

# PRODUCT INFORMATION PACKET

Model No: 254TTTNA16545

Catalog No: U1871

XRI®-SD Severe Duty Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
254TV Frame, TEAO



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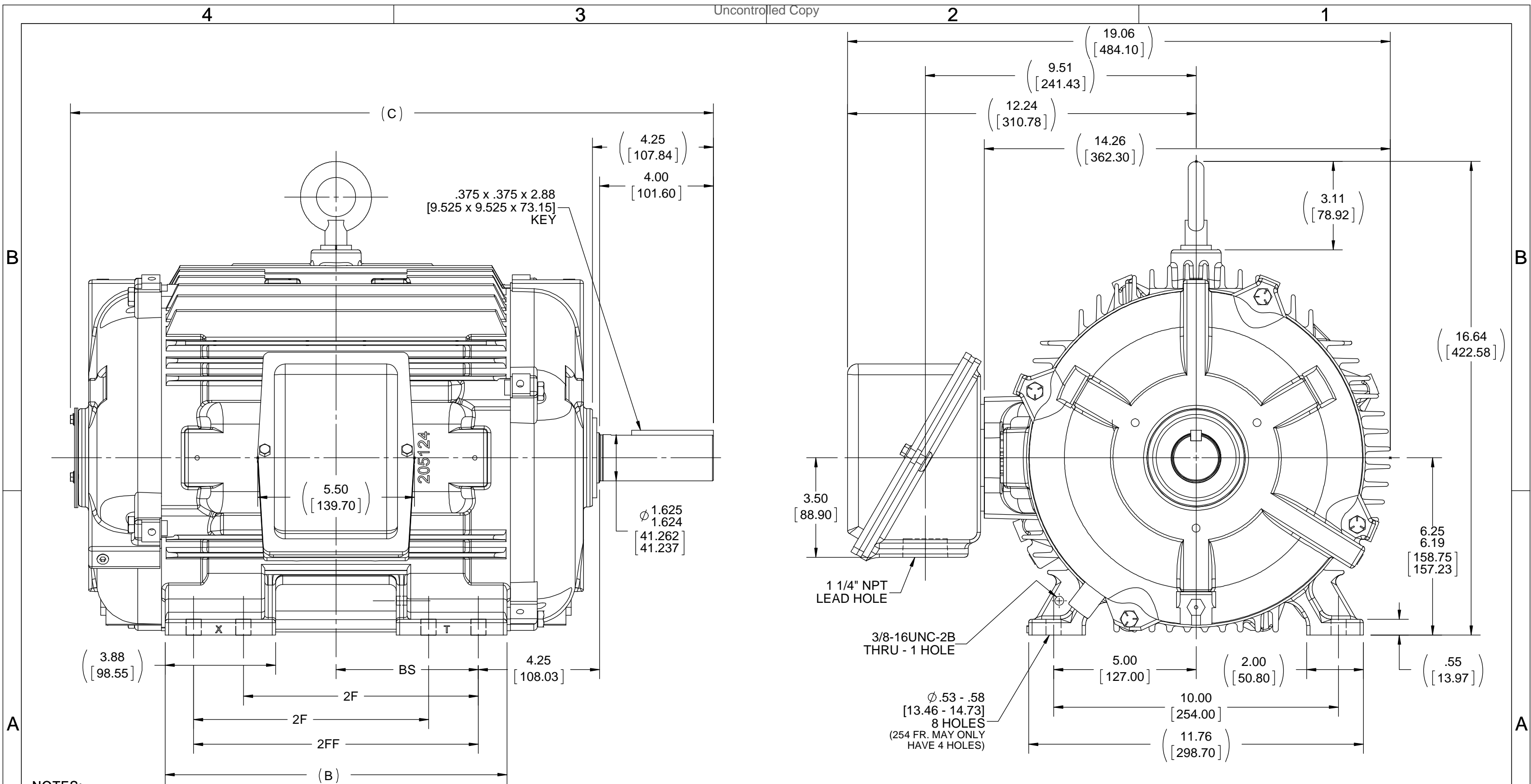
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>15 &amp; 10 Hp</b>
Output KW	<b>11.2 &amp; 7.5 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1775 &amp; 1478 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>254TV</b>	Enclosure	<b>Totally Enclosed Air Over</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>92.4 &amp; 91.7 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>37.5/18.8 &amp; 31/15.5 A</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.649 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal Or Up Or Down</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>20.61 in</b>
Frame Length	<b>10.50 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4.25 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 20:1</b>		
Outline Drawing	<b>B-SS203092-1050</b>	Connection Drawing	<b>A-EE7308</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. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 4. DIMENSIONS IN [ ] ARE IN MILLIMETERS.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	20.83 [529.08]	8.25 [209.55]	---	4.12 [104.65]
1225	254/256T	12.00 [304.80]	22.58 [573.53]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION D	REVISION BY JJB	DATE 09-20-2017
ECO ECO-0130892	APPROVED BY DJK	DATE 09-20-2017
ECO DESCRIPTION <b>UPDATED FRAME</b>		
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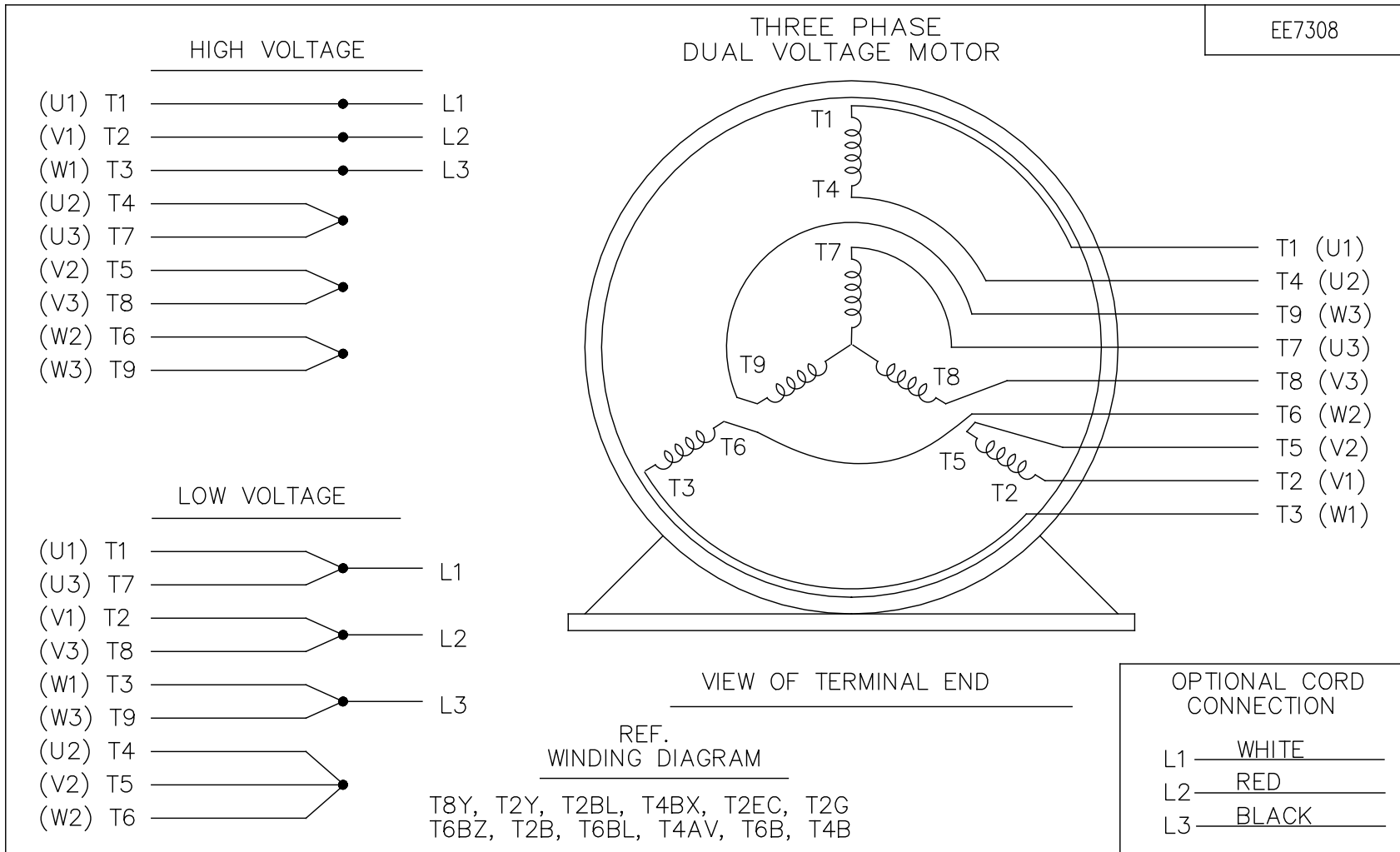
TOLERANCES UNLESS OTHERWISE SPECIFIED:

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 [.076/.381] X 45°  
 CORNER FILLETS: R.02 [.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY BLR	DATE 04-26-1996
APPROVED BY BW	DATE 04-24-1996
REFERENCE	
THIRD ANGLE PROJECTION	

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 250T FR. - TENV - BB - STD	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS203092</b>
	SHEET 1 OF 1



NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							DIST WP					

**CERTIFICATION DATA SHEET**

**Model#:** 254TTTNA16545 AA      **WINDING#:** K2564165 R32 1  
**CONN. DIAGRAM:** A-EE7308      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS203092-1050

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15&10	11.2&7.5	1800	1775&1478	254TV	TEAO	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	37.5/18.8&31/ 15.5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 92.4&91.7	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81&79	3/4 LOAD PF: 78	1/2 LOAD PF: 68	91	SQ CAGE INV RATED	15.6 / 7.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.4 LB-FT	220 / 110	85 LB-FT 191	125 LB-FT 282	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	2.4 LB-FT^2	110 LB-FT^2	25 SEC.	2	310 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL OR UP OR DOWN	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	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: CONSTANT 20:1
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: 06/21/2017 10:59:48 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

**Data Sheet**

**Date:** 20-06-2017  
**Customer:** \_\_\_\_\_  
**Attention:** \_\_\_\_\_  
**Submitted by:** FAREEDA DUDEKULA



254TTTNA16545

**Submittal**  
 Data @ **460 V**

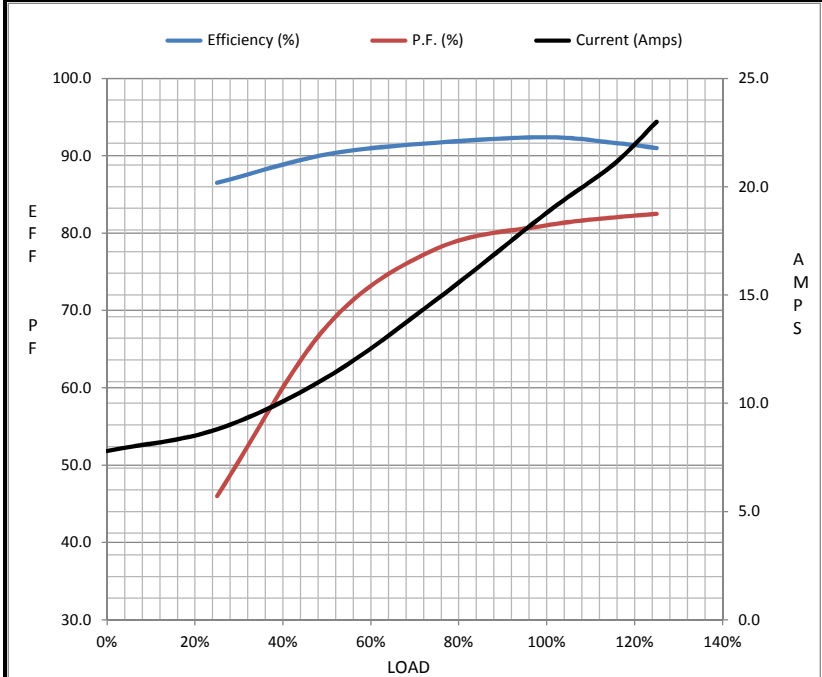
**Motor Load Data**

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.8	8.8	11.2	14.8	18.8	21.0	23.0	110
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.4	50.5	56.0	85.0
RPM	1800	1792	1790	1780	1775	1,770	1765	0
Efficiency (%)		86.5	90.2	91.7	92.4	91.7	91.0	
P.F. (%)	11.5	46.0	68.0	78.0	81.0	82.0	82.5	40.0

**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	110	95.0	69.0	18.8	7.8
Torque (ft-lb)	85.0	75.0	125	44.4	0.00

Information Block				
HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TEAO			
Construction	TTN			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	0 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.40 Lb-Ft <sup>2</sup>			
Ref Wdg	K2564165 R32			
Sound Pressure @ 1M	999 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS203092-1050			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3760	0.2380	1.3510	1.7770	32.5080



**Speed - Torque Curve**

