

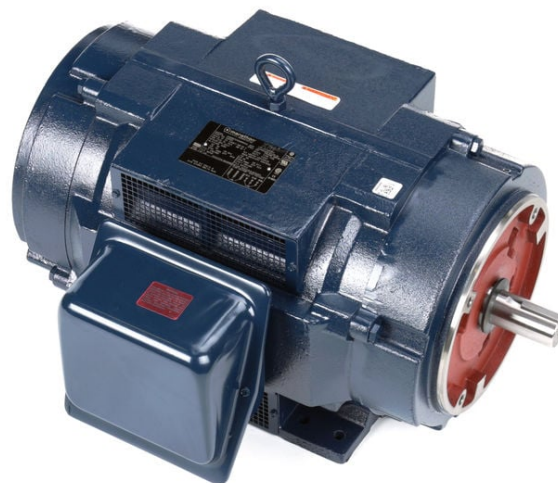
# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 286TSTDN16004

Catalog No: U443A

XRI® General Purpose General Purpose Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 286TSC Frame, DP



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

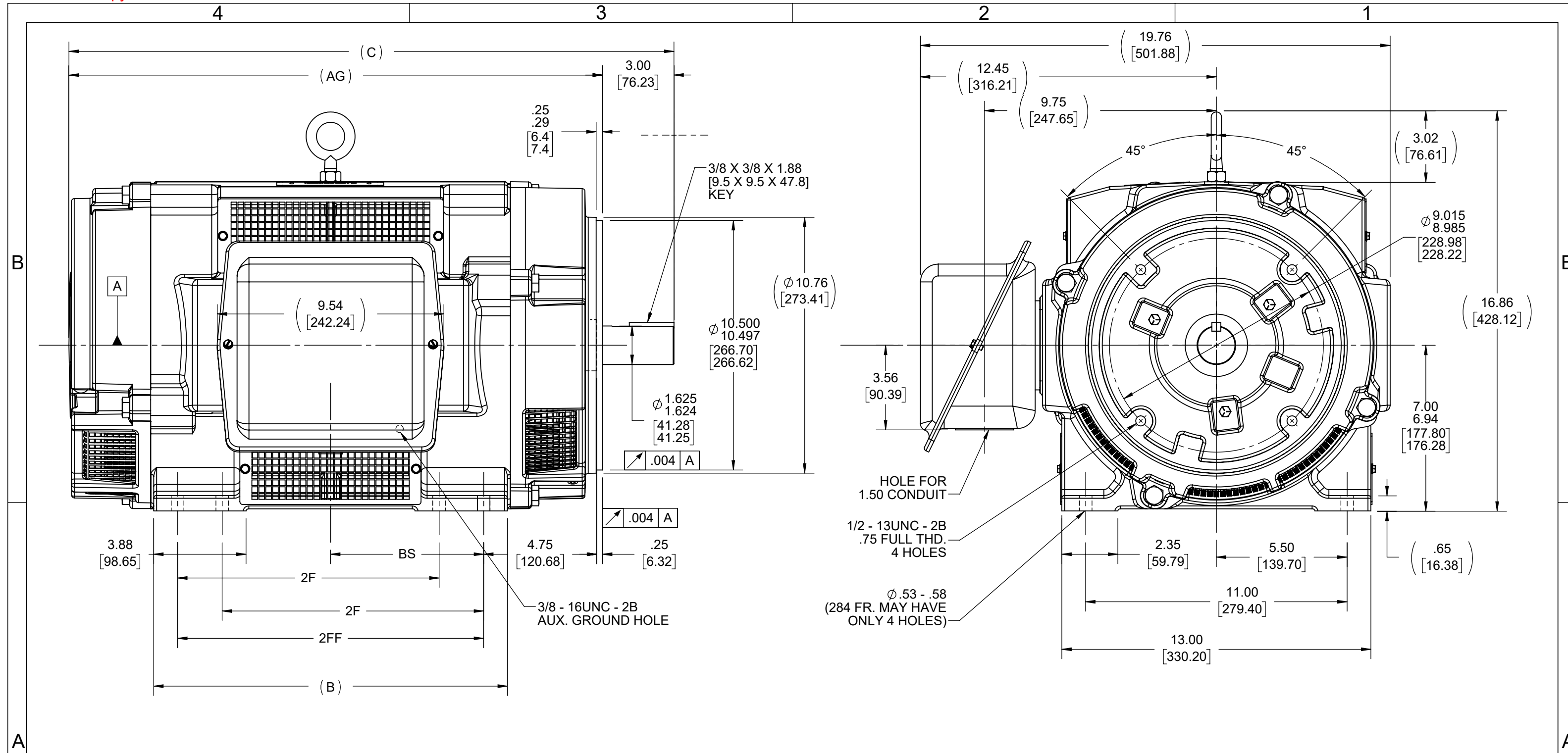


### Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 190/380 V
Speed	3560 & 2960 rpm	Service Factor	1.15 & 1.15
Frame	286TSC	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	93.6 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	90/45 & 83/41.5 A	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.197 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	25.45 in
Frame Length	15.12 in	Shaft Diameter	1.625 in
Shaft Extension	3 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7358	Outline Drawing	B-SS207991-1512



- 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	AG
1325	284TSC	12.63 [320.80]	25.58 [649.73]	---	9.50 [241.3]	5.50 [139.7]	20.58 [522.73]
1512	286TSC	14.88 [377.95]	25.45 [646.43]	11.00 [279.4]	12.88 [327.15]	6.44 [163.58]	22.45 [570.23]

DRAWING REVISION C	REVISION BY MJ	REV DATE/© DATE 12/05/2022
REQUEST NUMBER CR-0012138	APPROVED BY CHRIS	DATE 12/05/2022
REQUEST NUMBER DESCRIPTION OUTLINE DRAWING IS UPDATED WITH NEW FRAME.		
<small>COPYRIGHT (PER REVISION DATE) REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		

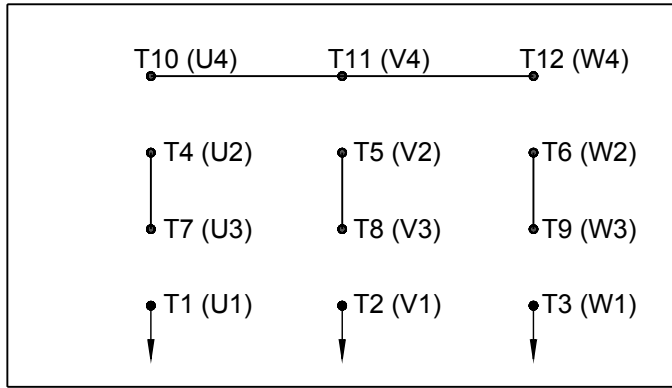
TOLERANCES (EXCEPT AS NOTED):  
 DEC. INCH mm ANGLE  
 .X ±0.1 [±3] ±7° 30"  
 .XX ±0.03 [±0.8]  
 .XXX ±0.005 [±0.13]  
 .XXXX ±0.0005 [±0.013]  
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°  
 CORNER FILLETS: R.02 [.5]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY SJW	DATE 05-22-2012
APPROVED BY TBROWN	DATE 05-23-2013
REFERENCE	THIRD ANGLE PROJECTION

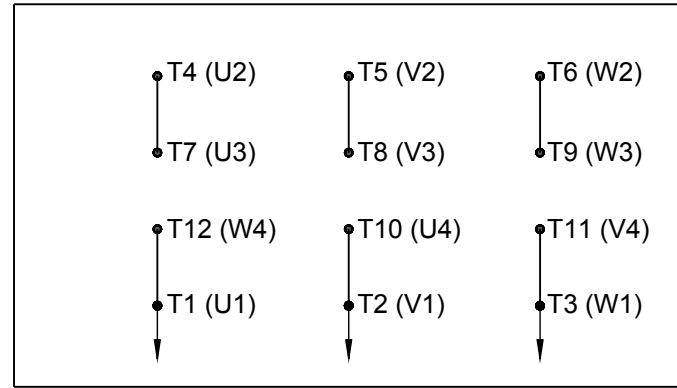
		Regal Beloit America, Inc.	
DESCRIPTION		OUTLINE	
280TSC FR. - TS - D.P. - CAST IRON			
MATERIAL	PROCESS/FINISH	SIZE	DRAWING NUMBER
		B	SS207991
			SHEET 1 OF 1

# HIGH VOLTAGE

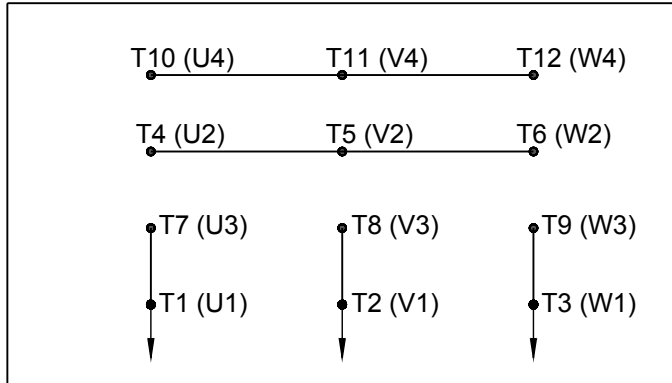
WYE START



DELTA RUN

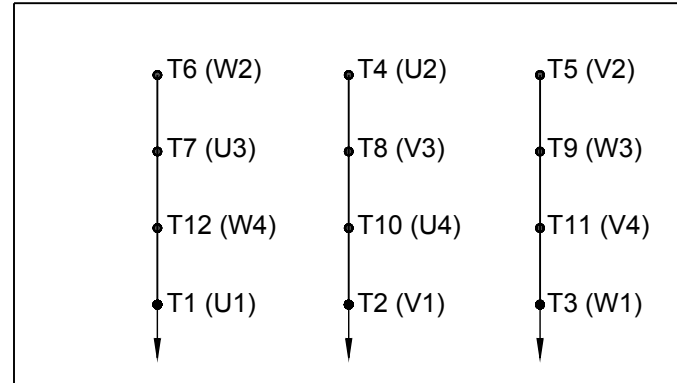


WYE START



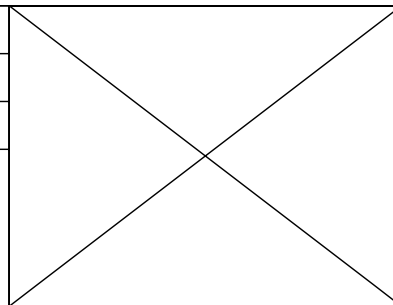
# LOW VOLTAGE

DELTA RUN



4/2 CKTY  $\triangle$

DRAWING REVISION D	REVISION BY JWO	DATE 01-26-2016
ECO ECO-0092547	APPROVED BY TB	DATE 01-26-2016
ECO DESCRIPTION ADDED IEC MARKINGS		



DRAWN BY BLR	Regal Beloit America, Inc.		
DATE 03-09-1998			
APPROVED BY GK	DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> 12 LEAD - DUAL VOLT. - WYE START - DELTA RUN		
DATE 03-23-1998			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7358	SHEET 1 OF 1

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

**CERTIFICATION DATA SHEET**

**Model#:** 286TSTDN16004 AA      **WINDING#:** K286297 R1 6  
**CONN. DIAGRAM:** A-EE7358      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS207991-1512

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40&30	30&22.4	3600	3560&2960	286TSC	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	90/45&83/41.5	PWS(LV ONLY) & YDRUN	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93.6&93.6	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5&87	3/4 LOAD PF: 87	1/2 LOAD PF: 80	92.4	SQ CAGE IND RUN	26 / 13

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59 LB-FT	580 / 290	95 LB-FT 161	190 LB-FT 322	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	2.9 LB-FT^2	- LB-FT^2	15 SEC.	-	425 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	6210						

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

* N O T E S *	INVERTER TORQUE: NONE
	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	

DATE: 06/27/2017 01:49:42 AM  
FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 16-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



286TSTDN16004

Submittal

Data @ 460 V

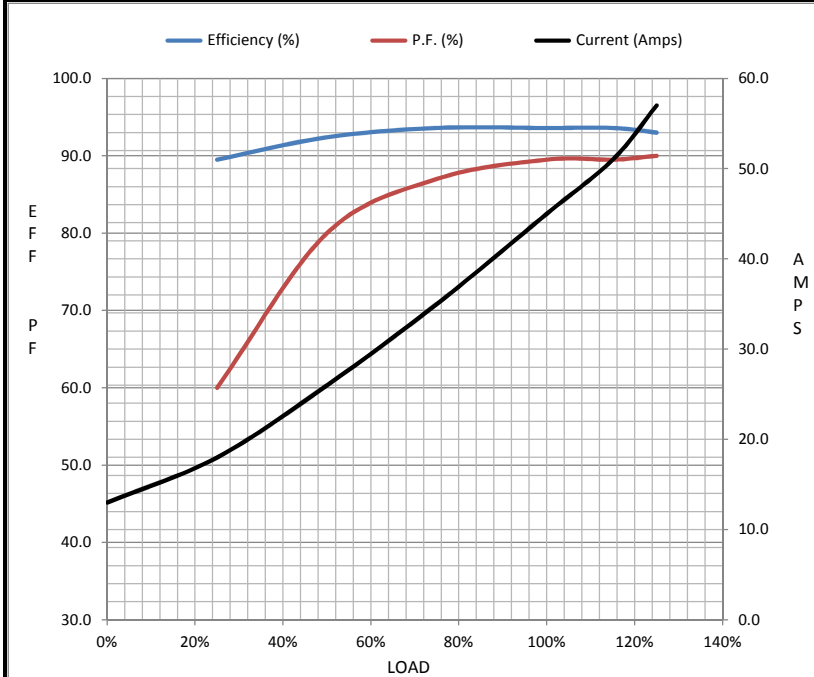
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.0	18.0	26.0	35.0	45.0	51.0	57.0	290
Torque (ft-lb)	0.00	14.5	29.5	44.0	59.0	66.5	74.0	95.0
RPM	3600	3590	3580	3570	3560	3,550	3545	0
Efficiency (%)		89.5	92.4	93.6	93.6	93.6	93.0	
P.F. (%)	7.5	60.0	80.0	87.0	89.5	89.5	90.0	32.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1780	3305	3560	3600
Current (Amps)	290	261	205	45.0	13.0
Torque (ft-lb)	95.0	80.8	190	59.0	0.00

Information Block				
HP	40.0			
Sync. RPM	3600			
Frame	286			
Enclosure	DP			
Construction	TDN			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	A			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	35 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.90 Lb-Ft <sup>2</sup>			
Ref Wdg	K286297 R1			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS207991-1512			
Conn. Diag	A-EE7358			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1110	0.0750	0.5680	0.4330	20.4480



Speed - Torque Curve

