

# PRODUCT INFORMATION PACKET

Model No: 284TSTDN16003

Catalog No: U901A

30 HP General Purpose Motor, 3 phase, 3600 RPM, 200 V, 284TS Frame, ODP  
General Purpose Motors



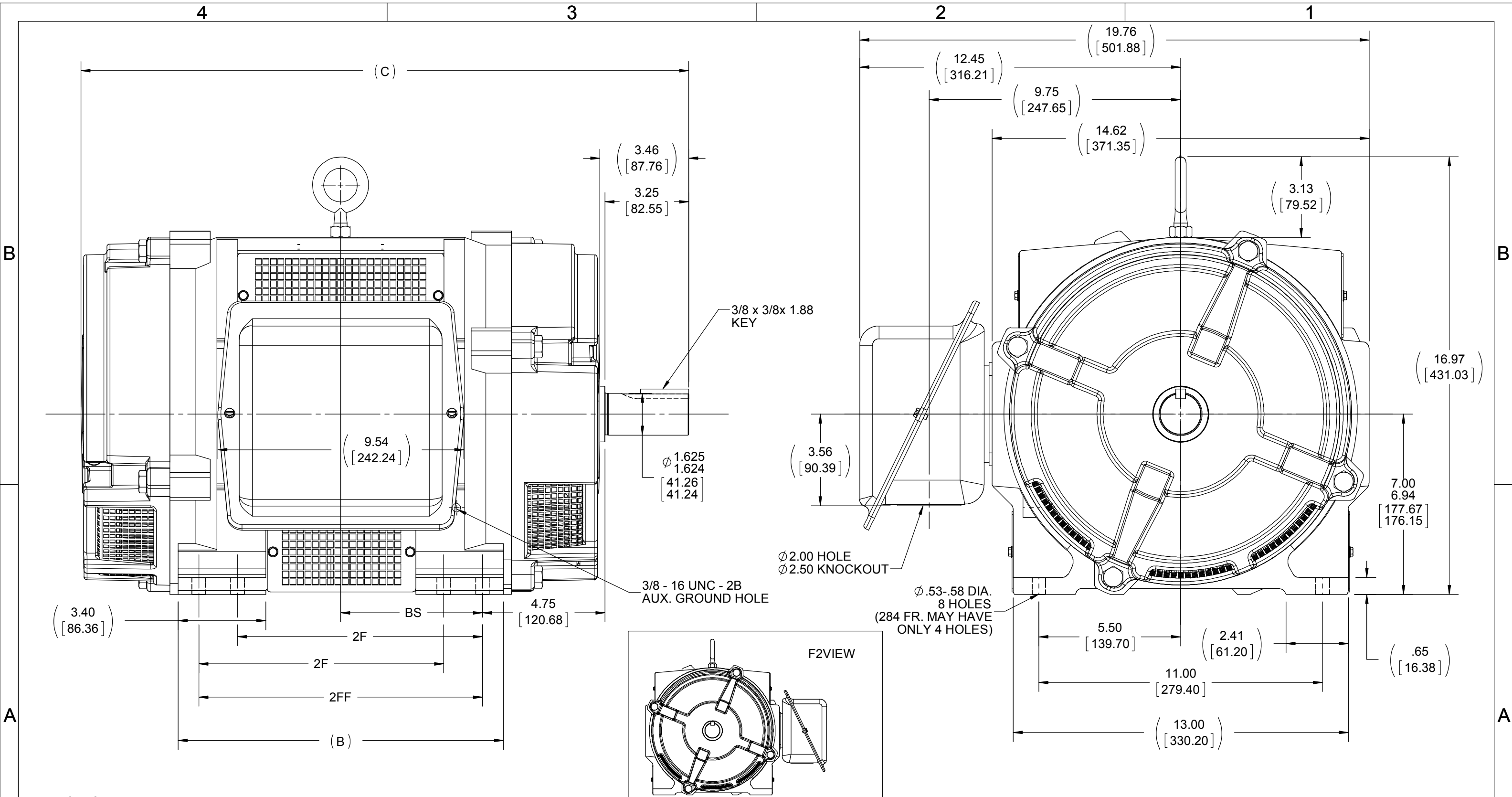
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### Nameplate Specifications

Output HP	<b>30 Hp</b>	Output KW	<b>22.4 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>200 V</b>
Current	<b>78.0 A</b>	Speed	<b>3552 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.6 %</b>	Power Factor	<b>88</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>284TS</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6311</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>23</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.285 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>TS</b>	Overall Length	<b>23.57 in</b>
Frame Length	<b>13.26 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>3.46 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Connection Drawing	<b>A-EE7300U</b>	Outline Drawing	<b>B-SS207972-1325</b>



- 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
1325	284/286T	12.63	23.57	9.50	11.00	5.50
1512	286T	14.50	25.44	11.00	---	6.44

DRAWING REVISION D	REVISION BY NK	DATE 03-07-2019
ECO ECO-0163158	APPROVED BY VY	DATE 03-07-2019
ECO DESCRIPTION F2 VIEW ADDED		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:  
 DEC. X ±0.1 [±2.5] ANGLE ±7° 30"  
 .XX ±0.03 [±0.76]  
 .XXX ±0.005 [±0.127]  
 .XXXX ±0.0005 [±0.0127]  
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]  
 CORNER FILLETS: .02 [0.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY LC
DATE 1-21-2014
APPROVED BY TBROWN
DATE 1-21-2014
PROCESS/FINISH
THIRD ANGLE PROJECTION

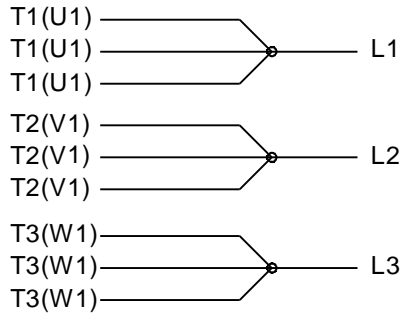
**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**280 FR. - TS - DR. PR. - CAST IRON**

MATERIAL

SIZE B DRAWING NUMBER **SS207972** 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 <b>L</b>	REVISION BY <b>AJW</b>	DATE <b>05-04-2015</b>	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY <b>DRS</b>	<b>Regal Beloit America, Inc.</b>																					
ECO <b>ECO-0077067</b>	APPROVED BY <b>EWH</b>	DATE <b>05-05-2015</b>	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE <b>09-27-1996</b>
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.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION <b>UPDATED TO SOLIDWORKS</b>			APPROVED BY <b>GK</b>	DATE <b>09-30-1996</b>	MATERIAL	PROCESS/FINISH																				
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.			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	REFERENCE	SIZE <b>A</b>	DRAWING NUMBER <b>EE7300U</b>	SHEET <b>1 OF 1</b>																			
				THIRD ANGLE PROJECTION																						



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 284TSTDN16003  
 CONN. DIAGRAM: A-EE7300U CAT #: U901A  
 OUTLINE: B-SS207972-1325 CUSTOMER PART #: \_\_\_\_\_  
 WINDING: K284284 NONE 4 MOUNTING: F1/F2 CAPABLE  
 SPEED: \_\_\_\_\_

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	3600	3552	284TS	DP	TDN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	200	78	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	93.0	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	88.0	3/4 LD PF	86.0	1/2 LD PF	80.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
44.5 LB-FT	499	62.0 LB-FT 139%	120 LB-FT 270%	50

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
80 dBA	89 dBA	2.60 LB-FT <sup>2</sup>	35 LB-FT <sup>2</sup>	15 SEC.	2	375 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	RODENT	BLUE (ENAMEL)

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

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	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
0.036	0.02	0.154	0.113	5.07	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE	
	NONE NONE PPR	

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 9/10/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC

Data Sheet

284TSTDN16003

Date: 11/29/2018  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 200 V

Motor Load Data

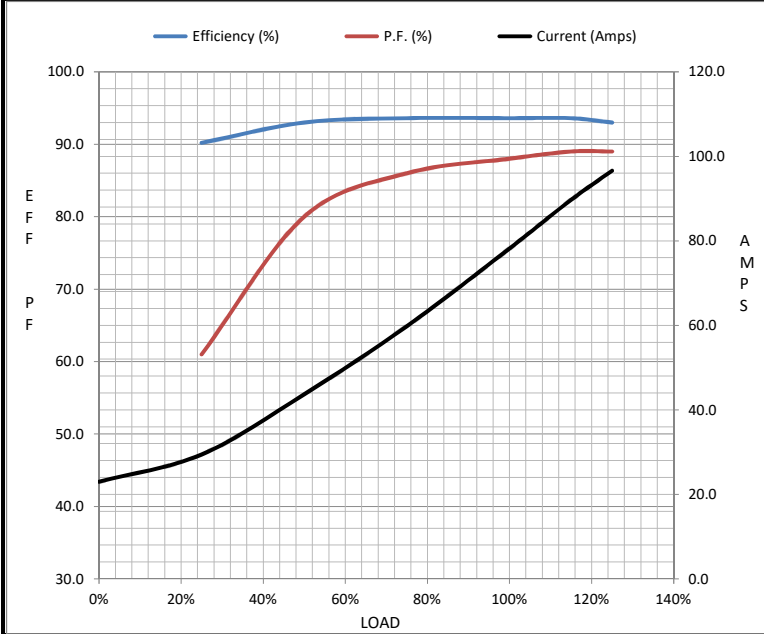
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	23.0	29.4	43.7	59.8	78.2	89.7	96.6	499
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.5	51.0	55.5	62.0
RPM	3600	3590	3578	3565	3552	3,545	3540	0
Efficiency (%)		90.2	93.0	93.6	93.6	93.6	93.0	
P.F. (%)	7.0	61.0	80.0	86.0	88.0	89.0	89.0	31.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3552	3600
Current (Amps)	499	460	311	78.2	23.0
Torque (ft-lb)	62.0	52.0	120	44.5	0.00

Information Block

HP	30.0			
Sync. RPM	3600			
Frame	284			
Enclosure	DP			
Construction	TDS			
Voltage	200 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	50 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.60 Lb-Ft <sup>2</sup>			
Ref Wdg	K284284 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS207972-1325			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0360	0.0200	0.1540	0.1130	5.0700



Speed - Torque Curve

