

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 405TTDS16081
Catalog No: U271
75,1200,DP,405T,3/60/230/460
Open Drip Proof (ODP)



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REGAL[®]



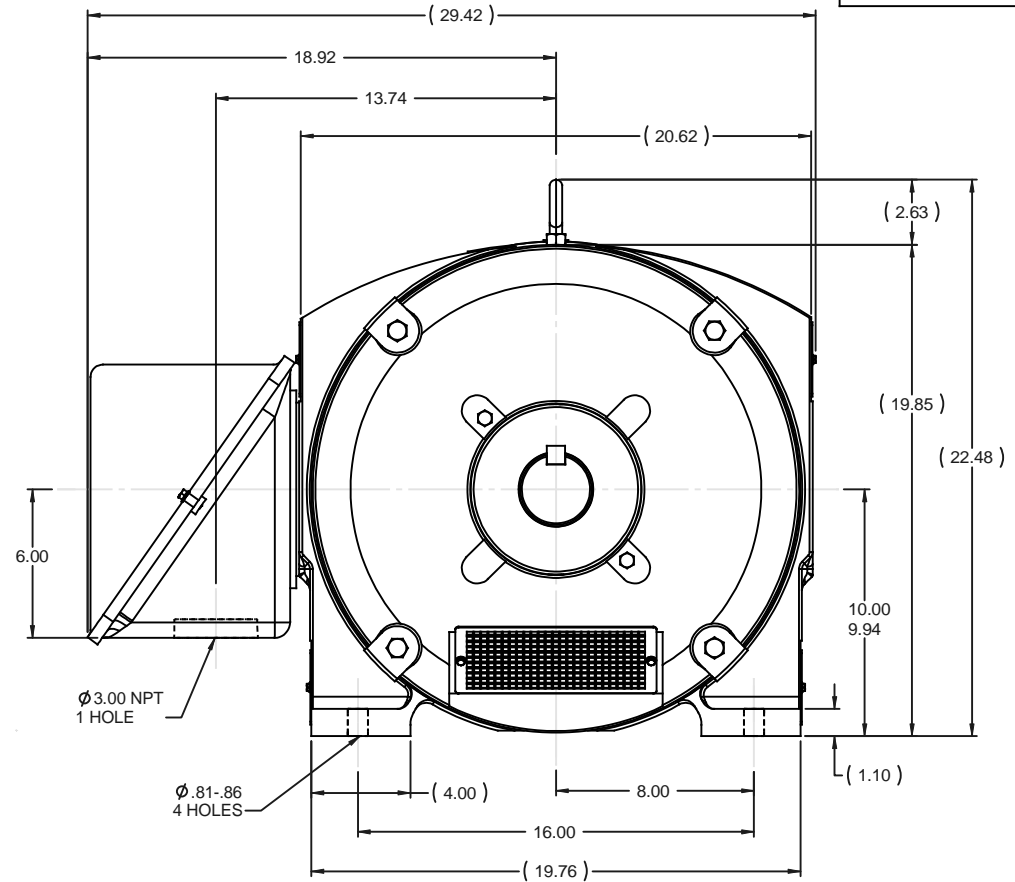
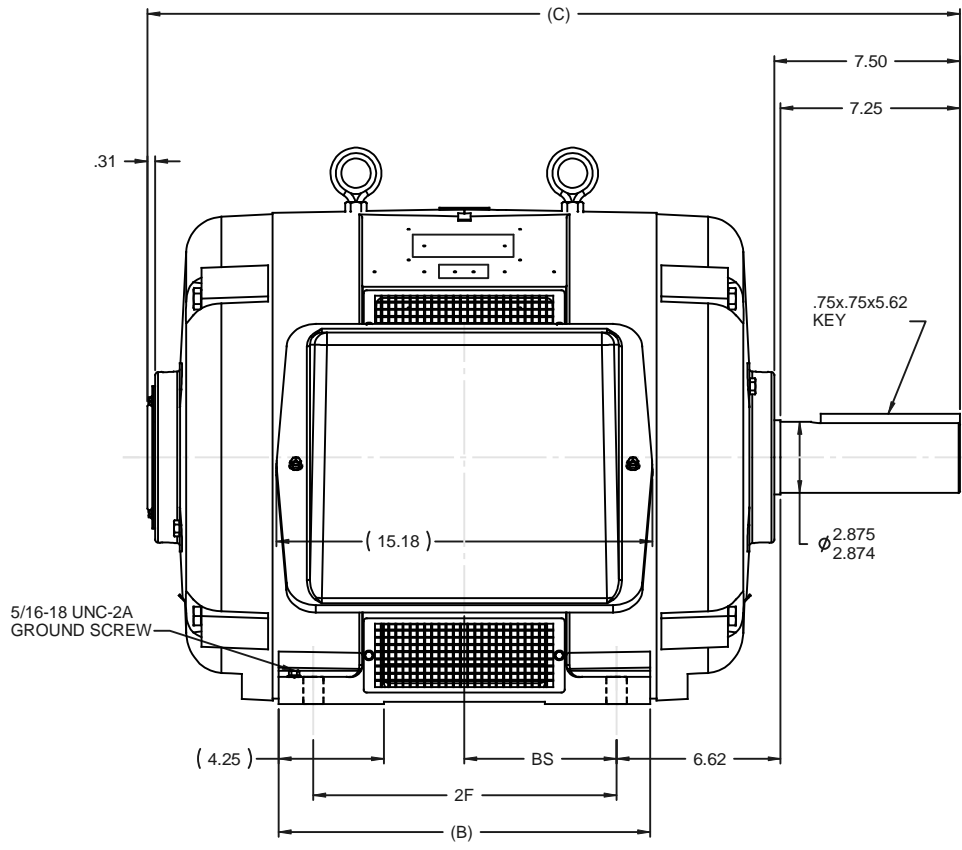
Nameplate Specifications

Output HP	75 Hp	Output KW	56.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	180.0/90.0 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	95 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	F	Frame	405T
Enclosure	Drip Proof	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6316
Opp Drive End Bearing Size	6313	UL	Recognized
CSA	Y	CE	Y
IP Code	12		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	34.31 in	Frame Length	17.00 in
Shaft Diameter	2.875 in	Shaft Extension	7.5 in
Assembly/Box Mounting	F1/F2 Capable		
Outline Drawing	B-SS513937-1700	Connection Diagram	A-EE7308T

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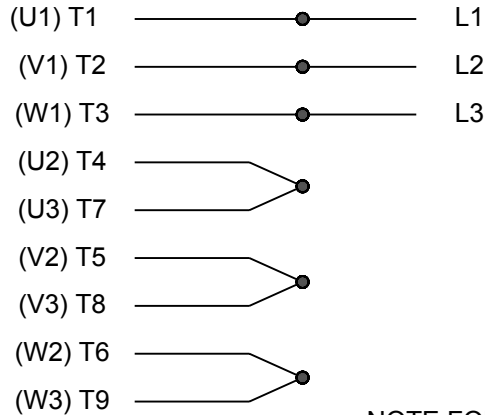


- NOTES:
 1- BOX CAN BE ROTATED IN 90° STEPS
 2- BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
 3- NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

DASH	FRAME	B	C	2F	BS
1550	404T	15.00	32.81	12.25	6.12
1700	405T	16.50	34.31	13.75	6.88

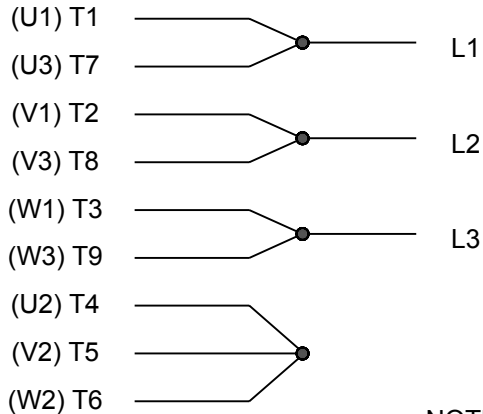
		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN DA 02-06-1991	
		DEC	INCHES			CHK	TB 02-11-1991
4	C'BOX LEAD HOLE WAS Ø2.50 NPT 2 HOLES CN 32922	DRS 12-07-2004	ML	x	±.1	APPR ML 02-11-1991	
3	UPDATED C'BOX GEOMETRY CN 28063	DRS 12-07-2004	.XX		±.03	SCALE 1:5	
2	ADDED SCREENS TO FRONT & REAR BRACKETS 4041416	DJK 06-18-1993	.XXX		±.005	REF	
1	NEW DRAWING CN 13005	DA 02-06-1991	.XXX		±.0005	FMF	
NO	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	PREV
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT		RFP	CAD FILE SS513937		SIZE	DRAWING NO	REV
		DIST	WA	B		SS513937	4

HIGH VOLTAGE



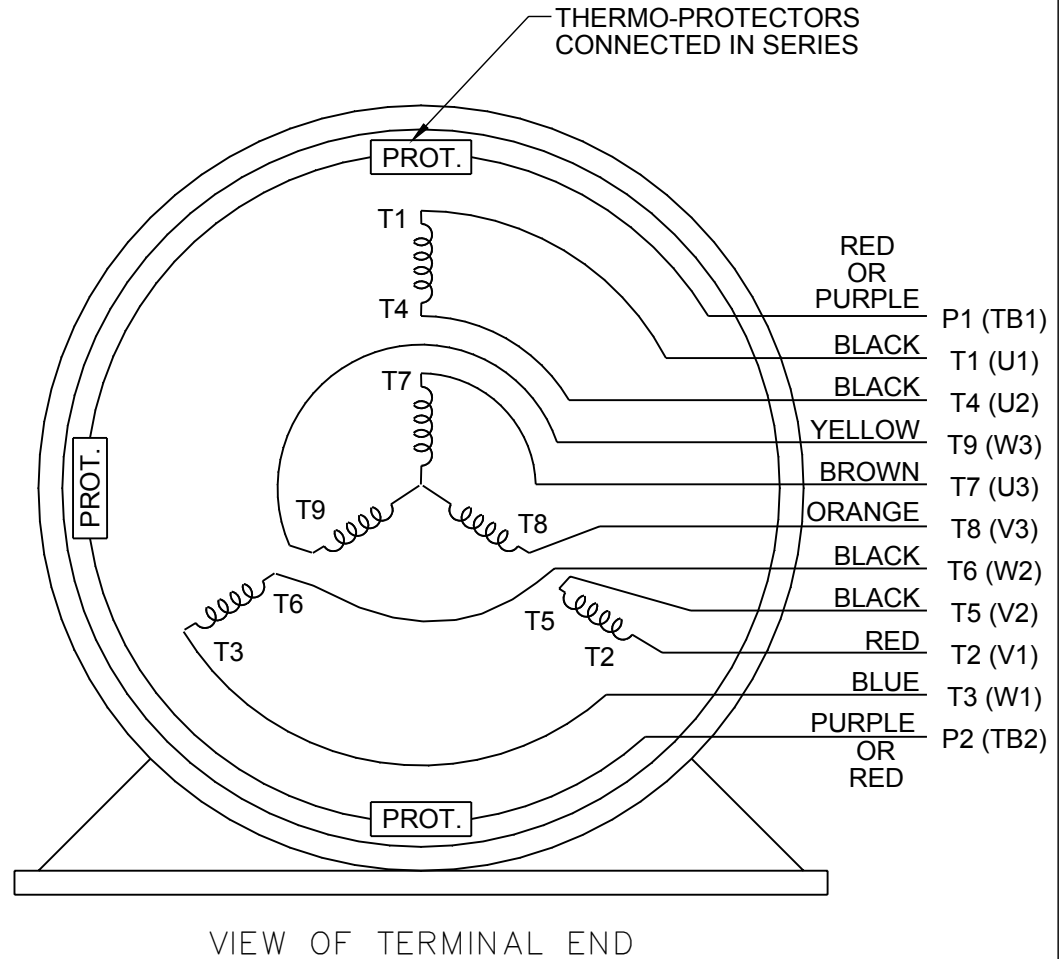
**NOTE FOR FACTORY USE ONLY:
 TO SURGE TEST FOR COMMON CONNECT:
 HIGH VOLT: CONNECT P1 TO T1
 THEN P2 TO L1
 LOW VOLT: CONNECT P1 TO T1 & T7,
 THEN P2 TO L1**

LOW VOLTAGE



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

THREE PHASE DUAL VOLTAGE MOTOR



DRAWING REVISION R	REVISION BY AJW	DATE 07-17-2015		DRAWN BY SMC	Regal Beloit America, Inc.	
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015		DATE 05-13-1992		
ECO DESCRIPTION REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL	
COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.				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#: 405TTDS16081 AN **WINDING#:** T405646 NONE 1
CONN. DIAGRAM: A-EE7308T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS513937-1700

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&60	56&45	1200	1185&985	405T	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	180/90&174/8 7	ACROSS THE LINE	CONTINUOU S	F1	1.15/1.15	40	3300

FULL LOAD EFF: 95&94.5	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82.5&83	3/4 LOAD PF: 80	1/2 LOAD PF: 72	94.5	SQ CAGE IND RUN	59 / 29.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
332 LB-FT	1000 / 500	550 LB-FT 166	725 LB-FT 218	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
73 dBA	83 dBA	38 LB-FT^2	1100 LB-FT^2	20 SEC.	2	1150 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6316	BALL 6313	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: NONE
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

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DATE: 06/22/2017 12:19:04 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 20-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



405TTDS16081

Submittal

Data @ 460 V

Motor Load Data

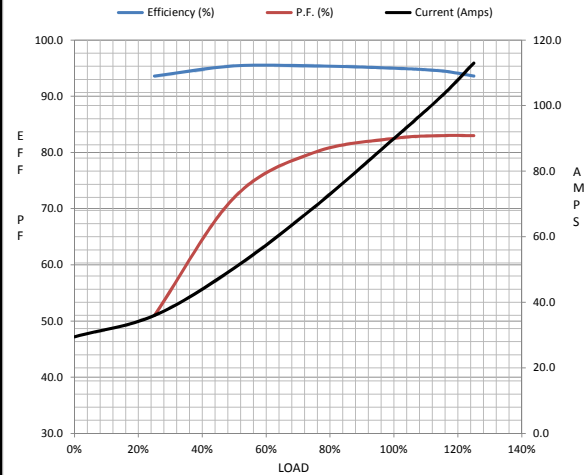
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	29.5	36.0	50.5	69.0	90.0	103	113	500
Torque (ft-lb)	0.00	83.0	165	250	332	382	418	550
RPM	1200	1197	1194	1190	1185	1,182	1180	0
Efficiency (%)		93.6	95.4	95.4	95.0	94.5	93.6	
P.F. (%)	4.0	51.0	72.0	80.0	82.5	83.0	83.0	34.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1125	1185	1200
Current (Amps)	500	400	275	90.0	29.5
Torque (ft-lb)	550	500	725	332	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	38.0 Lb-Ft ²			
Ref Wdg	T405646 NONE			
Sound Pressure @ 1M	73 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS513937-1700			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0640	0.0340	0.0330	0.0470	8.6180



Speed -Torque Curve

