PRODUCT INFORMATION PACKET

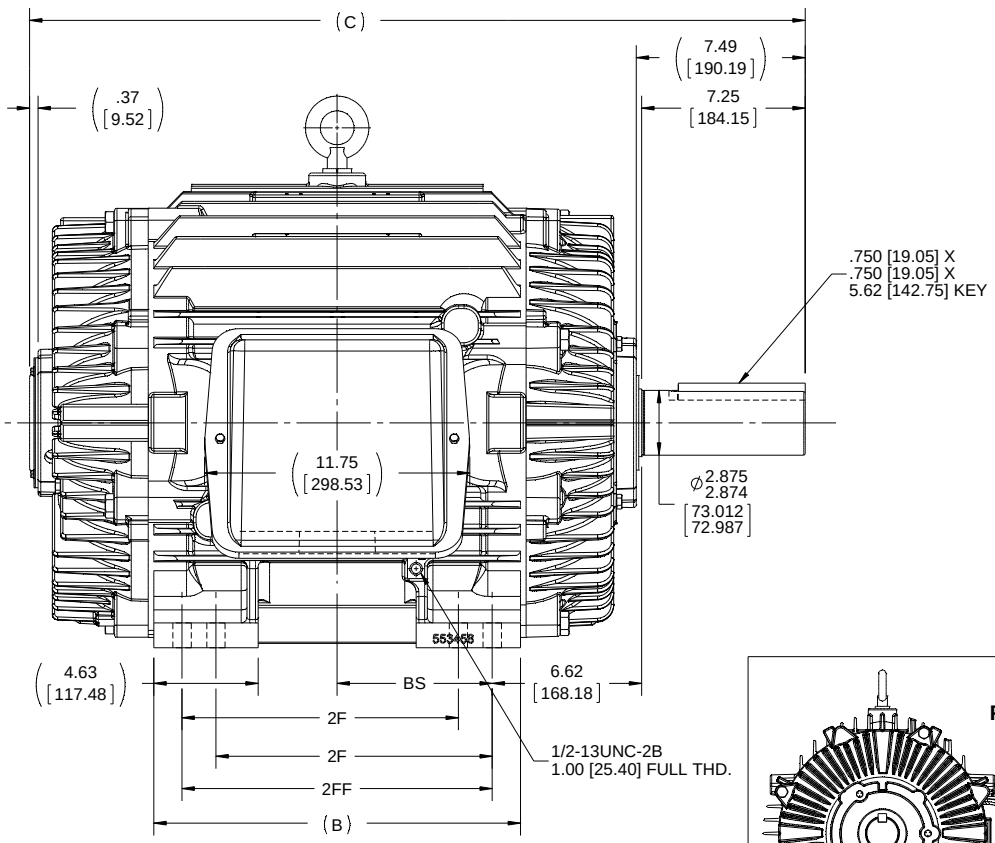
Model No: 405TTTS16578AN
Catalog No: 824565.00
..75HP..1200RPM.405T.TEAO.230/460V.3PH.60HZ.CONT.40C.1.15SF.RIGID.....COOLING TOWER.....
Cooling Tower

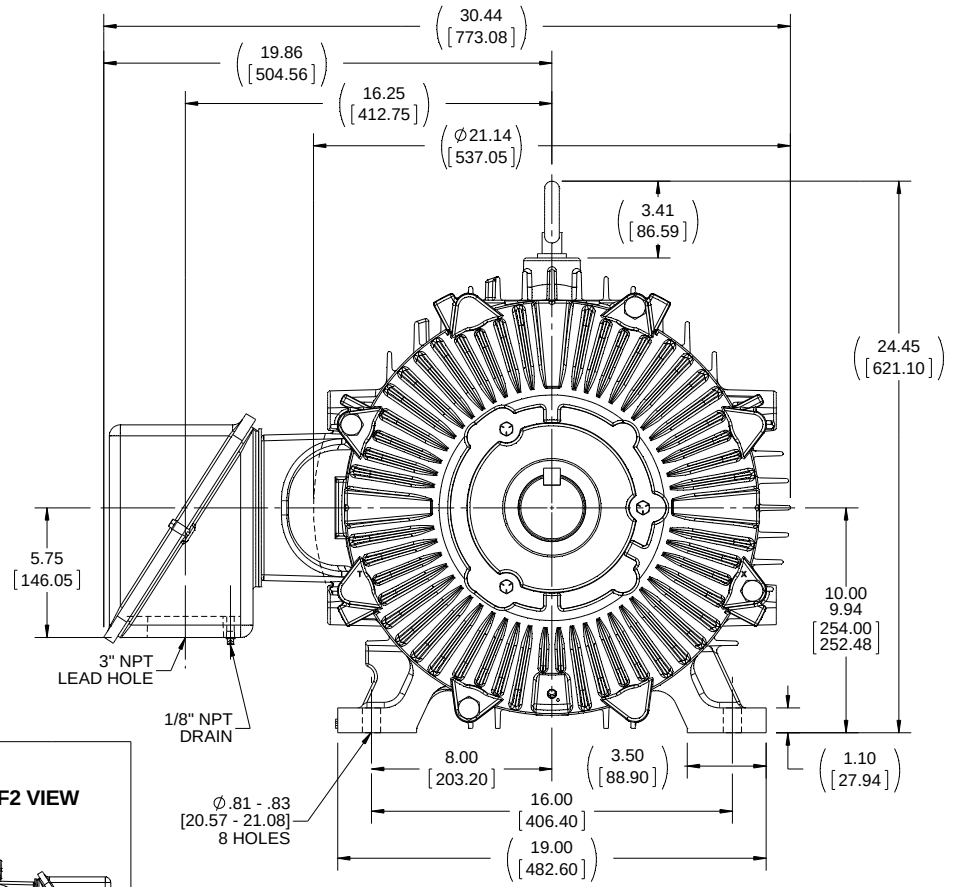
Nameplate Specifications

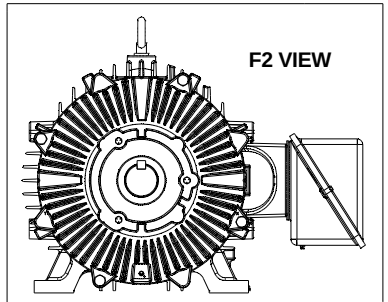
Output HP	**75 Hp**	Output KW	**56.0 kW**
Frequency	**60 Hz**	Voltage	**230/460 V**
Current	**179.0/89.5 A**	Speed	**1185 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**95 %**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Frame	**405TV**
Enclosure	**Totally Enclosed Air Over**	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	**56**		

Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Mounting	**Rigid base**	Motor Orientation	**HORIZONTAL OR UP OR DOWN**
Drive End Bearing	**BALL**	Opp Drive End Bearing	**BALL**
Frame Material	**Cast Iron**	Shaft Type	**T**
Overall Length	**34.38 in**	Frame Length	**16.75 in**
Shaft Diameter	**2.875 in**	Shaft Extension	**7.49 in**
Assembly/Box Mounting	**F1/F2 CAPABLE**		
Outline Drawing	**B-SS555787LE-1675**	Connection Diagram	**A-EE7308T-LE**







NOTES:
1. **CONDUIT BOX CAN BE ROTATED IN 90˚ STEPS.**
2. **CONDUIT BOX CAN BE MOUTED 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	2FF	BS
1675	404/405T	16.75 [425.45]	34.38 [873.25]	12.25 [311.15]	13.75 [349.25]	6.88 [174.75]

DRAWING REVISION	REVISION BY	DATE
E	AJW	05-11-2015
ECO	APPROVED BY	DATE
ECO-0077297	JHA	05-11-2015

ECO DESCRIPTION
REMOVED "T" FROM 1/8" NPT DRAIN CALLOUT

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381]
CORNER FILLETS: .02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	HV
DATE	06-06-2013
APPROVED BY	DJK
DATE	06-07-2013
REFERENCE	

THIRD ANGLE PROJECTION

Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
400T FR. - TAPPED LEAD HOLE

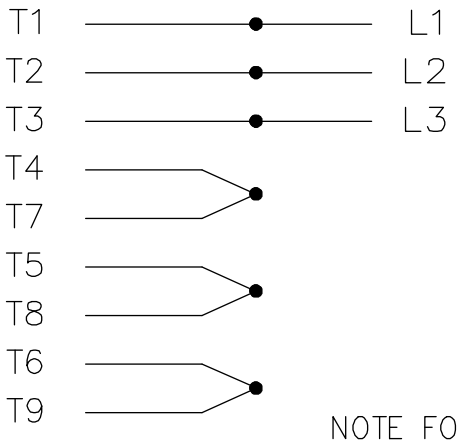
MATERIAL | PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS555787LE	1 OF 1

EE7308T-LE

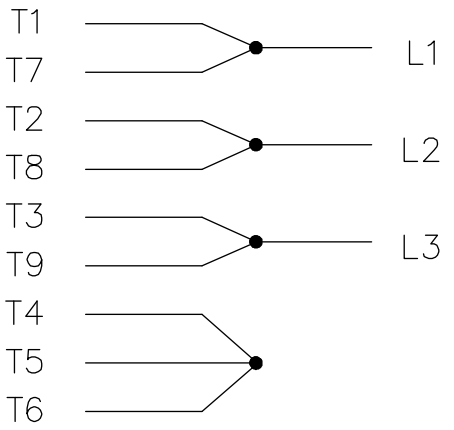
THREE PHASE
DUAL VOLTAGE MOTOR

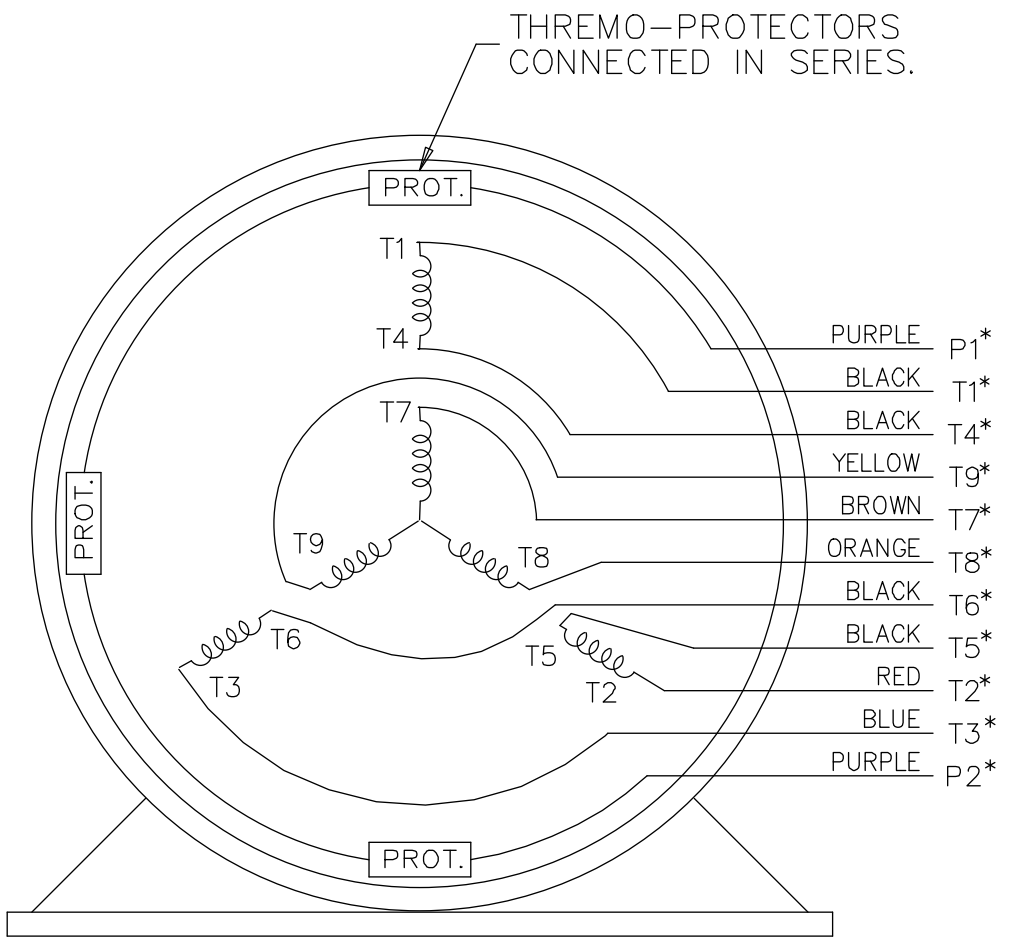
HIGH VOLTAGE



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





VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

NO.	REVISION	BY & DATE	CHK
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML
03	RE-ISSUE	NJS 04-21-2004	JET
02	REDRAWN	TAT 04-20-2004	ML
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
RFP
CAD FILE EE7308T_LE
DIST LB-WP-LE

DRAWN	TJB	05-07-2002
CHK	ML	05-08-2002
APPD	TB	05-08-2002
SCALE		1=1
REF		
FMF		
PREV		

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7308T-LE	05

P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LE **CAT #:** 824565.00
OUTLINE: B-SS555787LE-1675
WINDING: T405671 R7 1

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	56	1200	1185	405TV	TEAO	TTS	G	BC

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	179/89.5&178/89	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	ELECT. TYPE
F.L. PF	83.0	3/4 LD PF	80.0	1/2 LD PF	70.5	94.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
332 LB-FT	542	700 LB-FT 211%	800 LB-FT 241%	0	

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	42.0 LB-FT²	1100 LB-FT²	25 SEC.	2	1400 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	ZONTAL OR UP OR D	UM SEVERE	NONE	NO	NONE	UE - LEESON (EPOX

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6316	BALL 6313	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.059	0.036	0.299	0.433	7.881	0.080	ODE

*
NOTES
*

INVERTER TORQUE: VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: Y-(LEESON UL REC)

DATE: 1/19/2018

Data Sheet

Date: 1/19/2018

824565.00

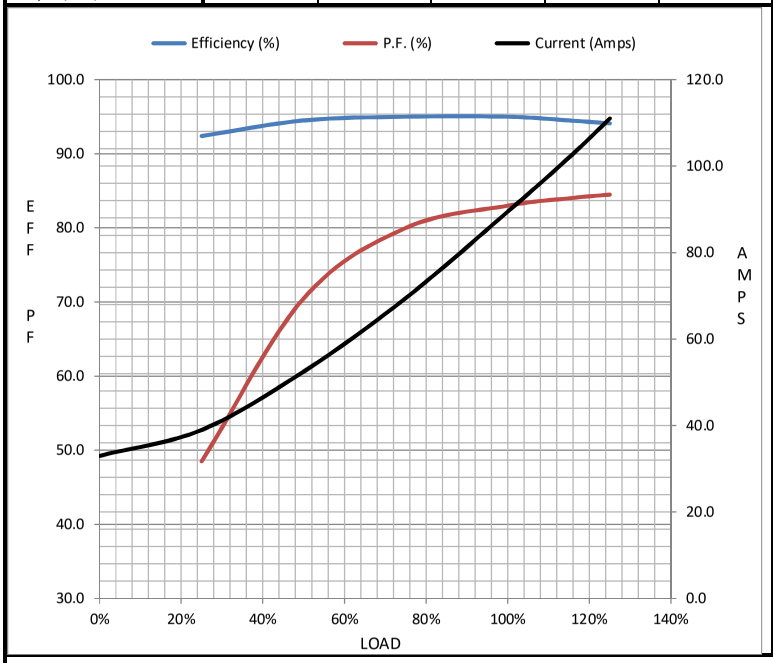
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	33.0	39.0	52.5	69.5	89.5	102	111	542	
Torque (ft-lb)	0.00	82.5	165	248	332	382	416	700	
RPM	1200	1195	1192	1190	1185	1,182	1180	0	
Efficiency (%)		92.4	94.5	95.0	95.0	94.5	94.1		
P.F. (%)	3.5	48.5	70.5	80.0	83.0	84.0	84.5	35.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1185	1200
Current (Amps)	542	475	300	89.5	33.0
Torque (ft-lb)	700	625	800	332	0.00



Information Block

HP	75.0	
Sync. RPM	1200	
Frame	405	
Enclosure	TEAO	
Construction	TTS	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	0	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	42.0	Lb-Ft²
Ref Wdg	T405671 R7	
Sound Pressure @ 1M	999	dBA
VFD Rating	VARIABLE 10:1	
Outline Dwg	B-SS555787LE-1675	
Conn. Diag	A-EE7308T-LE	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0590	0.0360	0.2990	0.4330	7.8810

Speed -Torque Curve