

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TTFCA6085  
Catalog No: GT3423  
15,1200,TEFC,284JP,3/60/230/460  
JP



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**REGAL**<sup>®</sup>



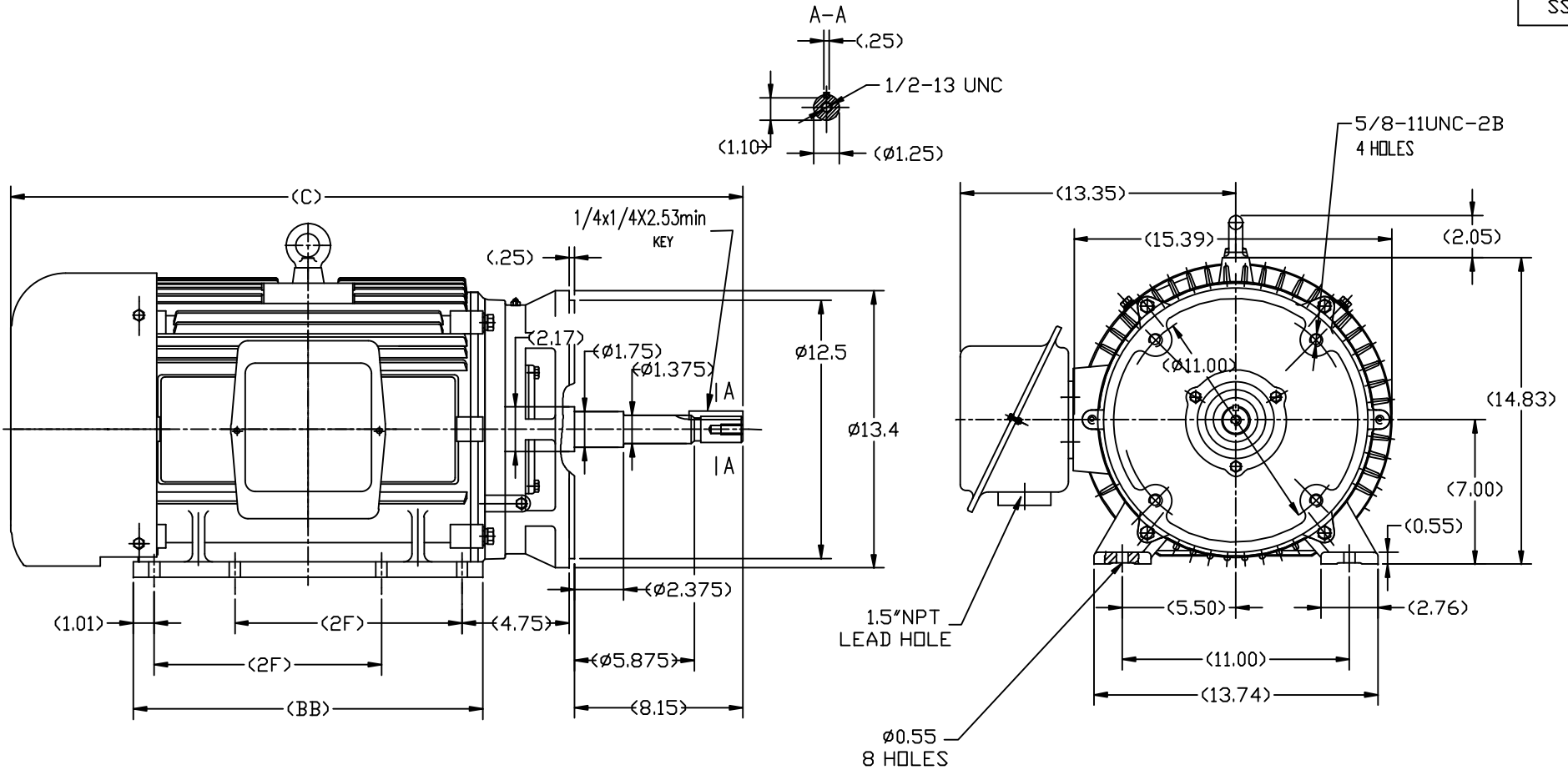
### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>39.5/19.8 A</b>	Speed	<b>1185 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91.7 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>284JPV</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6311</b>
Opp Drive End Bearing Size	<b>6210</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Wye Start Delta Run Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal Or Shaft Down</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>JP</b>
Overall Length	<b>33.82 in</b>	Shaft Diameter	<b>1.250 in</b>
Shaft Extension	<b>8.15 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>SS620568</b>	Connection Diagram	<b>EE7308AA</b>

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284TC	33.82	15.75	9.50
286TC	35.00	16.93	11.00
FRAME	C	BB	2F

TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION		DRAWN Lee 05-16-2012	
DEC.	INCHES	CHK	HPH	05-16-2012	APPD
X	$\pm .1$				JGX 05-16-2012
XX	$\pm .03$				SCALE 2=13
XXX	$\pm .005$				REF
XXXX	$\pm .0005$				FMF HWADA
					PREV
NO.	REVISION	BY & DATE	CHK	ANG	RFP
					CAD FILE
					SS620568
					SIZE
					B
					DRAWING NO.
					SS620568
					REV.

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### LOW VOLTAGE



### HIGH VOLTAGE



### VIEW OF TERMINAL END

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

CERTIFICATION DATA SHEET

Model#: 284TTFCA6085 AA WINDING#: CHT28460001 NONE 1  
 CONN. DIAGRAM: EE7308AA ASSEMBLY: F1/F2 CAPABLE  
 OUTLINE: SS620568

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.50	1200	1185&985	284JPV	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	41/20.5&33.5/ 16.8	LINE OR INVERTER	CONTINUOUS	F7	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&90.2	3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 74.5&73	3/4 LOAD PF: 73	1/2 LOAD PF: 62	90.2	SQ CAGE INV RATED	20 / 10

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
66.5 LB-FT	220 / 110	124 LB-FT 185	200 LB-FT 300	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	5.5 LB-FT^2	- LB-FT^2	20 SEC.	2	- 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 OR SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	JP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6311	6210						

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

If Inverter equals NONE, contact factory for further information

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

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\*\* Subject to change without notice.

Data Sheet

Date: 20-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



284TFCA6085

Submittal

Data @ 460 V

Motor Load Data

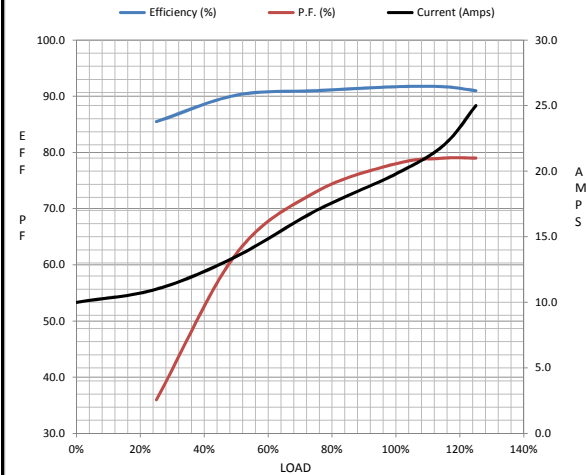
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	11.0	13.5	17.0	19.8	22.0	25.0	110
Torque (ft-lb)	0.00	16.5	33.0	48.0	66.5	76.8	83.5	124
RPM	1200	1195	1192	1188	1185	1,180	1180	0
Efficiency (%)		85.5	90.2	91.0	91.7	91.7	91.0	
P.F. (%)	5.0	36.0	62.0	73.0	78.0	79.0	79.0	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1100	1185	1200
Current (Amps)	110	100	72.0	19.8	10.0
Torque (ft-lb)	124	110	200	66.5	0.00

Information Block

HP	15.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	5.5 Lb-Ft <sup>2</sup>			
Ref Wdg	CHT28460001 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS620568			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4010	0.2060	1.0800	2.2730	26.2380



Speed -Torque Curve

