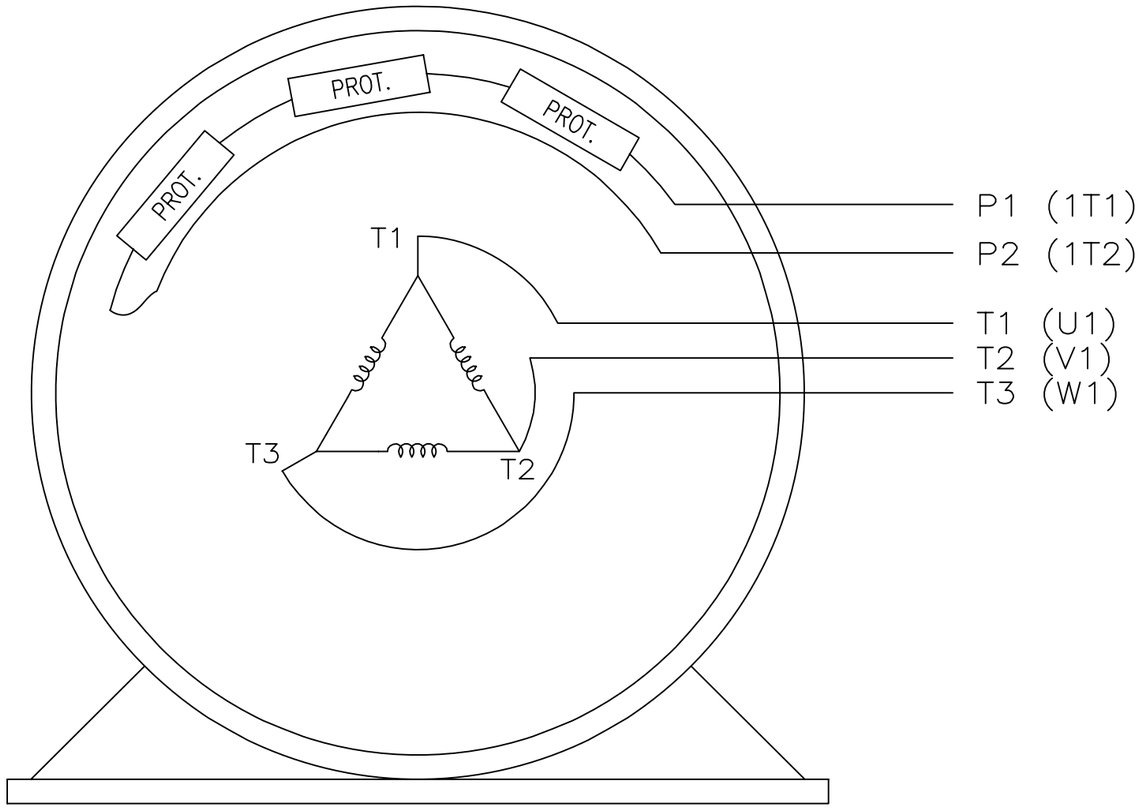
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY: SMC	Regal Beloit America, Inc.
DATE: 04-15-1996	
APPROVED BY: JPN	DESCRIPTION: OUTLINE
DATE: 04-19-1996	444/445T FR. - EXPLOSION PROOF
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS515577 / SHEET: 1 OF 1

EE7300S

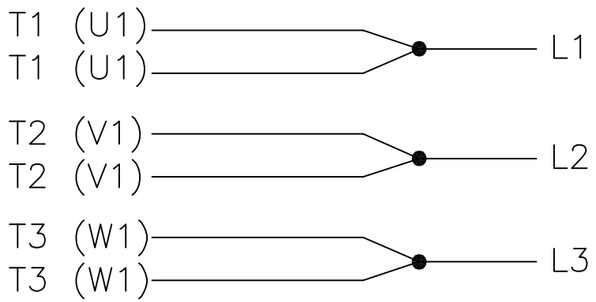
THREE PHASE – SINGLE VOLTAGE MOTOR

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

MAT'L.

FINISH

CAD FILE ee7300s

RFP

DIST WA–LB–SB

DRAWN	KL 12–15–1999
CHK	DJK 12–15–1999
APPD	DJK 12–15–1999
SCALE	1=1
REF	
FMF	
PREV	

SIZE A | DRAWING NO. EE7300S | PAGE OF | REV. F

CERTIFICATION DATA SHEET

Model#:	445TTGN6542 AB	**WINDING#:**	T4454127 NONE 1
CONN. DIAGRAM:	A-EE7300S	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-SS515577-2025		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&125	112&93	1800	1785&1485	445T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	172&170	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 95.8&95.8	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85&86	3/4 LOAD PF: 82	1/2 LOAD PF: 74	95.4	SQ CAGE INV RATED	60

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1085	800 LB-FT 181	1150 LB-FT 261	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	47 LB-FT^2	1000 LB-FT^2	25 SEC.	2	2050 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	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 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

* NOTES *

DATE: 06/21/2017 06:11:22 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 29-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

445TTGN6542

Submittal

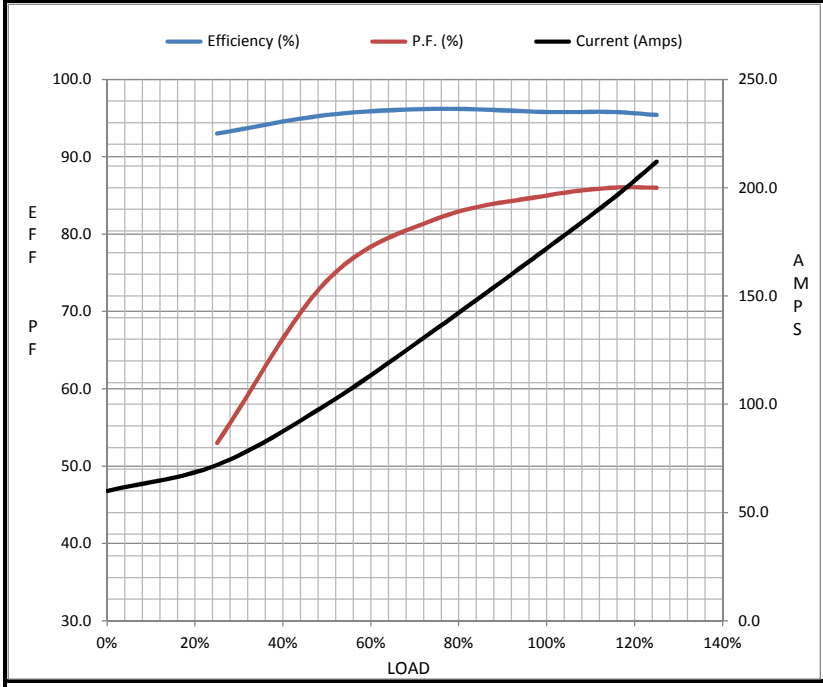
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	60.0	72.0	100	135	172	195	212	1,085	
Torque (ft-lb)	0.00	110	220	330	441	508	553	800	
RPM	1800	1796	1792	1790	1785	1,782	1780	0	
Efficiency (%)		93.0	95.4	96.2	95.8	95.8	95.4		
P.F. (%)	4.5	53.0	74.0	82.0	85.0	86.0	86.0	28.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,085	950	600	172	60.0
Torque (ft-lb)	800	775	1,150	441	0.00



Information Block

HP	150.0
Sync. RPM	1800
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	70 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	47.0 Lb-Ft²
Ref Wdg	T4454127 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	CONSTANT 2:1
Outline Dwg	B-SS515577-2025
Conn. Diag	A-EE7300S

Additional Specifications:

0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0210	0.0120	0.1680	0.1590	4.4090

Speed -Torque Curve