

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 324TSTGS6501

Catalog No: E566

Hazardous Duty® Explosion Proof Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 324TS Frame, EPFC



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**RegalRexnord**

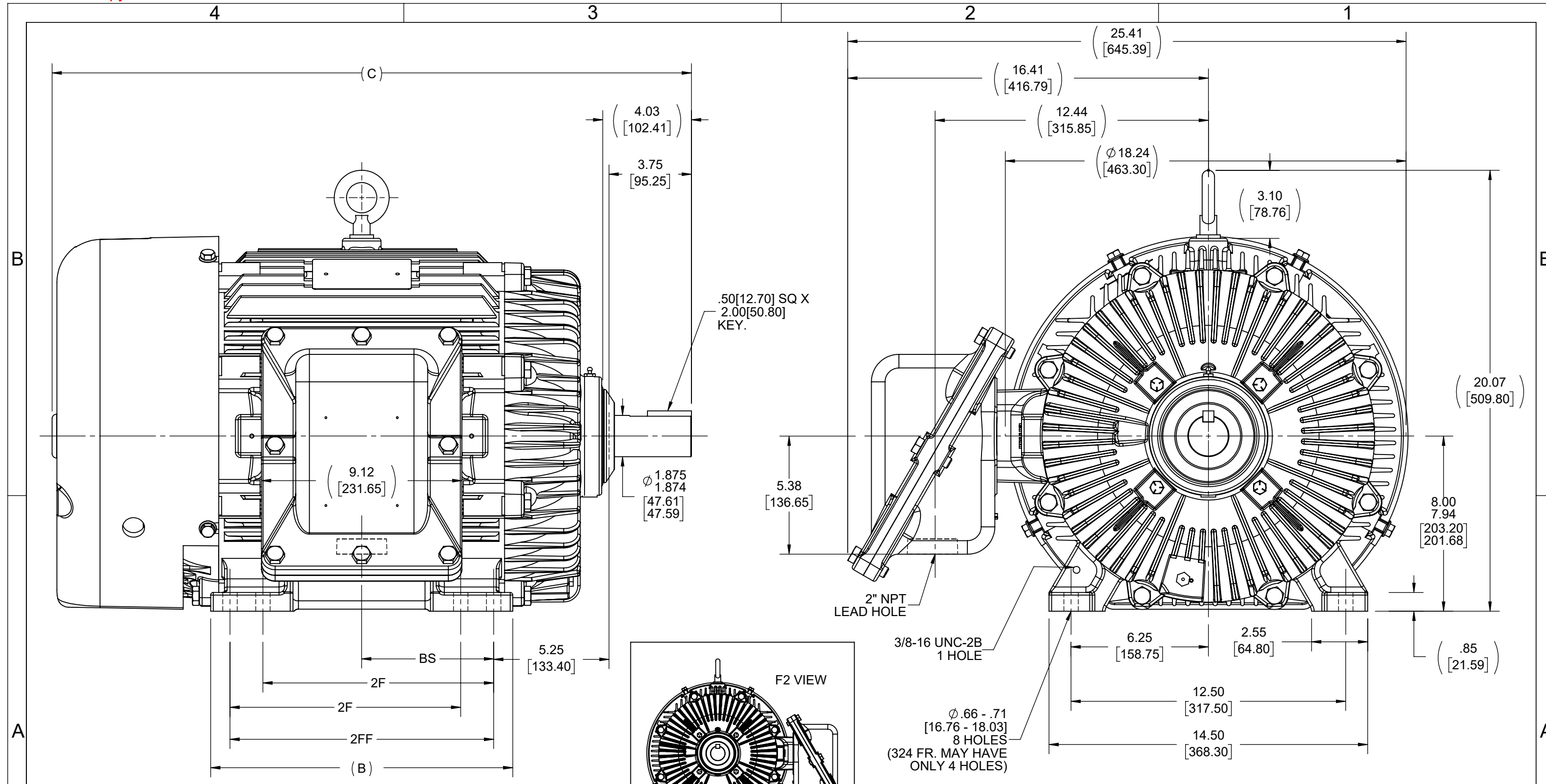
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>40 &amp; 30 Hp</b>
Output KW	<b>30.0 &amp; 22.4 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>3545 &amp; 2955 rpm</b>	Service Factor	<b>1.00 &amp; 1.00</b>
Frame	<b>324TS</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>93.6 &amp; 94.1 %</b>
Ambient Temperature	<b>50 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>94/47 &amp; 83/41.5 A</b>	Power Factor	<b>85</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>6312</b>	Opp Drive End Bearing Size	<b>6311</b>
UL	<b>UL Listed And CSA Certified</b>	CSA	<b>Y</b>
CE	<b>N</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.122 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>28.87 in</b>
Frame Length	<b>13.00 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>4 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Connection Drawing	<b>A-EE7308AD</b>	Outline Drawing	<b>B-SS28118-1300</b>

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NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

1150	324TS	27.60 [701.04]	13.00 [330.20]	---	10.50 [266.70]	5.25 [133.35]
1300	324/326TS	29.10 [739.06]	13.75 [349.25]	10.50 [266.70]	12.00 [304.80]	6.00 [152.40]
1450	326TS	30.60 [777.25]	15.00 [381.00]	12.00 [304.80]	13.50 [342.90]	6.75 [171.45]
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION L	REVISION BY MJ	REV DATE/© DATE 11/14/2022
REQUEST NUMBER CR-0011131	APPROVED BY CHRIS	DATE 11/14/2022
REQUEST NUMBER DESCRIPTION OUTLINE DRAWING IS UPDATED WITH NEW FRAME.		
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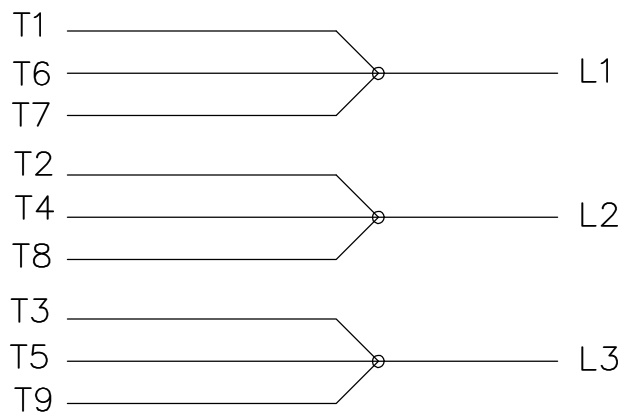
TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7° 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

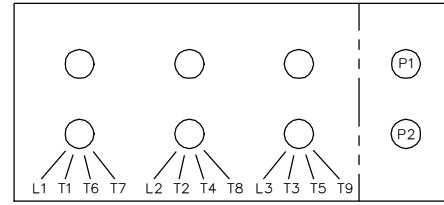
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.08/.38] X 45°  
 CORNER FILLETS: R.02 [5]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY MRB	Regal Rexnord Regal Beloit America, Inc.	
DATE 09-06-1995	DESCRIPTION OUTLINE	
APPROVED BY GK	320TS FR. - EPFC - BB	
DATE 09-06-1995	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS28118
THIRD ANGLE PROJECTION	SHEET 1 OF 1	

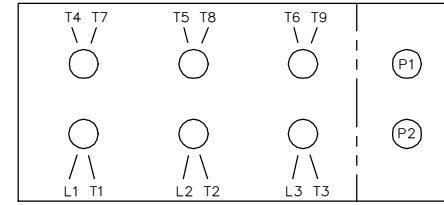
LOW VOLTAGE



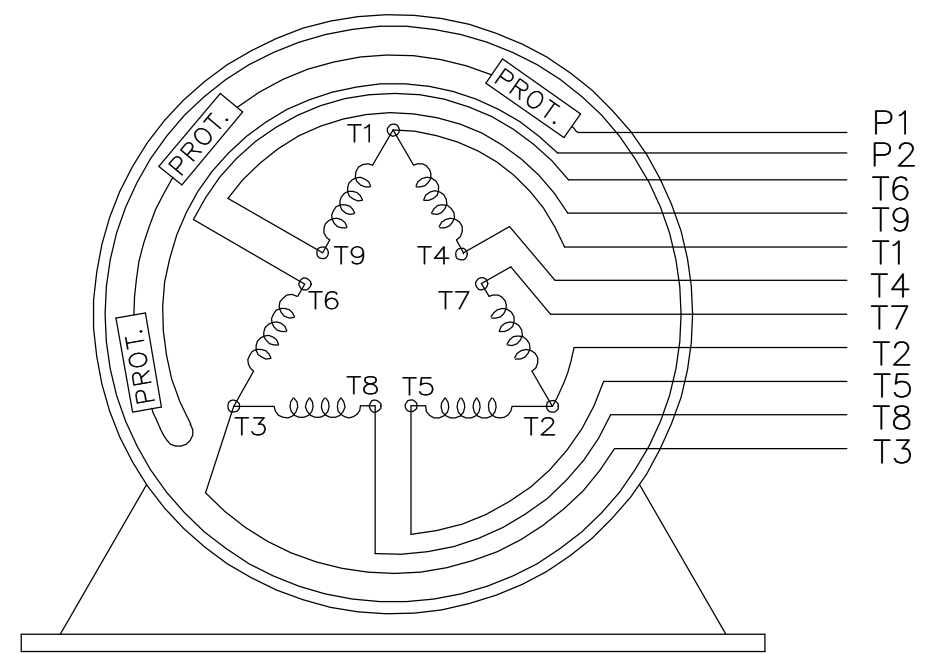
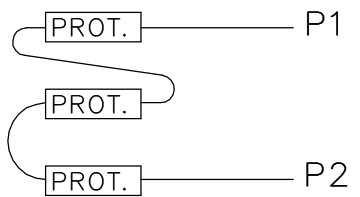
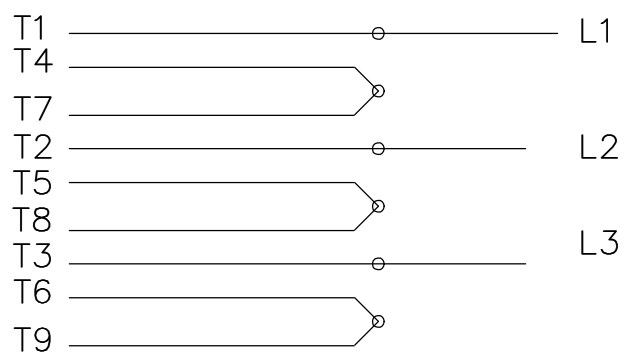
LOW VOLTAGE



HIGH VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

DRAWING REVISION <b>L</b>	REVISION BY <b>JP</b>	REV DATE/© DATE <b>06-21-2019</b>	TOLERANCES (EXCEPT AS NOTED): DEC. .X ±0.1 [±3] .XX ±0.02 [±0.5] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: 200/ 5.1 INCH/mm mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY <b>MJD</b>	Regal Beloit America, Inc.	
ECO <b>ECO-0168744</b>	APPROVED BY <b>MH</b>	DATE <b>06-21-2019</b>		DATE <b>12-19-1997</b>		
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>			DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b>	APPROVED BY <b>GK</b>	MATERIAL	PROCESS/FINISH
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			THIRD ANGLE PROJECTION			



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Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



324TSTGS6501

Submittal

Data @ 460 V

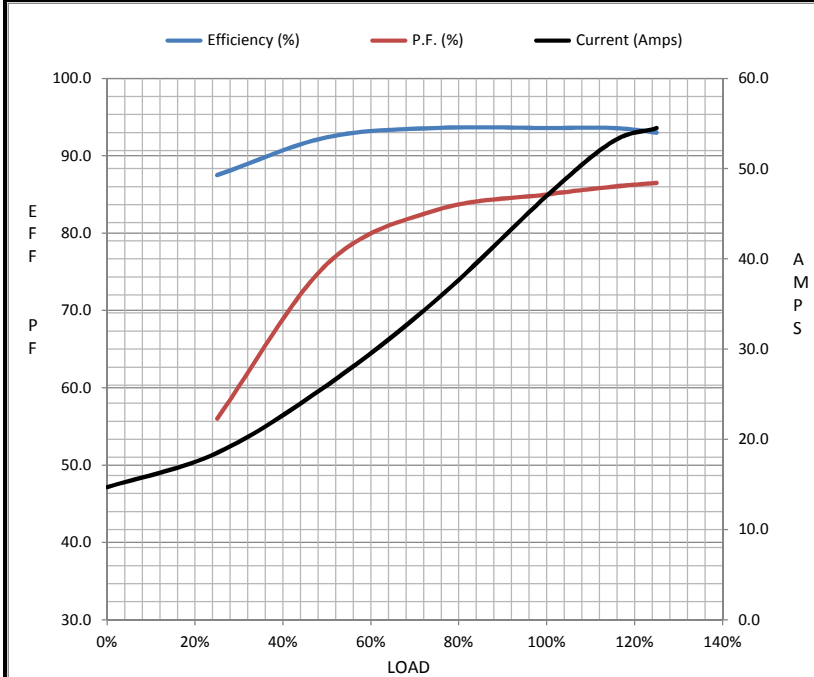
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.7	18.5	26.0	35.5	47.0	53.0	54.5	275
Torque (ft-lb)	0.00	14.5	29.5	44.0	59.5	68.5	74.5	91.5
RPM	3600	3590	3575	3560	3545	3,540	3530	0
Efficiency (%)		87.5	92.4	93.6	93.6	93.6	93.0	
P.F. (%)	9.3	56.0	76.0	83.0	85.0	86.0	86.5	29.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3300	3545	3600
Current (Amps)	275	248	172	47.0	14.7
Torque (ft-lb)	91.5	82.0	157	59.5	0.00

Information Block				
HP	40.0			
Sync. RPM	3600			
Frame	324			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/38(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	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	4.9 Lb-Ft <sup>2</sup>			
Ref Wdg	324248 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS28118-1300			
Conn. Diag	A-EE7308AD			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0750	0.0720	0.6480	0.4750	18.6730



Speed - Torque Curve

