

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 254TTDX4012

Catalog No: U216

Close-Coupled Pump Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,  
254JPV Frame, DP



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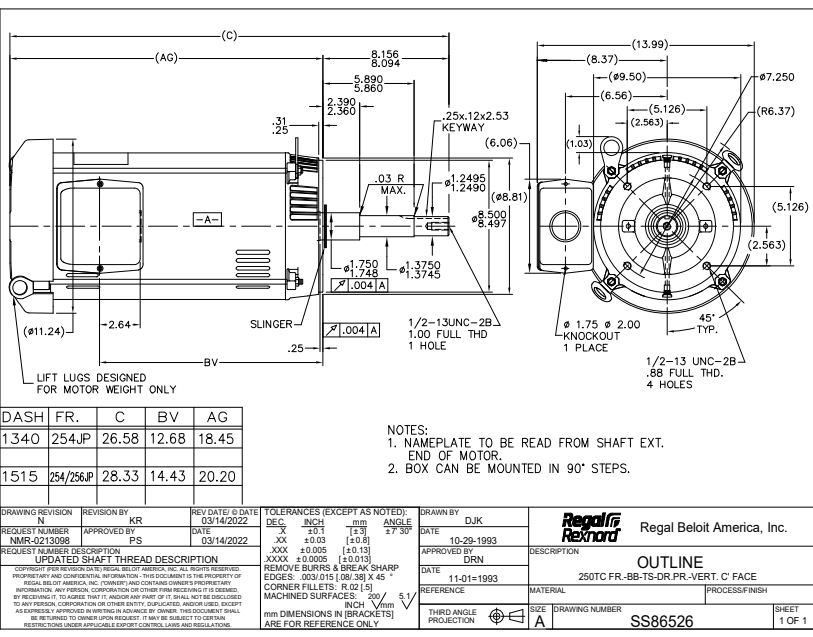
**RegalRexnord**

### Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	3520 & 2925 rpm	Service Factor	1.15 & 1.15
Frame	254JPV	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	46/23.1 & 42/21 A	Power Factor	88.6
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	F
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

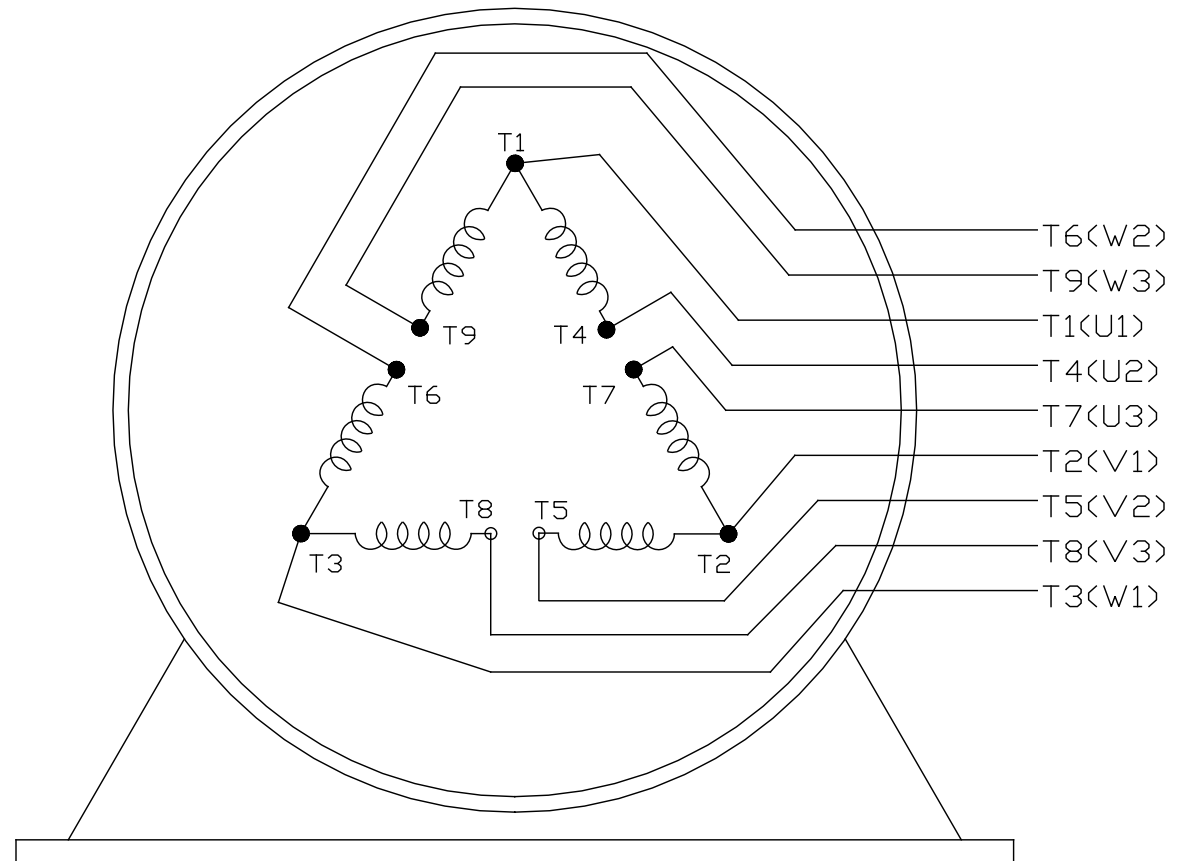
### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.485 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	JP	Overall Length	26.58 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-SS86526-1340



LOW VOLTAGE

EE7308K

HIGH VOLTAGE

VIEW OF TERMINAL END

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

## CERTIFICATION DATA SHEET

Model#: 254TTDX4012 CC  
 CONN. DIAGRAM: A-EE7308K  
 OUTLINE: A-SS86526-1340

WINDING#: K2152191 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

## 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	254JPV	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	CONTINUOU S	B3	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	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	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)	ROLLED STEEL
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: NONE  
 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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DATE: 06/23/2017 03:34:15 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 6/19/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



254TTDX4012

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	Information Block				
Speed (RPM)	0	1800	3050	3520	3600	HP	20.0			
Current (Amps)	144	130	90.0	23.1	7.0	Sync. RPM	3600			
Torque (ft-lb)	52.5	48.0	86.5	30.0	0.00	Frame	254			
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><div>EFFICIENCY (%)</div><div>P.F. (%)</div><div>CURRENT (AMPS)</div><div>LOAD</div></div>						Enclosure	DP			
						Construction	TDX			
						Voltage	30/460#190/381V			
						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 wk <sup>2</sup>	0.65 Lb-Ft <sup>2</sup>			
						Ref Wdg	K2152191 NONE			
						Sound Pressure @ 1M	78 dBA			
						VFD Rating	NONE			
						Outline Dwg	A-SS86526-1340			
						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

