

PRODUCT INFORMATION PACKET

Model No: 286TTFCD16847

Catalog No: E623A-P

Severe Duty Motors, TEFC, 30 HP, 3 Ph, 60 Hz, 460 V, 1770 RPM, 286T Frame



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Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	460 V
Current	35.5 A	Speed	1770 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	84
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.27 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.875 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 10:1/VARIABLE 20:1
Connection Drawing	EE7300	Outline Drawing	SS312942-200

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DASH NO.	4		3				2		1	
	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	10.83	26.64	5.50	11.00	---	9.50	4.75	4.75	F1 OR F2	284T
200	12.68	28.14			9.50	11.00		5.50		284/286T



DRAWING REVISION D	REVISION BY VS	REV DATE/© DATE 27-10-2020
ECO CR-0000272	APPROVED BY GNK	DATE 27-10-2020
ECO DESCRIPTION DRAWING UPDATED		
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DRAWN BY BISWA	REGAL ® Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 284/286T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS312942
	SHEET 1 OF 1

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

**IF MOTOR HAS
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD
CONNECTION**

- L1 _____ WHITE _____
- L2 _____ RED _____
- L3 _____ BLACK _____

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

Regal Beloit America, Inc.		
		DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 286TTFCD16847
 OUTLINE: SS312942
 CAT #: E623A-P
 WINDING: HA31804006 NONE 8
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
30	22.4	1800	1775	286T	TEFC	TFC	G	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	36.5	LINE OR INVERTER	CONT	H	1.15	40	3300
F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE		
F.L. PF	83.0	3/4 LD PF	78.0	1/2 LD PF	67.5	93.0	SQ CAGE INV RATED		
F.L. TORQUE	LR AMPS	L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
89.0 LB-FT	217	178 LB-FT	200%	227 LB-FT	255%	60			
SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.			
75 dBA	84 dBA	5.7 LB-FT²	225 LB-FT²	20 SEC.	2	532 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	PREMIUM SEVERE DUTY	NONE	NO	NONE	BLUE (EPOXY)	
BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		
BALL 6311	BALL 6211								
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		
0.168	0.111	0.617	0.851	16.727	0.080		ODE		
* N O T E S *	If Inverter equals NONE, contact factory for further information								
	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE								
	ENCODER: NONE NONE NONE NONE PPR								
	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ:								
PREPARED BY:									
DATE: 5/13/2020									
FORM: 3531 REV_4 2/27/06 ** Subject to change without notice.									

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

286TTFC16847



Submittal

Data @ 460 V

Motor Load Data

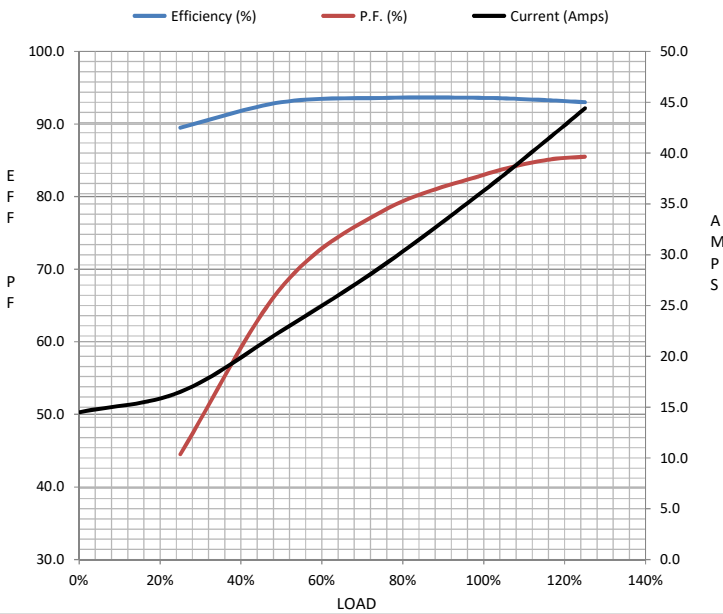
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.5	16.5	22.5	28.9	36.3	41.1	44.4	217
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	102	111	178
RPM	1800	1795	1788	1782	1775	1,770	1768	0
Efficiency (%)		89.5	93.0	93.6	93.6	93.3	93.0	
P.F. (%)	5.0	44.5	67.5	78.0	83.0	85.0	85.5	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1775	1800
Current (Amps)	217	180	129	36.3	14.5
Torque (ft-lb)	178	151	227	89.0	0.00

Information Block

HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	5.7 Lb-Ft ²			
Ref Wdg	HA31804006 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS312942			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1680	0.1110	0.6170	0.8510	16.7270



Speed -Torque Curve

