

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 100LTFC6501

Catalog No: R351A

Globetrotter® IEC Cast Iron Motor, 4 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 3600 & 3000 RPM,  
100L Frame, TEFC



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**RegalRexnord**

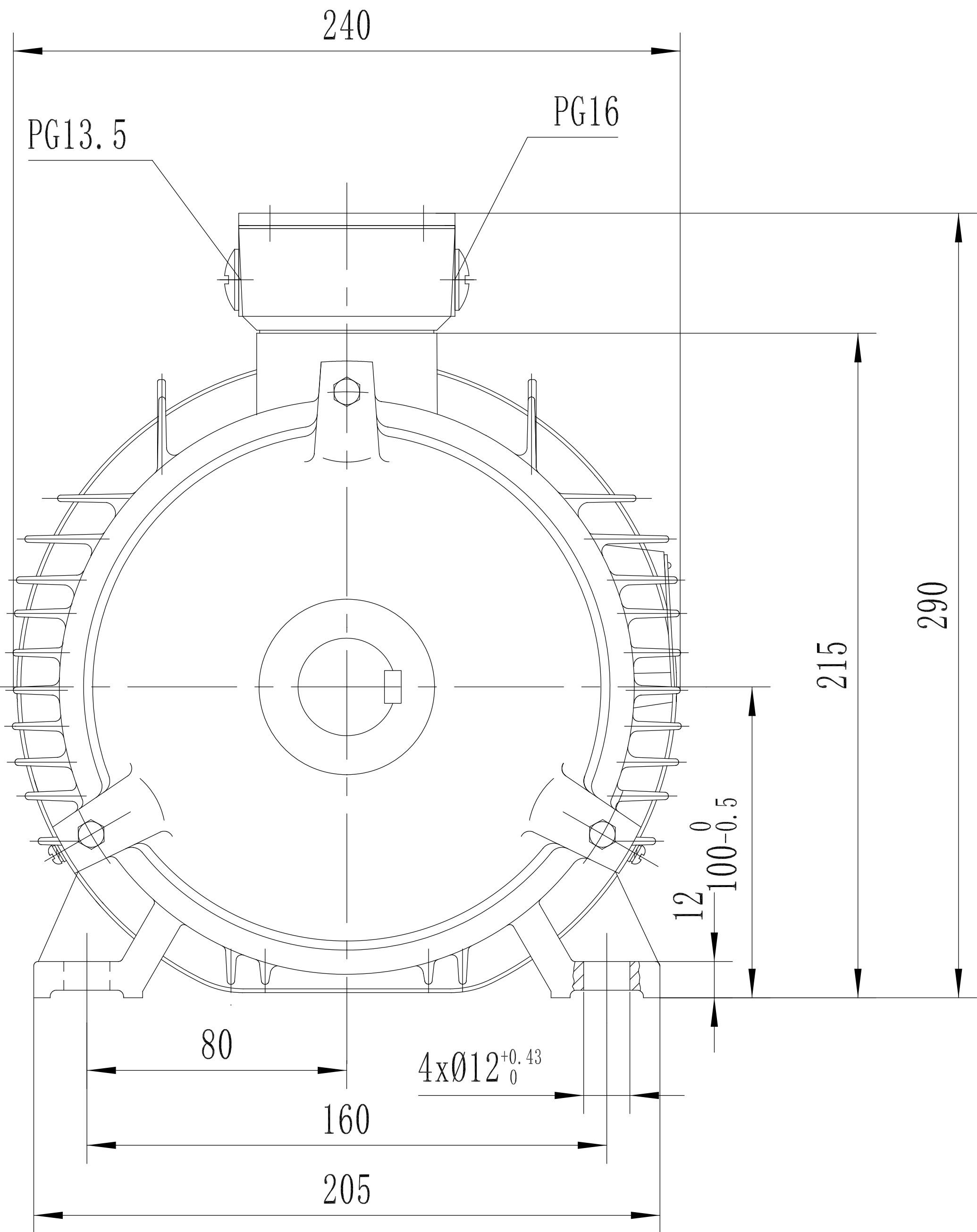
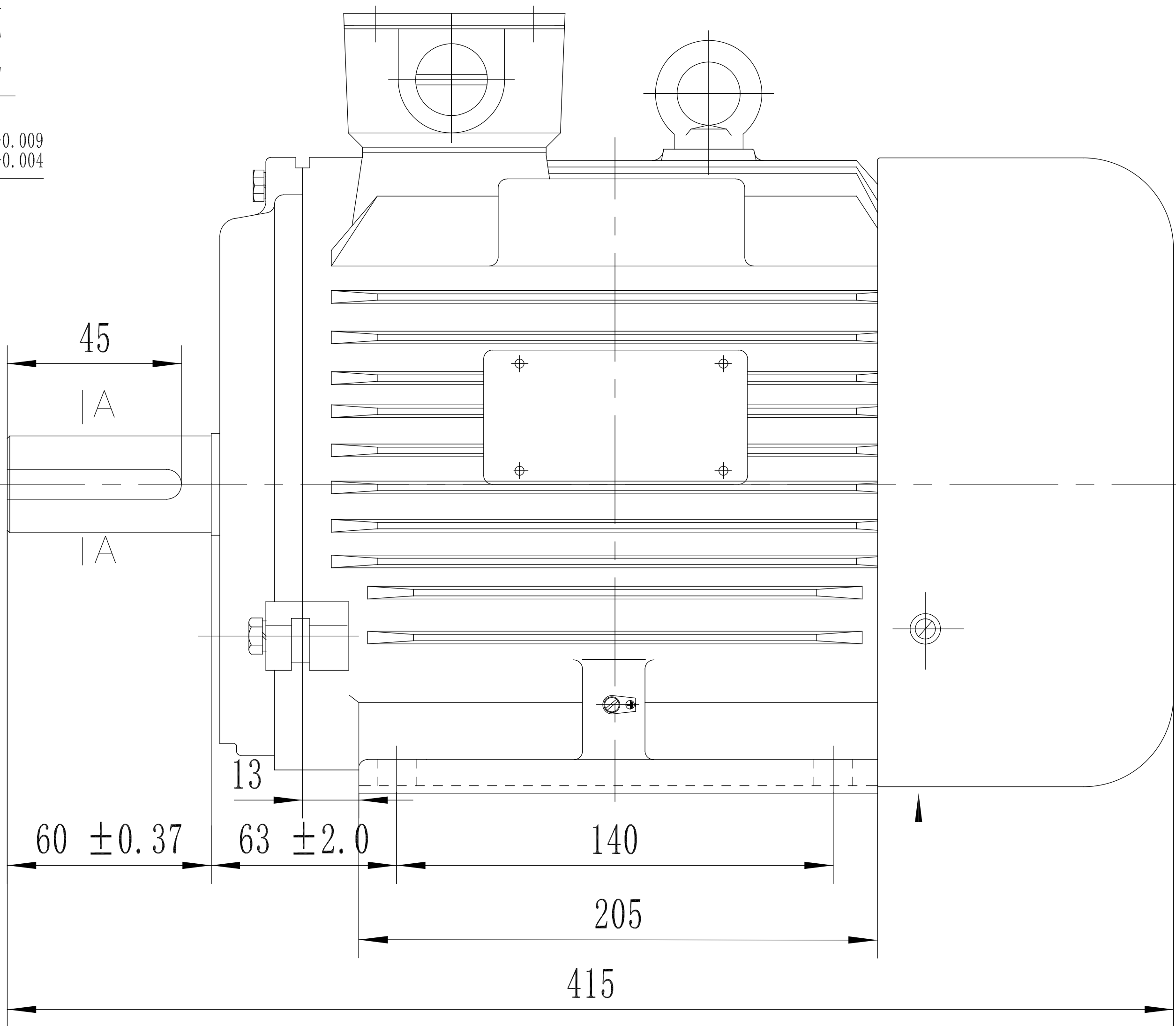
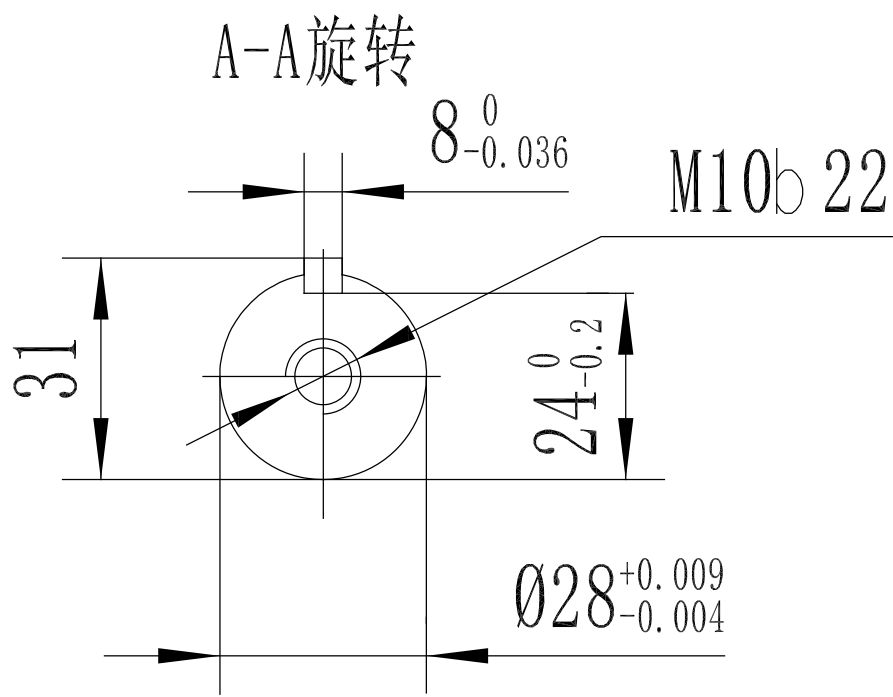
## Nameplate Specifications

Phase	3	Output HP	4 & 3 Hp
Output KW	3.0 & 2.2 kW	Voltage	230/460 & 200/400 V
Speed	3510 & 2938 rpm	Service Factor	1.15 & 1.15
Frame	100L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 89.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	9.2/4.6 & 8.2/4.1 A	Power Factor	90
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	J
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
UL	No	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

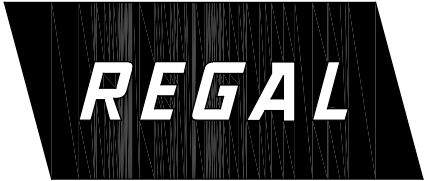
## Technical Specifications

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	005010.01	Outline Drawing	SS622236-DF100L-2R

SS622236

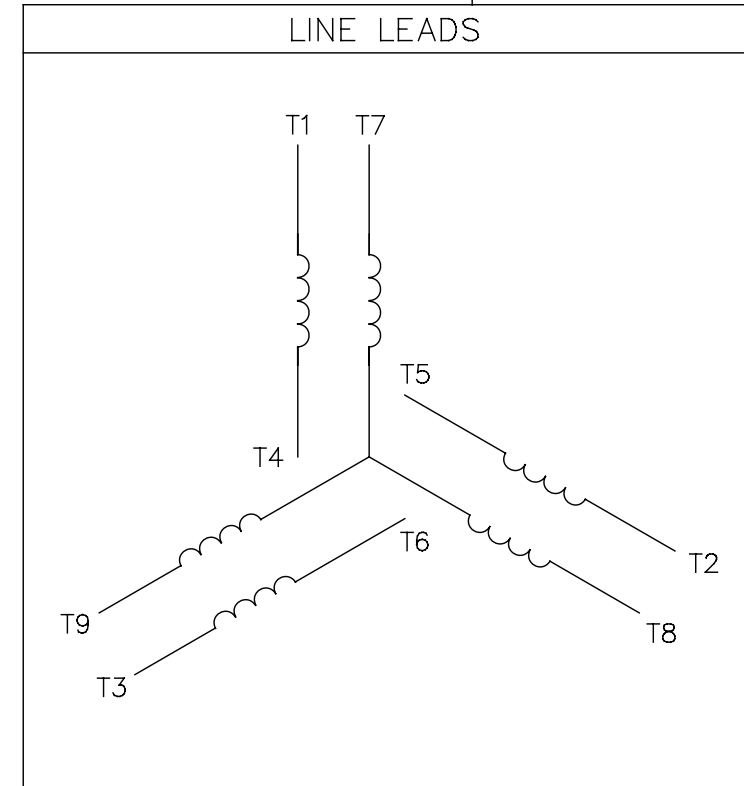


DF100L-2R	193303.60
DF100L1-4R	193301.60
DF100L2-4R	193304.60
DF100L-6R	193300.60
FRAME	PART #


			TOLERANCES UNLESS SPECIFIED		 Regal-Beloit Corporation	DRAWN	
			DEC.	INCHES		CHK	
			.X	±.1	TITLE	APPD	
			.XX	±.03		SCALE	
			.XXX	±.005	MAT'L.	REF	
			.XXXX	±.0005		FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2	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		SIZE
			DIST				DRAWING NO.
							B
							SS622236
							REV.

005010-01

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

				TOLERANCES UNLESS SPECIFIED		 <b>Regal Beloit America, Inc.</b>	DRAWN RDW 04/12/02		
				DEC.	INCHES		CHK		
				.X	±.1		APPD		
				.XX	±.01		SCALE 1=1		
				.XXX	±.005	TITLE EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR	REF FIG.2-51		
A	UPDATED TO REGAL LOGO	SAJ 06/26/15	AJY	.XXXX	±.0005		MAT'L. DECAL - 004014	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	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 04/12/02		CAD FILE 00501001		SIZE	DRAWING NO.	REV.
			DIST BRF-NLV				A	005010-01	A

## CERTIFICATION DATA SHEET

Model#: 100LTC6501 AA  
 CONN. DIAGRAM: 005010.01  
 OUTLINE: SS622236

WINDING#: T06802008 NONE 3  
 ASSEMBLY: F3

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
4&3	2.98&2.24	3600	3510&2938	100L	TEFC	J	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	9.2/4.6&8.2/4. 1	LINE OR INVERTER	CONTINUOU S	F2	1.15/1.15	40	3300

FULL LOAD EFF: 89.5&89.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 90&89	3/4 LOAD PF: 87	1/2 LOAD PF: 80	88.5	SQ CAGE INV RATED	3 / 1.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	76 / 38	12 LB-FT 200	20 LB-FT 332	55

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	POLYREX EM	STANDARD IEC	NONE	NONE	AISI 1045 (C-240)	CAST IRON
6206	6205						

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: 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	

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DATE: 06/22/2017 04:16:09 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



100LTC6501

Submittal

Data @ 460 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.50	1.90	2.60	3.6	4.6	5.2	5.8	38.0	
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. (%)	9.5	60.5	80.0	87.0	90.0	91.0	92.0	52.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																					
Speed (RPM)	0	1800	2975	3520	3600																																					
Current (Amps)	38.0	34.0	23.5	4.6	1.50																																					
Torque (ft-lb)	12.0	8.5	20.0	6.0	0.00																																					
<div><div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div></div><table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0</td><td>-</td><td>-</td><td>4.5</td></tr><tr><td>25</td><td>84</td><td>60</td><td>4.8</td></tr><tr><td>50</td><td>88</td><td>78</td><td>5.5</td></tr><tr><td>60</td><td>90</td><td>85</td><td>6.0</td></tr><tr><td>80</td><td>90</td><td>90</td><td>6.8</td></tr><tr><td>100</td><td>89</td><td>91</td><td>7.5</td></tr><tr><td>125</td><td>88</td><td>92</td><td>6.5</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	0	-	-	4.5	25	84	60	4.8	50	88	78	5.5	60	90	85	6.0	80	90	90	6.8	100	89	91	7.5	125	88	92	6.5					
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						Enclosure					TEFC																															
						Construction					TFC																															
						Voltage					30/460#200/40V																															
						Frequency					60 Hz																															
						Design					B																															
						LR Code letter					J																															
						Service Factor					1.15																															
						Temp Rise @ FL					55 °C																															
						Duty					CONT																															
						Ambient					40 °C																															
						Elevation					1,000 feet																															
Rotor/Shaft wk²					0.00 Lb-Ft²																																					
Ref Wdg					T06802008 NONE																																					
Sound Pressure @ 1M					72 dBA																																					
VFD Rating					CONSTANT 20:1																																					
Outline Dwg					SS622236																																					
Conn. Diag					005010.01																																					
Additional Specifications:																																										
0																																										
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EQUIV CKT (OHMS / PHASE)																																										
R1		R2		X1	X2	Xm																																				
2.4820		1.2760		3.9350	2.1270	178.6680																																				

## Speed -Torque Curve

