

# PRODUCT INFORMATION PACKET

Model No: TCA1P53AP211GAA009

Catalog No: R420B

1.5 kW General Purpose Low Voltage IEC Motor, 3 phase, 1200 RPM, 575 V, 100L Frame, TEFC  
Cast Iron IE3 Efficiency Motors



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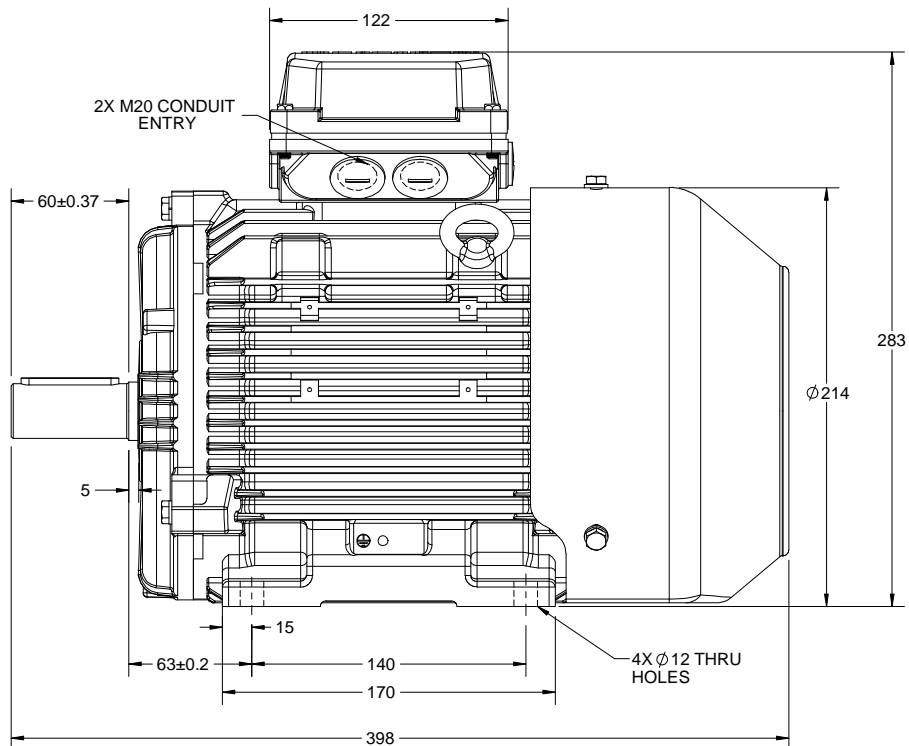
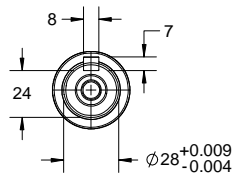
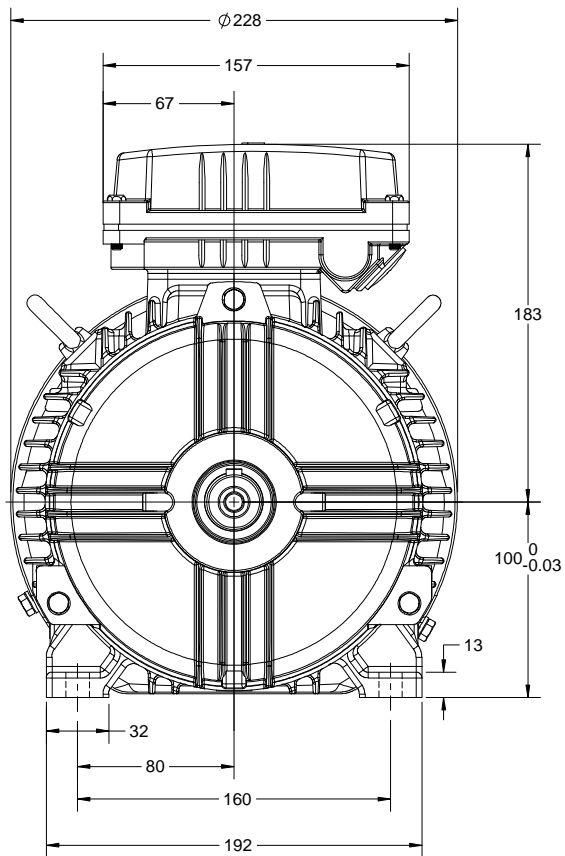
### Nameplate Specifications

Output HP	<b>2 Hp</b>	Output KW	<b>1.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>2.4 A</b>	Speed	<b>1175 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>88.5 %</b>	Power Factor	<b>72</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>N (IEC)</b>	KVA Code	<b>K</b>
Frame	<b>100L</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6206</b>	Opp Drive End Bearing Size	<b>6206</b>
UL	<b>Recognized</b>	CSA	<b>N</b>
CE	<b>Y</b>	IP Code	<b>55</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>6.5 Ohms</b>	Mounting	<b>B3</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>IEC</b>	Overall Length	<b>15.67 in</b>
Frame Length	<b>7.87 in</b>	Shaft Diameter	<b>1.102 in</b>
Shaft Extension	<b>2.36 in</b>	Assembly/Box Mounting	<b>F3</b>

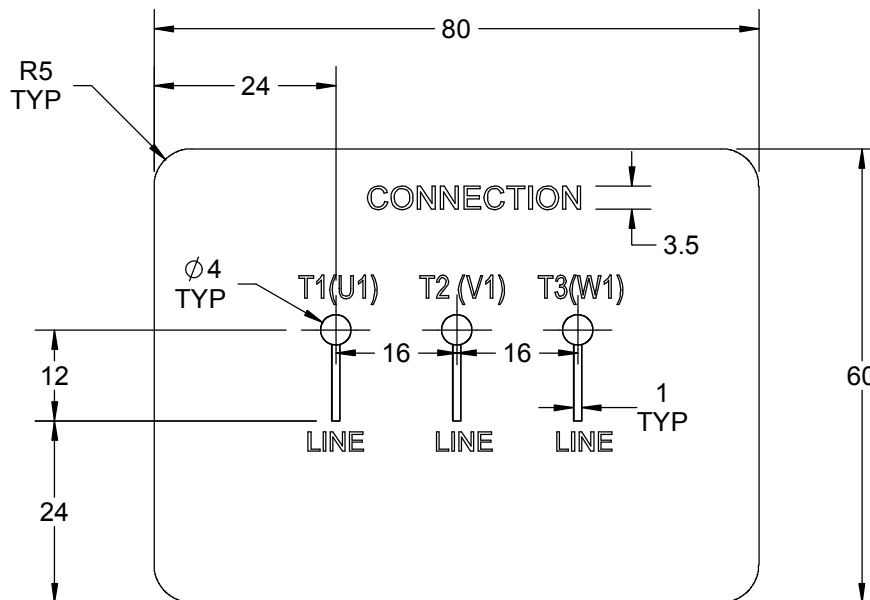
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DRAWING REVISION A	REVISION BY NIV	DATE 03/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 03/12/2018
ECO DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY NIV	
DATE 03/12/2018	
APPROVED BY JAY	
DATE 03/12/2018	
REFERENCE	DESCRIPTION OUTLINE IEC-100 FR- B3 MOTOR TYPE: TEFC-CAST IRON
THIRD ANGLE PROJECTION	MATERIAL
SIZE B	DRAWING NUMBER SS600216
	PROCESS/FINISH
	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-T2 - T3 & U1-V1-W1 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

DRAWING REVISION A	REVISION BY A. KEETHA	DATE 25/07/2019		DRAWN BY A. KEETHA	Regal Beloit America, Inc.	
ECO ECO-0171114	APPROVED BY SN	DATE 25/07/2019		DATE 24/07/2019		
ECO DESCRIPTION NEW DRAWING RELEASE				APPROVED BY SN	DESCRIPTION CONNECTION DIAGRAM 3 LEAD CONNECTION	
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				REFERENCE	THIRD ANGLE PROJECTION	SIZE A



Data Sheet

TCA1P53AP211GAA009

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Date: 5/29/2019

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

Submitted by: Fareeda Dudekula

Submital

Data @ 575 V

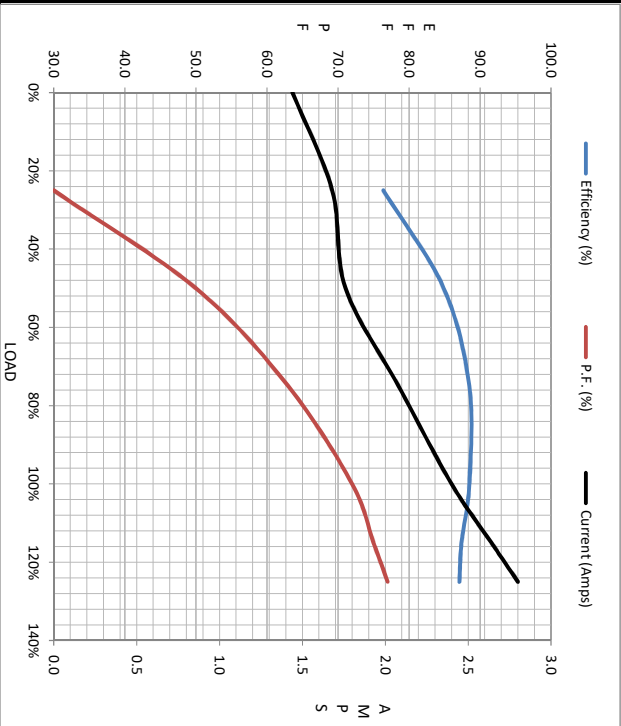
Load	Motor Load Data						LR	
	0%	25%	50%	75%	100%	115%		125%
Current (Amps)	1.44	1.68	1.76	2.08	2.40	2.64	2.80	17.8
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.3	11.3	21.6
RPM	1200	1193	1187	1181	1175	1169	1166	0
Efficiency (%)		76.4	84.9	88.5	88.5	87.4	87.1	
P.F. (%)	8.0	30.0	50.0	63.0	72.0	75.0	77.0	63.4

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	977	1175	1200
Current (Amps)	17.8	17.0	10.0	2.40	1.44
Torque (ft-lb)	21.6	20.5	30.8	9.0	0.00

IEC

Information Block				
HP	2.0			
Sync. RPM	1200			
Frame	100			
Enclosure	TEFC			
Construction	TCA 100L06			
Voltage	575 V			
Frequency	60 Hz			
Design	N			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	0.45 Lb-Ft <sup>2</sup>			
Ref Wdg	IE3L1006202 NONE			
Sound Pressure @ 1M	55 dBA			
VFD Rating	CONSTANT 2:1-VARIABLE 10:1			
Outline Dwg	SS600216			
Conn. Diag	8442000675			
Additional Specifications:				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
5.9830	3.7670	11.0800	14.4040	226.2520



Speed - Torque Curve

