

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 405TTFCD6038
Catalog No: GT1246A
100,1800,TEFC,405TC,3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]

Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	226.0/113.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	95.4 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	405TC
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6316
Opp Drive End Bearing Size	6314	UL	Listed
CSA	Y	CE	Y
IP Code	55		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Frame Length	18.11 in	Shaft Diameter	2.875 in
Shaft Extension	7.25 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	SS557007	Connection Diagram	EE7308AA

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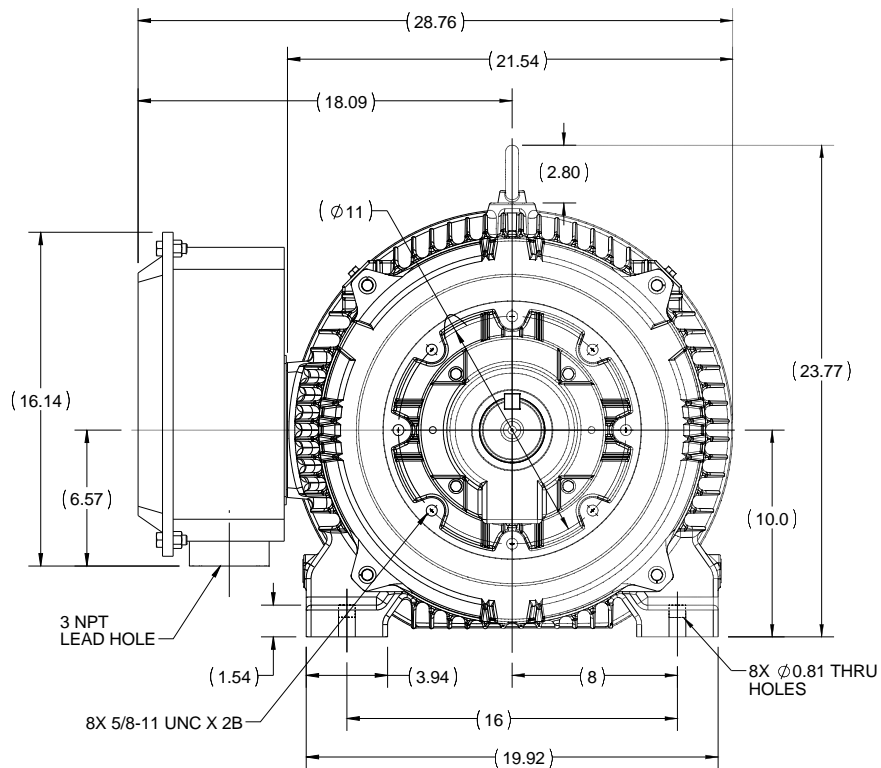
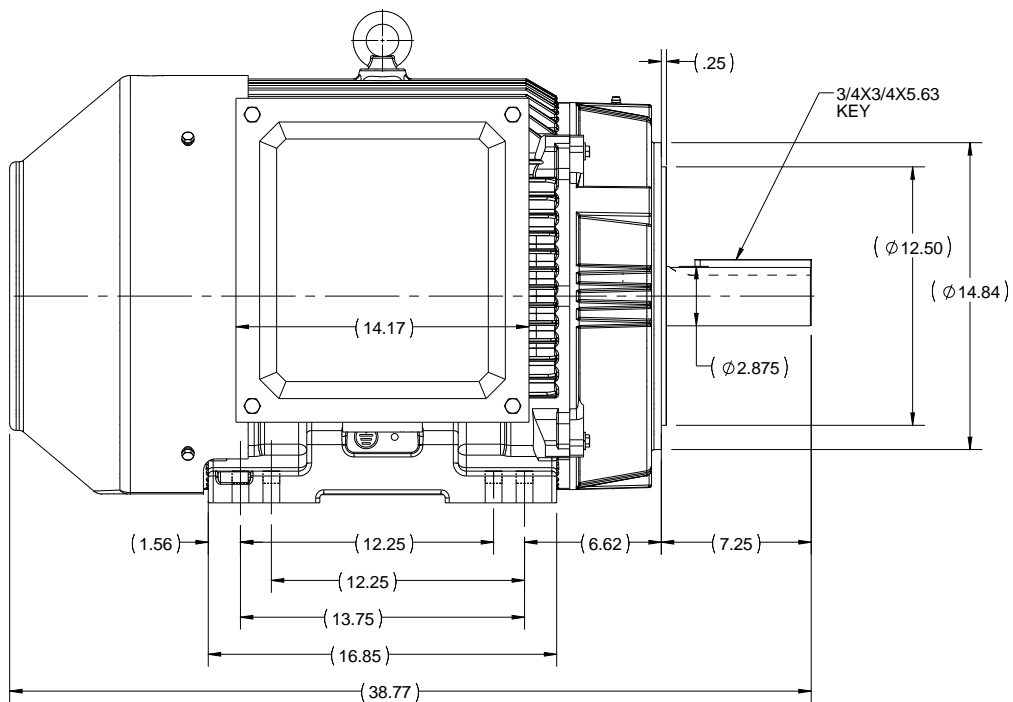
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1

OUTLINE

B

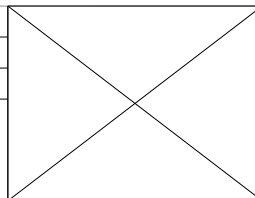
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A

A

DRAWING REVISION A	REVISION BY MVG	DATE 05/07/16
ECO ECO-0105009	APPROVED BY SBD	DATE 05/07/16
ECO DESCRIPTION NEW OUTLINE RELEASE		
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DRAWN BY NIV	 Regal Beloit America, Inc.
DATE 29/03/2016	
APPROVED BY SBD	DESCRIPTION OUTLINE 404/405TC FR-TEFC
DATE 29/03/2016	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS557007
	SHEET 1 OF 1

4

3

2

1



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	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE A	DRAWING NUMBER EE7308AA
THIRD ANGLE PROJECTION	SHEET 1 OF 1	



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:
 ORDER #: EE7308AA REFERENCE MODEL #: 40STTFCD6038
 CONN. DIAGRAM: SSS57007 CAT #: GT1246A
 OUTLINE: HE32504006 NONE 2 CUSTOMER PART #:
 WINDING: NONE 2 MOUNTING: F1/F2 CAPABLE
 SPEED:
TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
100	75	1800	1785	40STC	TEFC	TFC	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	226/113&208/104	START D RUN OR INI	CONT	F	1.15	40	3300
	F.L. EFF	95.4	3/4 LD EFF	95.4	1/2 LD EFF	95.0	GTD EFF	ELECT. TYPE	
	F.L. PF	87.0	3/4 LD PF	83.5	1/2 LD PF	74.5	95.0	SQ CAGE INV RATED	
	F.L. TORQUE	LR AMPS @ 460 V	LR TORQUE	B.D. TORQUE	F.L. RISE (°C)				
	294 LB-FT	725	529 LB-FT	180%	764 LB-FT	280%	65		
	@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT		
	75 DBA	84 DBA	35.0 LB-FT²	550 LB-FT²	25 SEC.	2	1575 LB.		

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	DIVISION 2 T2B	NO	NONE	BLUE - MARATHON
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE BALL 6316	BALL POLYREX EM 6314	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		

THEMOSTATS	PROTECTORS	WIDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.033	0.02	0.17	0.284	6.532	0.080	ODE

INVERTER TORQUE: VARIABLE 10:1
 INV. HP SPEED RANGE: NONE

ENCODER: NONE
 NONE
 NONE
 BRAKE: NONE
 NONE
 NONE
 NONE PPR

PREPARED BY: FAREEDA DUDEKULA
 DATE: 5/3/2018

UL: NO LETTER - ME WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL
 HZ:

Data Sheet

Date: 5/3/2018

4051TFC06038

Customer: _____



Submital

Attention: FAREEDA DUDEKULA

Data @ 460 V

Submitted by: _____

Motor Load Data

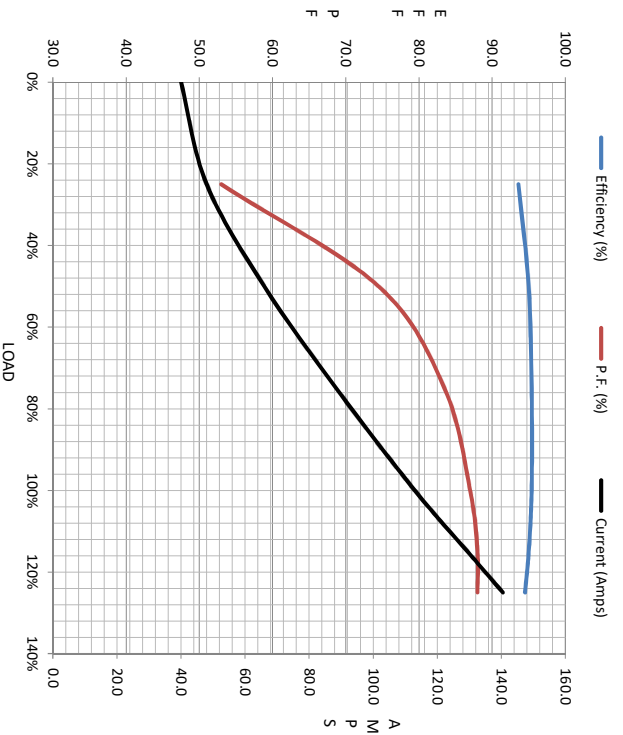
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	40.0	48.0	66.0	88.5	113	130	141	725
Torque (ft-lb)	0.00	73.0	147	220	294	339	370	529
RPM	1800	1796	1792	1790	1785	1782	1780	0
Efficiency (%)		93.6	95.0	95.4	95.4	95.0	94.5	
P.F. (%)	4.5	53.0	74.5	83.5	87.0	88.0	88.0	32.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1735	1785	1800
Current (Amps)	725	580	410	113	40.0
Torque (ft-lb)	529	445	764	294	0.00

Information Block

HP	100.0			
Sync. RPM	1800			
Frame	4051821TFC060380			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/380 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 wk²	35.0 Lb-Ft²			
Ref Wdg	HE32504006 NONE			
Sound Pressure @ 1M	75 dbA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS557007			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
0				
R1	R2	X1	X2	Xm
0.0380	0.0200	0.1700	0.2840	6.5320



Speed - Torque Curve

