

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 100LTFC6502

Catalog No: R451A

Globetrotter® IEC Cast Iron Motor, 4 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 100L Frame, TEFC



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**RegalRexnord**

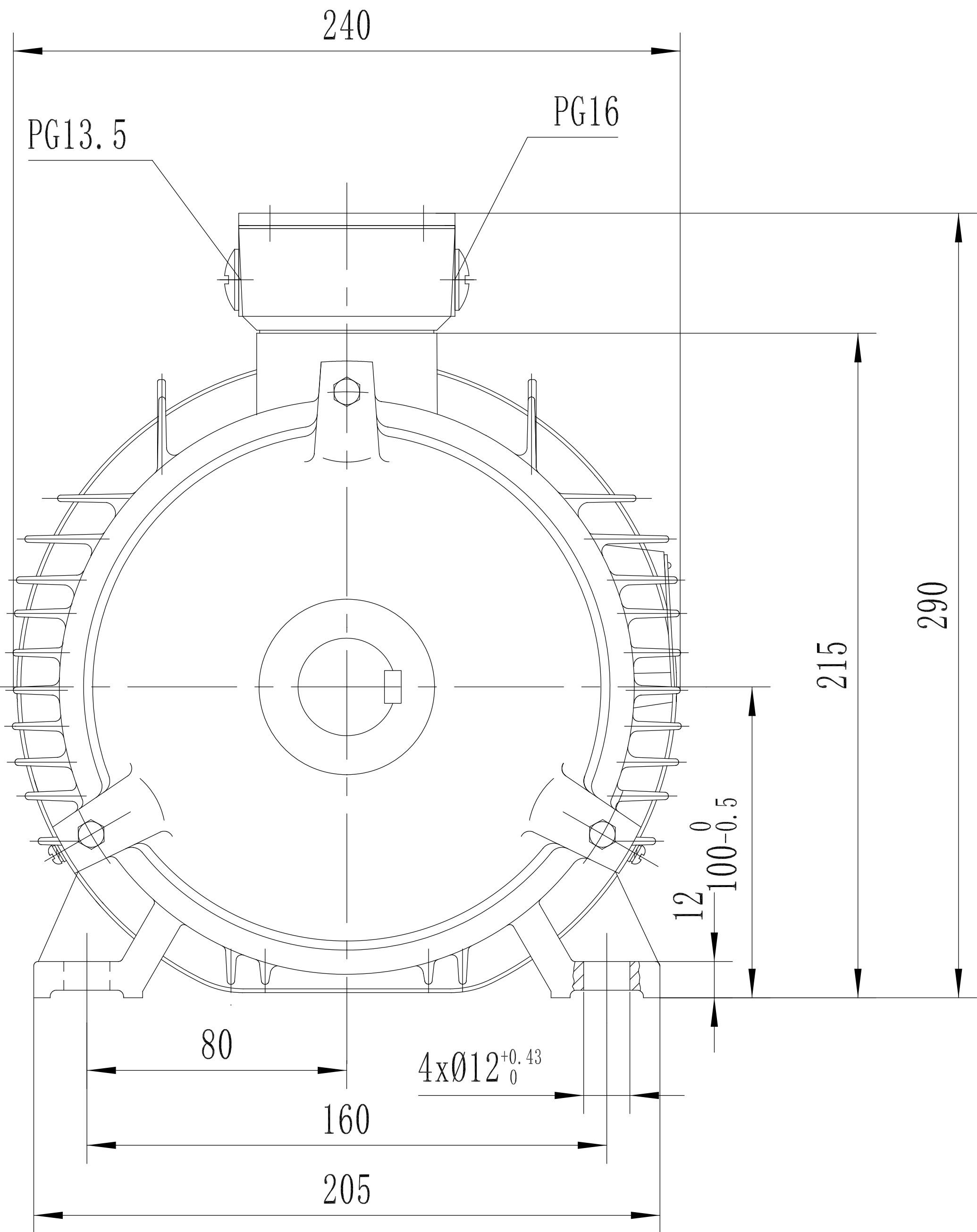
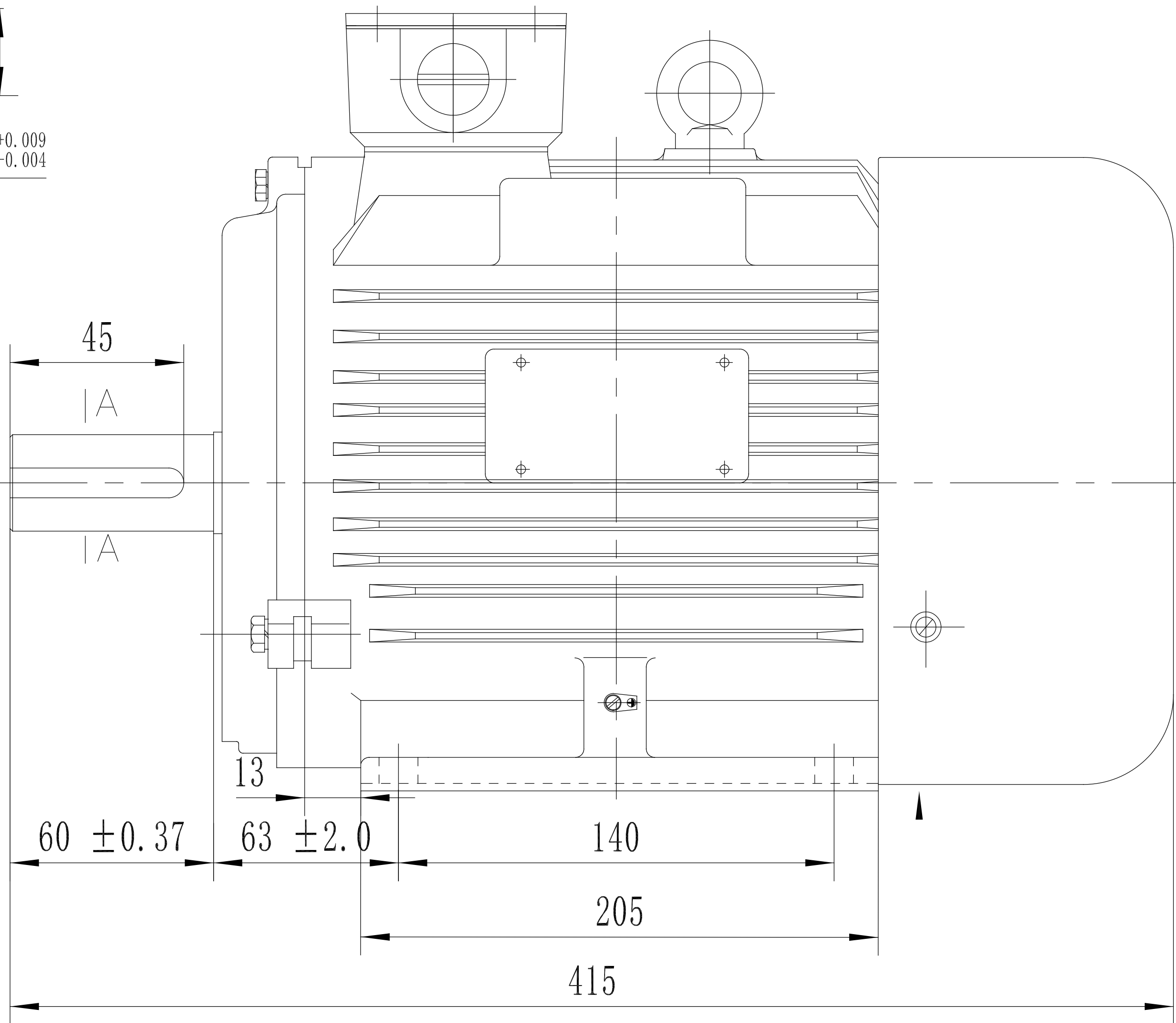
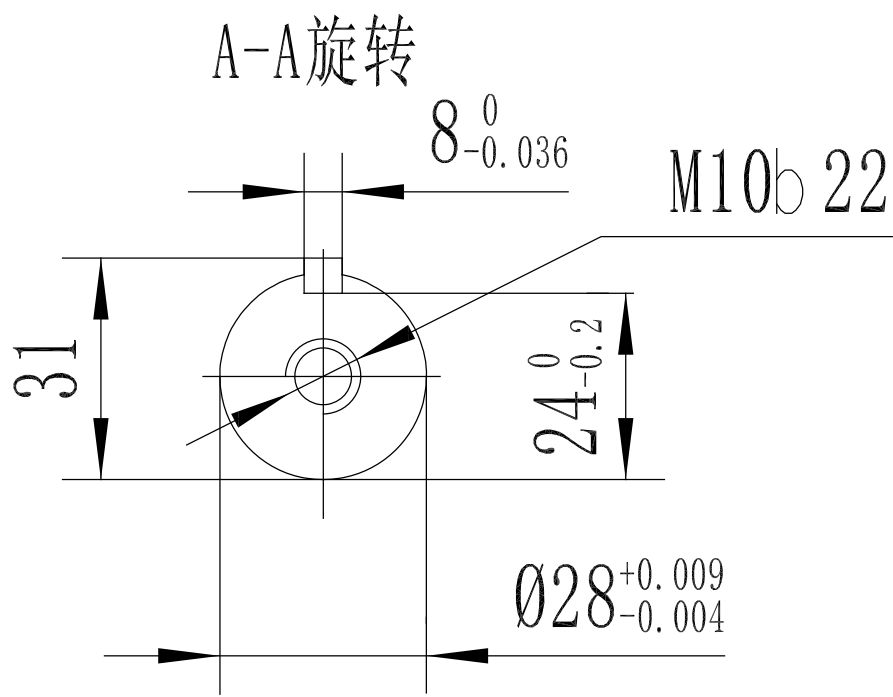
### Nameplate Specifications

Phase	3	Output HP	4 Hp
Output KW	3.0 kW	Voltage	575 V
Speed	3520 rpm	Service Factor	1.15
Frame	100L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	3.8 A	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	J
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		


### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	3.865 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	16.33 in
Shaft Diameter	1.111 in	Shaft Extension	2.36 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 20:1
Connection Drawing	00510201ME	Outline Drawing	SS622236-DF100L-2R

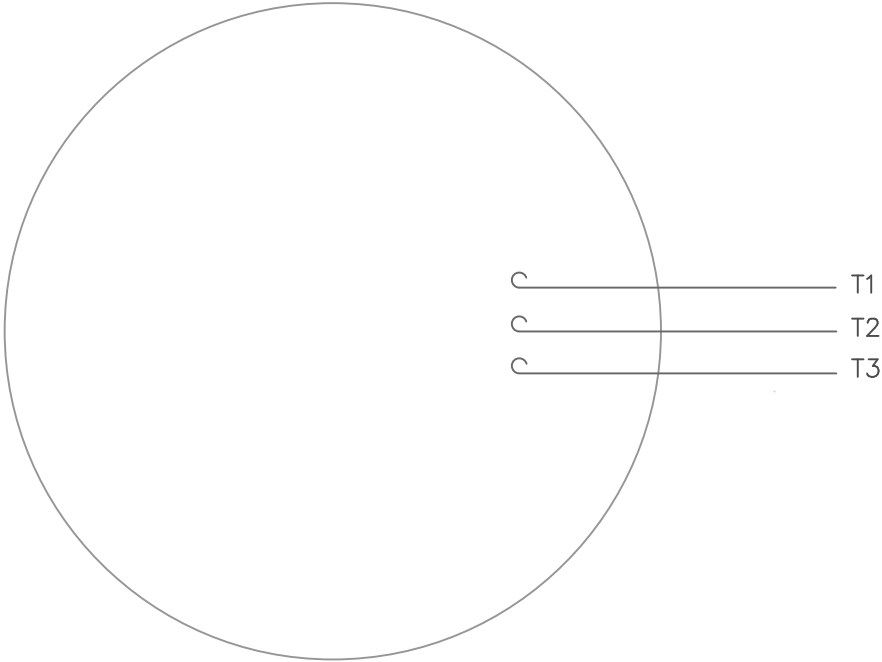
SS622236



DF100L-2R	193303.60
DF100L1-4R	193301.60
DF100L2-4R	193304.60
DF100L-6R	193300.60
FRAME	PART #


				TOLERANCES UNLESS SPECIFIED		<div>Regal-Beloit Corporation</div>			DRAWN	
				DEC.	INCHES				CHK	
				.X	±.1				APPD	
				.XX	±.03	TITLEOUTLINE			SCALE	
				.XXX	±.005				REF	
				.XXXX	±.0005	MAT'L.FINISH			FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2				PREV	
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			DIST					B	SS622236	

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



CONNECT LEADS AS FOLLOWS  
FOR FOUR CONDUCTOR CORD ( )

CORD	L1 (RED)	L2 (WHITE)	L3 (BLACK)	(GREEN)
MOTOR	T1	T2	T3	GROUND

				TOLERANCES UNLESS SPECIFIED			DRAWN RDW 5/1/02		
				DEC.	INCHES		CHK		
				.X	±.1		APPD		
				.XX	±.01		SCALE 1=1		
				.XXX	±.005		REF		
				.XXXX	±.0005	MAT'L. DECAL - 004169		FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2°	FINISH		PREV	
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			DIST						

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## CERTIFICATION DATA SHEET

Model#: 100LTC6502 AA

WINDING#: T06802010 NONE 4

CONN. DIAGRAM: 00510201ME

ASSEMBLY: F3

OUTLINE: SS622236

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
4	2.98	3600	3520	100L	TEFC	J	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	3.75	LINE OR INVERTER	CONTINUOU S	F2	1.15	40	3300

FULL LOAD EFF: 89.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89	3/4 LOAD PF: 86	1/2 LOAD PF: 78	88.5	SQ CAGE INV RATED	1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	30.4	12 LB-FT 200	20 LB-FT 332	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	- LB-FT^2	5 LB-FT^2	15 SEC.	2	- LBS.

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	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						
6206	6205	POLYREX EM	STANDARD IEC	NONE	NONE	AISI 1045 (C-240)	CAST IRON

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

* N O T E S *	INVERTER TORQUE: CONSTANT 20:1					
	INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE NONE					
	NONE NONE PPR					
	BRAKE: NONE NONE					
	NONE P/N NONE					
	NONE NONE					
	NONE FT-LB		NONE V		NONE Hz	

DATE: 06/22/2017 04:18:11 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 1/3/2019

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

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

Submitted by: FAREEDA DUDEKULA



100LTC6502

Submittal

Data @ 575 V

## Motor Load Data

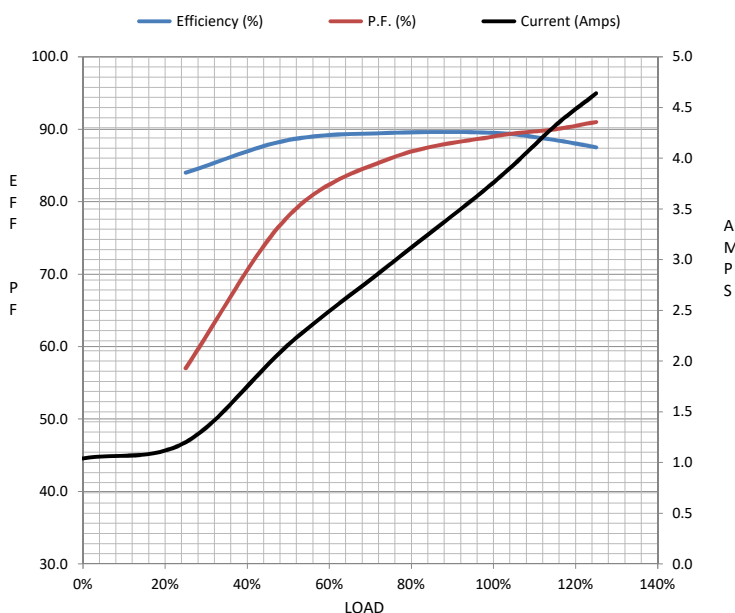
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.04	1.20	2.16	2.96	3.8	4.3	4.6	30.4	
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.9	7.5	12.0	
RPM	3600	3580	3565	3545	3520	3,510	3500	0	
Efficiency (%)		84.0	88.5	89.5	89.5	88.5	87.5		
P.F. (%)	9.0	57.0	78.0	86.0	89.0	90.0	91.0	52.0	

## Motor Speed Data

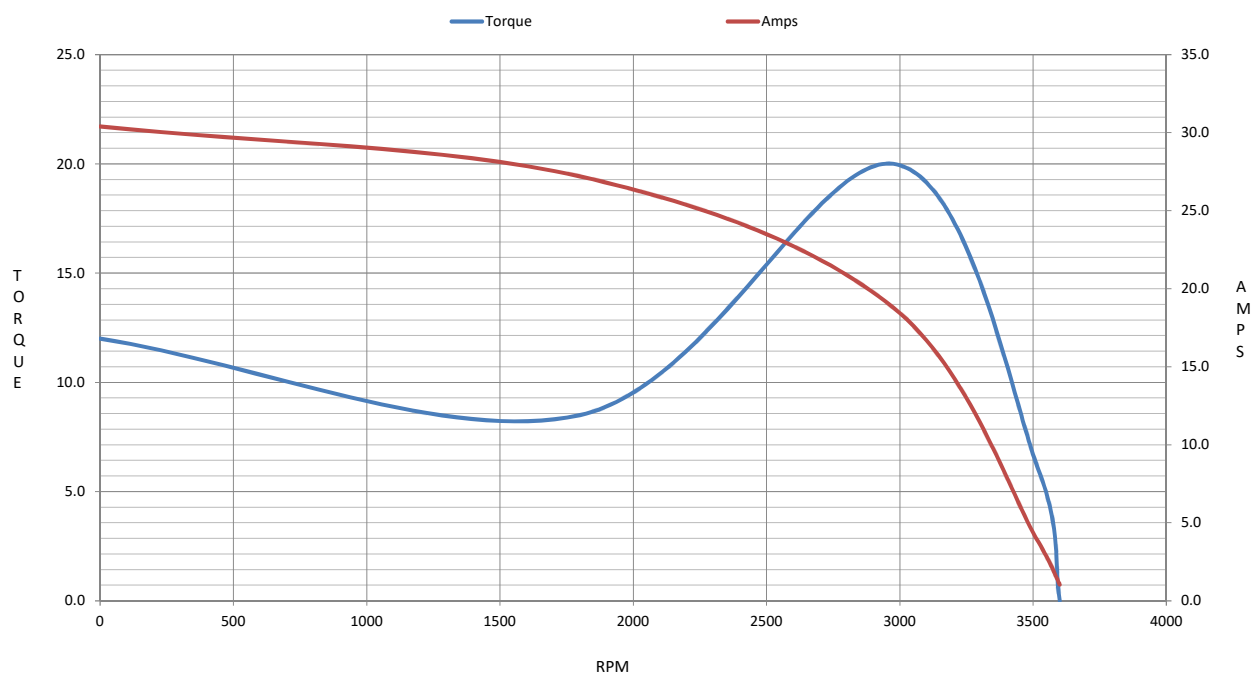
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	2975	3520	3600
Current (Amps)	30.4	27.2	18.8	3.8	1.04
Torque (ft-lb)	12.0	8.5	20.0	6.0	0.00

## Information Block

HP	4.0			
Sync. RPM	3600			
Frame	100			
Enclosure	TEFC			
Construction	TFS			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	50 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3300 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	T06802010 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	SS622236			
Conn. Diag	005102			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.8770	1.9940	6.1480	3.3230	279.1690



## Speed -Torque Curve



## 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 : 100LTFC6502

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

Catalog No : R451A

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**