

# PRODUCT INFORMATION PACKET

Model No: TCA0112AE271GAA009

Catalog No: R634

11.0 kW General Purpose Low Voltage IEC Motor, 3 phase, 1800 RPM, 230/460 V, 160M Frame, TEFC  
Cast Iron IE3 Efficiency Motors



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**REGAL**

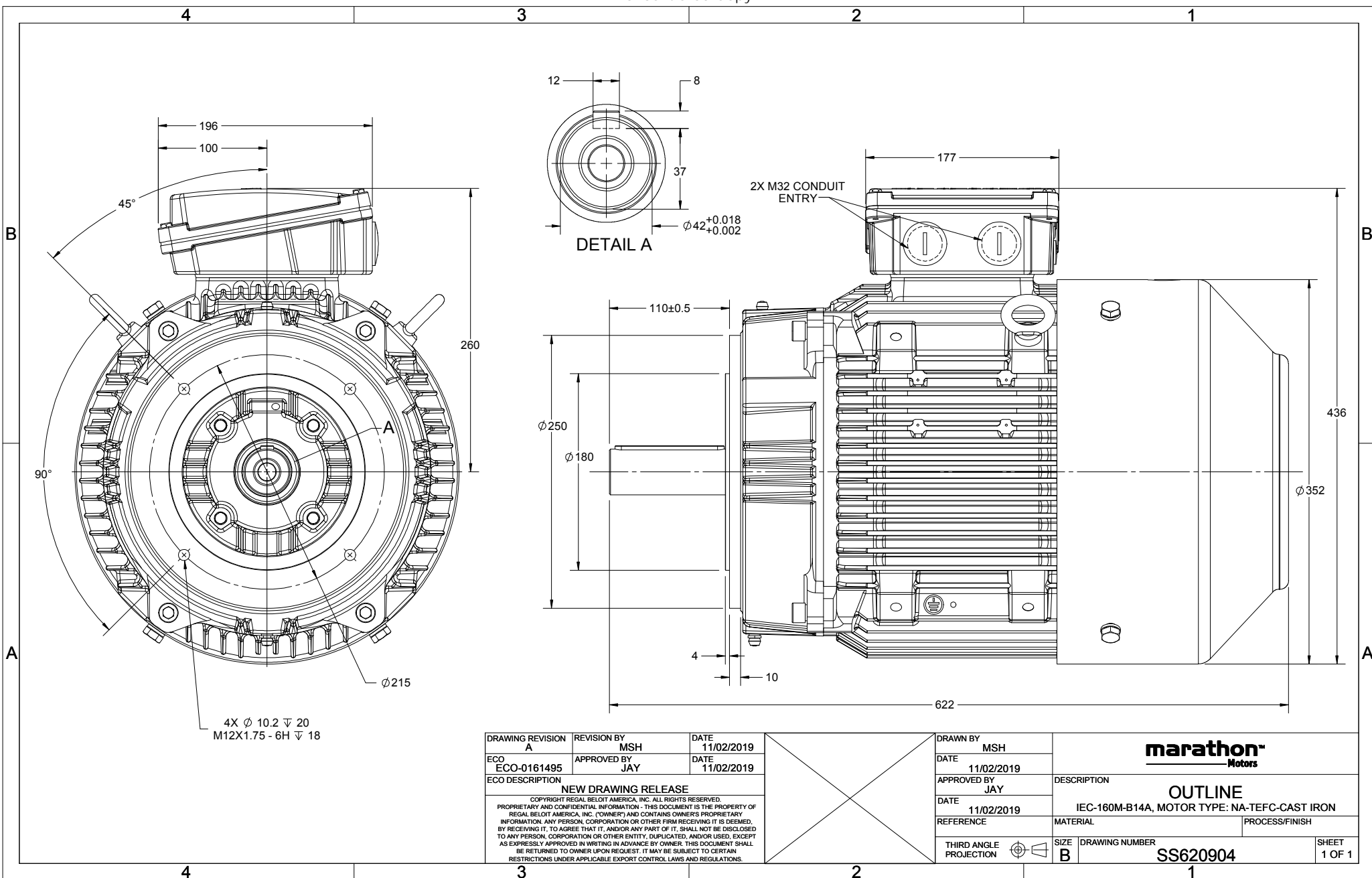
### Nameplate Specifications

Output HP	15 Hp	Output KW	11.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	37.5/18.7 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	92.4 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
Frame	160M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	N
CE	Y	IP Code	55

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.69 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	24.49 in
Frame Length	10.00 in	Shaft Diameter	1.654 in
Shaft Extension	4.33 in	Assembly/Box Mounting	F3

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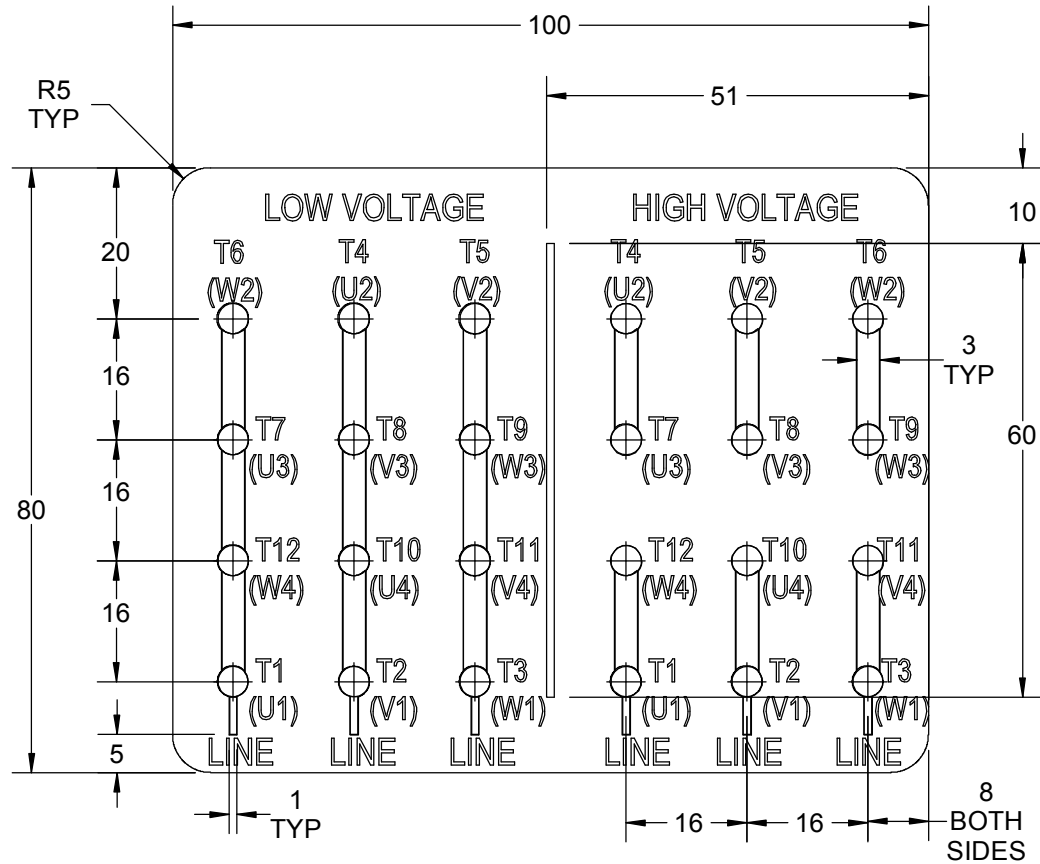


DRAWING REVISION A	REVISION BY MSH	DATE 11/02/2019
ECO ECO-0161495	APPROVED BY JAY	DATE 11/02/2019
ECO DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY MSH
DATE 11/02/2019
APPROVED BY JAY
DATE 11/02/2019
REFERENCE

<b>marathon</b> Motors	
<b>OUTLINE</b>	
IEC-160M-B14A, MOTOR TYPE: NA-TEFC-CAST IRON	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS620904
THIRD ANGLE PROJECTION	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>C</b>	REVISION BY <b>NIV</b>	DATE <b>05/03/2019</b>		DRAWN BY <b>NIV</b>	Regal Beloit America, Inc.
ECO <b>ECO-0162986</b>	APPROVED BY <b>JAY</b>	DATE <b>05/03/2019</b>		DATE <b>29/01/2019</b>	
ECO DESCRIPTION <b>UPDATED DRAWING</b>				APPROVED BY <b>JAY</b>	DESCRIPTION <b>CONNECTION DIAGRAM</b> 12 LEAD -DELTA CONNECTION
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			REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>8442000677</b>

Data Sheet

TCA0112AE27GA009

Date: 5/30/2019

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

**Submittal**

Submitted by: Fareeda Dudekula

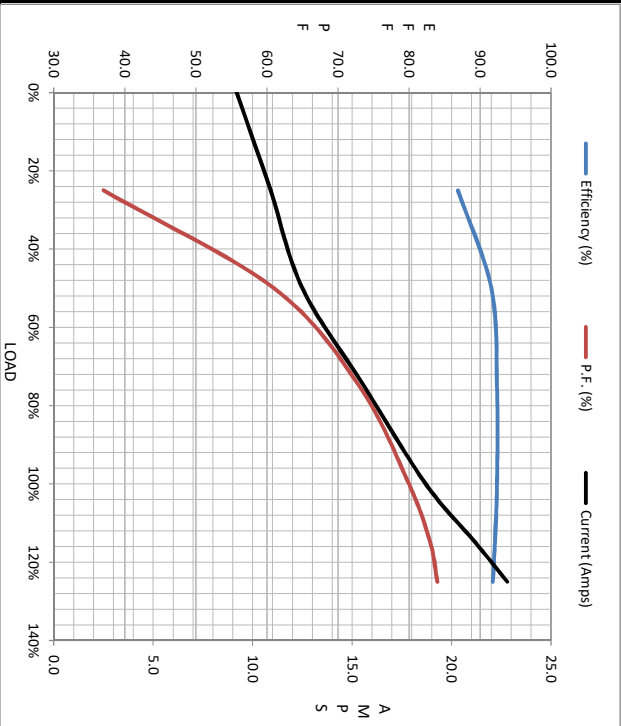
Data @ 460 V

Load	Motor Load Data						LR	
	0%	25%	50%	75%	100%	115%		125%
Current (Amps)	9.2	10.9	12.5	15.6	18.7	21.2	22.8	134
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.4	51.1	55.7	103
RPM	1800	1794	1788	1783	1775	1,772	1769	0
Efficiency (%)		86.9	91.6	92.4	92.4	92.1	91.8	
P.F. (%)	5.0	37.0	61.0	73.0	80.0	83.0	84.0	63.4

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1612	1775	1800
Current (Amps)	134	127	81.5	18.7	9.2
Torque (ft-lb)	103	98.2	142	44.4	0.00

IEC



Information Block				
HP	15.0			
Sync. RPM	1800			
Frame	160			
Enclosure	TEFC			
Construction	TCA 160MB04			
Voltage	230/460#200/400 V			
Frequency	60 Hz			
Design	N			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	2.54 Lb-Ft <sup>2</sup>			
Ref Wdg	IE3L1604201 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 2:1-VARIABLE 10:1			
Outline Dwg	SS620904			
Conn. Diag	8442000677			
Additional Specifications:				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4350	0.2080	1.0020	1.2290	28.2140

Speed - Torque Curve

