PRODUCT INFORMATION PACKET

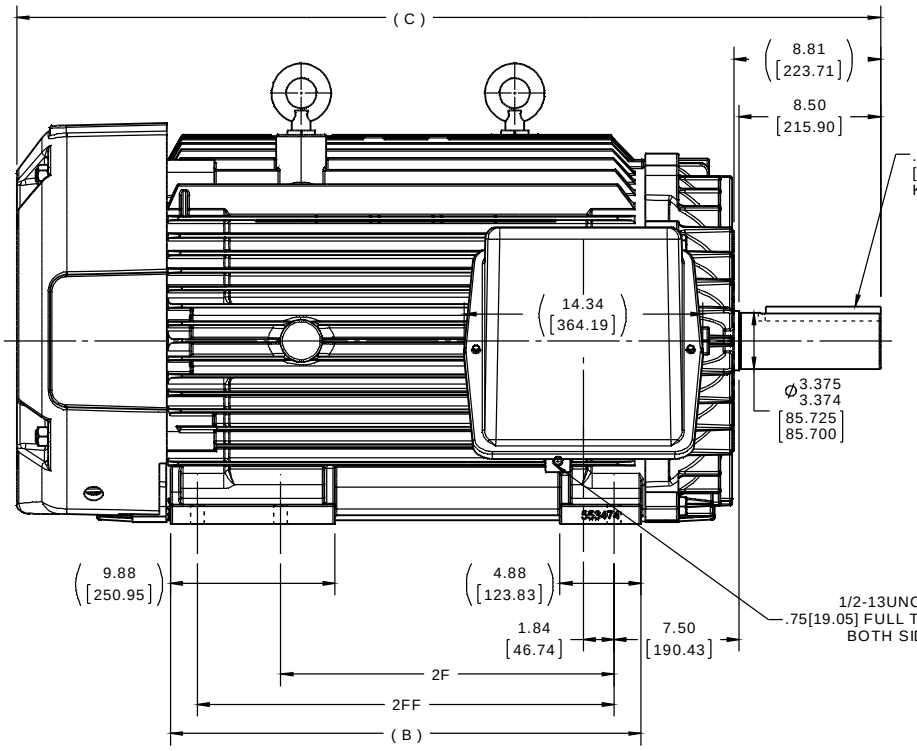
Model No: 449TTFS6538
Catalog No: E690
250 HP, Severe Duty Motor, 3 phase, 1800 RPM, 460 V,449T Frame, TEFC
Severe Duty Motors

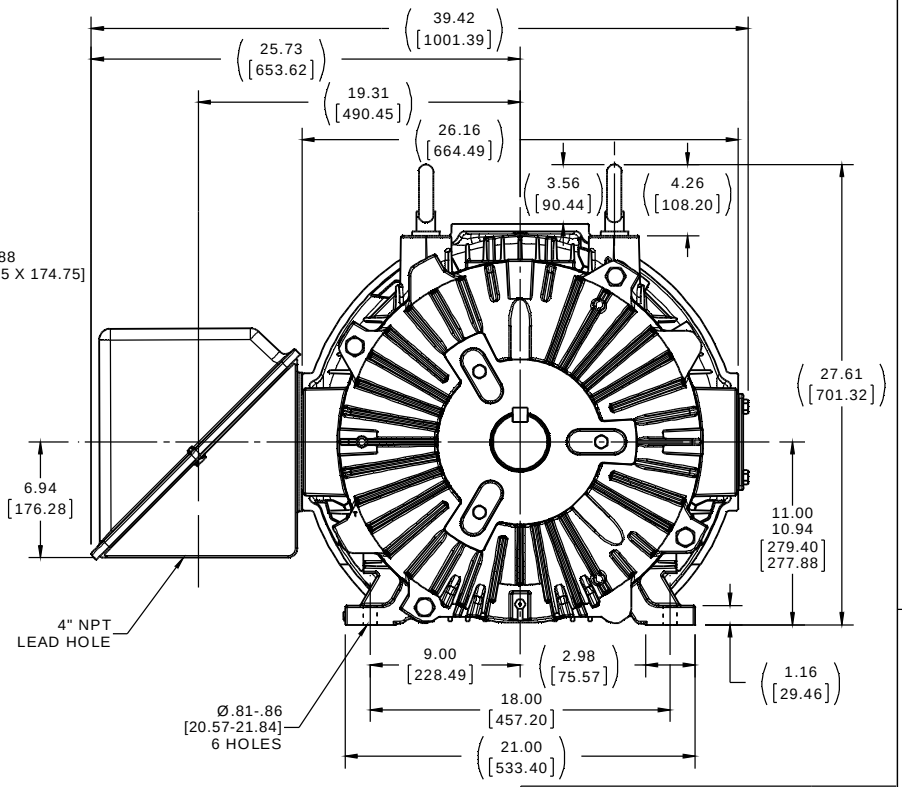
Nameplate Specifications

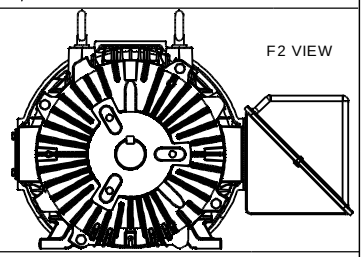
Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	285.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	96.5 %	Power Factor	86
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	449T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	NU319	Opp Drive End Bearing Size	6318
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Hazardous Location	DIVISION 2	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0107 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Roller
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	51.84 in
Frame Length	28.75 in	Shaft Diameter	3.375 in
Shaft Extension	8.81 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300U	Outline Drawing	B-SS515631-2875







NOTES:
1- CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2- NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
3- CONDUIT BOX CAN BE MOUNTED IN F2 POSITION.

DASH	FRAME	B	C	2F	2FF
2875	447T	28.25 [717.55]	51.84 [1316.74]	20.00 [508.00]	- - -
2875	449T	28.25 [717.55]	51.84 [1316.74]	- - -	25.00 [635.00]

DRAWING REVISION: R	REVISION BY: AJW	DATE: 02-23-2015
ECO: ECO-0072274	APPROVED BY: DJK	DATE: 02-23-2015

ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS

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] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	DT
DATE	06-03-1996
APPROVED BY	JL
DATE	06-05-1996
REFERENCE	

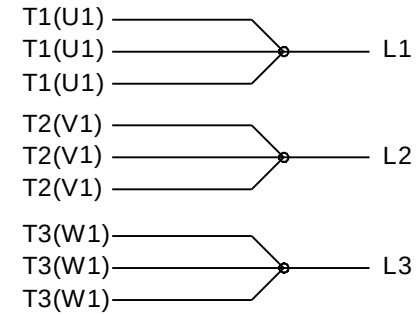
REGAL™ Regal Beloit America, Inc.

DESCRIPTION: OUTLINE
447-449T FR.-STD.

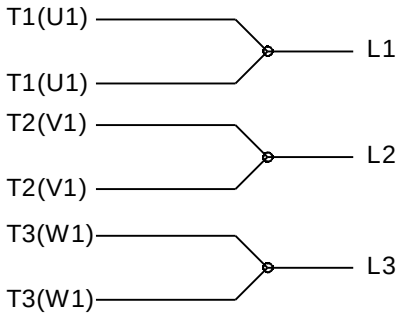
MATERIAL | PROCESS/FINISH

THIRD ANGLE PROJECTION | SIZE: B | DRAWING NUMBER: SS515631 | SHEET: 1 OF 1

IF MOTOR HAS 9 LEADS

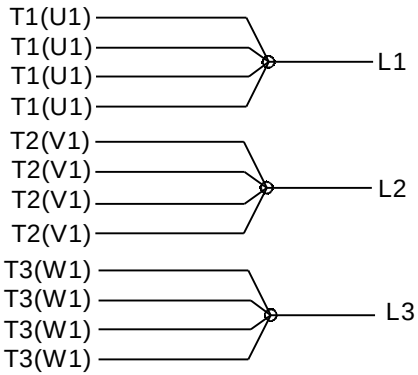


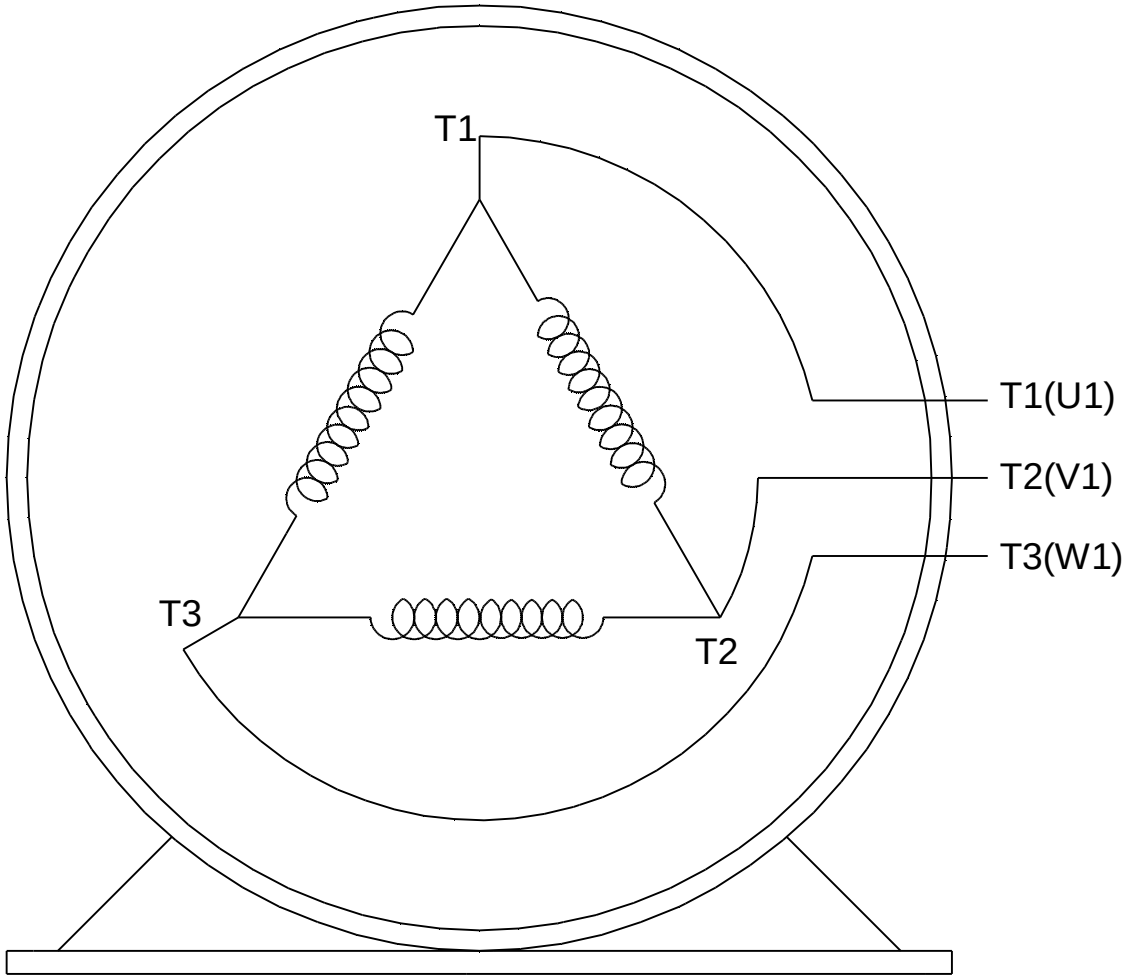
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

DRAWING REVISION: L	REVISION BY: AJW	DATE: 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY: DRS	Regal Beloit America, Inc.
ECO: ECO-0077067	APPROVED BY: EWH	DATE: 05-05-2015	DEC. .X ±0.1 [±2.5] ±7' 30"	DATE: 09-27-1996	
ECO DESCRIPTION: UPDATED TO SOLIDWORKS			.XX ±0.02 [±0.51]	APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE
			XXX ±0.005 [±0.127]	DATE: 09-30-1996	
			.XXXX ±0.0005 [±0.0127]	REFERENCE	MATERIAL / PROCESS/FINISH
			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°	THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300U / SHEET: 1 OF 1
			CORNER FILLETS: R.02 [.51]		
			MACHINED SURFACES: 200/ INCH 5.1/ mm		
			mm SHOWN IN [BRACKETS]		

CERTIFICATION DATA SHEET

Model#:	449TTFS6538 FW	**WINDING#:**	T449446 NONE 5
CONN. DIAGRAM:	A-EE7300U	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS515631-2875		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
250	187	1800	1785	447/449T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	285	LINE OR INVERTER	CONTINUOUS	H1	1.15	40	3300

FULL LOAD EFF: 96.5	3/4 LOAD EFF: 96.5	1/2 LOAD EFF: 95.8	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 83.5	1/2 LOAD PF: 77	96.2	SQ CAGE INV RATED	87

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
736 LB-FT	1825	1450 LB-FT 197	1825 LB-FT 248	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	81 LB-FT^2	2000 LB-FT^2	25 SEC.	1	2700 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	DIVISION 2	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
ROLLER NU319	BALL 6318	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: CONSTANT 2:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

*
NOTES
*

DATE: 06/21/2017 07:18:29 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

marathon® electric

449TTFS6538

Submittal

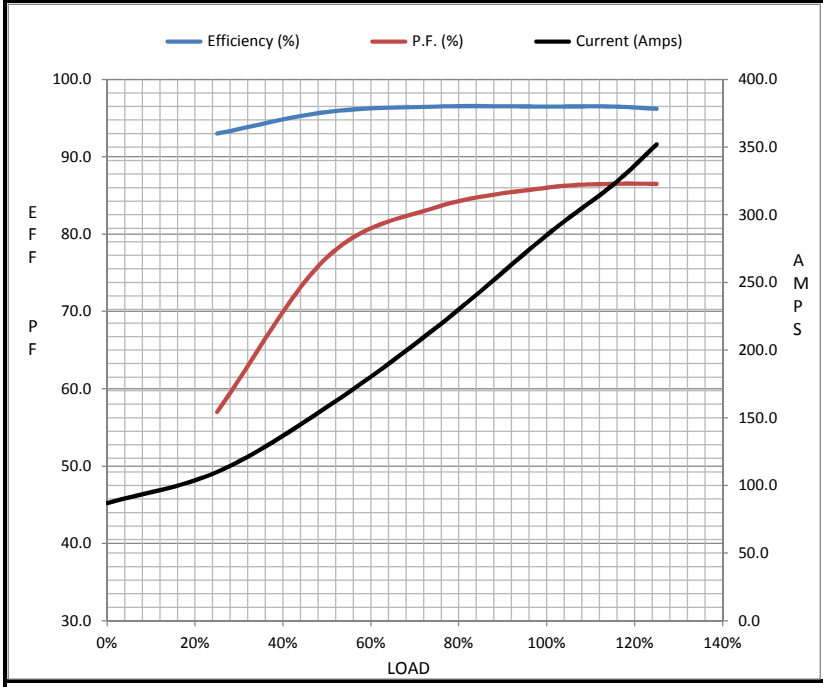
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	87.0	110	158	217	285	322	352	1,825	
Torque (ft-lb)	0.00	183	366	550	736	846	920	1,450	
RPM	1800	1796	1794	1790	1785	1,782	1780	0	
Efficiency (%)		93.0	95.8	96.5	96.5	96.5	96.2		
P.F. (%)	4.5	57.0	77.0	83.5	86.0	86.5	86.5	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1725	1785	1800
Current (Amps)	1,825	1,725	1,100	285	87.0
Torque (ft-lb)	1,450	1,250	1,825	736	0.00



Information Block

HP	250.0
Sync. RPM	1800
Frame	449
Enclosure	TEFC
Construction	TFN
Voltage	460 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	81.0 Lb-Ft²
Ref Wdg	T449446 NONE
Sound Pressure @ 1M	80 dBA
VFD Rating	CONSTANT 2:1
Outline Dwg	B-SS515631-2875
Conn. Diag	A-EE7300U

Additional Specifications:

0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0070	0.0070	0.0920	0.1300	2.9720

Speed -Torque Curve