

PRODUCT INFORMATION PACKET

Model No: 286UTFPA4001

Catalog No: P444

Automotive Duty Motor, 20 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 286U Frame, TEFC



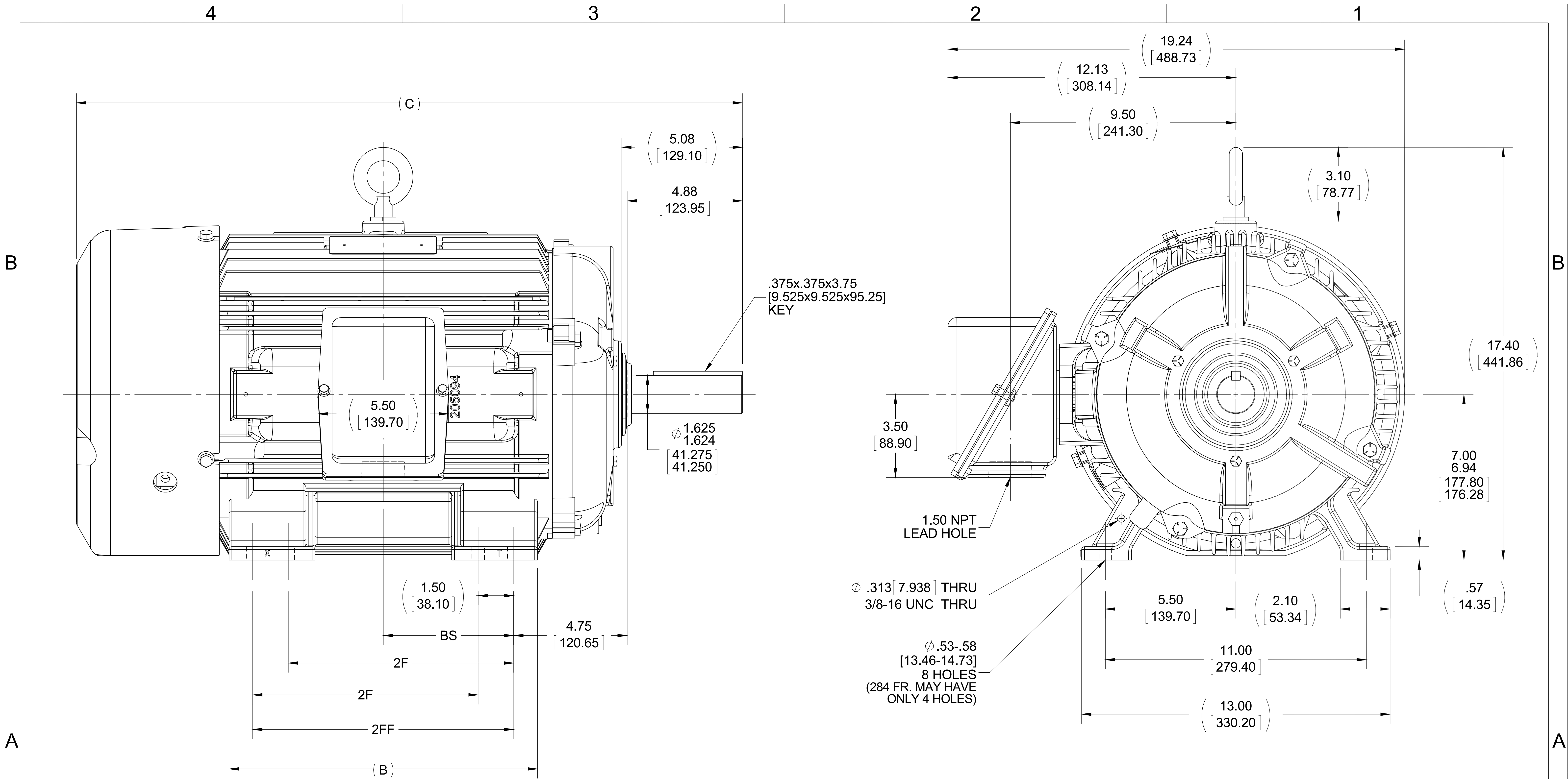
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Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	460 V
Current	23.4 A	Speed	3537 rpm
Service Factor	1	Phase	3
Efficiency	92.4 %	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286U	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	65 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.394 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	U	Overall Length	28.06 in
Frame Length	14.25 in	Shaft Diameter	1.625 in
Shaft Extension	5.08 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300	Outline Drawing	B-SS311055-1425



- 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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	B	2F	2FF	BS
1275	284U	26.56 [674.62]	11.50 [292.10]	9.50 [241.30]	---	4.75 [120.65]
1425	284/286U	28.06 [712.72]	13.00 [330.20]	9.50 [241.30]	11.00 [279.40]	5.50 [139.70]

DRAWING REVISION E	REVISION BY LPC	DATE 08-20-2015
ECO ECO-0083624	APPROVED BY TVUE	DATE 08-20-2015
ECO DESCRIPTION UPDATED TITLE BLOCK & TO CURRENT STD'S		
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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 [0.076/.381] X 45°
 CORNER FILLETS: R.02 [0.51]
 MACHINED SURFACES: 200 INCH mm 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY KL
DATE 04-12-2001
APPROVED BY JES
DATE 04-12-2001
REFERENCE
THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE	
280U FR. - TEFC - TFPA - STD. - 11.00 LAM. - CAST C' BOX	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS311055
SHEET 1 OF 1	

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS



OPTIONAL CORD CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

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

CERTIFICATION DATA SHEET

Model#: 286UTFPA4001 BC
CONN. DIAGRAM: A-EE7300
OUTLINE: B-SS311055-1425

WINDING#: K256288 R3 7
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	3600	3537	286U	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	23.4	ACROSS THE LINE	CONTINUOUS	F3	1.0	65	3300

FULL LOAD EFF: 92.4	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 85	1/2 LOAD PF: 78	91	SQ CAGE IND RUN	7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.7 LB-FT	145	55 LB-FT 185	84 LB-FT 283	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	1.3 LB-FT^2	26 LB-FT^2	20 SEC.	2	480 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	PROVISIONS ONLY	NONE	GRAY (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	U	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

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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 04:13:07 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

286UTFPA4001

Date: 1/25/2019
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

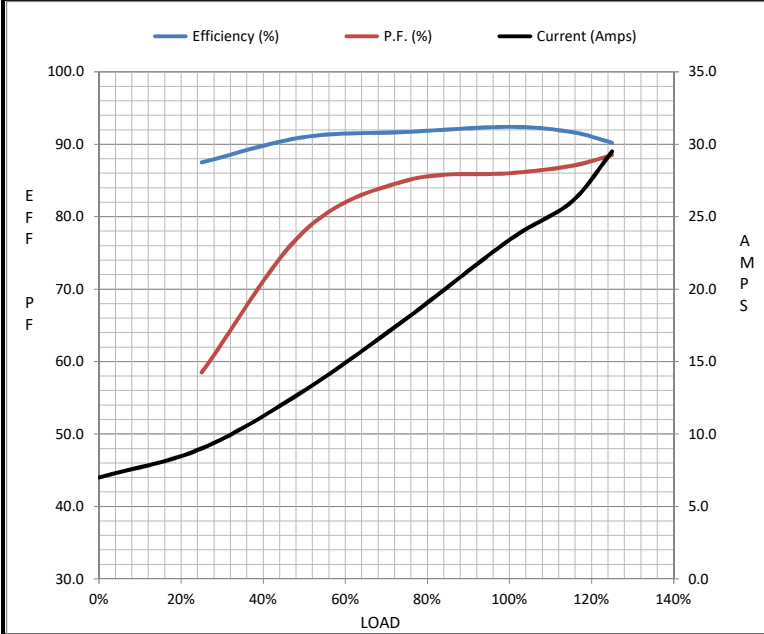
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.0	9.0	13.0	18.0	23.4	26.0	29.5	145
Torque (ft-lb)	0.00	7.5	15.0	22.0	29.7	31.0	37.5	55.0
RPM	3600	3585	3570	3555	3537	3,525	3515	0
Efficiency (%)		87.5	91.0	91.7	92.4	91.7	90.2	
P.F. (%)	10.5	58.5	78.0	85.0	86.0	87.0	88.5	37.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3155	3537	3600
Current (Amps)	145	131	100	23.4	7.0
Torque (ft-lb)	55.0	50.0	84.0	29.7	0.00

Information Block

HP	20.0			
Sync. RPM	3600			
Frame	286			
Enclosure	TEFC			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	1.30 Lb-Ft ²			
Ref Wdg	K256288 R3			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS311055-1425			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2530	0.2230	1.0790	1.1190	37.7720



Speed - Torque Curve

