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General Purpose Motors

Model No: 405TSTFCD6005
Catalog No: GT1145A

General Purpose Motor, 100 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 405TS Frame, TEFC

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Product Information Packet: Model No: 405TSTFCD6005, Catalog No: GT1145A General Purpose Motor, 100 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 405TS Frame, TEFC

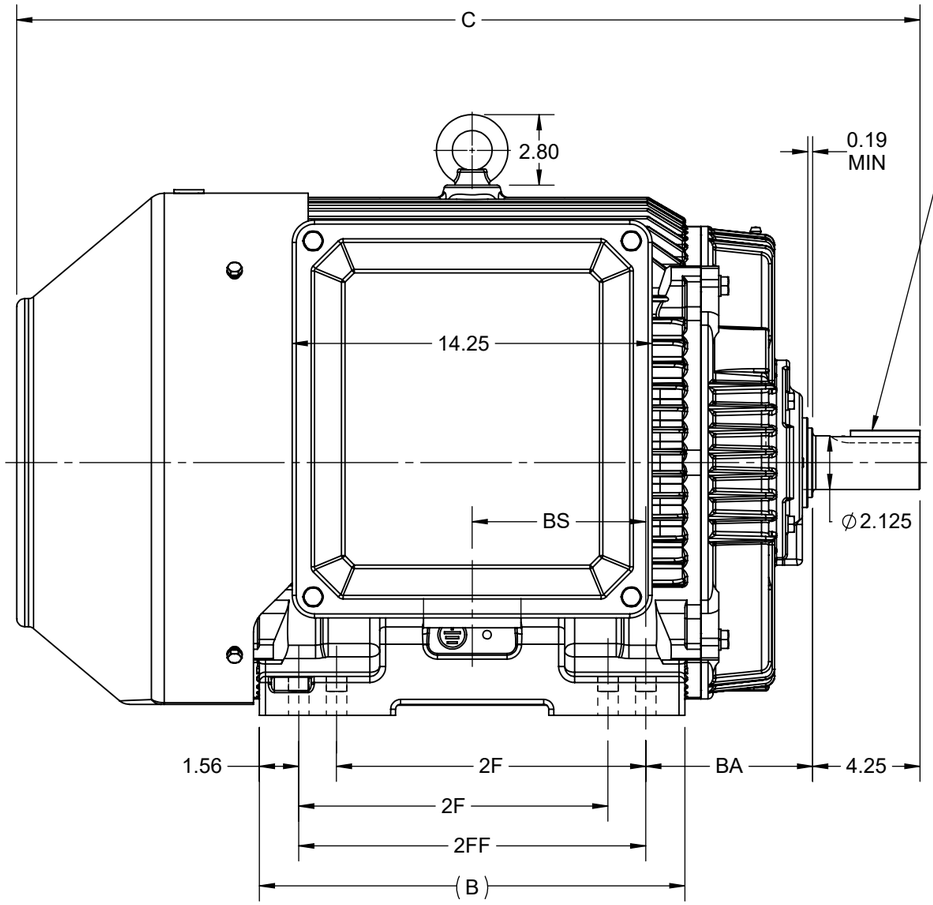
Nameplate Specifications			
Phase	**3**	Output HP	**100 Hp**
Output KW	**75.0 kW**	Voltage	**575 V**
Speed	**3575 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**405TS**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**89.0 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**		

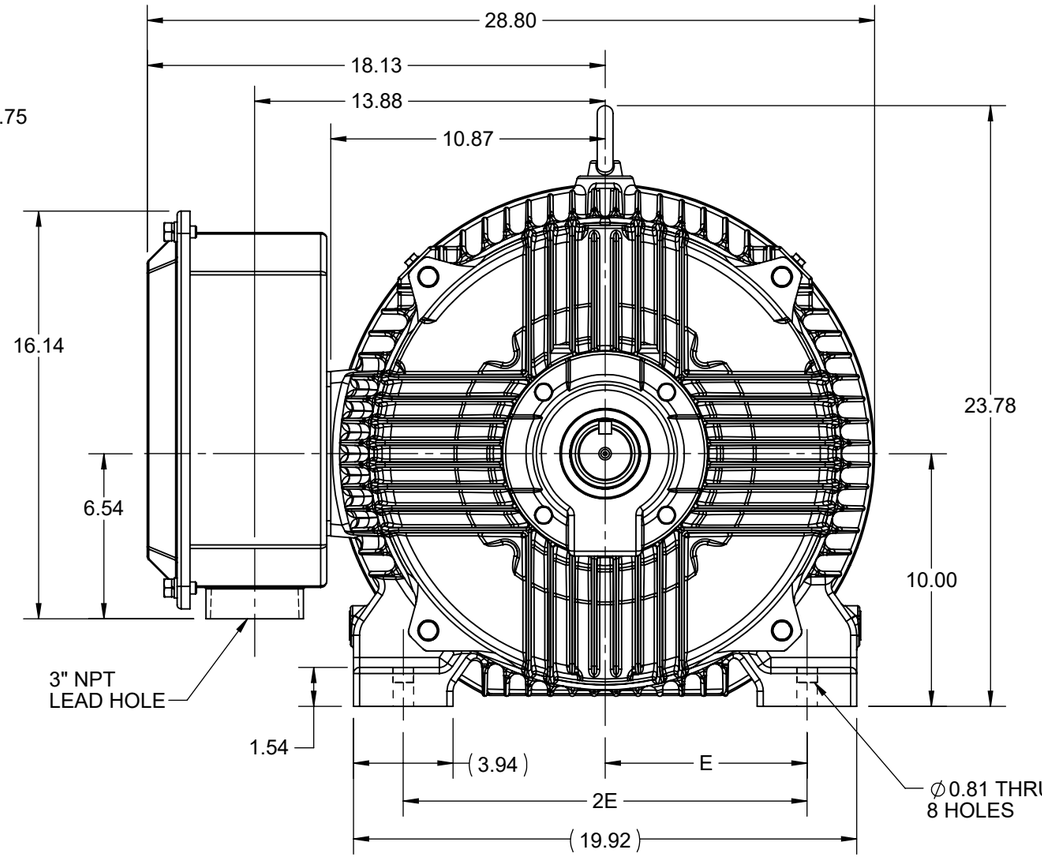
Technical Specifications			
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.056 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**TS**	Overall Length	**35.77 in**
Frame Length	**18.11 in**	Shaft Diameter	**4.25 in**
Shaft Extension	**2.125 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 2:1/Variable 10:1**		

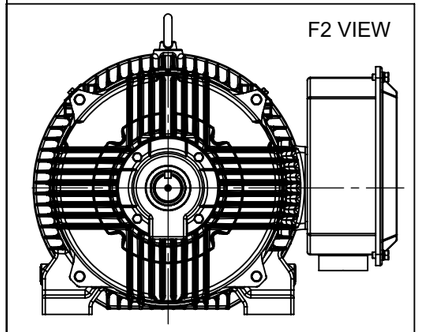
Drawings			
Connection Drawing	**EE7300**	Outline Drawing	**SS557004**

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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
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DATE	25/03/2016
APPROVED BY	SBD
DATE	25/03/2016
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
OUTLINE
404/405TS FR NEMA-TEFC

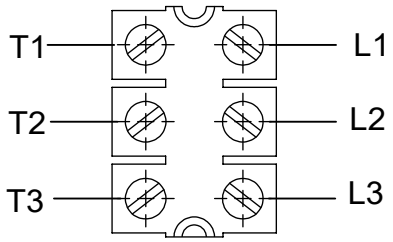
MATERIAL | PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS557004	1 OF 1

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

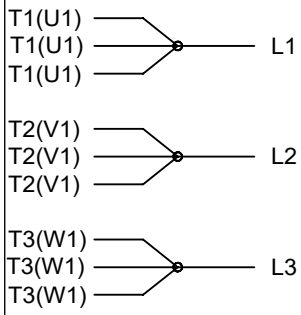
TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

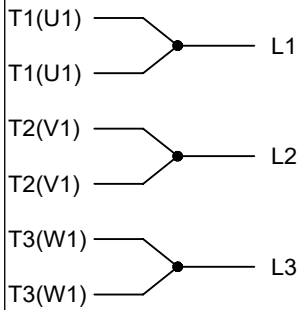


VIEW OF TERMINAL END

IF MOTOR HAS
9 LEADS



IF MOTOR HAS
6 LEADS



A-9806 DECAL

OPTIONAL CORD
CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION: AD	REVISION BY: SB	REV DATE/© DATE: 08/01/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025

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DATE: 03-26-1993	
APPROVED BY: TB	
DATE: 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

Uncontrolled Copy

Data Sheet

Date: 5/3/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

405TSTFCD6005

Submittal

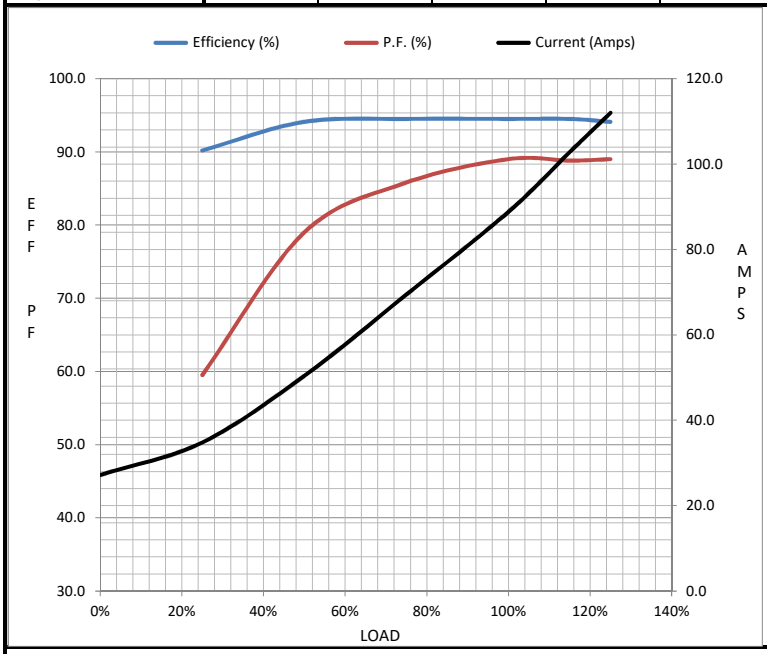
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	27.2	34.8	50.4	69.4	88.8	103	112	580	
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)	580	464	348	88.8	27.2
Torque (ft-lb)	265	225	427	147	0.00



Information Block

HP	100.0	
Sync. RPM	3600	
Frame	405182TTFC6080	
Enclosure	TEFC	
Construction	TFC	
Voltage	575	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	EE7300	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0530	0.0270	0.3640	0.3520	12.1600

Speed -Torque Curve

