

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TSTDS6007

Catalog No: U251

XRI® General Purpose General Purpose Motor, 150 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V,
3600 & 3000 RPM, 405TS Frame, DP



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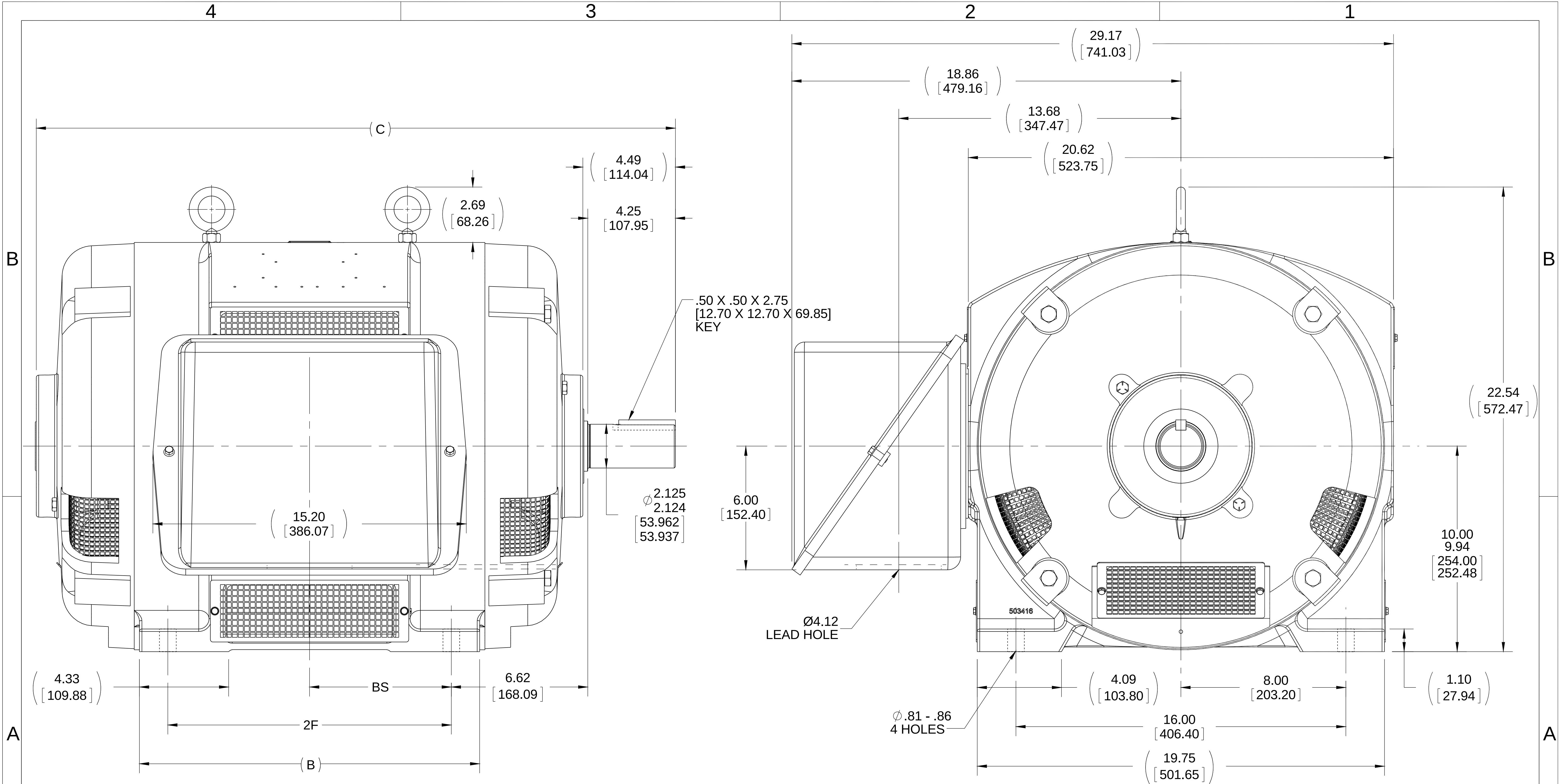
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	150 & 150 Hp
Output KW	112.0 & 112.0 kW	Voltage	460 & 380 V
Speed	3565 & 2955 rpm	Service Factor	1.15 & 1.15
Frame	405TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	165 & 202 A	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.0395 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	31.00 in
Frame Length	17.00 in	Shaft Diameter	2.125 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS511744-1700	Connection Drawing	A-EE7300BH



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

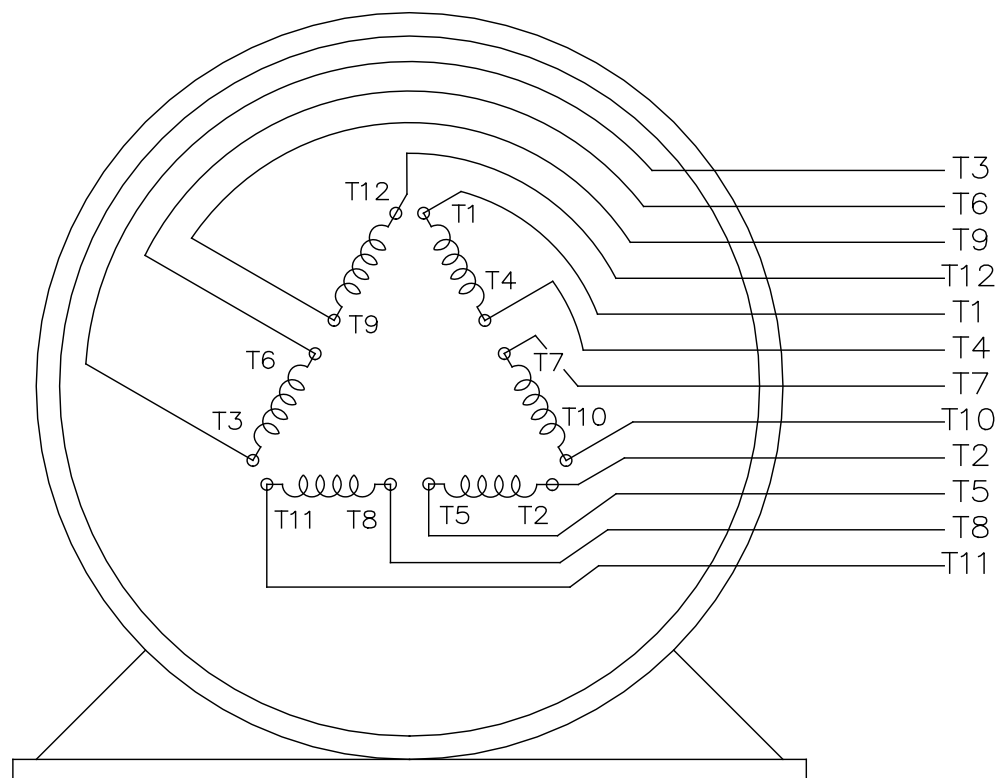
DASH	FRAME	B	C	2F	BS
1550	404TS	15.00 [381.00]	29.50 [749.30]	12.25 [311.15]	6.12 [155.45]
1700	405TS	16.50 [419.10]	31.00 [787.40]	13.75 [349.25]	6.88 [174.75]

DRAWING REVISION	REVISION BY	DATE
C	W. JOERGER	06-08-2016
ECO	APPROVED BY	DATE
ECO-0103342	E. HEIL	06-08-2016
ECO DESCRIPTION		
RE-DRAWN TO CURRENT STANDARDS		
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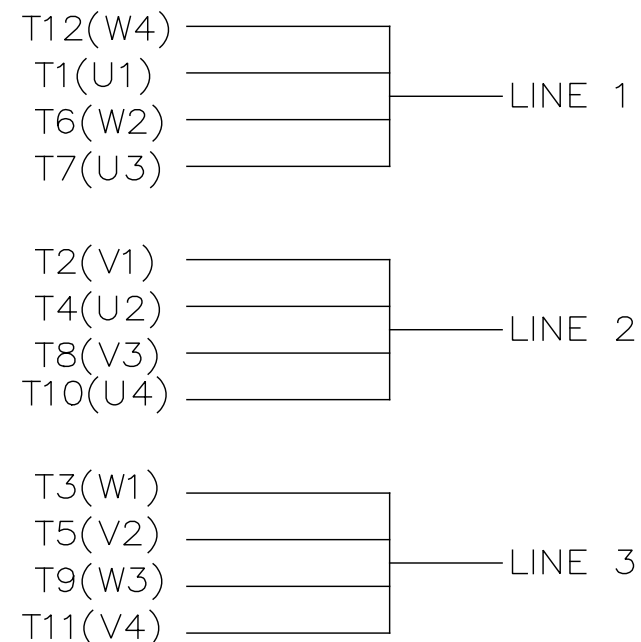
TOLERANCES UNLESS OTHERWISE SPECIFIED:
DEC. INCH mm
.X ±0.1 [±2.5]
.XX ±0.01 [±0.25]
.XXX ±0.005 [±0.127]
.XXXX ±0.0005 [±0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°
CORNER FILLETS: R.02 [51]
MACHINED SURFACES: 125 3.2 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	TLB
DATE	06-16-1982
APPROVED BY	GK
DATE	06-16-1982
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL™ Regal Beloit America, Inc.			
DESCRIPTION			
OUTLINE			
400TS FR - DR. PR. - (STD) SCREENED			
MATERIAL		PROCESS/FINISH	
SIZE	DRAWING NUMBER	SHEET	
B	SS511744	1 OF 1	



VIEW OF TERMINAL END



				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005				
				DEC.	INCHES		CHK	ML	02-11-2005		
				.X	±.1		APPD	GK	02-11-2005		
				.XX	±.02		SCALE				
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX	±.005	TITLE CONNECTION DIAGRAM 12 LEAD- SINGLE VOLTAGE			REF	
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX	±.0005	MAT'L.			FMF	
NO.	REVISION		BY & DATE	CHK	ANG	±7'30"	FINISH			PREV	
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				RFP 02-11-2005		CAD FILE ee7300bh		SIZE	DRAWING NO.	PAGE OF	REV.
				DIST LB				A	EE7300BH		C

CERTIFICATION DATA SHEET

Model#: 405TSTD6007 CP
 CONN. DIAGRAM: A-EE7300BH
 OUTLINE: B-SS511744-1700

WINDING#: T405241 NONE 2
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&150	112&112	3600	3565&2955	405TS	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	165&202	PWS & YDRUN	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 95&93.6	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5&90	3/4 LOAD PF: 88.5	1/2 LOAD PF: 84.5	94.5	SQ CAGE IND RUN	38.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1020	290 LB-FT 130	560 LB-FT 253	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	16.5 LB-FT^2	140 LB-FT^2	10 SEC.	2	1100 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	D RIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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
6313	6313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: NONE
	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

DATE: 06/21/2017 08:26:12 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



405TSTD6007

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	38.5	55.5	88.0	125	165	191	207	1,020	
Torque (ft-lb)	0.00	55.0	110	165	221	255	276	290	
RPM	3600	3592	3585	3575	3565	3,560	3555	0	
Efficiency (%)		91.7	94.5	95.0	95.0	94.5	94.5		
P.F. (%)	7.5	68.5	84.5	88.5	89.5	90.0	90.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	1800	3400	3565	3600					
Current (Amps)	1,020	915	610	165	38.5					
Torque (ft-lb)	290	240	560	221	0.00					

Efficiency (%)

P.F. (%)

Current (Amps)

LOAD	Efficiency (%)	P.F. (%)	Current (Amps)
0%			41
20%	92	140	50
40%	94	180	60
60%	95	200	70
80%	95	210	80
100%	95	215	90
120%	94	218	100

HP	150.0			
Sync. RPM	3600			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	16.5 Lb-Ft ²			
Ref Wdg	T405241 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS511744-1700			
Conn. Diag	A-EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0220	0.0130	0.1870	0.1440	6.0900

Speed -Torque Curve

