

PRODUCT INFORMATION PACKET

Model No: TCA7P52AE211GAA009

Catalog No: R331B

7.50 kW General Purpose Low Voltage IEC Motor, 3 phase, 1800 RPM, 230/460 V, 132M Frame, TEFC
Cast Iron IE3 Efficiency Motors





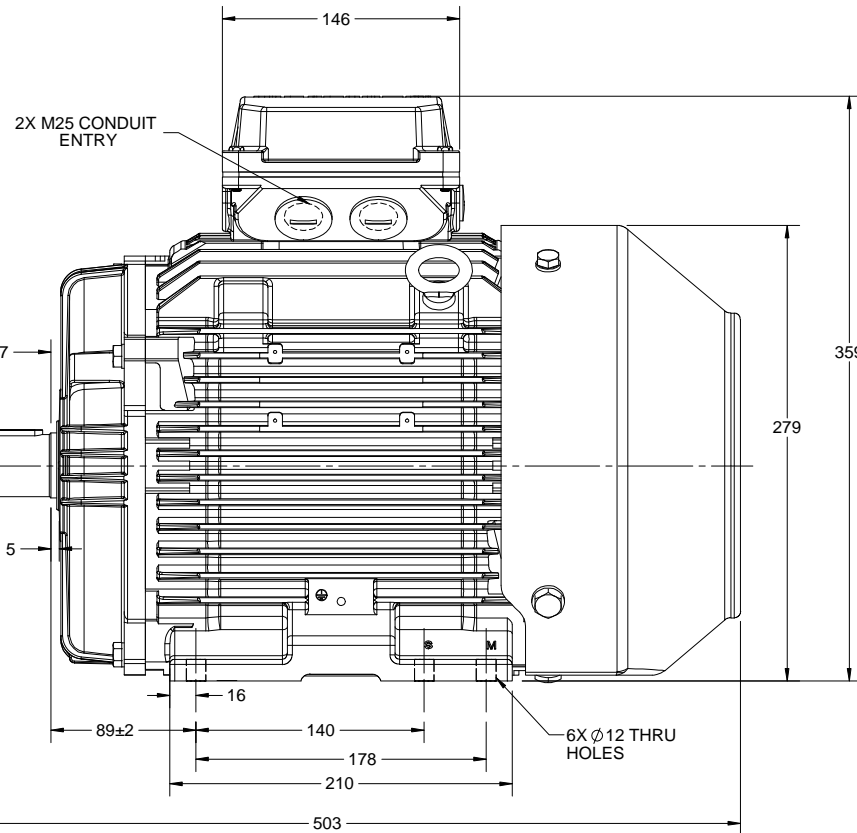
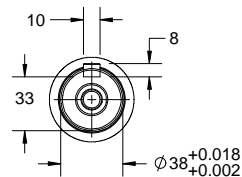
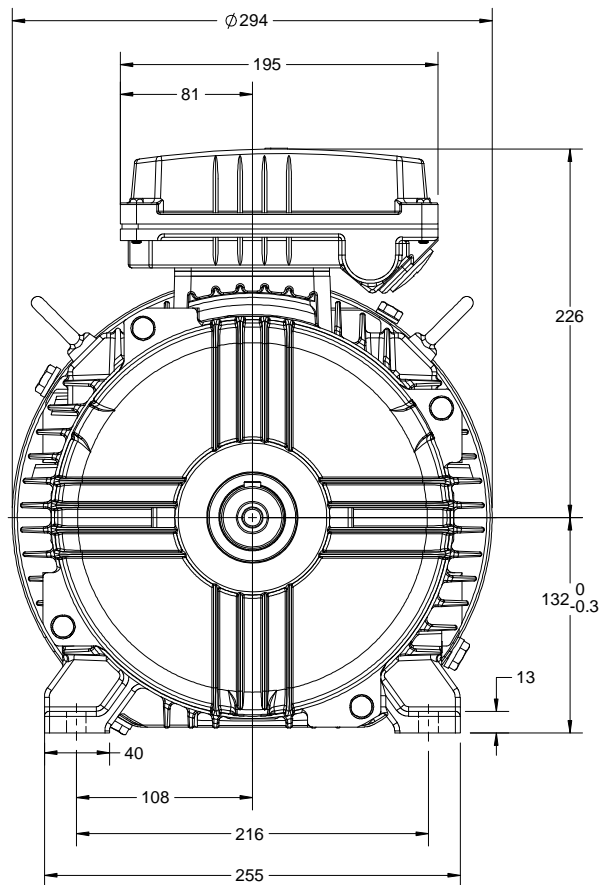
Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	25.4/12.7 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	K
Frame	132M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6308	Opp Drive End Bearing Size	6208
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	1.05 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	19.80 in
Frame Length	9.45 in	Shaft Diameter	1.496 in
Shaft Extension	3.15 in	Assembly/Box Mounting	F3
Connection Drawing	8442000677	Outline Drawing	SS810120

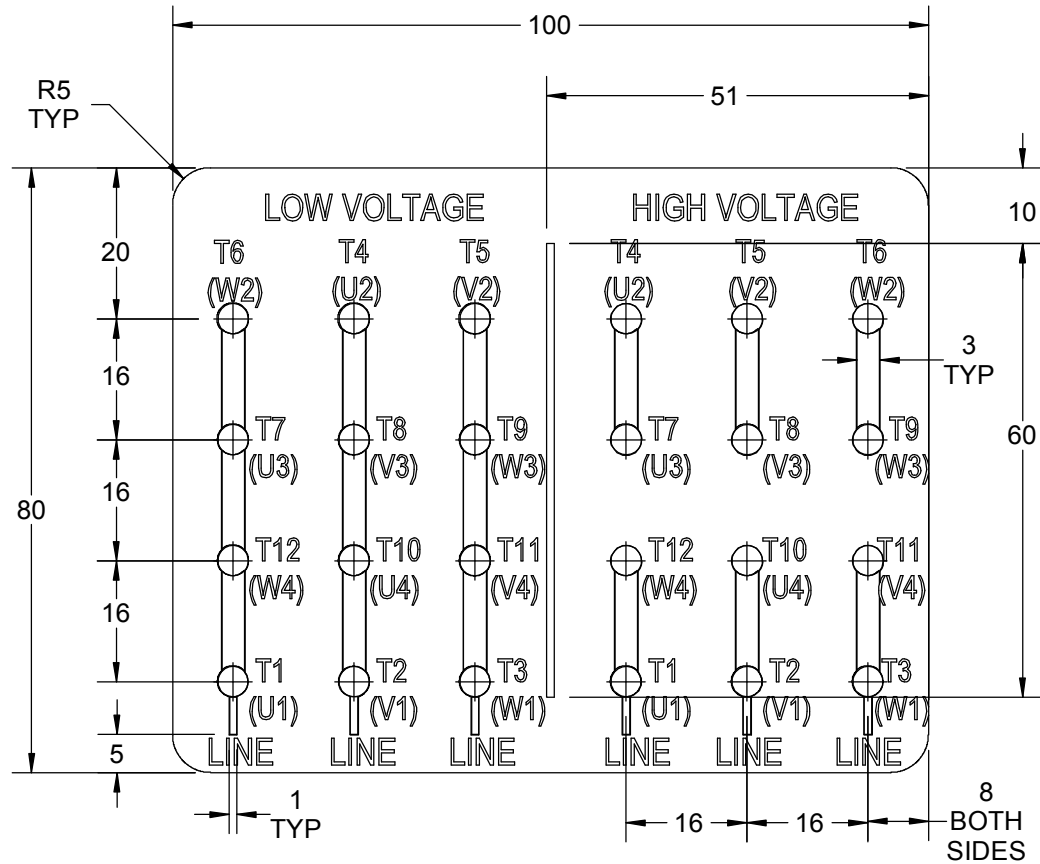
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DRAWING REVISION A	REVISION BY NIV	DATE 04/12/2018
ECO ECO-0157171	APPROVED BY JAY	DATE 04/12/2018
ECO DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY NIV		DESCRIPTION OUTLINE IEC-132S-FR.- B3 MOTOR TYPE : TEFC-CAST IRON
DATE 04/12/2018		
APPROVED BY JAY		
DATE 04/12/2018		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS810120
		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 C	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 12 LEAD -DELTA CONNECTION
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			REFERENCE	MATERIAL	SIZE A

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:		CUSTOMER P.O. #:	
ORDER #:	8442000677	REFERENCE MODEL #:	TCA7P52AE211GAA009
CONN. DIAGRAM:	SS810120	CAT #:	R331B
OUTLINE:	IE3L1324202	CUSTOMER PART #:	
WINDING:	NONE	MOUNTING:	F3
SPEED:	1		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
10	7.5	1800	1775	132M	TEFC	TCA 132M04	K	N	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#200/400	25.4/12.7&22.6/11.3	LINE OR INVERTER	CONT	F	1.15	40	3300
	F.L. EFF	F.L. PF	3/4 LD EFF	91.7	1/2 LD EFF	90.1	GTD EFF	ELECT. TYPE	
	81.0	81.0	3/4 LD PF	75.0	1/2 LD PF	64.0	90.5	SQ CAGE INV RATED	
	F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)				
	29.6 LB-FT	110	90.0 LB-FT	304%	95.7 LB-FT	80			
	@ 3 FT. DBA	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	START/SHOUR	MOTOR WGT		
	65	74 DBA	1.31 LB-FT²	1.31 LB-FT²	10 SEC.	2	98 LB.		

*** 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 6308	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
0.652	0.34	1.56	2.212	45.044	0.060	ODE

* N O T E S *	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	BRAKE: NONE
	FT-LB: NONE NA NONE
	VOLTAGE: NONE NONE
	UL: V - LI ME-INS CONST UL REC
	PREPARED BY: Fareeda Dudekula
	DATE: 5/28/2019

Data Sheet

TCATP52AE21GA009

Date: 5/28/2019

Customer: _____
Attention: _____

Submital

Submitted by: Fareeda Dudekula

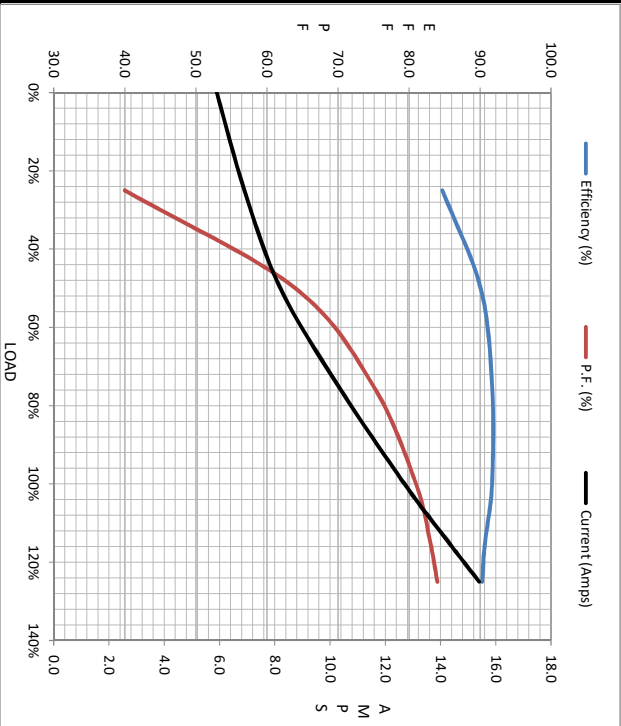
Data @ 460 V

Load	Motor Load Data					
	0%	25%	50%	75%	100%	LR
Current (Amps)	5.9	6.9	8.2	10.3	12.7	11.0
Torque (ft-lb)	0.00	7.3	14.7	22.1	29.6	90.0
RPM	1800	1794	1787	1781	1775	0
Efficiency (%)		84.7	90.1	91.7	91.7	90.3
P.F. (%)	7.0	40.0	64.0	75.0	81.0	83.4

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1572	1775	1800
Current (Amps)	110	105	59.2	12.7	5.9
Torque (ft-lb)	90.0	85.5	95.7	29.6	0.00

IEC



Information Block				
HP	1.0, 0			
Sync. RPM	1800			
Frame	132			
Enclosure	TEFC			
Construction	TCA 132M04			
Voltage	230/460#200/400 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/Shatt wk ²	1.31 Lb-Ft ²			
Ref Wdg	IE3L1324202 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 2:1-VARIABLE 10:1			
Outline Dwg	SS810120			
Conn. Diag	8442000677			
Additional Specifications:				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.6520	0.3400	1.5600	2.2120	45.0440

Speed - Torque Curve

