

PRODUCT INFORMATION PACKET

Model No: TCA0031AE211GAA009

Catalog No: R351B

3.00 kW General Purpose Low Voltage IEC Motor, 3 phase, 3600 RPM, 230/460 V, 100L Frame, TEFC
Cast Iron IE3 Efficiency Motors



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REGAL



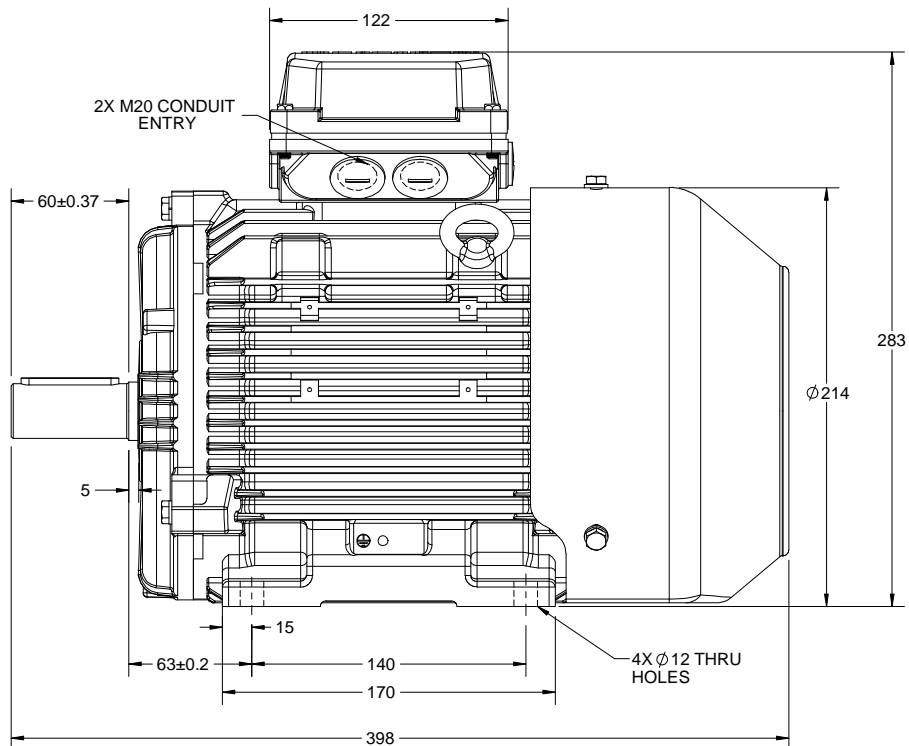
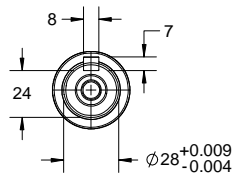
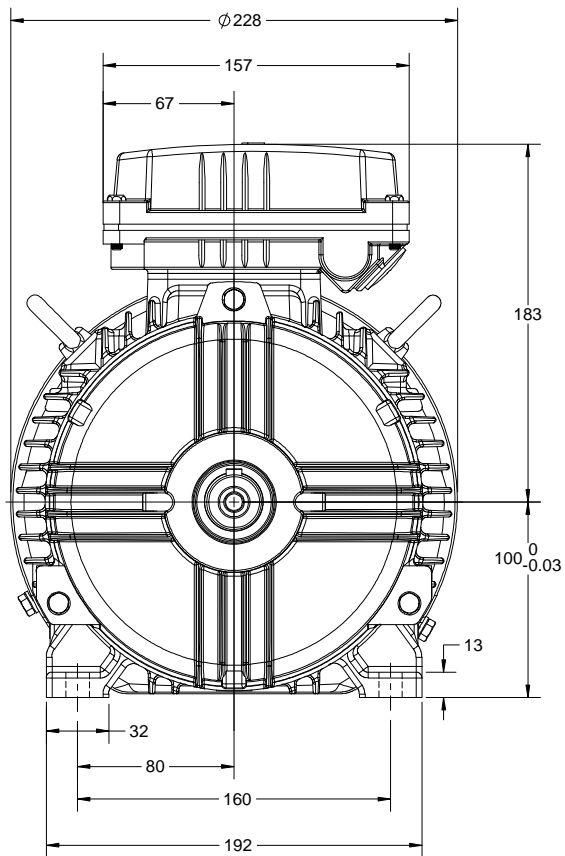
Nameplate Specifications

Output HP	4 Hp	Output KW	3.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	9.8/4.9 A	Speed	3499 rpm
Service Factor	1.15	Phase	3
Efficiency	88.5 %	Power Factor	89.0
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	K
Frame	100L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	N
CE	Y	IP Code	55

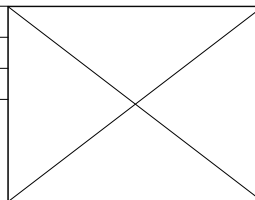
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	3.74 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	15.67 in
Frame Length	7.87 in	Shaft Diameter	1.102 in
Shaft Extension	2.36 in	Assembly/Box Mounting	F3
Outline Drawing	SS600216	Connection Drawing	8442000675

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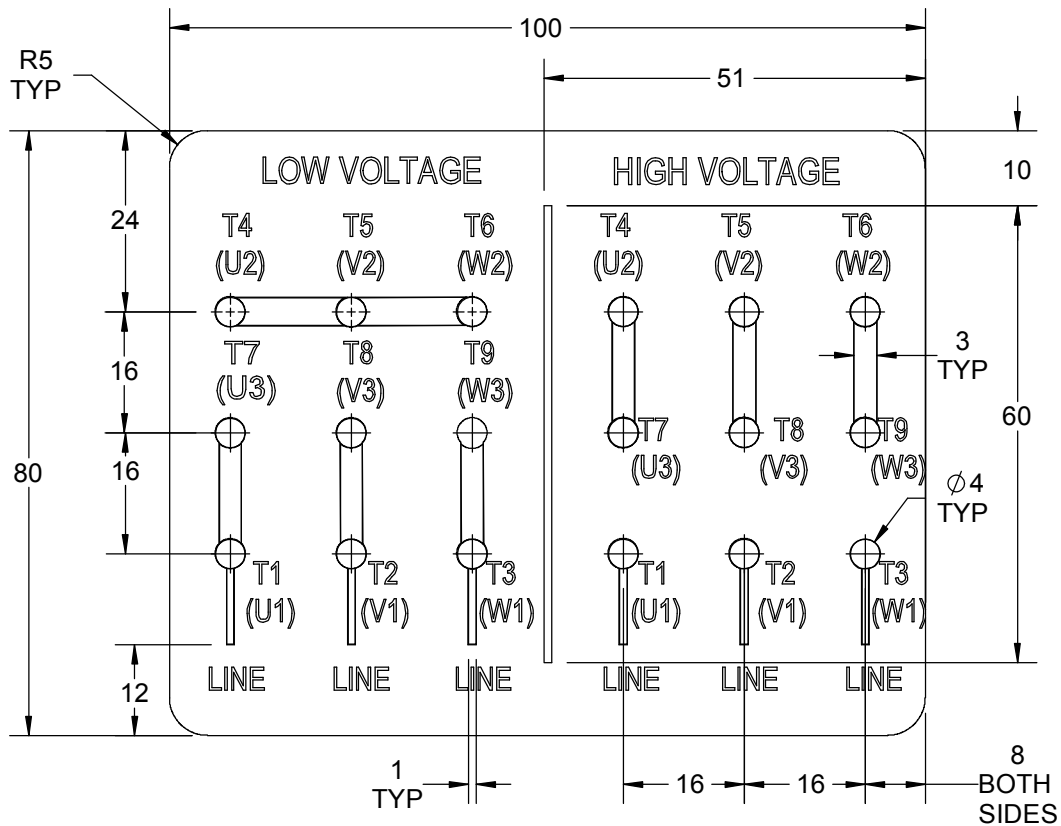
DRAWING REVISION A	REVISION BY NIV	DATE 03/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 03/12/2018
ECO DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY NIV
DATE 03/12/2018
APPROVED BY JAY
DATE 03/12/2018
REFERENCE
THIRD ANGLE PROJECTION

marathon Motors	
DESCRIPTION OUTLINE IEC-100 FR- B3 MOTOR TYPE: TEFC-CAST IRON	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS600216
SHEET 1 OF 1	

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



NOTES:

1. PRESSURE-SENSITIVE ADHESIVE TAPE COATED WITH ANTI-ADHESIVE.
2. YELLOW COLOR BACK GROUND LETTERS WILL BE BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T12 & U1-U4,V1-V4& W1-W4 OF ARIAL WITH 3mm SIZE.
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

DRAWING REVISION B	REVISION BY NIV	DATE 05/03/2019		DRAWN BY NIV	Regal Beloit America, Inc.
ECO ECO-0162986	APPROVED BY JAY	DATE 05/03/2019		DATE 29/01/2019	
ECO DESCRIPTION UPDATED DRAWING				APPROVED BY JAY	DESCRIPTION CONNECTION DIAGRAM 9 LEADS- STAR CONNECTOR
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			REFERENCE	SIZE A	DRAWING NUMBER 8442000675

P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 480

CERTIFICATION DATA SHEET

CUSTOMER:		CUSTOMER P.O. #:	
ORDER #:	8442000675	REFERENCE MODEL #:	TCA0031AE21TGA009
CONN. DIAGRAM:	SS600216	CAT #:	R351B
OUTLINE:	IE3L1002201	CUSTOMER PART #:	
WINDING:	R1	MOUNTING:	F3
SPEED:			

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
4	3.0	3600	3499	100L	TEFC	TCA 100LA02	K	N
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB
3	60/50	230/460#200/400	9.75/4.85&8.5/4.25	LINE OR INVERTER	CONT	F	1.15	40
	F.L. EFF	F.L. PF	3/4 LD EFF	1/2 LD EFF	GTD EFF	ELECT. TYPE	SO CAGE INV RATED	
	86.5	89.3	3/4 LD PF	86.5	84.5	75.2	84.5	
	F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)			
	6.0 LB-FT	45.0	19.1 LB-FT	318%	22.1 LB-FT	368%		
	@ 3 FT. DBA	POWER DBA	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME SEC.	STARTS/HOUR	2	MOTOR WGT LB.
	50	59	0.11	0.11	15	85		

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	B3	HORIZONTAL	NO	NONE	NO	NONE	BLUE - RAL 5014
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE ODE BALL 6206	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT ODE
2.34	1.56	3.971	1.347	143.455	0.150	

INVERTER TORQUE: CONSTANT 2.1/VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER:	NONE
FT-LB:	NA
VOLTAGE:	NONE
UL:	V - LI-ME-INS CONST UL REC

PREPARED BY: Fareeda Dudekula

DATE: 5/27/2019

FORM: 3531 REV. 4 2/27/06

