marathon®

Vertical Pump Motors

Model No: 444TTDN16078
Catalog No: M747

Vertical Pump Motor, 100 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 444HPV Frame, DP

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Product Information Packet: Model No: 444TTDN16078, Catalog No: M747 Vertical Pump Motor, 100 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 444HPV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**100 Hp**
Output KW	**75.0 kW**	Voltage	**230/460 V**
Speed	**1190 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**444HPV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**95 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**246.0/123.0 A**
Power Factor	**80**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6318**
Opp Drive End Bearing Size	**7316**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**12**	Number of Speeds	**1**

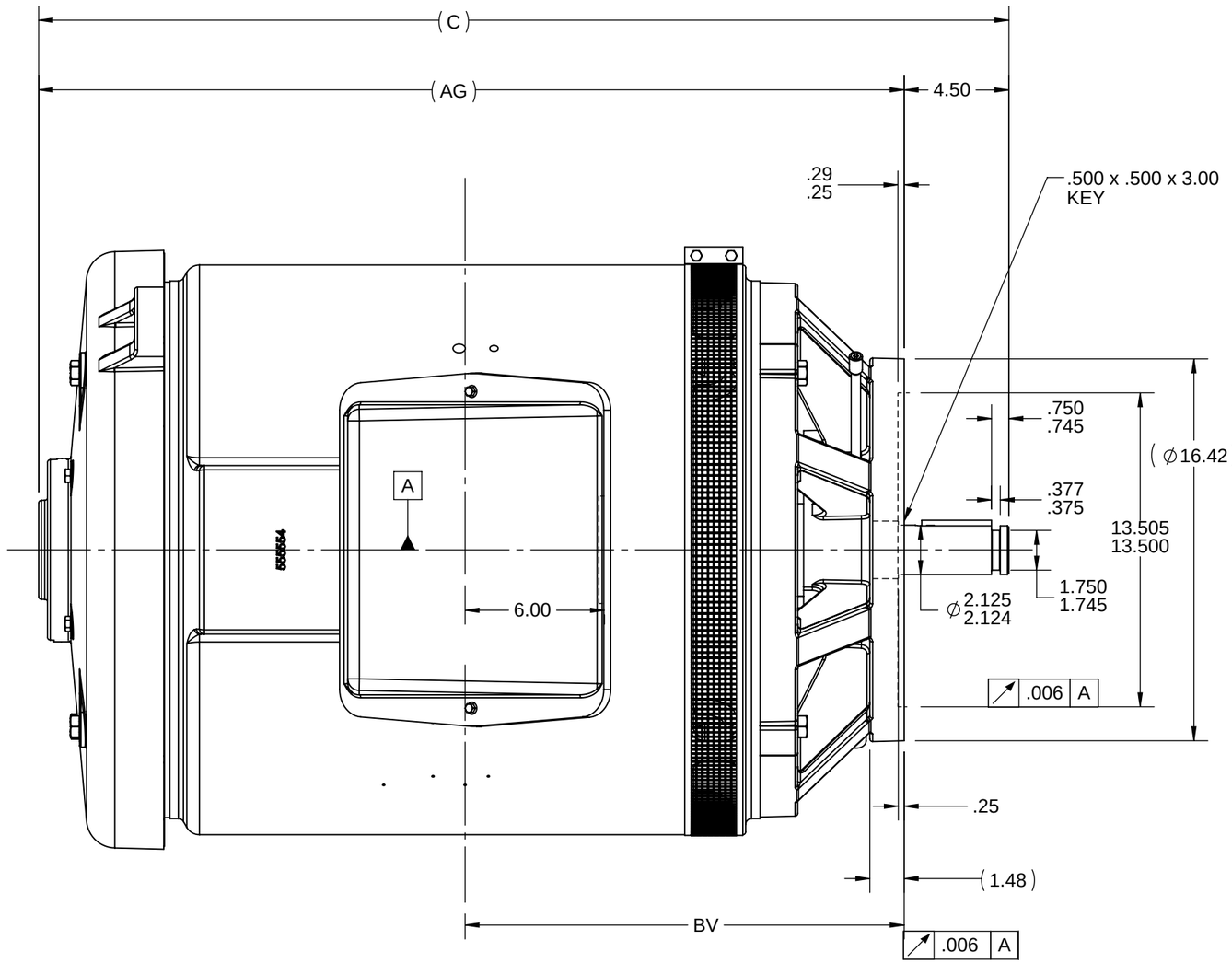
Technical Specifications

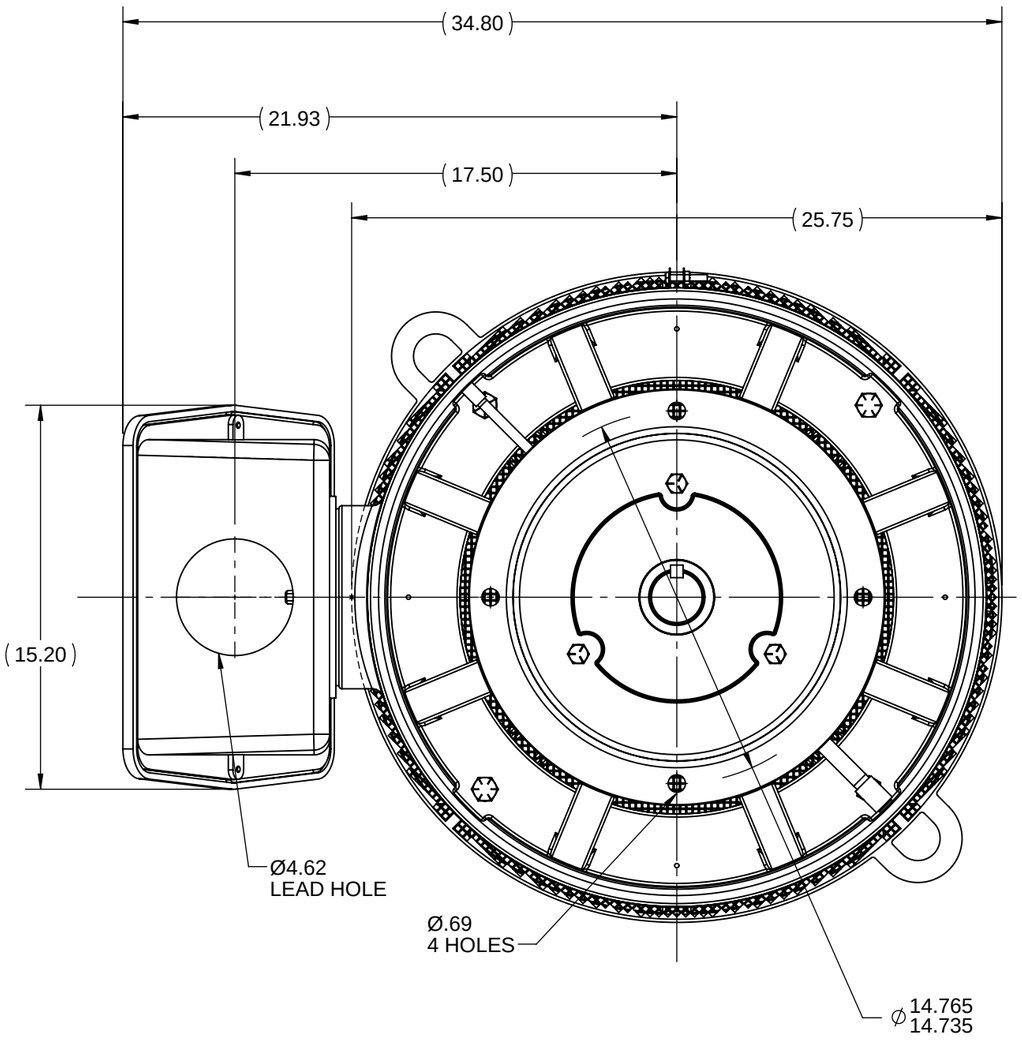
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.046 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Double Angular Contact**	Frame Material	**Cast Iron**
Shaft Type	**HP**	Overall Length	**41.72 in**
Frame Length	**25.38 in**	Shaft Diameter	**2 1/8 in**
Shaft Extension	**4.5 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**EE7308K**	Outline Drawing	**B-SS555833-2538**

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NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS
2. NAMEPLATES TO BE READ FROM SHAFT EXTENSION END OF MOTOR

DASH	FRAME	C	AG	BV
2538	444/5PV	41.72	37.22	18.88

DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SV	05/22/2026
REQUEST NUMBER	APPROVED BY	DATE
CR-0026372	RMS	05/22/2026

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±0.5°
.XX	±0.01	[±0.3]	
.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: 125/ 3.2/ INCH mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	TJW
DATE	07-16-2013
APPROVED BY	DJK
DATE	07-19-2013
REFERENCE	
THIRD ANGLE PROJECTION	

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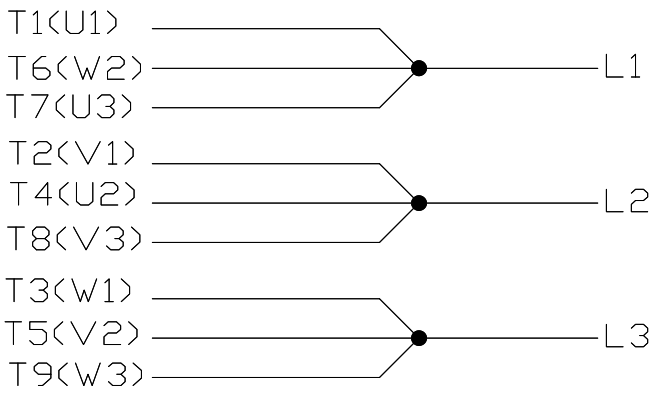
DESCRIPTION
OUTLINE
444/5PV FR. -DR.PR. -P'BASE

MATERIAL	PROCESS/FINISH

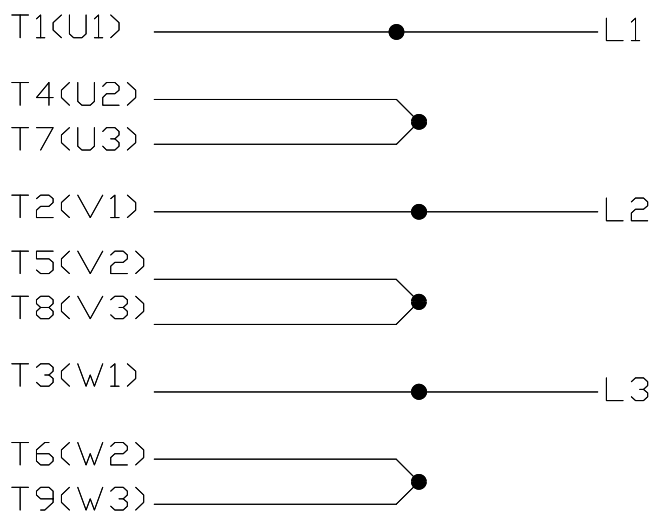
SIZE	DRAWING NUMBER	SHEET
B	SS555833	1 OF 1

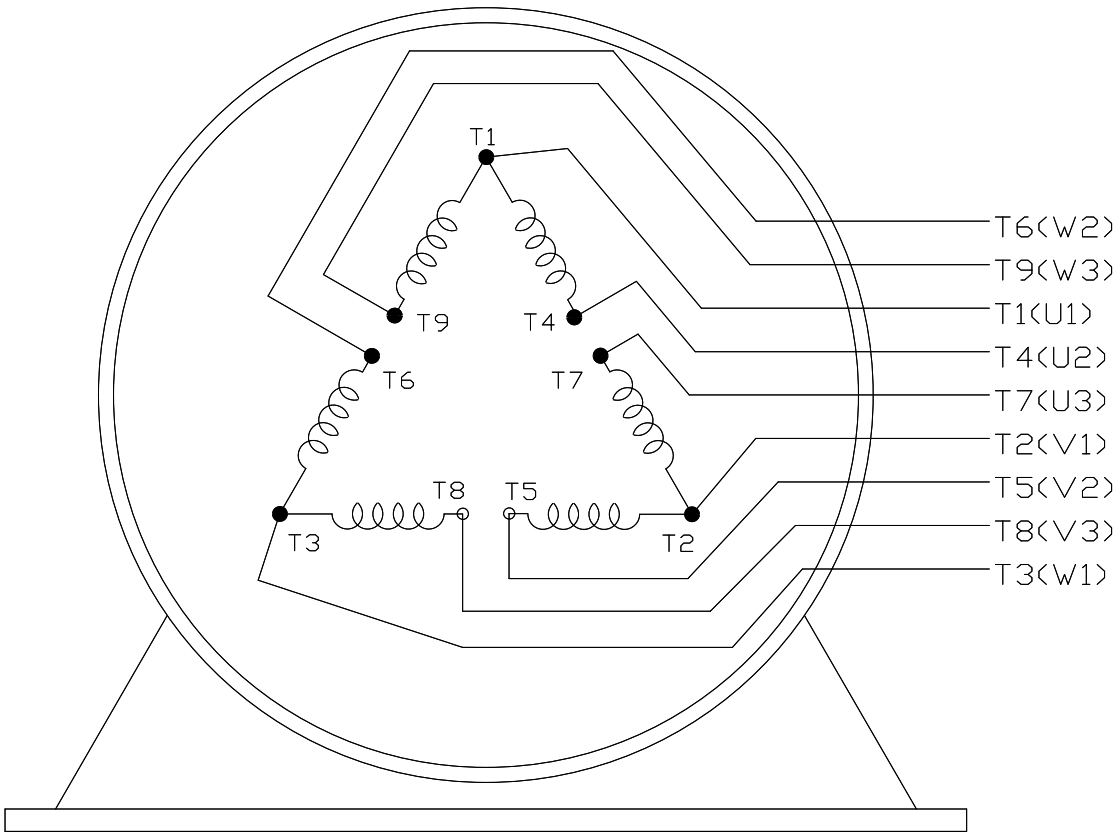
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LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

DRAWING REVISION: F	REVISION BY: SB	REV DATE/ © DATE: 08/01/2025	DRAWN BY: PGK	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025	DATE: 06/04/1997	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED			APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL DELTA CON. - 3ø - 9 LEADS
			DATE: 06/15/1997	
			REFERENCE	MATERIAL / PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7308K / SHEET: 1 OF 1

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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

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Data Sheet

Date: 1/28/2019
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

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444TTDN16078

Submittal

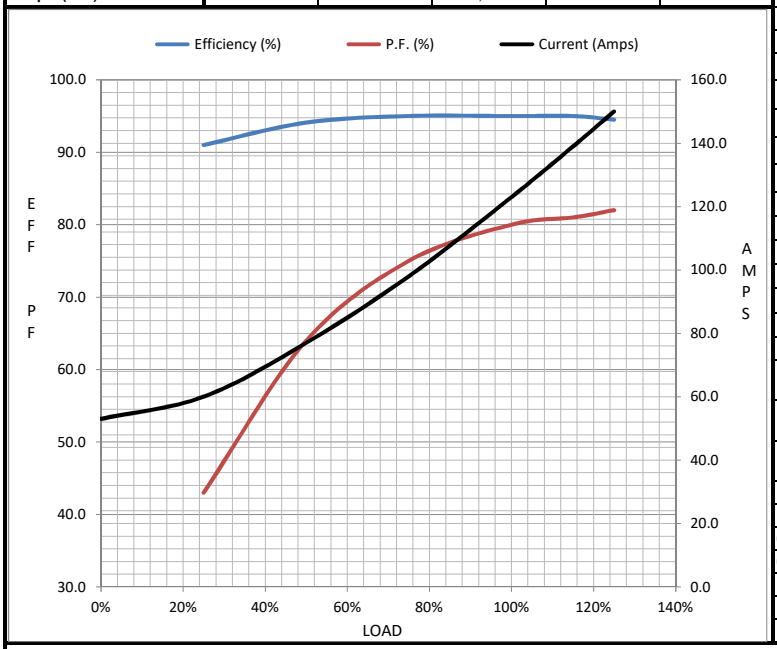
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	53.0	60.0	77.0	98.0	123	139	150	725	
Torque (ft-lb)	0.00	110	220	331	442	508	554	750	
RPM	1200	1197	1195	1192	1190	1,188	1186	0	
Efficiency (%)		91.0	94.1	95.0	95.0	95.0	94.5		
P.F. (%)	4.0	43.0	64.0	75.0	80.0	81.0	82.0	29.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1190	1200
Current (Amps)	725	600	425	123	53.0
Torque (ft-lb)	750	525	1,100	442	0.00



Information Block

HP	100.0	
Sync. RPM	1200	
Frame	444	
Enclosure	DP	
Construction	TDN	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	55.0	Lb-Ft²
Ref Wdg	T4446118 NONE	
Sound Pressure @ 1M	76	dBA
VFD Rating	NONE	
Outline Dwg	B-SS555833-2538	
Conn. Diag	A-EE7308K	

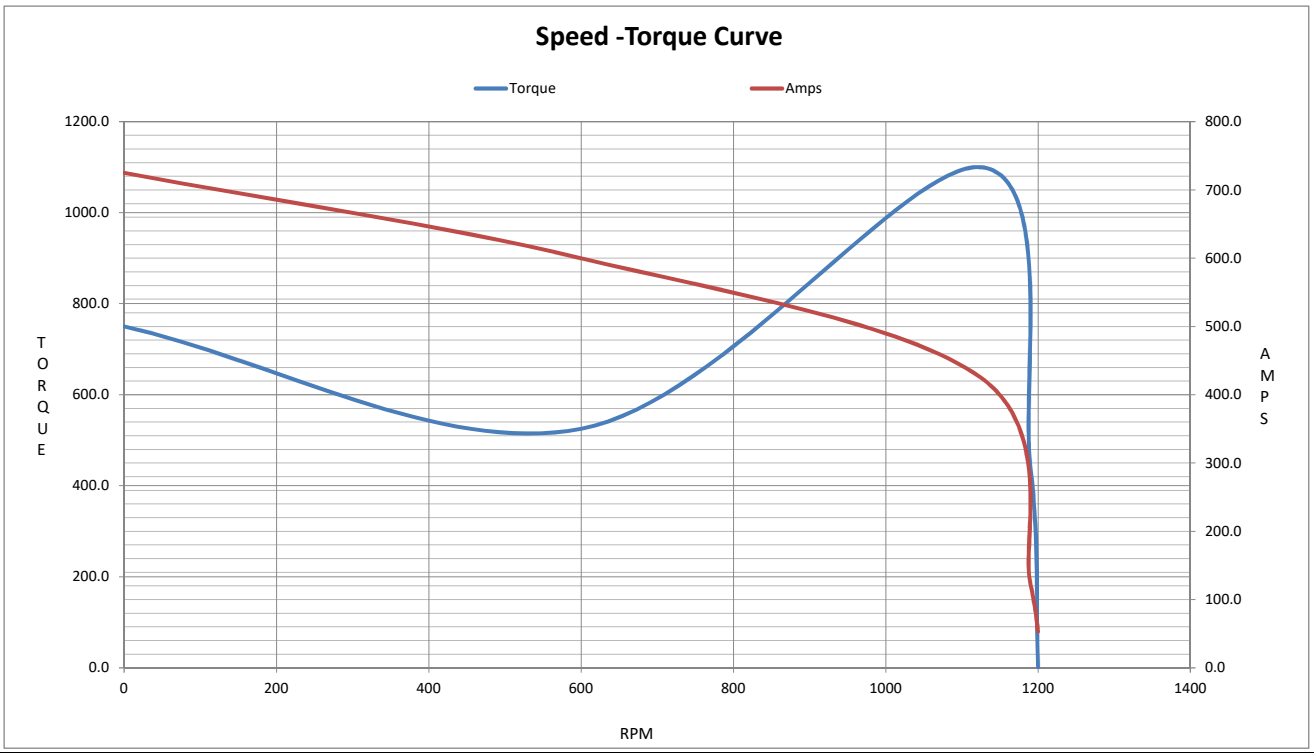
Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0330	0.0200	0.2360	0.2780	4.8760



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CERTIFICATION DATA SHEET

Model#:	444TTDN16078 AA	**WINDING#:**	T4446118 NONE 1
CONN. DIAGRAM:	A-EE7308K	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS555833-2538		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75	1200	1190	444HPV	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	246/123	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 94	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 75	1/2 LOAD PF: 64	94.5	SQ CAGE IND RUN	106 / 53

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
442 LB-FT	1450 / 725	750 LB-FT 168	1100 LB-FT 248	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
76 dBA	86 dBA	55 LB-FT^2	1700 LB-FT^2	20 SEC.	2	1600 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	DOUBLE ANGULAR CONTACT	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6316						

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: 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

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