

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 254TTDCA6085  
Catalog No: GT2417  
7.5,1200,DP,254JP,3/60/230/460  
JP



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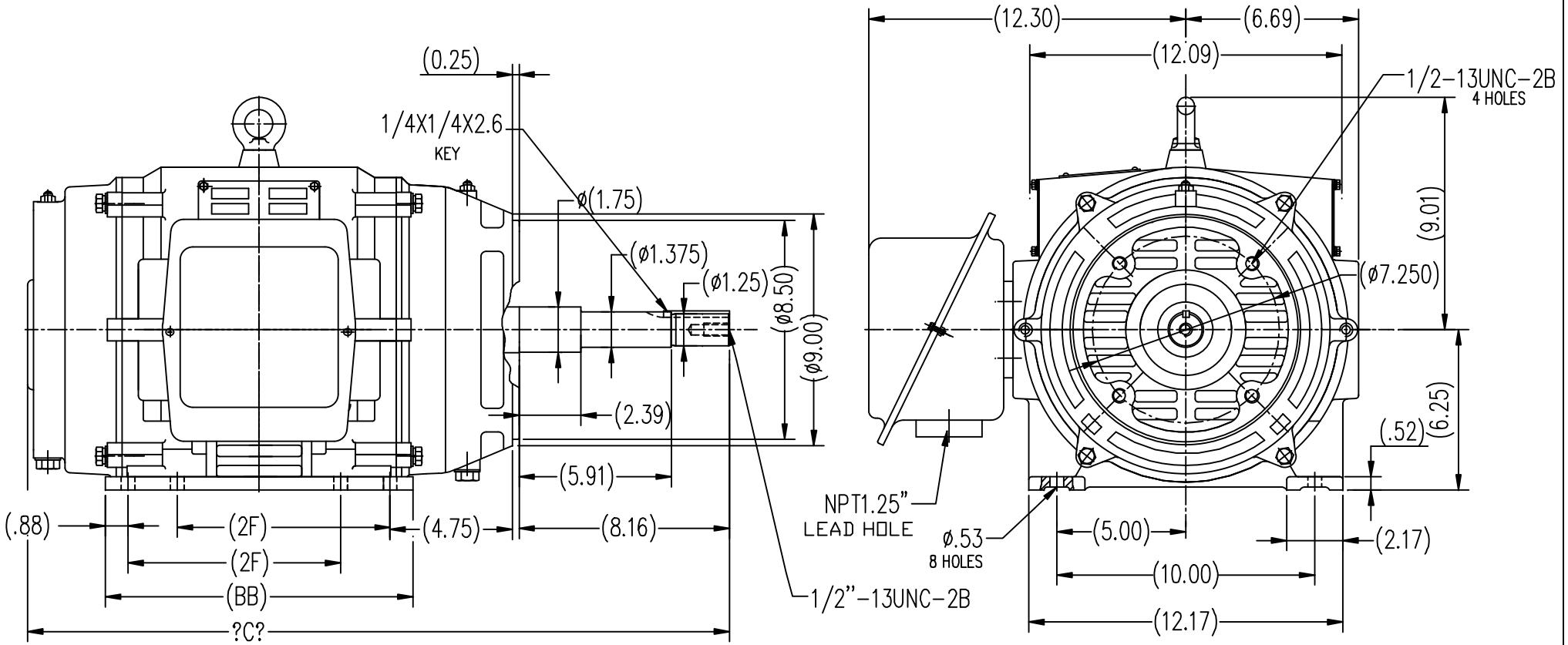
### Nameplate Specifications

Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>21.0/10.5 A</b>	Speed	<b>1182 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>90.2 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>254JPV</b>
Enclosure	<b>Drip Proof</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6208</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>22</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line 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>27.32 in</b>	Shaft Diameter	<b>1.250 in</b>
Shaft Extension	<b>8.16 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>SS620572</b>	Connection Diagram	<b>EE7308K</b>

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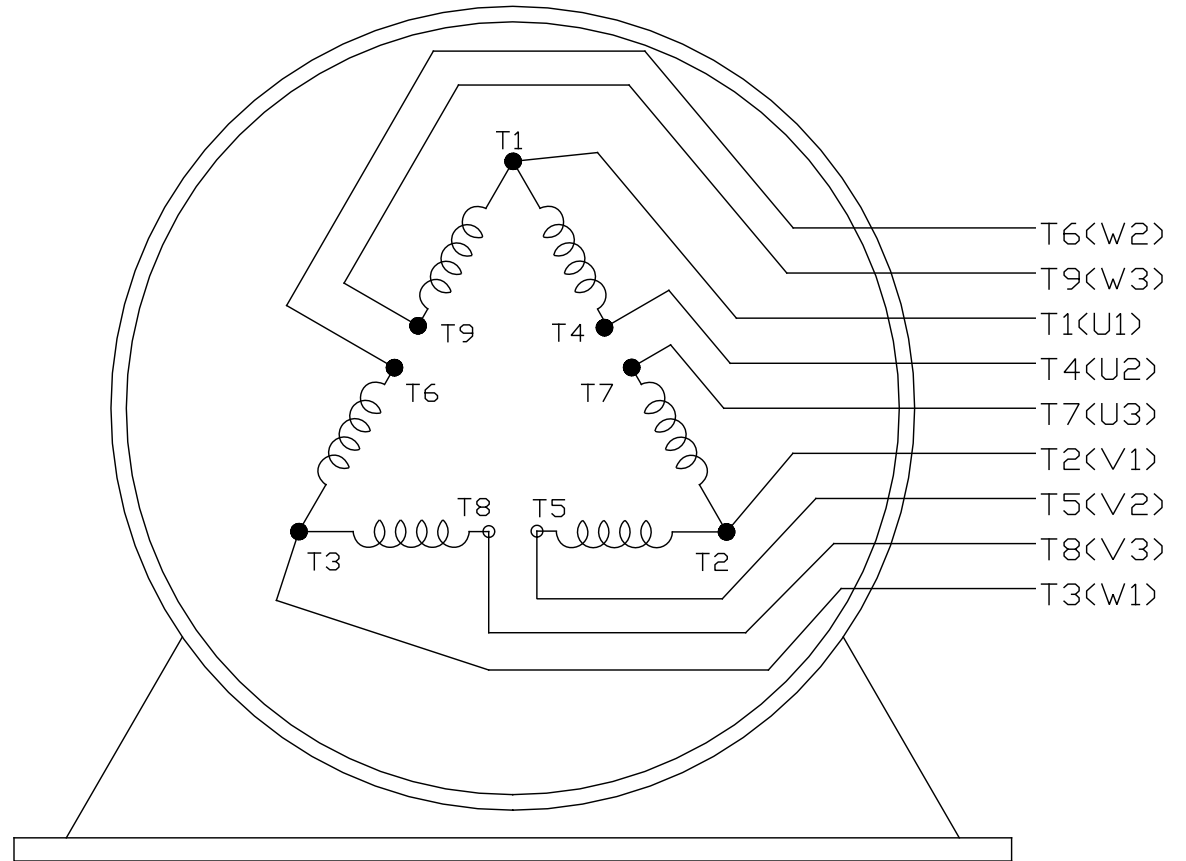
254T	8.25	12.00	27.32
256T	10.00	13.59	28.9
FRAME	2F	BB	C

		TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION	DRAWN LSJ 05-16-2012
		DEC.	INCHES		CHK
		.X	±.1		APPD
		.XX	±.03	TITLE	SCALE 1=6
		.XXX	±.005	DDP-254/256JP FR-CAST IRON	
		.XXXX	±.0005	MAT'L.	REF
NO.	REVISION	BY & DATE	CHK	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	CAD FILE	SIZE
			DIST	SS620572	DRAWING NO.
				B	SS620572
					REV.

LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997					
NO.	REVISION	BY & DATE	CHK	ANG	±		UNIT	CHK	ML 06-05-1997			
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.	±.1	INCHES		APPD GK 06-15-1997				
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.02		TITLE CONNECTION DIAGRAM	SCALE				
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.005		DELTA CON. - 3Ø - 9 LEADS	REF				
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.0005		MAT'L.	FMF				
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±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	CAD FILE EE7308K	SIZE A	DRAWING NO. EE7308K	PAGE OF	REV. E
							DIST					

**CERTIFICATION DATA SHEET**

**Model#:** 254TTDCA6085 AA      **WINDING#:** CHT25460002 NONE 1  
**CONN. DIAGRAM:** EE7308K      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** SS620572

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	1200	1182&985	254JPV	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	21/10.5&18/9	LINE OR INVERTER	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&88.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 73.5&69.5	3/4 LOAD PF: 66.5	1/2 LOAD PF: 53.5	89.5	SQ CAGE INV RATED	12.4 / 6.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.4 LB-FT	108 / 54	51 LB-FT 150	86 LB-FT 257	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	2.2 LB-FT^2	150 LB-FT^2	15 SEC.	2	225 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	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	JP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6208						

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

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: 19-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



254TTDCA6085

Submittal

Data @ 460 V

Motor Load Data

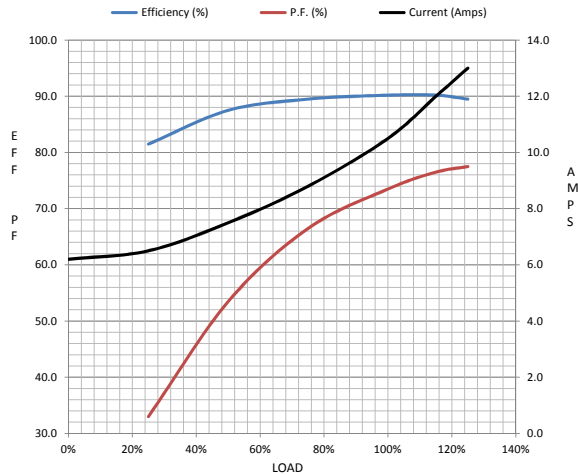
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.2	6.5	7.5	8.8	10.5	12.0	13.0	54.0
Torque (ft-lb)	0.00	8.2	16.5	24.9	33.4	38.5	42.0	51.0
RPM	1200	1195	1190	1185	1182	1,178	1175	0
Efficiency (%)		81.5	87.5	89.5	90.2	90.2	89.5	
P.F. (%)	6.0	33.0	53.5	66.5	73.5	76.5	77.5	37.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1100	1182	1200
Current (Amps)	54.0	48.5	34.0	10.5	6.2
Torque (ft-lb)	51.0	45.0	86.0	33.4	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	DP			
Construction	TDC			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.20 Lb-Ft <sup>2</sup>			
Ref Wdg	CHT25460002 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS620572			
Conn. Diag	EE7308K			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9450	0.4540	2.2680	3.4850	43.4320



Speed -Torque Curve

