

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: TCA0904A3111GACD01  
Catalog No: TCA0904A3111GACD01  
TerraMAX® Cast Iron Motor, 120 HP, 3 Ph, 50 Hz, 415 V, 315L Frame



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**RegalRexnord**

### Nameplate Specifications

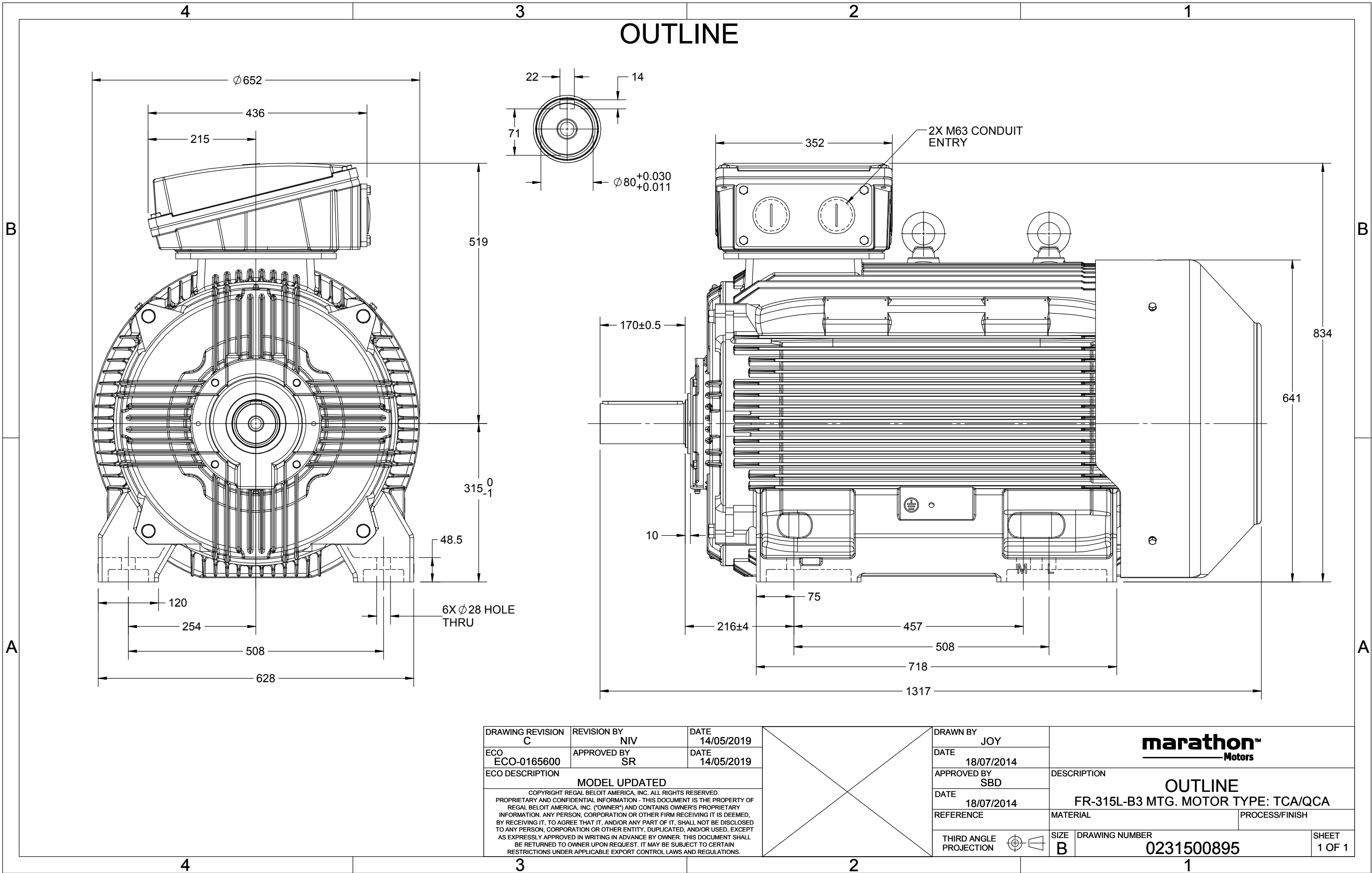
Phase	3	Output HP	120 Hp
Output KW	90.0 kW	Voltage	415 V
Speed	743 r/min	Service Factor	1
Frame	315L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.4 %
Ambient Temperature	50 °C	Frequency	50 Hz
Current	183.6 A	Power Factor	0.73
Duty	S1	Insulation Class	F
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6319
UL	No	CSA	No
CE	Yes	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

### Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	8	Rotation	Bi-Directional
Mounting	B3	Motor Orientation	Horizontal
Drive End Bearing	C3	Opp Drive End Bearing	C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	1317 mm	Frame Length	840 mm
Shaft Diameter	80 mm	Shaft Extension	170 mm
Assembly/Box Mounting	Top		
Connection Drawing	8442000085	Outline Drawing	0231500895

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# OUTLINE



DRAWING REVISION C	REVISION BY NIV	DATE 14/05/2019
ECO ECO-0165600	APPROVED BY SR	DATE 14/05/2019
ECO DESCRIPTION MODEL UPDATED		
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DRAWN BY JOY	<b>marathon™</b> Motors	
DATE 18/07/2014		
APPROVED BY SBD	DESCRIPTION OUTLINE	
DATE 18/07/2014	FR-315L-B3 MTG. MOTOR TYPE: TCA/QCA	
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER 0231500895
		SHEET 1 OF 1

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DRAWING REVISION <b>A</b>	REVISION BY <b>SN</b>	DATE <b>13/01/2017</b>
ECO <b>ECO-0116390</b>	APPROVED BY <b>SBD</b>	DATE <b>13/01/2017</b>
ECO DESCRIPTION <b>NEW DRAWING RELEASE</b>		

GEOMETRIC TOLERANCE		
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3



**NOTES:**

1. PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE.
2. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.

8WD.442.2017



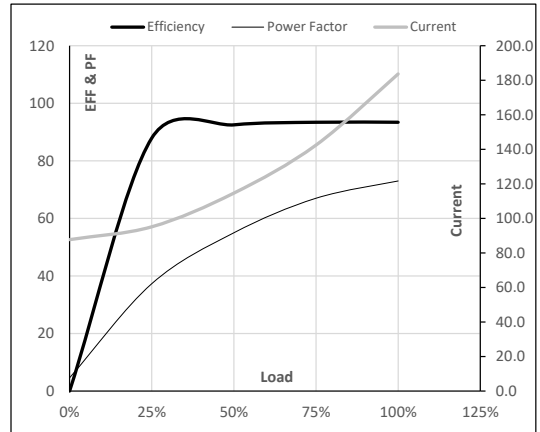
DRAWN BY <b>SN</b>	 <b>Regal Beloit America, Inc.</b>		
	DESCRIPTION <b>CONN DIAGRAM-NAMEPLATE</b>		
DATE <b>16/12/2016</b>	APPROVED BY <b>SBD</b>		PROCESS/FINISH
DATE <b>16/12/2016</b>	REFERENCE		
THIRD ANGLE PROJECTION 	SIZE <b>A</b>	DRAWING NUMBER <b>8442000085</b>	SHEET <b>1 OF 1</b>

**Model No.** TCA0904A3111GACD01

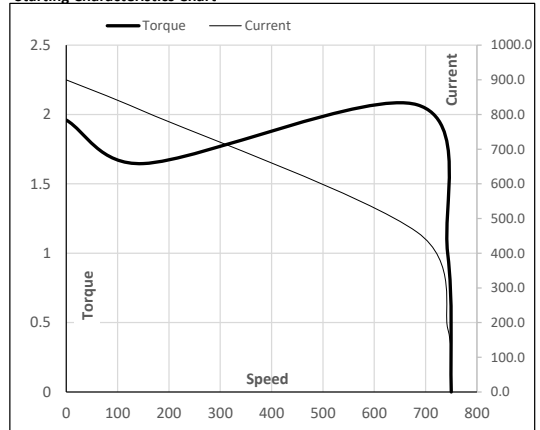
Enclosure	U (V)	Δ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [RPM]	T [kgm]	T [Nm]	IE Class	Amb [°C]	Duty	Elevation [m]	Inertia [kg-m <sup>2</sup> ]	Weight [kg]
TEFC	415	Δ	50	90	120.0	183.6	743	117.40	1151.34	IE3	50	S1	1000	5.6618	909.0

**Motor Load Data**

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	87.7	95.1	114.6	142.5	183.6	
Torque	Nm	0.0	285.8	572.8	861.2	1151.3	
Speed	r/min	750	748	747	745	743	
Efficiency	%	0.0	87.9	92.5	93.4	93.4	
Power Factor	%	4.6	37.3	55.0	67.0	73.0	

**Performance vs Load Chart**

**Motor Speed Torque Data**

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	150	684	743	750
Current	A	899.9	809.9	460.7	183.6	87.7
Torque	pu	2.0	1.6	2.1	1	0

**Starting Characteristics Chart**

**NOTE** Refer data sheet for applicable standard and tolerances on performance parameters

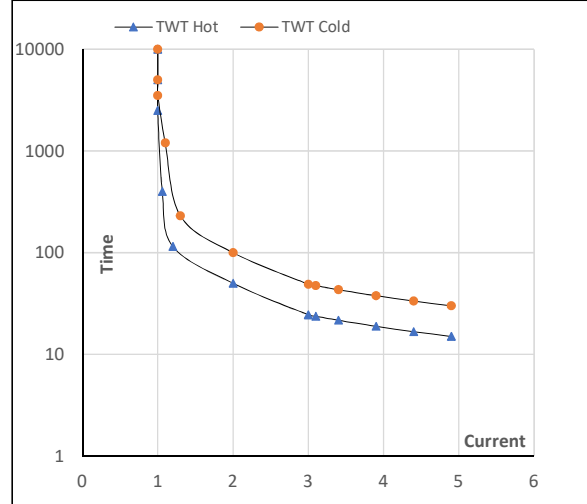
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**Model No.** TCA0904A3111GACD01

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**Motor Speed Torque Data**

Load	FL	$I_1$	$I_2$	$I_3$	$I_4$	$I_5$	LR
TWT Hot	s	10000	50	25	21	18	15
TWT Cold	s	10000	100	49	42	37	30
Current	pu	1	2	3	3.5	4	4.5

**Thermal Characteristics Chart**

**NOTE** Refer data sheet for applicable standard and tolerances on performance parameters

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