PRODUCT INFORMATION PACKET

Model No: 254TTDX4017
Catalog No: U213
20 HP Close-Coupled Pump Motor, 3 phase, 3600 RPM, 230/460 V, 254JP Frame, ODP
JP Motors

marathon® Motors

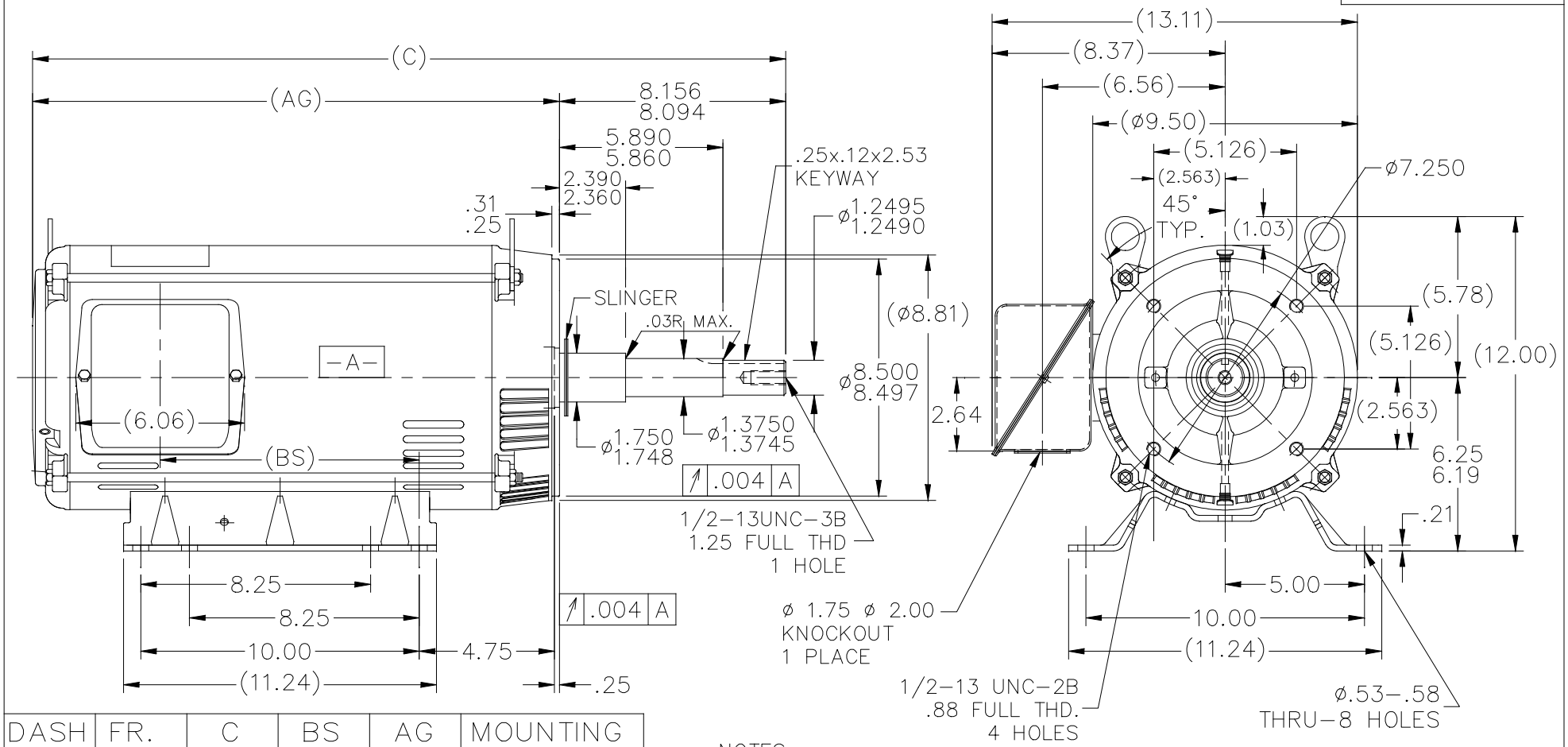
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	46.0/23.1 A	Speed	3520 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	88.6
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	254JP	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	12

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.485 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	JP	Overall Length	25.29 in
Frame Length	13.40 in	Shaft Diameter	1.250 in
Shaft Extension	8.15 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7308K	Outline Drawing	A-SS86519-1340

SS86519



DASH	FR.	C	BS	AG	MOUNTING
1545	256JP	27.34	9.43	19.22	F1 OR F2
1340	254JP	25.29	7.68	17.17	F1 OR F2
1515	254/256JP	27.04	9.43	18.92	F1 OR F2

NOTES:
1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)

NO.	REVISION	BY & DATE
7	ADDED 1545 PER NMR-0186853	SD 11/26/2019
6	UPDATED DRAWING	TJW 04/27/2007
5	REDRAWN IN AUTOCAD	TAT 07-13-2004
4	ADD'D TOLERANCE TO THIRD STEP OF SHAFT CN 28604	NJS 02-28-2000
3	UPDATED CONDUIT BOX CN 28427	TJB 01-31-2000
2	-1515 WAS FOR 256JP FR. ONLY CN 18683	KL 10-11-1994

TOLERANCES UNLESS SPECIFIED		
	DEC.	INCHES
ML	.X	±.1
	.XX	±.03
	.XXX	±.005
	.XXXX	±.0005
CHK	ANG	±7'30"

MARATHON ELECTRIC

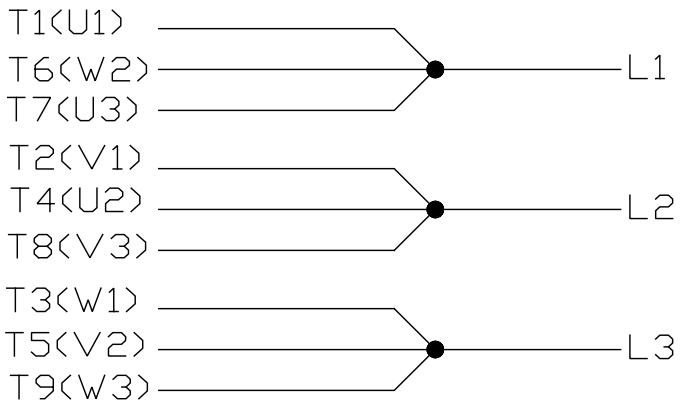
DRAWN	DJK 10-19-1993
CHK	ML 10-22-1993
APPD	DRN 10-22-1993
TITLE	OUTLINE 250JP FR.-BB-TS-DR.PR.-'C' FACE
SCALE	3=16
REF	
MAT'L.	
FMF	
FINISH	
PREV	

RFP
DIST LB
CAD FILE ss86519

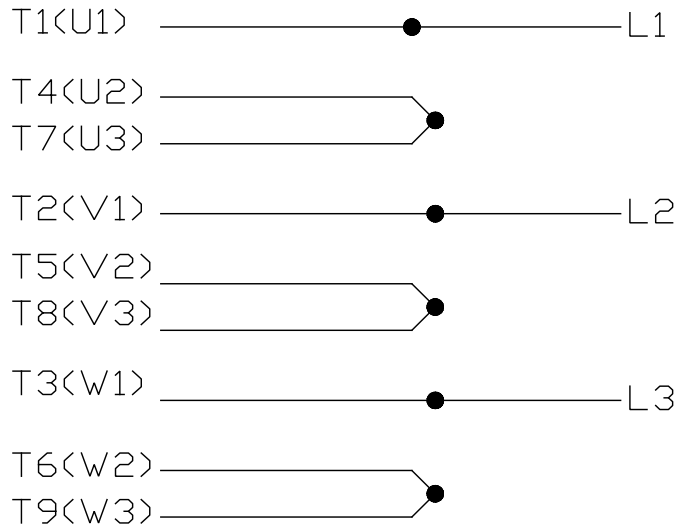
SIZE	DRAWING NO. PAGE OF	REV.
A	SS86519	7

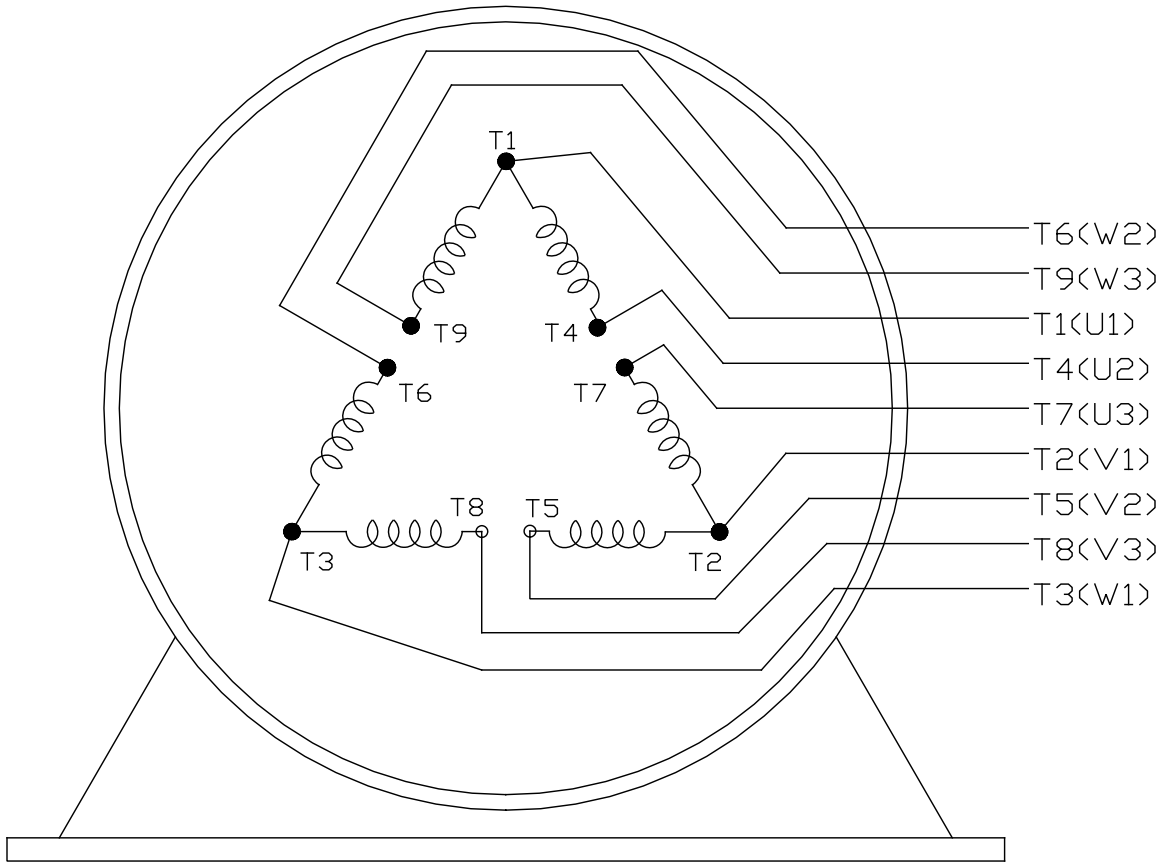
EE7308K

LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

NO.	REVISION	BY & DATE	CHK
E	CORRECTED IEC MARKINGS ECO-0111208	WGJ 01-23-2017	EMH
D	RE-DRAWN WITH REGAL LOGO ECO-0110493	WGJ 09-30-2016	EMH
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS
7	REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998	
6	REDRAWN ON CADD	PGK 06-05-1997	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

REGAL - BELOIT CORPORATION

TITLE: CONNECTION DIAGRAM
DELTA CON. - 3Ø - 9 LEADS

MAT'L.

FINISH

CAD FILE EE7308K

RFP

DIST

DRAWN PGK 06-04-1997
CHK ML 06-05-1997
APPD GK 06-15-1997
SCALE
REF
FMF
PREV

SIZE	DRAWING NO.	PAGE OF	REV.
A	EE7308K		E

CERTIFICATION DATA SHEET

Model#:	254TTDX4017 BC	**WINDING#:**	K2152191 NONE 1
CONN. DIAGRAM:	A-EE7308K	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	A-SS86519-1340		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	3600	3520&2925	254JP	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	46/23.1&42/21	ACROSS THE LINE	CONTINUOUS	F4	1.15/1.15	40	3300

FULL LOAD EFF: 91&90.2	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.6&88	**3/4 LOAD PF: 85.5**	**1/2 LOAD PF: 78**	89.5	SQ CAGE IND RUN	14 / 7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	288 / 144	52.5 LB-FT 175	86.5 LB-FT 288	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	0.65 LB-FT^2	18 LB-FT^2	15 SEC.	2	160 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 6309	BALL 6208	POLYREX EM	JP	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL

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: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/23/2017 03:38:56 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

254TTDX4017

Submittal

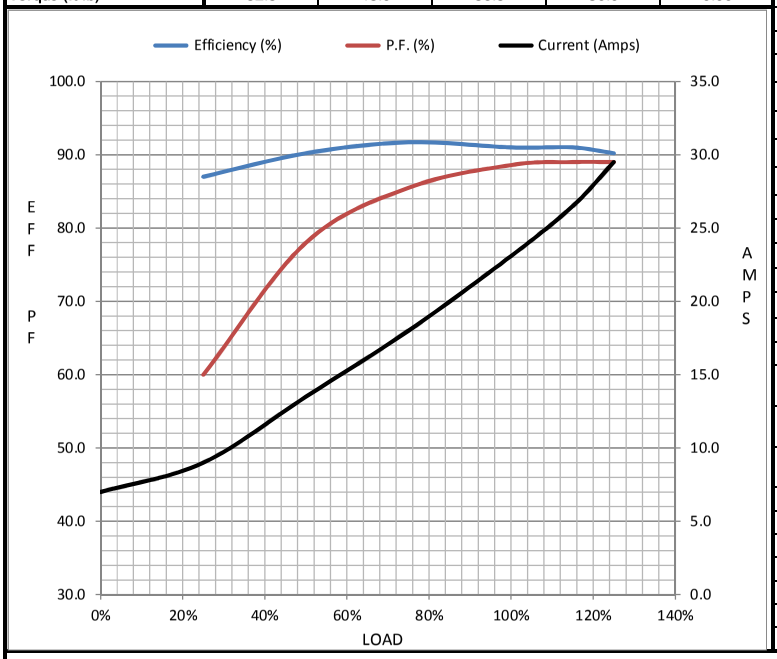
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.0	9.0	13.5	18.0	23.1	26.5	29.5	144	
Torque (ft-lb)	0.00	7.5	15.0	22.2	30.0	34.5	37.5	52.5	
RPM	3600	3580	3565	3545	3520	3,515	3490	0	
Efficiency (%)		87.0	90.2	91.7	91.0	91.0	90.2		
P.F. (%)	9.0	60.0	78.0	85.5	88.6	89.0	89.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3050	3520	3600
Current (Amps)	144	130	90.0	23.1	7.0
Torque (ft-lb)	52.5	48.0	86.5	30.0	0.00



Information Block

HP	20.0
Sync. RPM	3600
Frame	254
Enclosure	DP
Construction	TDX
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	A
LR Code letter	F
Service Factor	1.15
Temp Rise @ FL	45 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.65 Lb-Ft²
Ref Wdg	K2152191 NONE
Sound Pressure @ 1M	78 dBA
VFD Rating	NONE
Outline Dwg	A-SS86519-1340
Conn. Diag	A-EE7308K
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.2880	0.2300	1.0850	1.1460	35.0740

Speed -Torque Curve