

# PRODUCT INFORMATION PACKET

Model No: TCA0041AE211GAA009

Catalog No: R324B

4.0 kW General Purpose Low Voltage IEC Motor, 3 phase, 3600 RPM, 230/460 V, 112M Frame, TEFC  
Cast Iron IE3 Efficiency Motors





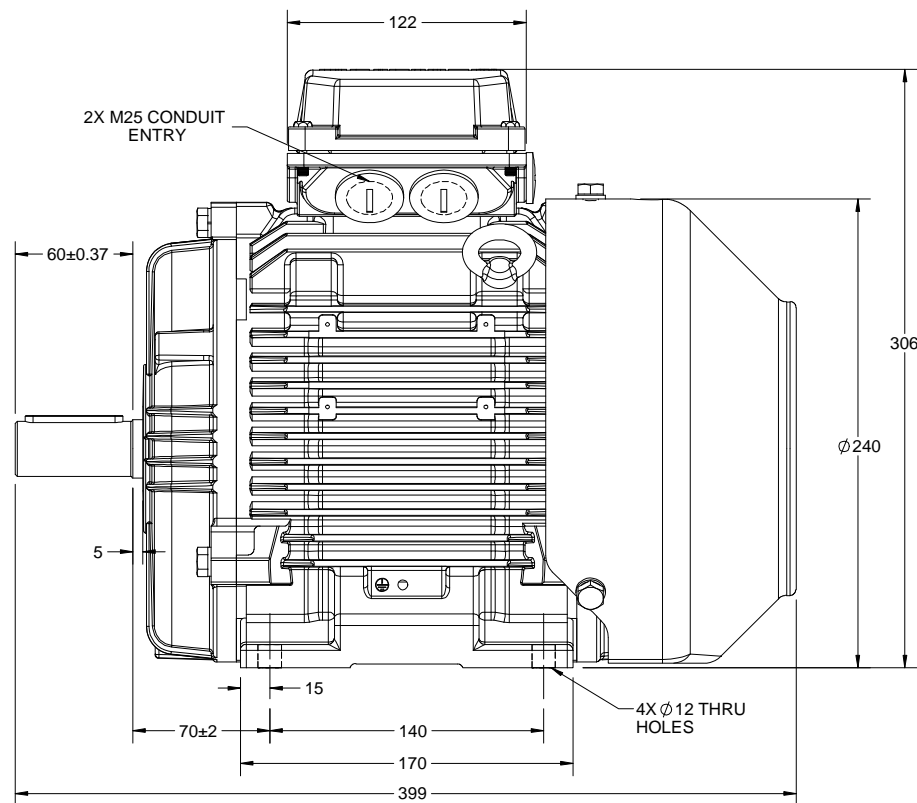
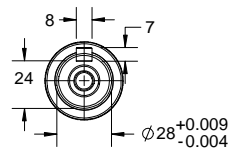
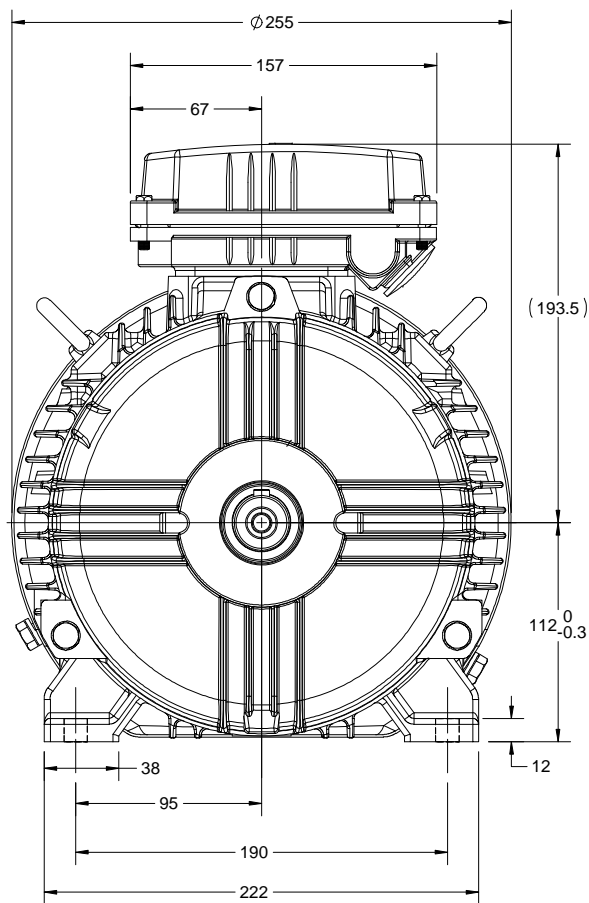
### Nameplate Specifications

Output HP	<b>5.50 Hp</b>	Output KW	<b>4.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>12.4/6.2 A</b>	Speed	<b>3520 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>89.5 %</b>	Power Factor	<b>91</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>N (IEC)</b>	KVA Code	<b>J</b>
Frame	<b>112M</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6306</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>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>3.17 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>15.71 in</b>
Frame Length	<b>6.85 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 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
DATE 04/12/2018
APPROVED BY JAY
DATE 04/12/2018
REFERENCE

**marathon**  
Motors

DESCRIPTION  
**OUTLINE**  
IEC-112 FR- B3 MOTOR TYPE : TEFC-CAST IRON

THIRD ANGLE  
PROJECTION

MATERIAL PROCESS/FINISH

SIZE  
B DRAWING NUMBER  
SS600217

SHEET  
1 OF 1



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

<b>CUSTOMER:</b>		<b>CUSTOMER P.O. #:</b>	
<b>ORDER #:</b>	8442000676	<b>REFERENCE MODEL #:</b>	TCA0041AE21TGA009
<b>CONN. DIAGRAM:</b>	SS600217	<b>CAT #:</b>	R324B
<b>OUTLINE:</b>	IE3L1122201	<b>CUSTOMER PART #:</b>	
<b>WINDING:</b>	NONE	<b>MOUNTING:</b>	F3
<b>SPEED:</b>	1		

**TYPICAL MOTOR PERFORMANCE DATA**

<b>HP</b>	<b>KW</b>	<b>SYNC RPM</b>	<b>FL RPM</b>	<b>FRAME</b>	<b>ENCLOSURE</b>	<b>TYPE</b>	<b>KVA CODE</b>	<b>DESIGN</b>	
5.5	4.1	3600	3520	112M	TEFC	TCA112M02	J	N	
<b>PH</b>	<b>HZ</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>START TYPE</b>	<b>DUTY</b>	<b>INSL</b>	<b>S.F.</b>	<b>AMB</b>	<b>ELEV.</b>
3	60/50	230/460#200/400	12.4/6.2&11.2/5.6	LINE OR INVERTER	CONT	F	1.15	40	3300
	<b>F.L. EFF</b>		<b>3/4 LD EFF</b>				<b>GTD EFF</b>		<b>ELECT. TYPE</b>
	89.5		89.5				89.2		SO CAGE INVERTED
	<b>F.L. PF</b>		<b>3/4 LD PF</b>				87.9		
	91.0		87.0						
<b>F.L. TORQUE</b>	<b>LR AMPS @ 460 V</b>	<b>L.R. TORQUE</b>	<b>B.D. TORQUE</b>	<b>F.L. RISE (° C)</b>					
8.2 LB-FT	55.1	17.8 LB-FT	217%	27.9 LB-FT	340%	80			
<b>@ 3 FT. DBA</b>	<b>POWER</b>	<b>ROTOR WK²</b>	<b>MAX. LOAD WK²</b>	<b>SAFE STALL TIME</b>	<b>STARTS/HOUR</b>	<b>MOTOR WGT</b>			
68 DBA	77 DBA	0.28 LB-FT²	0.28 LB-FT²	7 SEC.	2	53 LB.			

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

<b>DE BRACKET TYPE</b>	<b>ODE BRACKET TYPE</b>	<b>MOUNT TYPE</b>	<b>MOTOR ORIENTATION</b>	<b>SEVERE DUTY</b>	<b>HAZARDOUS LOCATION</b>	<b>DRIP COVER</b>	<b>SCREENS</b>	<b>PAINT</b>
STANDARD	STANDARD	B3	HORIZONTAL	NO	NONE	NO	NONE	BLUE - RAL 5014
<b>BEARINGS</b>	<b>GREASE</b>	<b>SHAFT TYPE</b>	<b>SPECIAL DE</b>	<b>SPECIAL ODE</b>	<b>SHAFT COVER</b>	<b>MATERIAL</b>	<b>FRAME MATERIAL</b>	
DE BALL 6306	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		
<b>THERMOSTATS</b>	<b>PROTECTORS</b>	<b>WDG RTD's</b>	<b>BRG RTD's</b>	<b>THERMISTORS</b>	<b>CONTROL</b>	<b>SPACE HEATERS</b>		
NONE	NOT	NONE	NONE	NONE	FALSE	NA		
<b>R1 (ohms/ph)</b>	<b>R2 (ohms/ph)</b>	<b>X1 (ohms/ph)</b>	<b>X2 (ohms/ph)</b>	<b>Xm (ohms/ph)</b>	<b>VIBRATION (in/sec)</b>	<b>FLOAT ODE</b>		
1.908	0.928	3.094	1.599	126.712	0.060			

INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1  
INV. HP SPEED RANGE: NONE

ENCODER: NONE  
NONE  
NONE  
BRAKE: NONE  
FT-LB: NONE NA NONE  
VOLTAGE: NONE  
NONE PPR

PREPARED BY: Fareeda Dudekula  
DATE: 5/28/2019

FORM: 3531 REV. 4 2/27/06

UL: V-LI-ME-INS CONST UL REC

