

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TSTFC6003

Catalog No: GT1245

Globetrotter® General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
3600 & 3000 RPM, 405TSC Frame, TEFC



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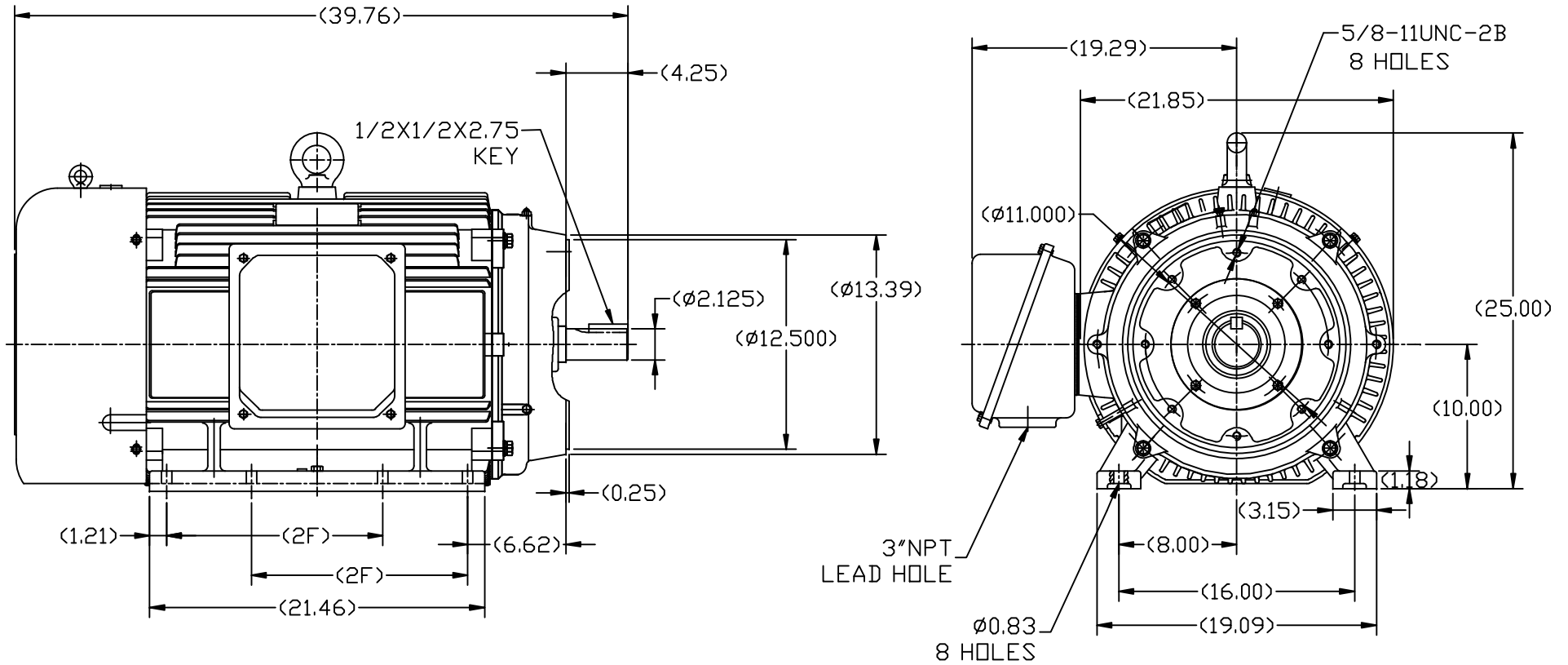
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 190/380 V
Speed	3575 & 2975 rpm	Service Factor	1.15 & 1.0
Frame	405TSC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.5 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	216/108 & 196/98 A	Power Factor	91
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.045 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	39.76 in
Shaft Diameter	2.125 in	Shaft Extension	4.25 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	VARIABLE 10:1
Connection Drawing	A-EE7308AA	Outline Drawing	SS620304-405TSC



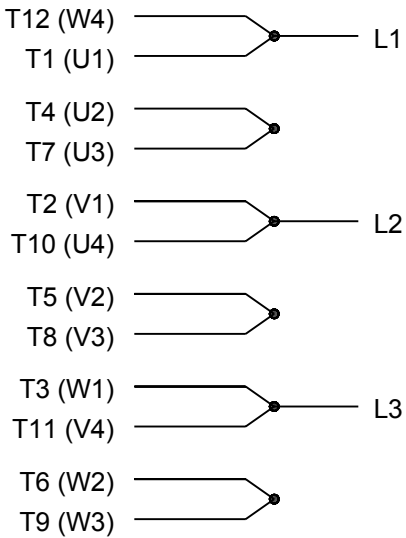
DRAWING NOT TO SCALE

404TSC	12.25
405TSC	13.75
FRAME	2F

		TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION		DRAWN SY 4-21-2010	
		DEC.	INCHES			CHK	HZJ 4-21-2010
		.X	±.1	TITLE		APPD	CL 4-21-2010
		.XX	±.03	404/405TSC FR-TEFC-CAST IRON		SCALE	2=19
		.XXX	±.005	MAT'L.		REF	FMF HWADA
		.XXXX	±.0005	FINISH		PREV	
NO.	REVISION	BY & DATE	CHK	ANG	RFP	CAD FILE	SS620304
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						REV.	



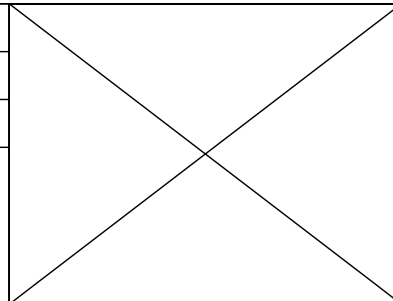
LOW VOLTAGE



HIGH VOLTAGE



DRAWING REVISION K	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC 60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-12-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS	
DATE 01-14-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308AA
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 405TSTFC6003 AA **WINDING#:** CHT40520001 NONE 1
CONN. DIAGRAM: A-EE7308AA **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS620304

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	3600	3575&2975	405TSC	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	216/108&196/ 98	Y START D RUN OR INV	CONTINUOU S	F7	1.15/1.0	40	3300

FULL LOAD EFF: 94.5&94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 91&91	3/4 LOAD PF: 90.5	1/2 LOAD PF: 88	93.6	SQ CAGE INV RATED	44 / 22

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	1450 / 725	250 LB-FT 170	400 LB-FT 272	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	19 LB-FT^2	65 LB-FT^2	15 SEC.	2	1550 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	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

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INVERTER TORQUE: VARIABLE 10:1
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 08:27:40 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 16-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



405TSTFC6003

Submittal

Data @ 460 V

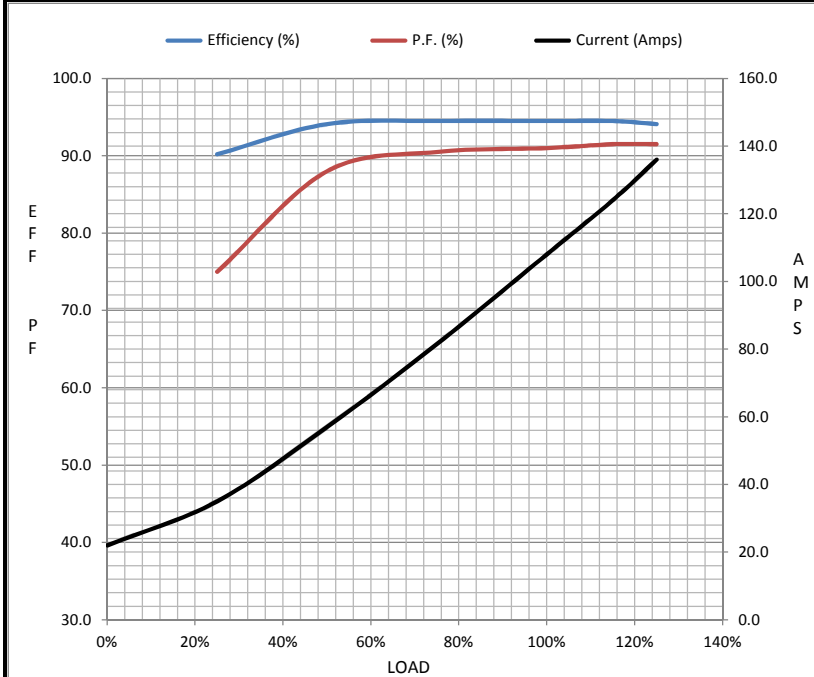
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	22.0	35.0	57.0	81.5	108	124	136	725
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	250
RPM	3600	3595	3588	3582	3575	3,570	3565	0
Efficiency (%)		90.2	94.1	94.5	94.5	94.5	94.1	
P.F. (%)	10.0	75.0	88.0	90.5	91.0	91.5	91.5	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3475	3575	3600
Current (Amps)	725	650	425	108	22.0
Torque (ft-lb)	250	200	400	147	0.00

Information Block				
HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/38(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	19.0 Lb-Ft ²			
Ref Wdg	CHT40520001 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	B-SS620304			
Conn. Diag	A-EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0180	0.2140	0.2840	12.3260



Speed - Torque Curve

