marathon®

General Purpose Motors

Model No: 405TSTFCD6001
Catalog No: GT1045A

General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 405TS Frame, TEFC

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Product Information Packet: Model No: 405TSTFCD6001, Catalog No: GT1045A General Purpose Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 RPM, 405TS Frame, TEFC

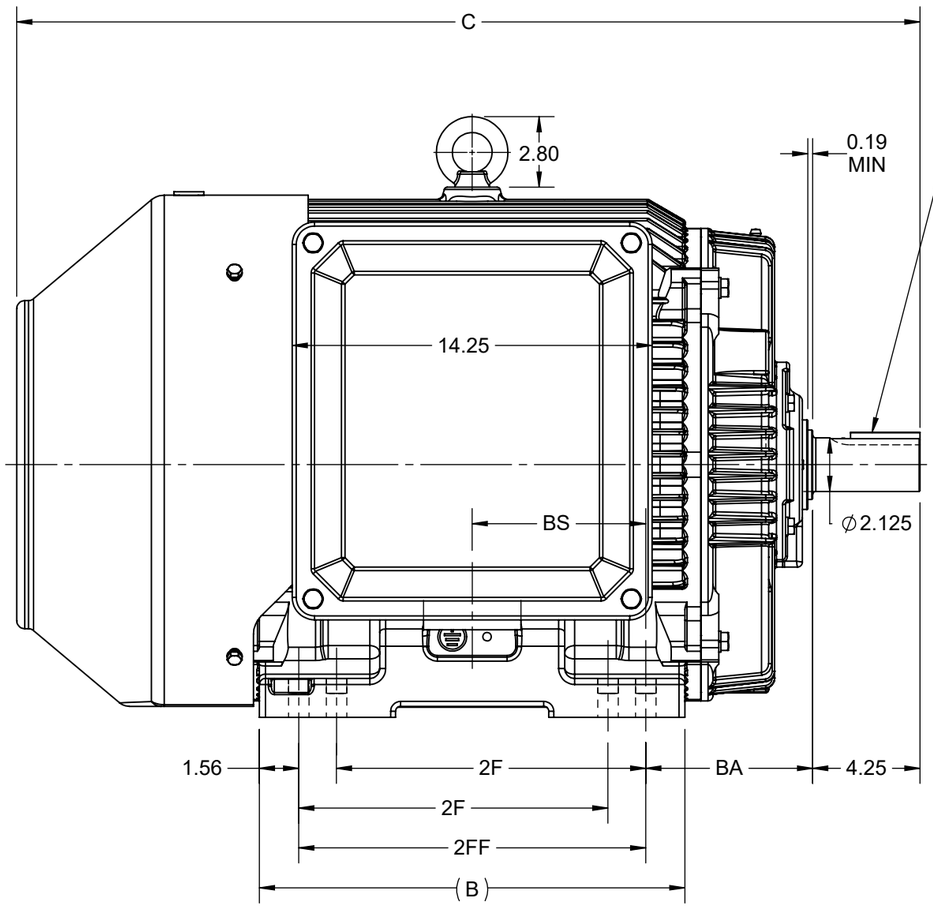
Nameplate Specifications			
Phase	**3**	Output HP	**100 & 75 Hp**
Output KW	**75.0 & 56.0 kW**	Voltage	**230/460 & 190/380 V**
Speed	**3575 & 2978 r/min**	Synchronous RPM	**3600 & 3000 r/min**
Service Factor	**1.15 & 1.15**	Frame	**405TS**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.5 & 94.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**222/111 & 203/102 A**
Power Factor	**89**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6314**
Opp Drive End Bearing Size	**6314**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

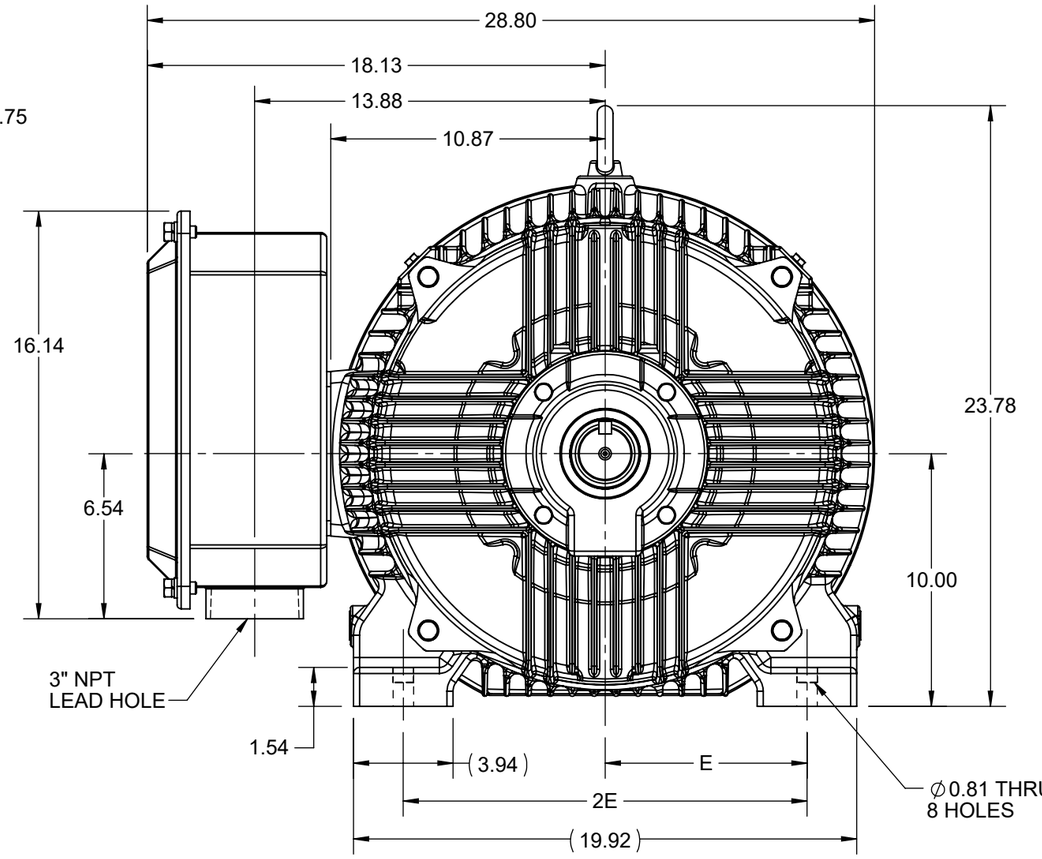
Technical Specifications			
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.056 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Overall Length	**35.77 in**
Shaft Diameter	**2 1/8 in**	Shaft Extension	**4.25 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

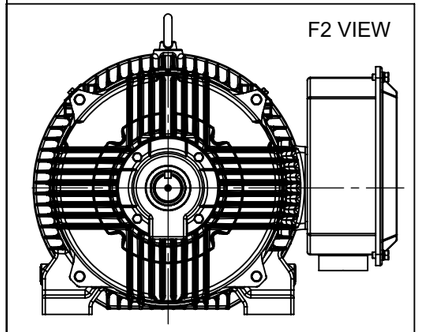
Drawings			
Connection Drawing	**EE7308AA**	Outline Drawing	**SS557004**

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B	C	E	2E	2F	2FF	BA	BS	MOUNTING
16.85	35.77	8.00	16.00	12.25	13.75	6.62	6.87	F1 OR F2







DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SB	08/14/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023600	SBD	08/14/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY	NIV
DATE	25/03/2016
APPROVED BY	SBD
DATE	25/03/2016
REFERENCE	

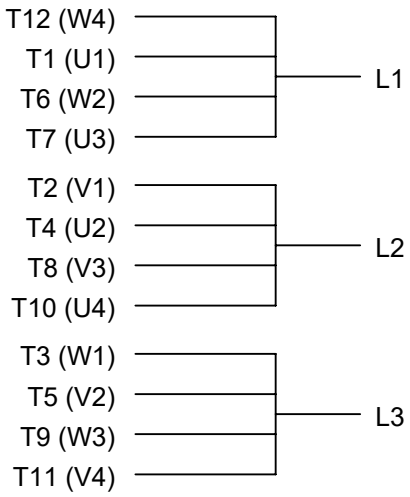
marathon™

DESCRIPTION
OUTLINE
404/405TS FR NEMA-TEFC

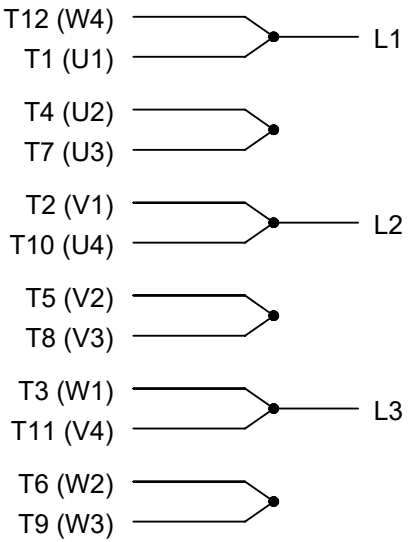
MATERIAL | PROCESS/FINISH

THIRD ANGLE PROJECTION

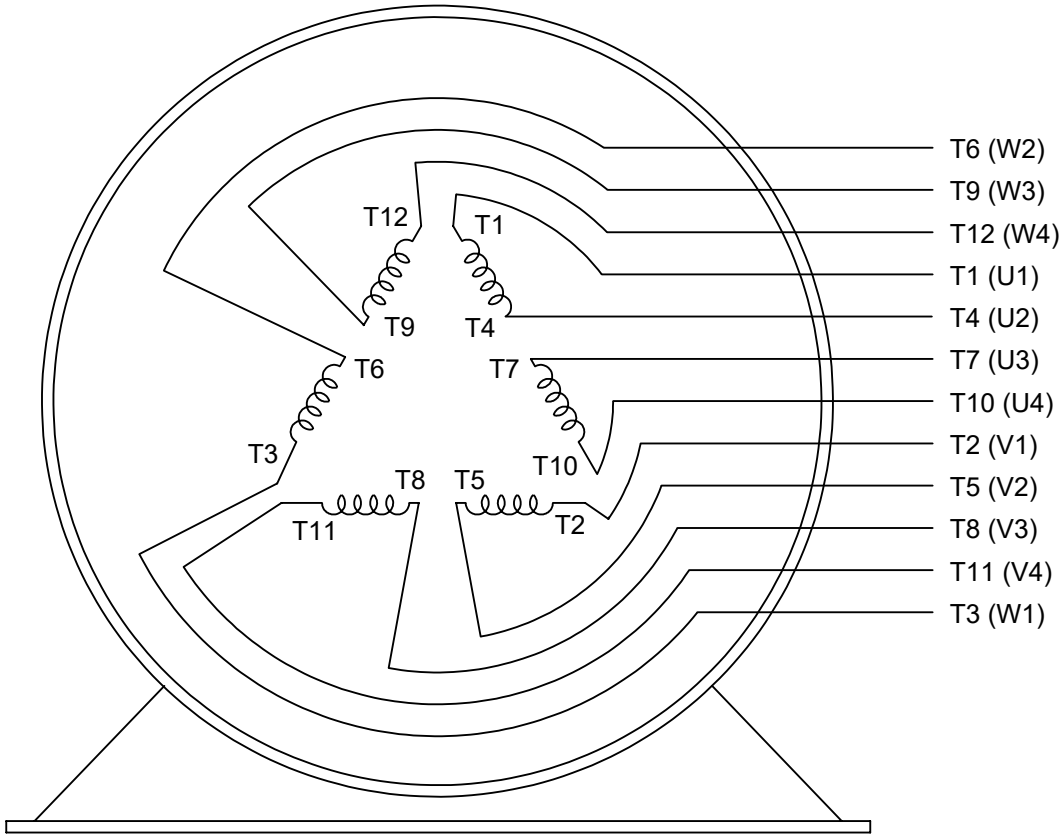
SIZE	DRAWING NUMBER	SHEET
B	SS557004	1 OF 1



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

DRAWING REVISION: L	REVISION BY: SB	REV DATE/© DATE: 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY: LZ	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025		DATE: 01-12-1994	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED				APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS
				DATE: 01-14-1994	
				REFERENCE	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7308AA / SHEET: 1 OF 1

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Data Sheet

Date: 12/12/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

405TSTFCD6001

Submittal

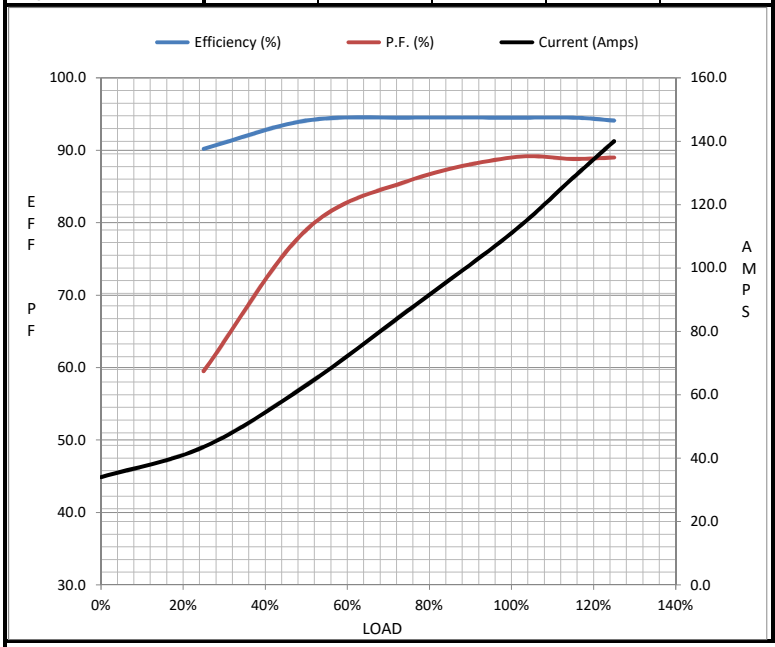
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	34.0	43.5	63.0	86.8	111	129	140	725	
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	265	
RPM	3600	3595	3588	3582	3575	3,570	3565	0	
Efficiency (%)		90.2	94.1	94.5	94.5	94.5	94.1		
P.F. (%)	6.5	59.5	79.0	85.8	89.0	88.8	89.0	29.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3470	3575	3600
Current (Amps)	725	580	435	111	34.0
Torque (ft-lb)	265	225	427	147	0.00

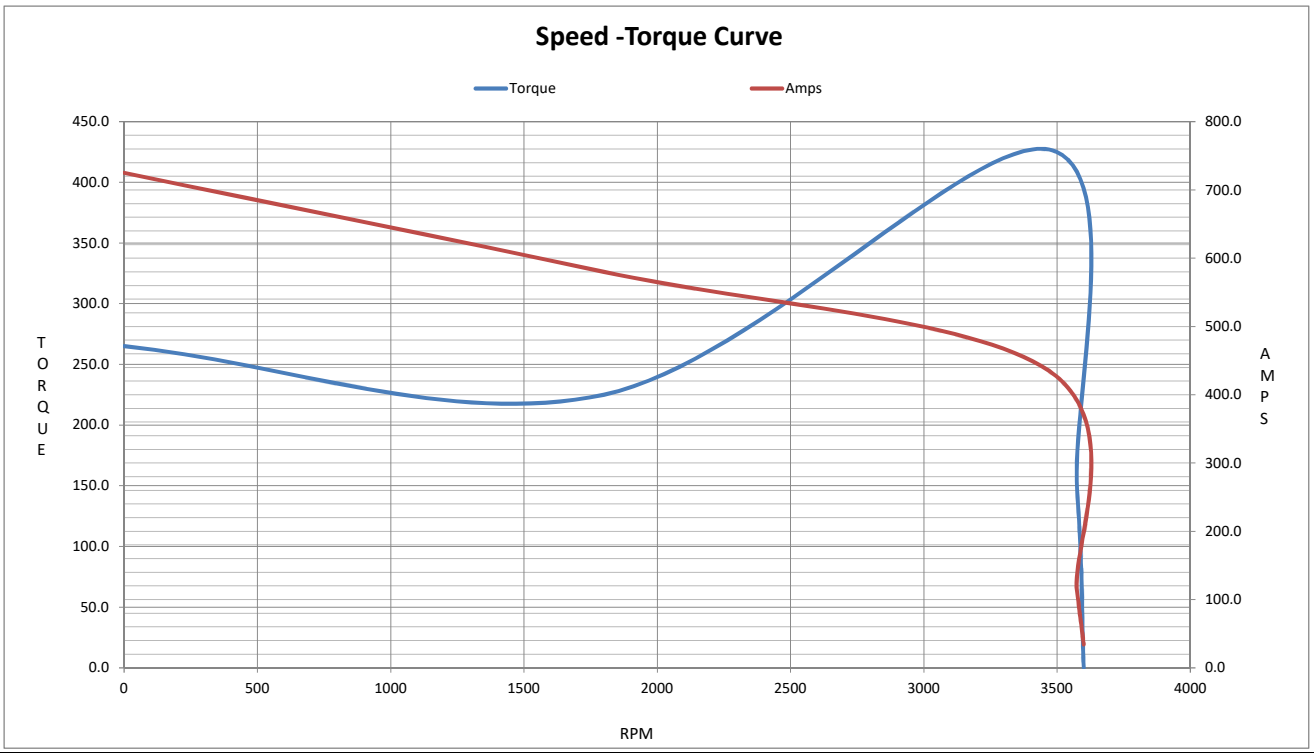


Information Block

HP	100.0
Sync. RPM	3600
Frame	405
Enclosure	TEFC
Construction	TFC
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	65 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	19.0 Lb-Ft²
Ref Wdg	HE32502006 NONE
Sound Pressure @ 1M	78 dBA
VFD Rating	VARIABLE 10:1
Outline Dwg	SS557004
Conn. Diag	EE7308AA
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0340	0.0170	0.2330	0.2250	7.7830



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CERTIFICATION DATA SHEET

Model#:	405TSTFCD6001 AA	**WINDING#:**	HE32502006 NONE 2
CONN. DIAGRAM:	EE7308AA	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	SS557004		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	3600	3575&2978	405TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	222/111&203/102	Y START D RUN OR INV	CONTINUOUS	F7	1.15/1.15	40	3300

FULL LOAD EFF: 94.5&94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89&88.5	3/4 LOAD PF: 85.8	1/2 LOAD PF: 79	93.6	SQ CAGE INV RATED	68 / 34

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	1450 / 725	265 LB-FT 180	427 LB-FT 290	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	19 LB-FT^2	65 LB-FT^2	15 SEC.	2	1500 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	DIVISION 2 T2B	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6314	BALL 6314	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: VARIABLE 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

*
NOTES
*

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FORM 3531 REV.3 02/07/99
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