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Cooling Tower Motors

Model No: 405TTFS7297
Catalog No: Y391

Cooling Tower Motor, 75 & 18.75 HP, 3 Ph, 60 & 60 Hz, 460 & 460 V, 1800 RPM, 405T Frame, TEFC

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Product Information Packet: Model No: 405TTFS7297, Catalog No: Y391 Cooling Tower Motor, 75 & 18.75 HP, 3 Ph, 60 & 60 Hz, 460 & 460 V, 1800 RPM, 405T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**75 & 18.75 Hp**
Output KW	**56.0 & 14.0 kW**	Voltage	**460 & 460 V**
Speed	**1785 & 890 r/min**	Synchronous RPM	**1800 & 900 r/min**
Service Factor	**1.15 & 1.15**	Frame	**405T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.1 & 92.4 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 60 Hz**	Current	**83 & 27 A**
Power Factor	**90**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**1VT**
KVA Code	**H**	Drive End Bearing Size	**6316**
Opp Drive End Bearing Size	**6313**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**2**

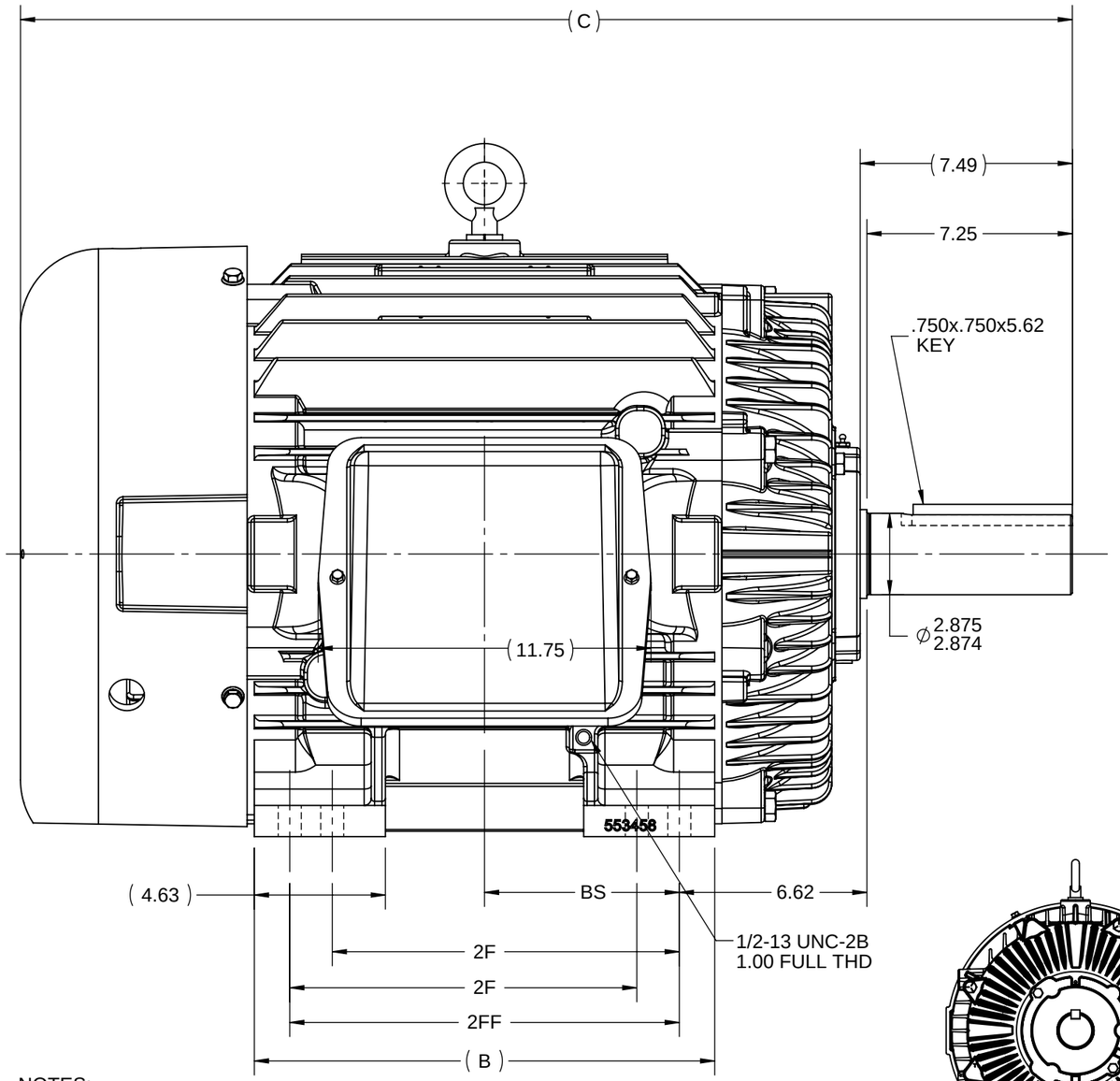
Technical Specifications

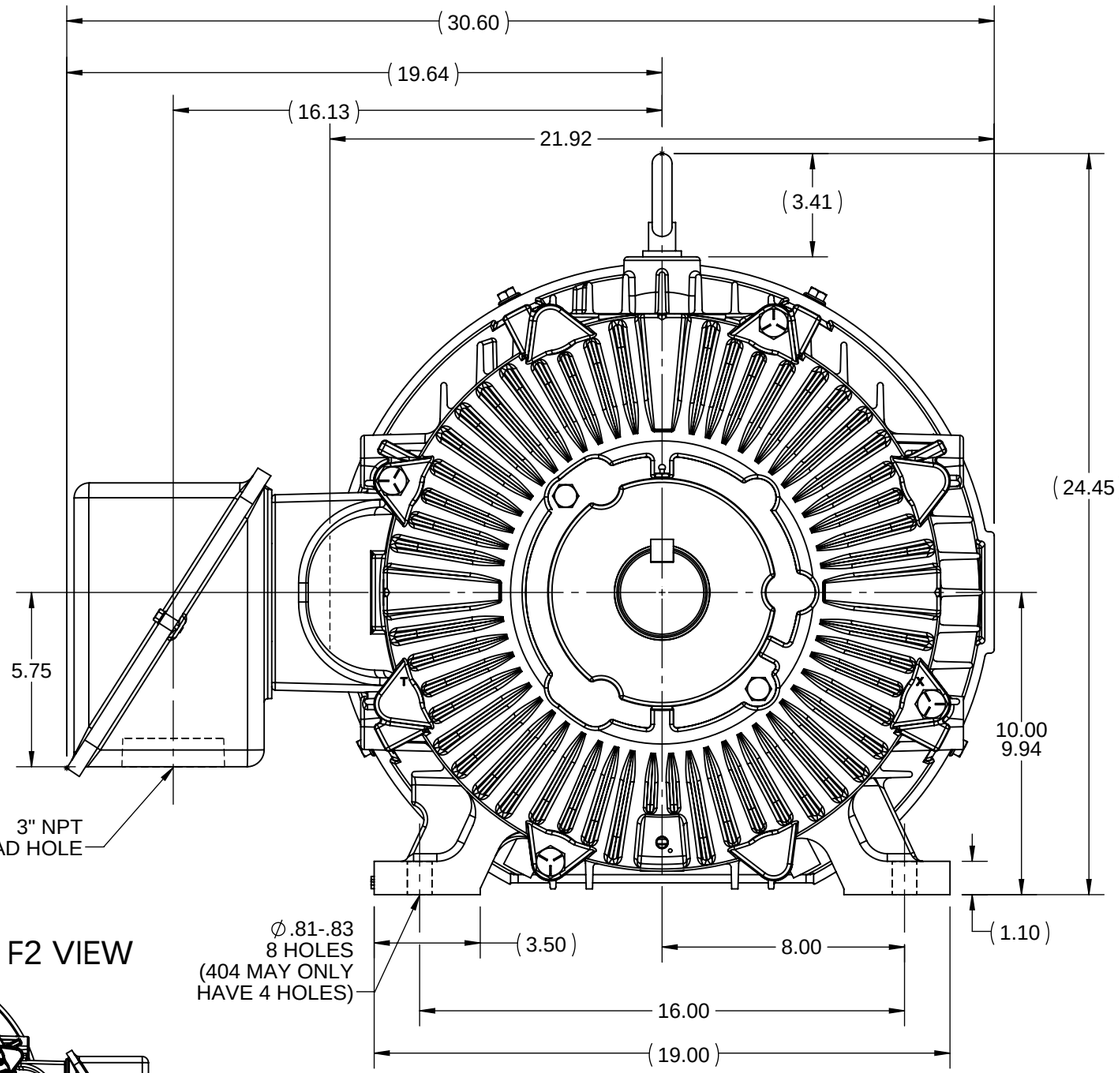
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**4/8**	Rotation	**Reversible**
Resistance Main	**.085 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**37.14 in**
Frame Length	**16.75 in**	Shaft Diameter	**2 7/8 in**
Shaft Extension	**7.5 in**	Assembly/Box Mounting	**F1/F2 Capable**

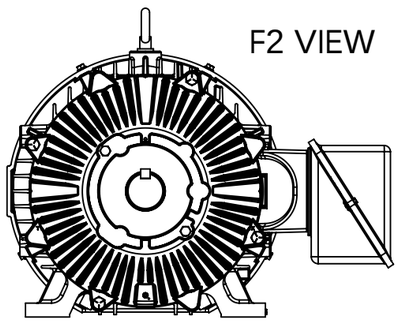
Drawings

Connection Drawing	**A-EE7322**	Outline Drawing	**B-SS508859-1675**

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F2 VIEW

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

DASH	FRAME	B	C	2F	2FF	BS
1525	404T	14.75	35.62	12.25	----	6.12
1675	404/405T	16.25	37.14	12.25	13.75	6.88

DRAWING REVISION: G	REVISION BY: SB	REV DATE/© DATE: 05/27/2026
REQUEST NUMBER: CR-0026396	APPROVED BY: RMS	DATE: 05/27/2026

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 200 / INCH 5.1 / mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

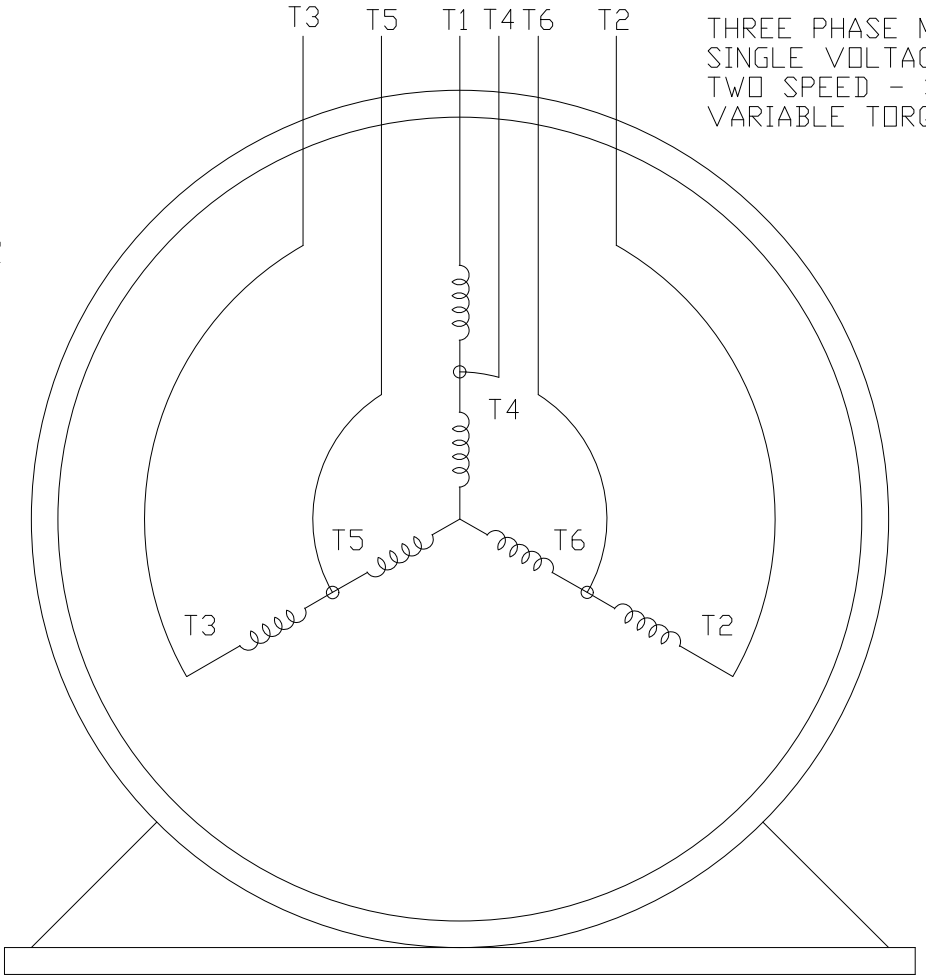
DRAWN BY	TLB
DATE	05-19-1988
APPROVED BY	ML
DATE	05-22-1988
REFERENCE	
MATERIAL	
PROCESS/FINISH	
THIRD ANGLE PROJECTION	
SIZE	B
DRAWING NUMBER	SS508859
SHEET	1 OF 1

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DESCRIPTION
OUTLINE
400T FR.-TAPPED LEAD HOLE

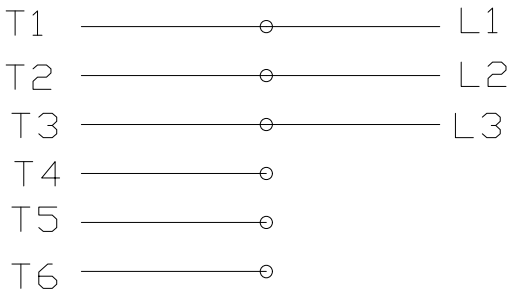
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THREE PHASE MOTOR
SINGLE VOLTAGE
TWO SPEED - SGL. WDG.
VARIABLE TORQUE

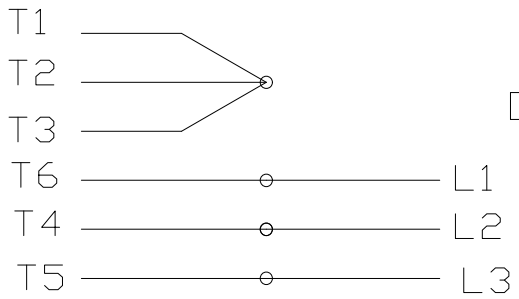


VIEW OF TERMINAL END

LOW SPEED

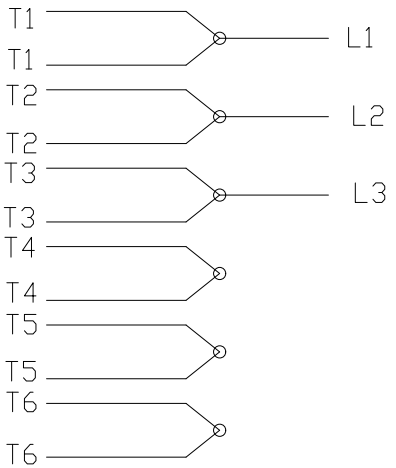


HIGH SPEED

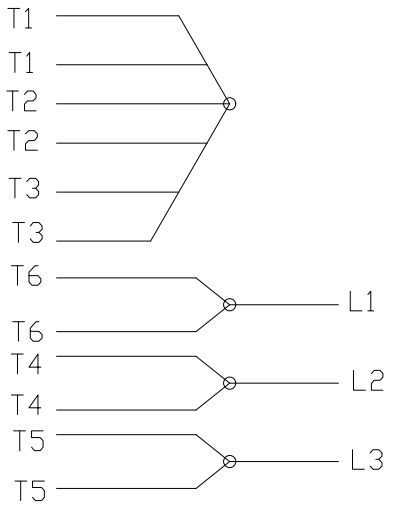


FOR DUAL LEADS

LOW SPEED



HIGH SPEED



T612C
T48B

DRAWING REVISION	REVISION BY	REV DATE/ © DATE
C	SB	08/20/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023600	SBD	08/20/2025

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

DRAWN BY	PGK
DATE	12/26/1996
APPROVED BY	TB
DATE	01/07/1997
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM
3Ø - SINGLE VOLTAGE - 2 SPEED

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	4 of 5 EE7322	1 OF 1

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CERTIFICATION DATA SHEET

Model#:	405TTFS7297 AP	**WINDING#:**	T405(4-8)11 NONE 1
CONN. DIAGRAM:	A-EE7322	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS508859-1675		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&18 3/4	56&14	900	1785&890	405T	TEFC	H	1VT

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/60	460	83&27	ACROSS THE LINE	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&92.4	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 90&71.5	3/4 LOAD PF: 67	1/2 LOAD PF: 57	90.9	SQ CAGE IND RUN	12.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
112 LB-FT	118	123 LB-FT 110	222 LB-FT 198	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
55 dBA	65 dBA	27 LB-FT^2	- LB-FT^2	- SEC.	-	1400 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

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			
NONE	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
- FT-LB NONE V NONE Hz

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