

# PRODUCT INFORMATION PACKET

Model No: 286TSTDN16033

Catalog No: U442A

30 HP General Purpose Motor, 3 phase, 1800 RPM, 230/460 V, 286TSC Frame, ODP  
Three Phase ODP Motors



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**REGAL**

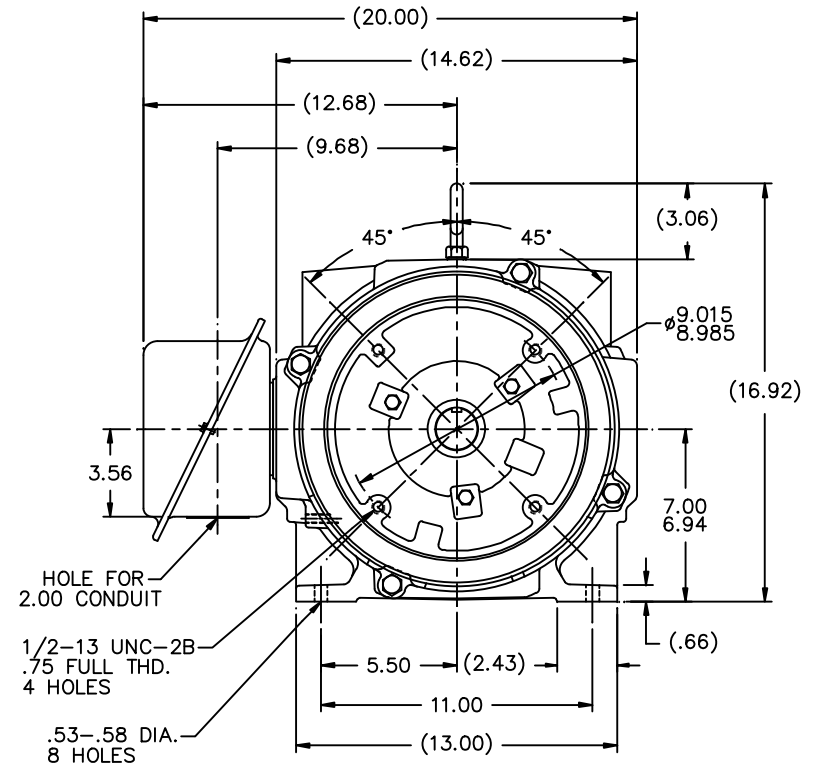
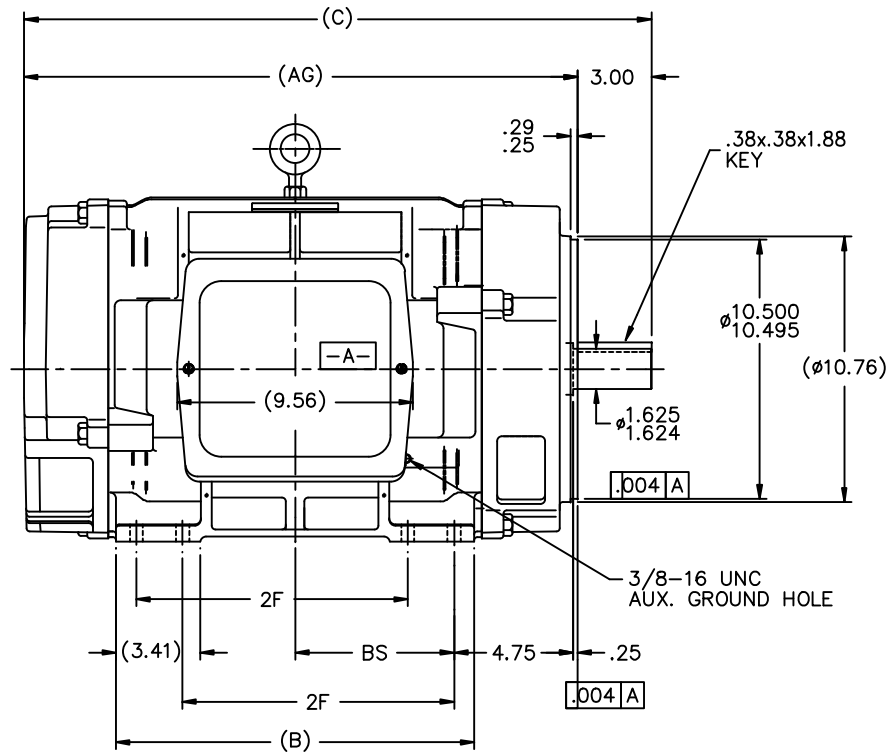
### Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	73.0/36.5 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286TSC	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	Y
CE	Y	IP Code	12

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.22 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	25.44 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-SS207877-1512

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NOTES:

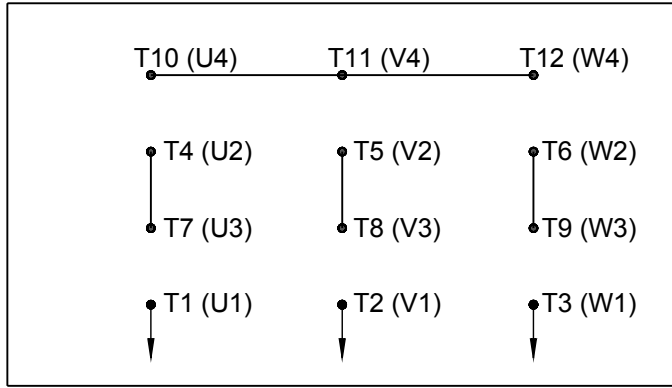
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

DASH	FRAME	B	C	2F	BS	MTG	AG
1325	284TSC	12.63	23.57	9.50	5.50		20.57
1512	286TSC	14.50	25.44	11.00	6.44		22.44

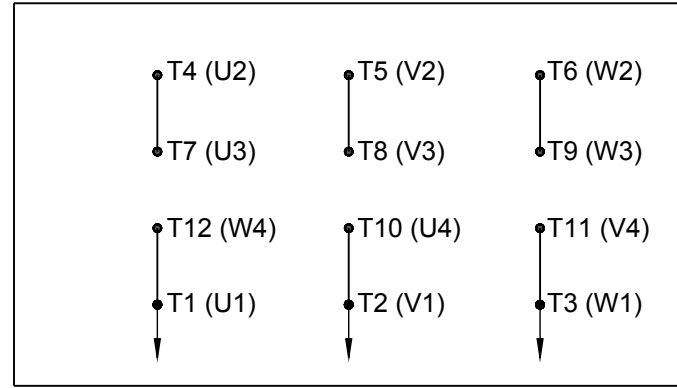
		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN RWR 03/03/2004
		DEC.	INCHES			CHK
		.X	±.1			APPD
		.XX	±.02	TITLE OUTLINE		SCALE 1=5
2	2.00 CONDUIT WAS 1.50 ECN #25435	EMH	.XXX	±.005	280TSC FR. -TS -DR.PR. - CAST IRON	
1	REPLACED D.E. BRKT W/φ10.50 FACE BRKT MU49925	MSG	1/5/2010	MJS	.XXXX	±.0005
NO. REVISION		BY & DATE		CHK	ANG	±7°30'
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	CAD FILE ss207877	
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						SIZE B
						DRAWING NO. SS207877
						PAGE 1 OF 1
						REV. 2

# HIGH VOLTAGE

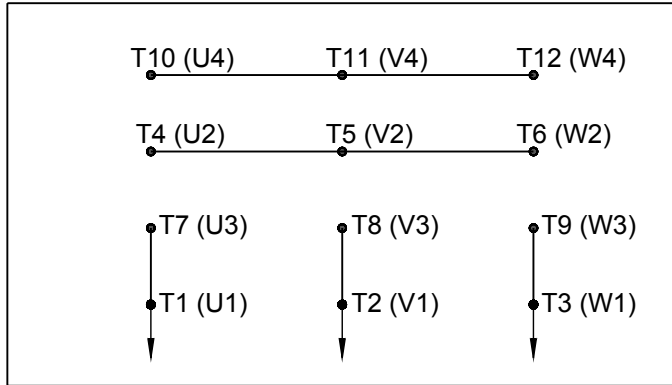
WYE START



DELTA RUN

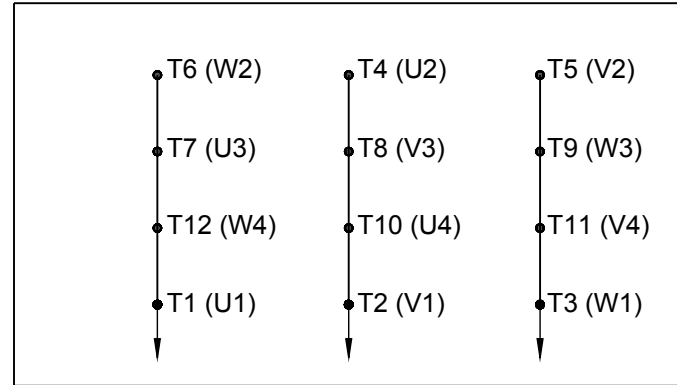


WYE START



# LOW VOLTAGE

DELTA RUN

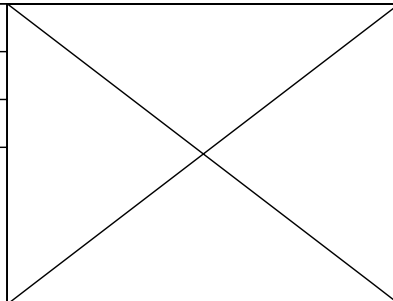


4/2 CKTY  $\triangle$

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**

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DRAWN BY BLR	
DATE 03-09-1998	
APPROVED BY GK	
DATE 03-23-1998	
REFERENCE	

Regal Beloit America, Inc.	
DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b> 12 LEAD - DUAL VOLT. - WYE START - DELTA RUN	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7358</b>
SHEET 1 OF 1	

**CERTIFICATION DATA SHEET**

**Model#:** 286TSTDN16033 AA      **WINDING#:** K2864262 NONE 1  
**CONN. DIAGRAM:** A-EE7358      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS207877-1512

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1775&1475	286TSC	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	73/36.5&75/37 .5	PWS & YDRUN OR INV	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&93	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&82	3/4 LOAD PF: 77	1/2 LOAD PF: 66.5	93.6	SQ CAGE INV RATED	31 / 15.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	434 / 217	165 LB-FT 185	240 LB-FT 270	25

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	4.7 LB-FT^2	- LB-FT^2	20 SEC.	-	460 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	NONE	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	6209						

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 10:1
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
NONE FT-LB NONE V NONE Hz

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DATE: 06/27/2017 01:52:38 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



286TSTDN16033

Submittal

Data @ 460 V

Motor Load Data

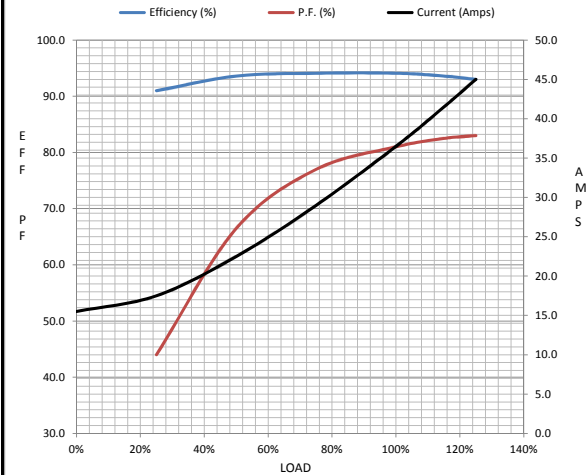
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	15.5	17.5	22.5	29.0	36.5	41.5	45.0	217
Torque (ft-lb)	0.00	22.0	44.0	66.5	89.0	100	112	165
RPM	1800	1795	1785	1780	1775	1,770	1765	0
Efficiency (%)		91.0	93.6	94.1	94.1	93.6	93.0	
P.F. (%)	4.0	44.0	66.5	77.0	81.0	82.5	83.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	217	190	125	36.5	15.5
Torque (ft-lb)	165	145	240	89.0	0.00

Information Block

HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	DP			
Construction	TDN			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	25 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.7 Lb-Ft <sup>2</sup>			
Ref Wdg	K2864262 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS207877-1512			
Conn. Diag	A-EE7358			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1320	0.1090	0.7100	0.8750	16.8100



Speed -Torque Curve

