

PRODUCT INFORMATION PACKET

Model No: TCA0221AP211GAA009

Catalog No: R442

22.0 kW General Purpose Low Voltage IEC Motor, 3 phase, 3600 RPM, 575 V, 180M Frame, TEFC
Cast Iron IE3 Efficiency Motors





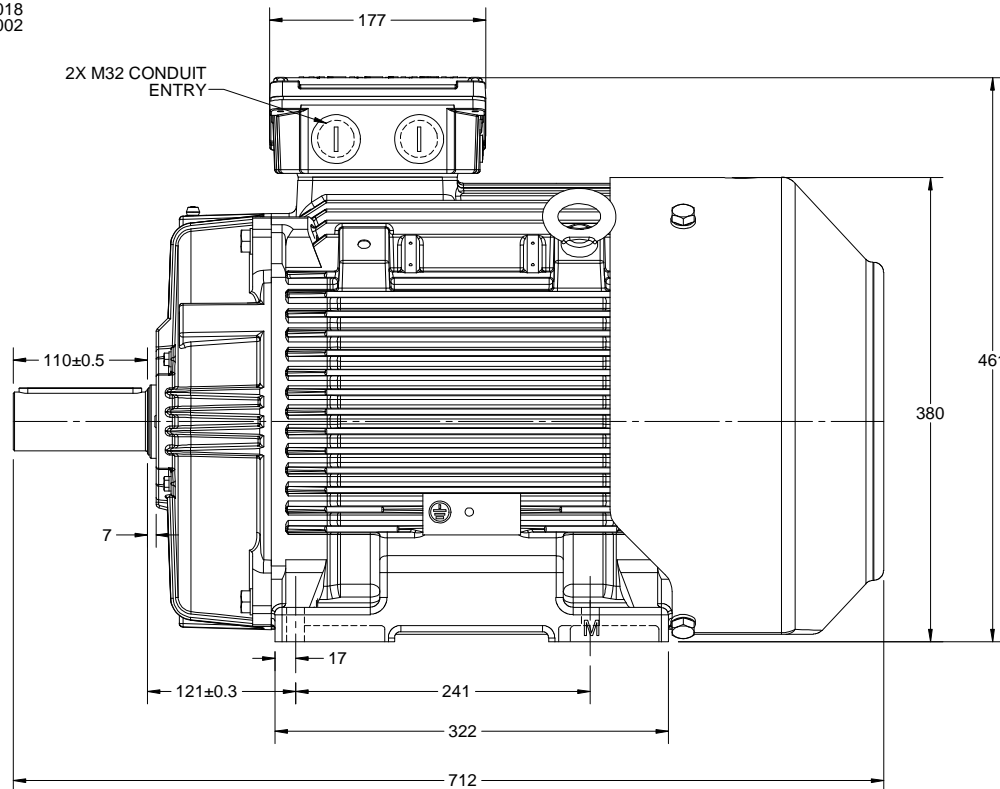
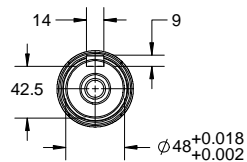
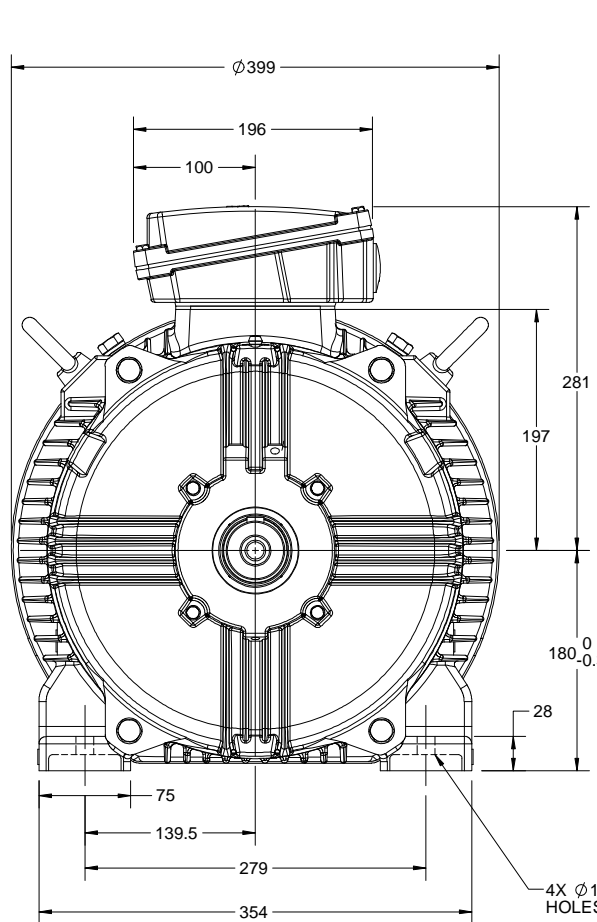
Nameplate Specifications

Output HP	30 Hp	Output KW	22.0 kW
Frequency	60 Hz	Voltage	575 V
Current	27.2 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	F
Frame	180M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
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	.37 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	28.03 in
Frame Length	12.91 in	Shaft Diameter	1.89 in
Shaft Extension	4.33 in	Assembly/Box Mounting	F3

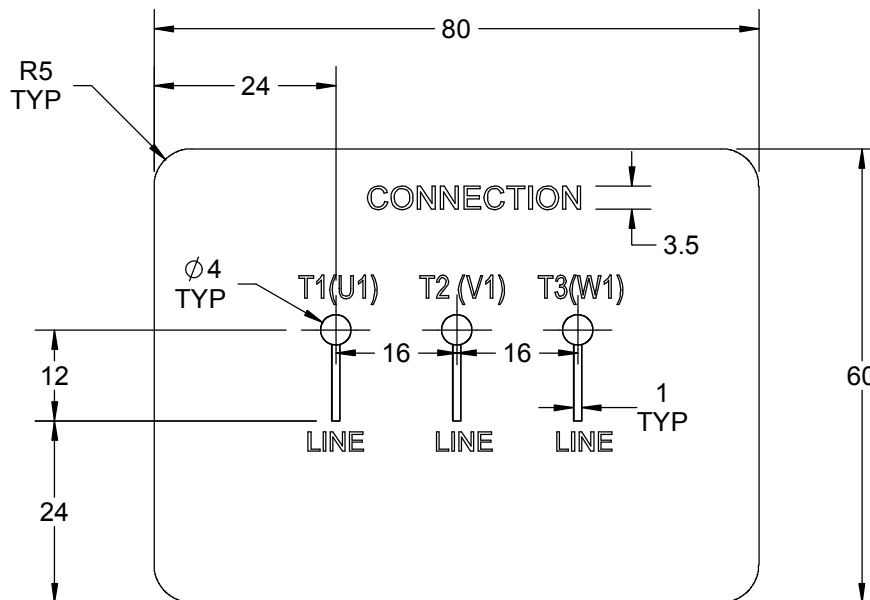
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DRAWING REVISION A	REVISION BY LK	DATE 05/12/2018
ECO ECO-0157830	APPROVED BY JAY	DATE 05/12/2018
ECO DESCRIPTION NEW DRAWING RELEASE		
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DRAWN BY LK		DESCRIPTION OUTLINE IEC-180M-B3 MOTOR TYPE: TEFC-CAST IRON	
DATE 05/12/2018			
APPROVED BY JAY			
DATE 05/12/2018			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS312997	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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			THIRD ANGLE PROJECTION		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 #:		REFERENCE MODEL #:	TCA0221AP21TGA009
CONN. DIAGRAM:	8442000677	CAT #:	R442
OUTLINE:	SS312997	CUSTOMER PART #:	
WINDING:	IE3L1802201	MOUNTING:	F3
SPEED:			

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
30	22.4	3600	3550	180M	TEFC	TCA 180M02	F	N	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	27.2	LINE OR INVERTER	CONT	F	1.15	40	3300
F.L. EFF		91.7	3/4 LD EFF	91.7	1/2 LD EFF	91.4	GTD EFF	ELECT. TYPE	
F.L. PF		88.0	3/4 LD PF	84.0	1/2 LD PF	77.0	90.5	SQ CAGE INV RATED	
F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (°C)	
44.4	LB-FT	165	65.0	LB-FT	146%	113	LB-FT	255%	80
@ 3 FT. DBA		POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	START/HOUR	MOTOR WGT		
		85 DBA	2.81 LB-FT²	2.81 LB-FT²	15 SEC.	2	199 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 BALL 6311	BALL 6211	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
0.369	0.177	1.034	1.197	36.165	0.090	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	NONE PPR
	BRAKE: NONE	NONE
	FT-LB: NONE	NA
	VOLTAGE: NONE	NONE
	HZ:	

PREPARED BY: Fareeda Dudekula
DATE: 5/29/2019

UL: V - LIME-INS CONST UL REC