

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 256TTFL16041

Catalog No: U353B

20 HP Close-Coupled Pump Motor, 3 phase, 1800 RPM, 200 V, 256JM Frame, TEFC  
Close-Coupled Pump Motors



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**RegalRexnord**

### Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	200 V
Current	55.5 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	256JM	Enclosure	Totally Enclosed Fan Cooled
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	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.474 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	JM	Overall Length	27.27 in
Frame Length	13.75 in	Shaft Diameter	1.250 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300	Outline Drawing	B-SS321151-1375



# THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.

## TERMINAL BLOCK WHEN SPECIFIED



### IF MOTOR HAS 6 LEADS



A-9806 DECAL

### OPTIONAL CORD CONNECTION



### VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION  
**CONNECTION DIAGRAM**  
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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## CERTIFICATION DATA SHEET

**Model#:** 256TTFL16041 AN  
**CONN. DIAGRAM:** A-EE7300  
**OUTLINE:** B-SS321151-1375

**WINDING#:** K2564164 R26 4  
**ASSEMBLY:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	1800	1775	256JM	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	200	55.5	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84	3/4 LOAD PF: 81	1/2 LOAD PF: 72	92.4	SQ CAGE IND RUN	19.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.2 LB-FT	317.4	104 LB-FT 176	146 LB-FT 247	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	3.2 LB-FT^2	125 LB-FT^2	25 SEC.	2	425 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	BALL						
6309	6208	POLYREX EM	JM	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM

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 07:06:06 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



256TTFL16041

Submittal

Data @ 200 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	19.6	24.2	32.2	42.6	55.4	62.1	69.0	317	
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	104	
RPM	1800	1795	1785	1780	1775	1,770	1760	0	
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7		
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	1625	1775	1800																													
Current (Amps)	317	265	198	55.4	19.6																													
Torque (ft-lb)	104	100	146	59.2	0.00																													
<div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div> <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25%</td><td>90.0</td><td>22.0</td><td>19.6</td></tr><tr><td>50%</td><td>92.0</td><td>45.0</td><td>35.0</td></tr><tr><td>75%</td><td>94.0</td><td>58.0</td><td>50.0</td></tr><tr><td>100%</td><td>93.0</td><td>62.0</td><td>65.0</td></tr><tr><td>125%</td><td>92.0</td><td>65.0</td><td>80.0</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	25%	90.0	22.0	19.6	50%	92.0	45.0	35.0	75%	94.0	58.0	50.0	100%	93.0	62.0	65.0	125%	92.0	65.0	80.0	Information Block				
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						HP		20.0																										
						Sync. RPM		1800																										
						Frame		256																										
						Enclosure		TEFC																										
						Construction		TFY																										
						Voltage		200 V																										
						Frequency		60 Hz																										
						Design		B																										
						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		3.2 Lb-Ft²																																
Ref Wdg		K2564164 R26																																
Sound Pressure @ 1M		65 dBA																																
VFD Rating		NONE																																
Outline Dwg		B-SS321151-1375																																
Conn. Diag		A-EE7300																																
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
0.0500		0.0390		0.1870		0.2820		5.3690																										

## Speed -Torque Curve

