

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 145TTGN6549

Catalog No: C363A

2 HP Explosion Proof Motor, 3 phase, 1800 RPM, 230/460 V, 145TC Frame, EPFC
Explosion Proof NEMA Motors



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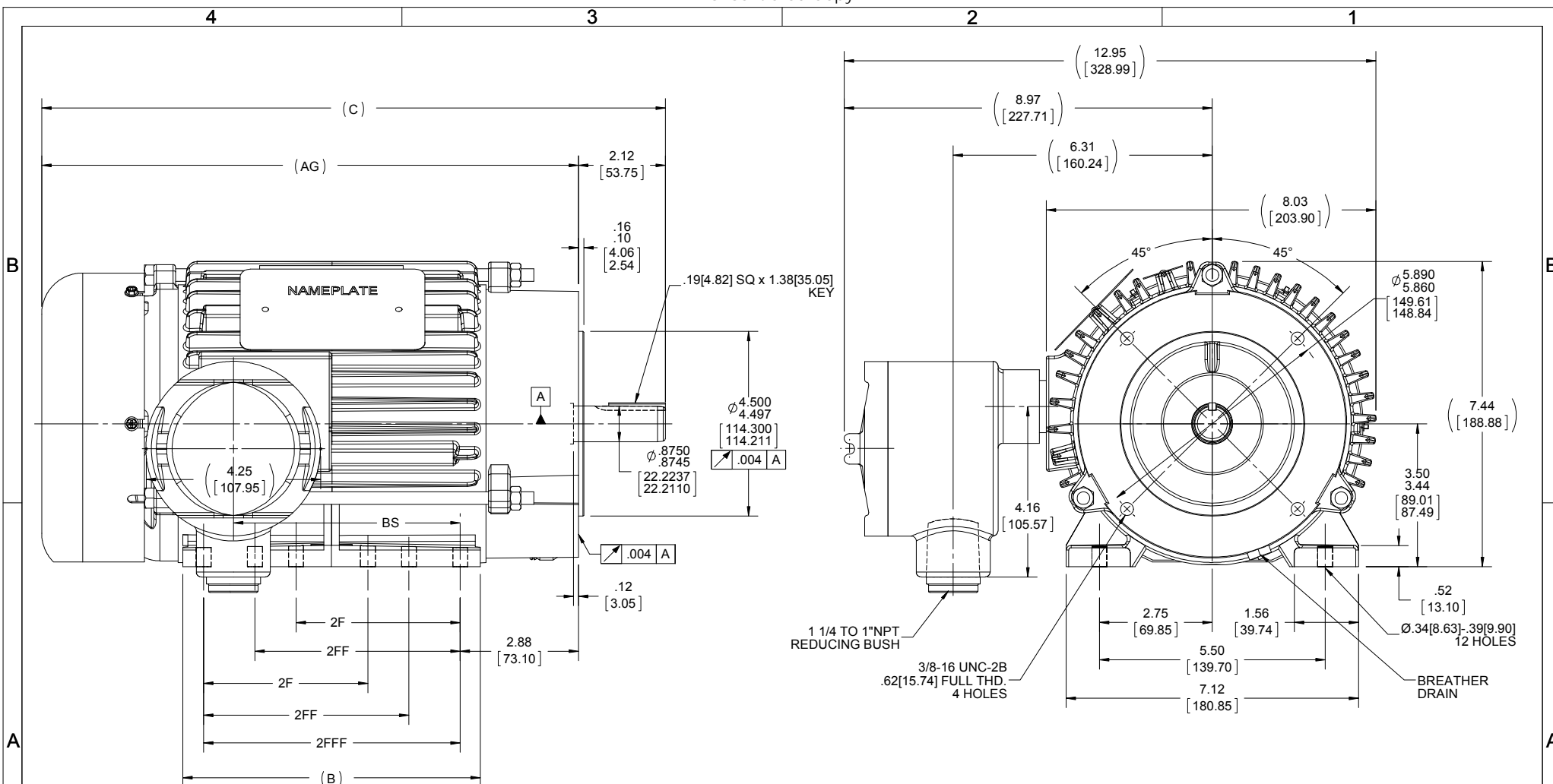
REGAL

Nameplate Specifications

Output HP	2 Hp	Output KW	1.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	6.0/3.0 A	Speed	1755 rpm
Service Factor	1.15	Phase	3
Efficiency	86.5 %	Power Factor	72
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	N
Frame	145TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	EXP PROOF CL I GR D CL II GR F&G T3B		

Technical Specifications

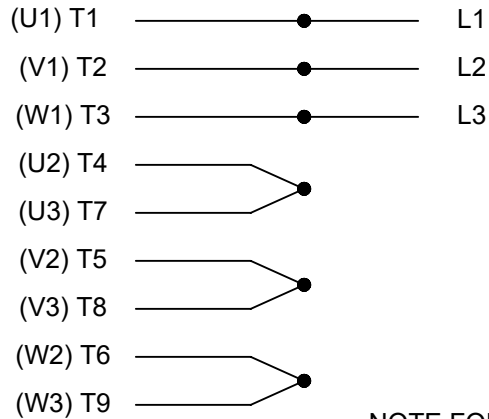
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	6.51 Ohms	Mounting	Rigid base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	15.23 in
Frame Length	7.50 in	Shaft Diameter	0.875 in
Shaft Extension	2.12 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	A-104479-750	Connection Drawing	A-EE7308T



NOTE:
 1. BOX CAN BE ROTATED IN 90° STEPS.
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°.
 3. READ NAMEPLATES FROM C'BOX SIDE OF MOTOR

DRAWING REVISION K		REVISION BY KHADHAR	DATE 01-28-2019	TOLERANCES UNLESS OTHERWISE SPECIFIED:		DRAWN BY BLR	REGAL™ Regal Beloit America, Inc.	
ECO ECO-0160710		APPROVED BY UD	DATE 01-28-2019	DEC. INCH	mm	DATE 08/05/1998	DESCRIPTION	
ECO DESCRIPTION		ADDED REDUCING BUSH		.X ±0.1 [+2.5]	ANGLE ±7.30°	APPROVED BY MTB	OUTLINE	
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				.XXXX ±0.0005 [+0.0127]	REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51]	REFERENCE 104479	MATERIAL	PROCESS/FINISH
				MACHINED SURFACES: 200	5.1	THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER 104479
				mm SHOWN IN [BRACKETS]				SHEET 1 OF 1

HIGH VOLTAGE



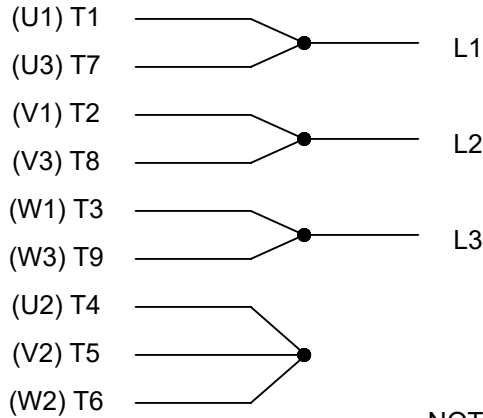
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



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



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 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			

CERTIFICATION DATA SHEET

Model#: 145TTGN6549 AA **WINDING#:** ZT4166 R1 3
CONN. DIAGRAM: A-EE7308T **ASSEMBLY:** F1 ONLY
OUTLINE: A-104479-750

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2&1 1/2	1.49&1.12	1800	1755&1465	145TC	EPFC	N	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	6/3&5.6/2.8	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF:	3/4 LOAD EFF:	1/2 LOAD EFF:	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
86.5&85.5	85.5	82.5			
FULL LOAD PF: 72&70	3/4 LOAD PF: 63	1/2 LOAD PF: 50	84	SQ CAGE INV RATED	3.8 / 1.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	60 / 30	24.5 LB-FT 408	32.5 LB-FT 542	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.13 LB-FT^2	0 LB-FT^2	20 SEC.	2	69 LBS.

***** SUPPLEMENTAL INFORMATION *****

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
6205	6203						

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

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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 NONE FT-LB NONE V NONE Hz

DATE: 06/27/2017 12:13:15 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Date: 6/19/2017

145TTGN6549

Customer: _____
Attention: _____



Submitted by: FAREEDA DUDEKULA

Submission
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.90	2.00	2.30	2.60	3.0	3.3	3.5	30.0
Torque (ft-lb)	0.00	1.50	2.95	4.5	6.0	6.9	7.5	24.5
RPM	1800	1790	1780	1770	1755	1750	1745	0
Efficiency (%)		74.0	82.5	85.5	86.5	86.5	86.5	
P.F. (%)		31.5	50.0	63.0	72.0	75.5	77.5	69.0

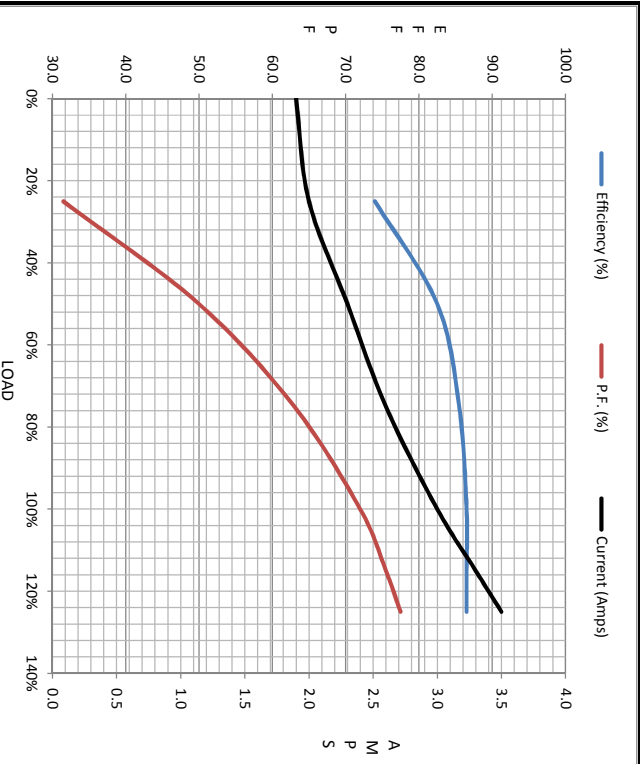
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	900	1245	1755	1800
Current (Amps)	30.0	25.0	18.7	3.0	1.90
Torque (ft-lb)	24.5	22.1	32.5	6.0	0.00

Information Block

HP	2.0
Sync. RPM	1800
Frame	145
Enclosure	TEFC
Construction	TEN
Voltage	30/460#190/38 V
Frequency	60 HZ
Design	A
LR Code letter	N
Service Factor	1.15
Temp Rise @ FL	35 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	0.13 Lb-Fe
Ret Wdg	Z14166 R1
Sound Pressure @ 1M	62 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	A-104479-750
Conn. Diag	A-EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS/ PHASE)				
R1	R2	X1	X2	Xm
3.8060	3.0530	5.9070	6.1490	165.4160



Speed -Torque Curve

