PRODUCT INFORMATION PACKET

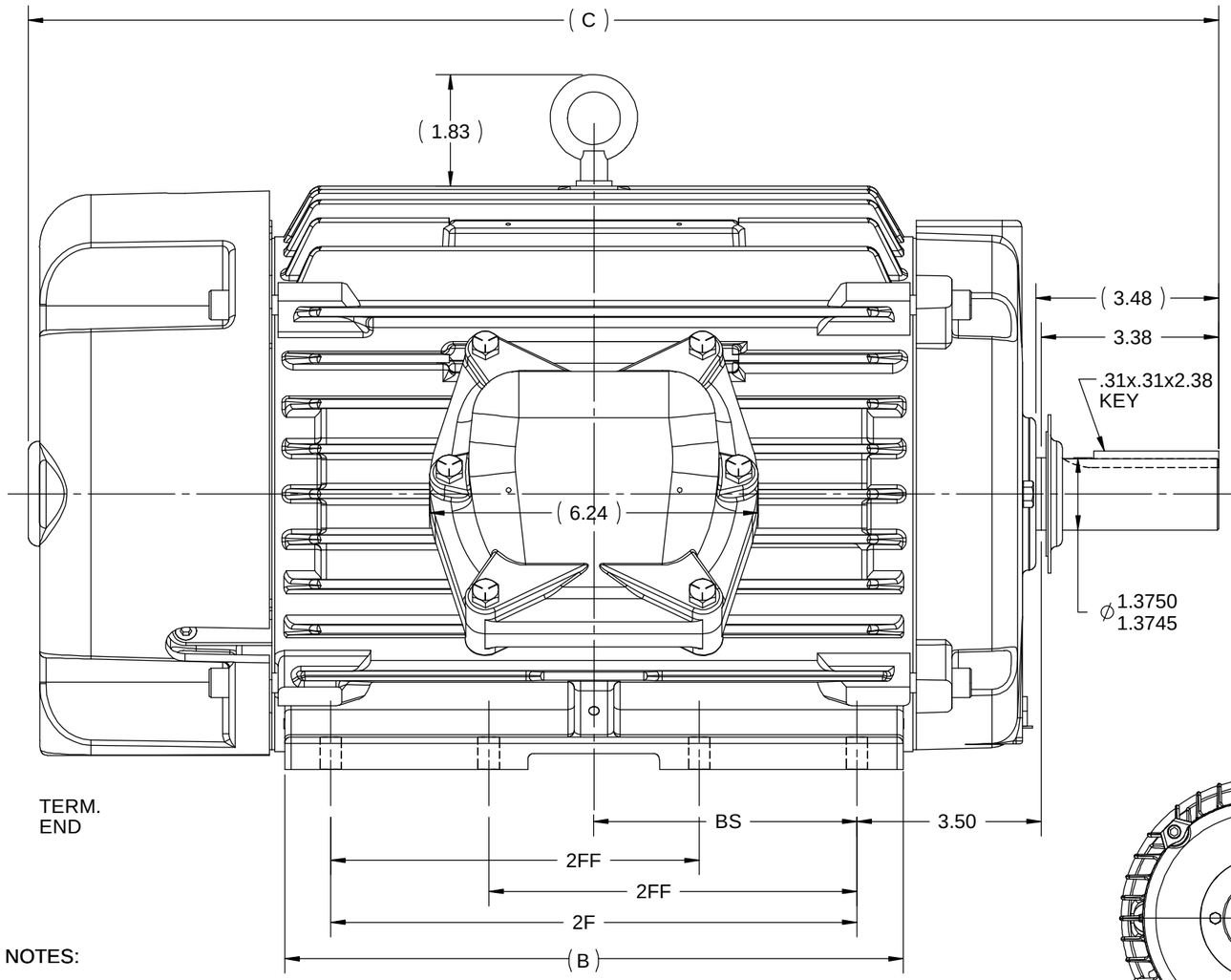
Model No: 213TTGN6501
Catalog No: U062A
Hazardous Duty® Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 213T Frame, EPFC

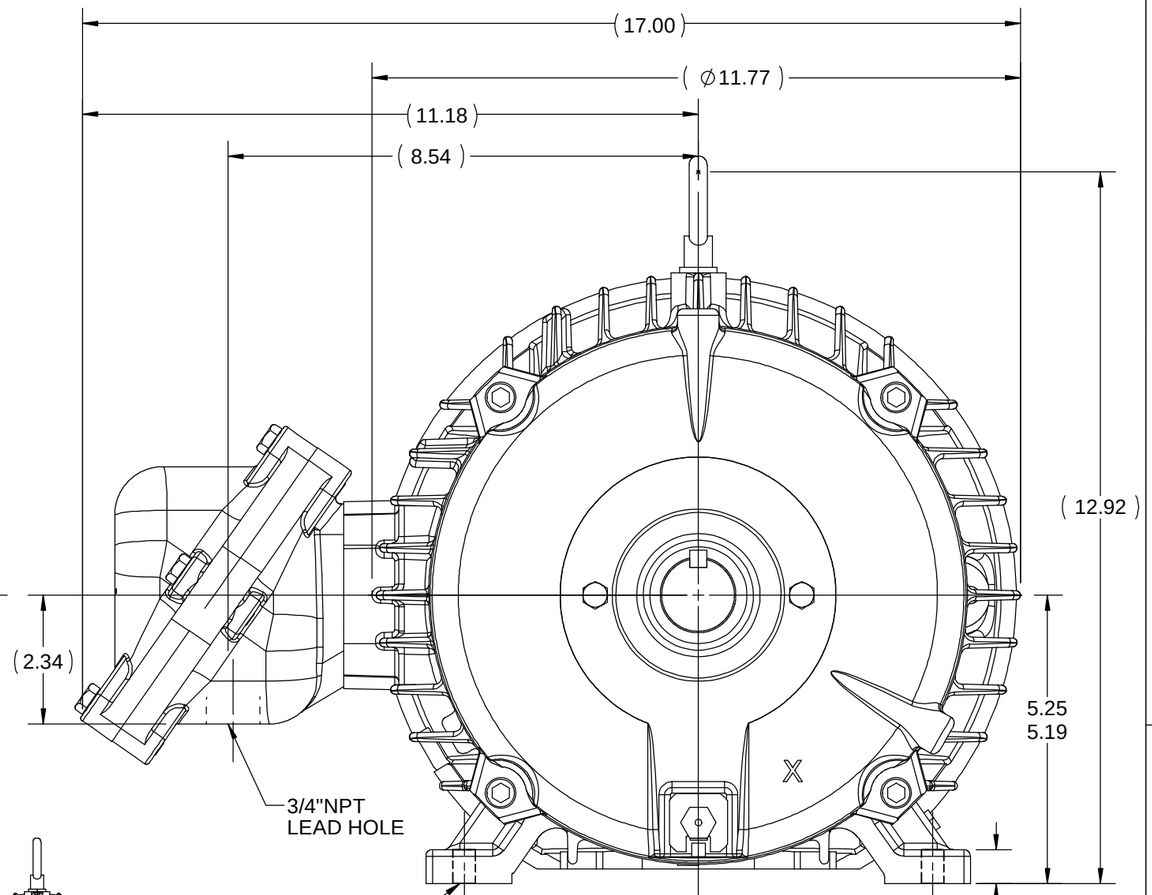
Nameplate Specifications

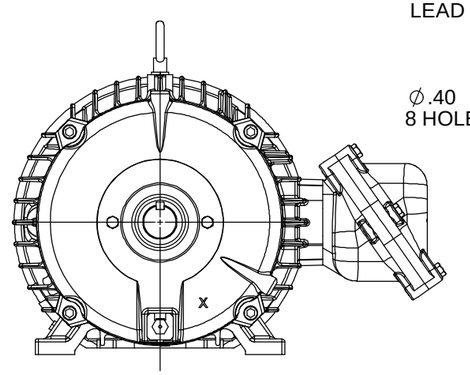
Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	3530 & 2950 rpm	Service Factor	1.15 & 1.15
Frame	213T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	90.2 & 89.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19/9.5 & 15/7.5 A	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6307	Opp Drive End Bearing Size	6208
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR D CL II GR F&G T3B

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	1.15 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	19.63 in
Frame Length	9.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.48 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	037660-912	Connection Drawing	A-EE7308T







F2 MOUNTING

NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTOR AND GENERATORS,. REBUILT FOR USE IN HAZARDOUS LOCATION".
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1212	215	22.63	11.76	10	7	5
912	213/215	19.63	8.63	7	5.5	3.5
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION G	REVISION BY MVG	DATE 02/08/2019
ECO ECO-0139404	APPROVED BY SR	DATE 02/08/2019
ECO DESCRIPTION OUTLINE UPDATED AS PER ECR-0149056		

TOLERANCES UNLESS OTHERWISE SPECIFIED:

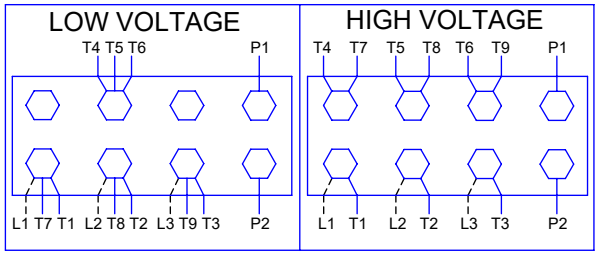
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45 °
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 / 5.1 / INCH / mm
mm SHOWN IN [BRACKETS]

DRAWN BY AK 10/28/2009	REGAL™ Regal Beloit America, Inc.	
DATE		
APPROVED BY	DESCRIPTION OUTLINE 210 FR. - EPFC	
DATE		
REFERENCE SS84370	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B / DRAWING NUMBER 037660	SHEET 1 OF 1

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

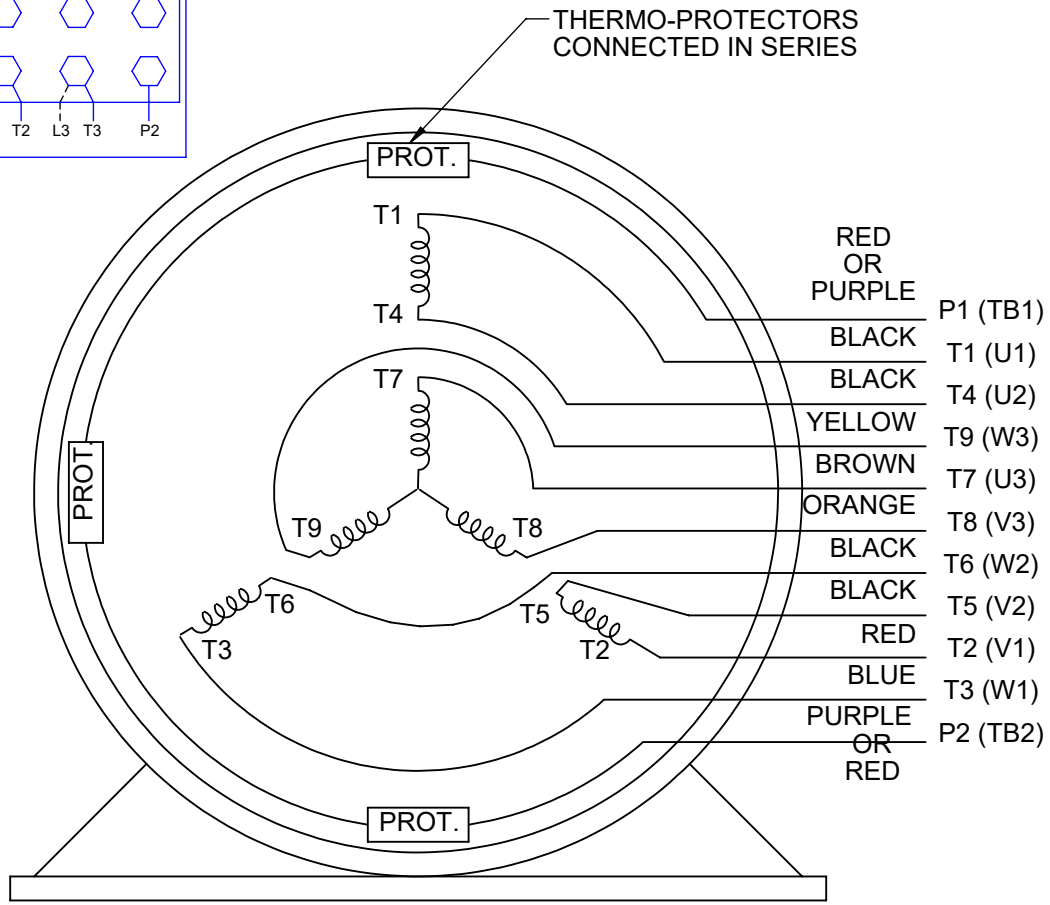


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6

THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION: T	REVISION BY: ZR	DATE: 01-14-2019		DRAWN BY: SMC	Regal Beloit America, Inc.
ECO: ECO-0159915	APPROVED BY: DR	DATE: 01-15-2019		DATE: 05-13-1992	
ECO DESCRIPTION: ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-INTERNAL
				DATE: 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

CERTIFICATION DATA SHEET

Model#:	213TTGN6501 AA	**WINDING#:**	K2132100 R14 1
CONN. DIAGRAM:	A-EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	037660-912		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	3600	3530&2950	213T	EPFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	19/9.5&15/7.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&89.5	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&83	3/4 LOAD PF: 82	1/2 LOAD PF: 73	88.5	SQ CAGE INV RATED	6.8 / 3.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
11.2 LB-FT	119 / 59.5	21.5 LB-FT 192	35 LB-FT 313	38

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.45 LB-FT^2	12 LB-FT^2	15 SEC.	2	150 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6307	BALL 6208	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/22/2017 06:02:20 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/16/2017
Customer:
Attention:
Submitted by: EARL BABBITTS

marathon electric

213TTGN6501

Submittal

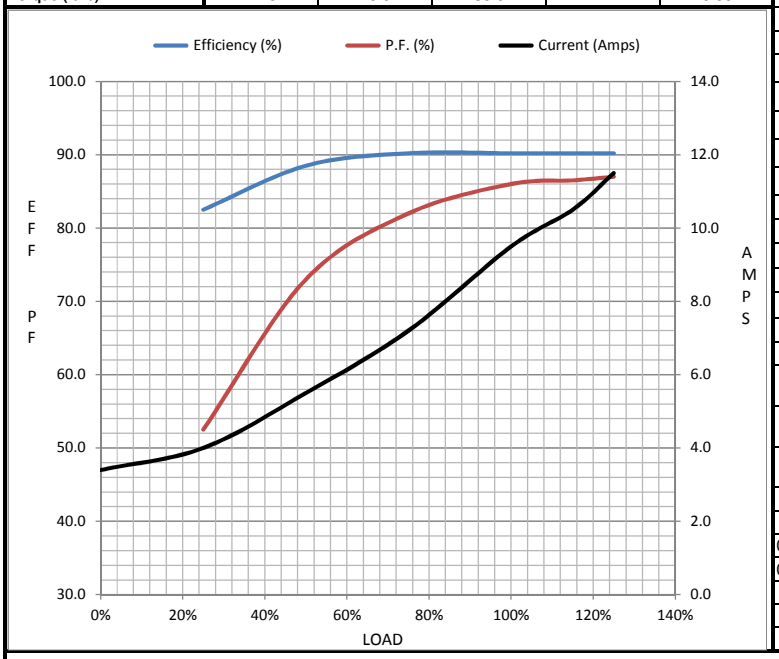
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.4	4.0	5.5	7.2	9.5	10.5	11.5	59.5	
Torque (ft-lb)	0.00	2.80	5.5	8.4	11.2	12.8	14.0	21.5	
RPM	3600	3585	3565	3550	3530	3,520	3510	0	
Efficiency (%)		82.5	88.5	90.2	90.2	90.2	90.2		
P.F. (%)	10.0	52.5	73.0	82.0	86.0	86.5	87.0	39.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	3175	3530	3600
Current (Amps)	59.5	52.0	37.0	9.5	3.4
Torque (ft-lb)	21.5	20.0	35.0	11.2	0.00



Information Block

HP	7.5
Sync. RPM	3600
Frame	213
Enclosure	TEFC
Construction	TFN
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	H
Service Factor	1.15
Temp Rise @ FL	38 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.45 Lb-Ft²
Ref Wdg	K2132100 R14
Sound Pressure @ 1M	72 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	037660-912
Conn. Diag	A-EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.8010	0.5520	2.7030	2.1320	79.3800