

# PRODUCT INFORMATION PACKET



Model No: TCA0552A3121GACD01

Catalog No: TCA0552A3121GACD01

TerraMAX® Cast Iron Motor, 75 HP, 3 Ph, 50 Hz, 415 V, 250M Frame





### Nameplate Specifications

Phase	3	Output HP	75 Hp
Output KW	55.0 kW	Voltage	415 V
Speed	1488 r/min	Service Factor	1
Frame	250M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.6 %
Ambient Temperature	50 °C	Frequency	50 Hz
Current	95.2 A	Power Factor	0.85
Duty	S1	Insulation Class	F
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
UL	No	CSA	No
CE	Yes	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

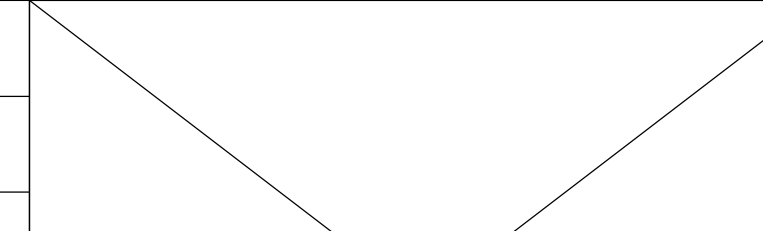

### Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	4	Rotation	Bi-Directional
Mounting	B5	Motor Orientation	Horizontal
Drive End Bearing	C3	Opp Drive End Bearing	C3
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	938 mm	Frame Length	460 mm
Shaft Diameter	65 mm	Shaft Extension	140 mm
Assembly/Box Mounting	Top		
Outline Drawing	0225000380	Connection Drawing	8442000085

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Technical drawing of a circular component. The drawing shows a cross-section of a cylinder with a central hole. The outer diameter is labeled as  $\varnothing 65^{+0.030}_{+0.011}$ . The inner diameter is labeled as 18. The total height of the component is labeled as 58. The height of the central hole is labeled as 11.



DRAWING REVISION		REVISION BY		DATE			DRAWN BY						
ECO		APPROVED BY		DATE			SDV						DATE
							18/07/2014		18/07/2014				
ECO DESCRIPTION							APPROVED BY		DESCRIPTION				
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						DATE							
												18/07/2014	
						REFERENCE		SIZE		DRAWING NUMBER		SHEET	
						THIRD ANGLE PROJECTION		B		0225000380		1 OF 1	

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

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

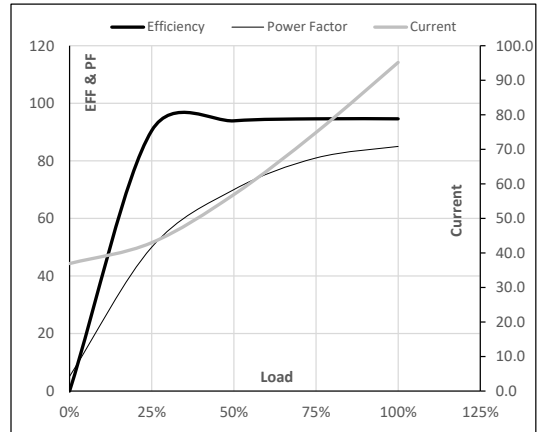
	DRAWN BY SN	Regal Beloit America, Inc.		
	DATE 16/12/2016			
	APPROVED BY SBD	DESCRIPTION CONN DIAGRAM-NAMEPLATE		
	DATE 16/12/2016			
	REFERENCE	MATERIAL	PROCESS/FINISH	
	THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER 8442000085	SHEET 1 OF 1

**Model No.** TCA0552A3121GACD01

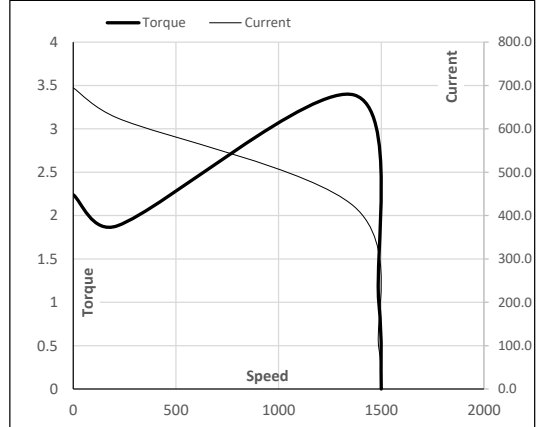
Enclosure	U (V)	Δ / Y Conn	f (Hz)	P [kW]	P [hp]	I [A]	n [RPM]	T [kgm]	T [Nm]	IE Class	Amb [°C]	Duty	Elevation [m]	Inertia [kg-m <sup>2</sup> ]	Weight [kg]
TEFC	415	Δ	50	55	75.0	95.2	1488	36.61	359.02	IE3	50	S1	1000	1.3974	542

**Motor Load Data**

Load Point		NL	1/4FL	1/2FL	3/4FL	FL	5/4FL
Current	A	36.9	43.0	56.9	74.9	95.2	
Torque	Nm	0.0	89.2	178.7	268.7	359.0	
Speed	r/min	1500	1497	1494	1491	1488	
Efficiency	%	0.0	90.5	93.9	94.6	94.6	
Power Factor	%	5.1	50.0	70.0	81.0	85.0	

**Performance vs Load Chart**

**Motor Speed Torque Data**

Load Point		LR	P-Up	BD	Rated	NL
Speed	r/min	0	214	1369	1488	1500
Current	A	694.7	625.2	420.5	95.2	36.9
Torque	pu	2.2	1.9	3.4	1	0

**Starting Characteristics Chart**

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

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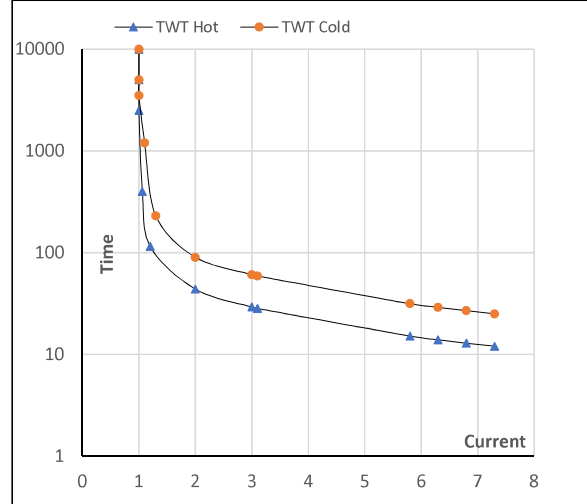
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Enclosure	U (V)	$\Delta$ / Y Conn	f [Hz]	P [kW]	P [hp]	I [A]	n [rpm]	T [kgm]	T [Nm]	IE Class	Amb [°C]	Duty	Elevation [m]	Inertia [kg-m <sup>2</sup> ]	Weight [kg]
TEFC	415	$\Delta$	50	55	75	95.2	1488	36.58	359.02	IE3	50	S1	1000	1.3974	542

#### Motor Speed Torque Data

Load	FL	$I_1$	$I_2$	$I_3$	$I_4$	$I_5$	LR	
TWT Hot	s 10000	44	29	25	20	16	12	
TWT Cold	s 10000	90	61	50	40	33	25	
Current	pu	1	2	3	4	5	5.5	7.3

#### Thermal Characteristics Chart



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

Issued By  
Issued Date



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : TCA0552A3121GACD01

(Model No. may contain prefix and/or suffix characters)

Catalog No : TCA0552A3121GACD01

Rework No : N/A

### Directives :

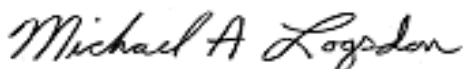
Low Voltage Directive 2014/35/EU

### Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

### Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

### Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**