marathon®

Vertical Pump Motors

Model No: 284TTDN16087
Catalog No: M715

Vertical Pump Motor, 15 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 284HPV Frame, DP

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Product Information Packet: Model No: 284TTDN16087, Catalog No: M715 Vertical Pump Motor, 15 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 284HPV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**15 Hp**
Output KW	**11.2 kW**	Voltage	**230/460 V**
Speed	**1178 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**284HPV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**91.7 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**41.0/20.4 A**
Power Factor	**75**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6311**
Opp Drive End Bearing Size	**7311**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**23**	Number of Speeds	**1**

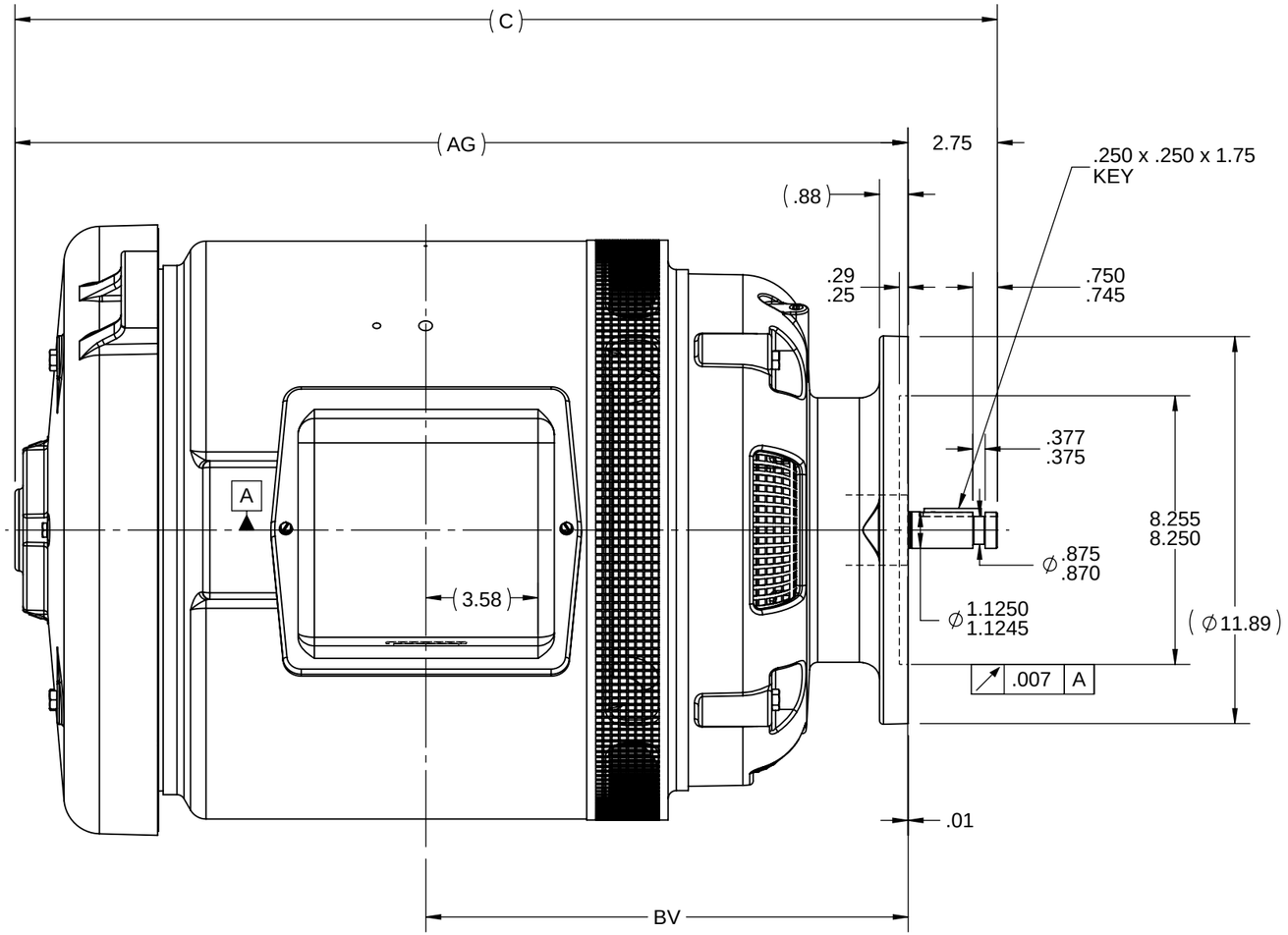
Technical Specifications

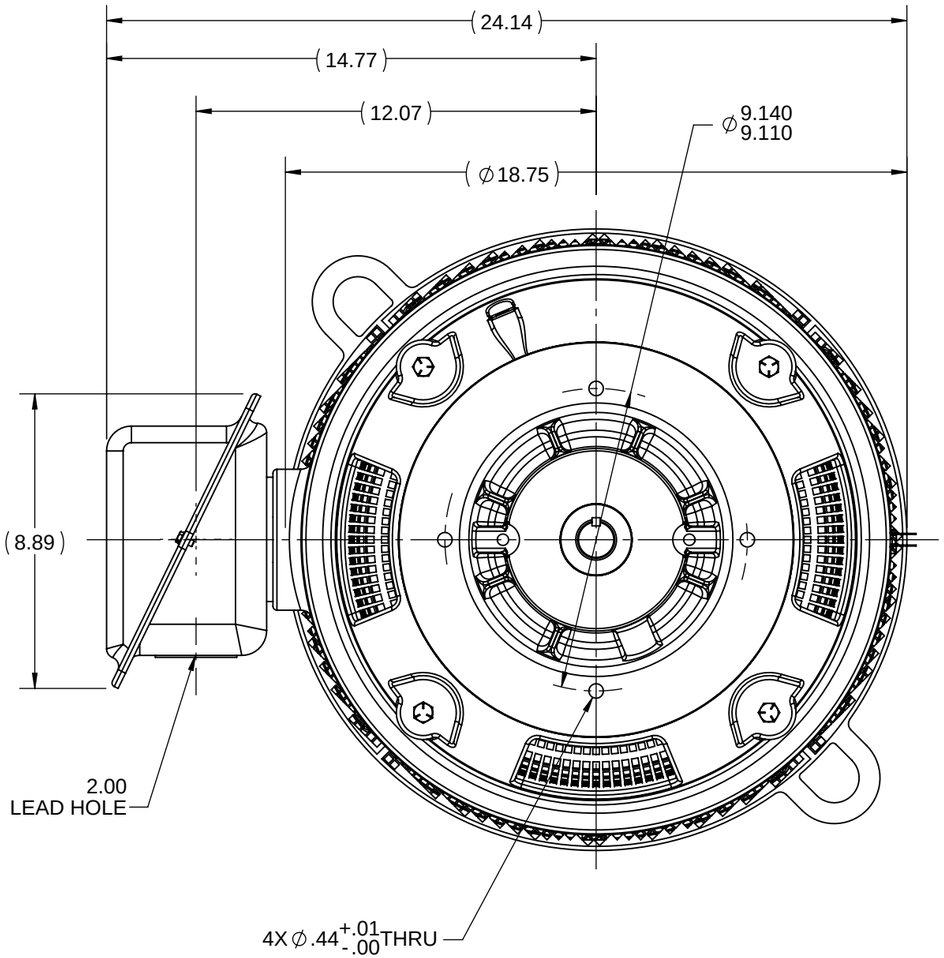
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.5026 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Duplex Tandem Angular Contact**	Frame Material	**Cast Iron**
Shaft Type	**HP**	Overall Length	**30.18 in**
Frame Length	**16.12 in**	Shaft Diameter	**1 1/8 in**
Shaft Extension	**2.75 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**EE7308**	Outline Drawing	**SS312773-1612**

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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	BV	AG
1612	284/6HP	30.18	14.81	27.43

DRAWING REVISION	REVISION BY	REV DATE/© DATE
B	SB	05/27/2026
REQUEST NUMBER	APPROVED BY	DATE
CR-0026372	RMS	05/27/2026

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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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 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	LPC
DATE	04-21-2016
APPROVED BY	TB
DATE	04-21-2016
REFERENCE	

marathon™

DESCRIPTION
OUTLINE
280 HP FR. - P'BASE - VERT. DR.PR.

MATERIAL | PROCESS/FINISH

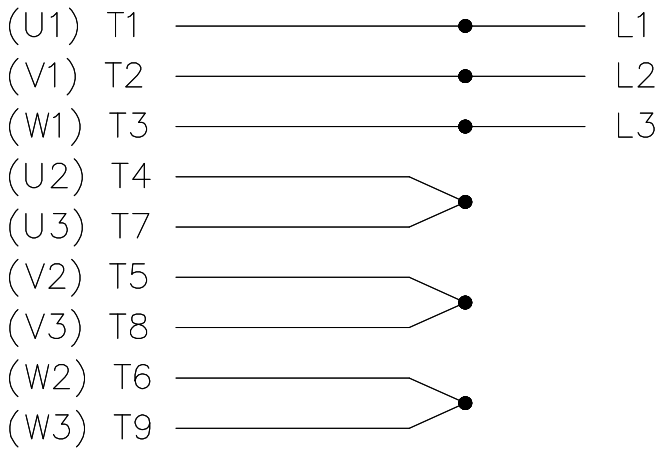
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS312773	1 OF 1

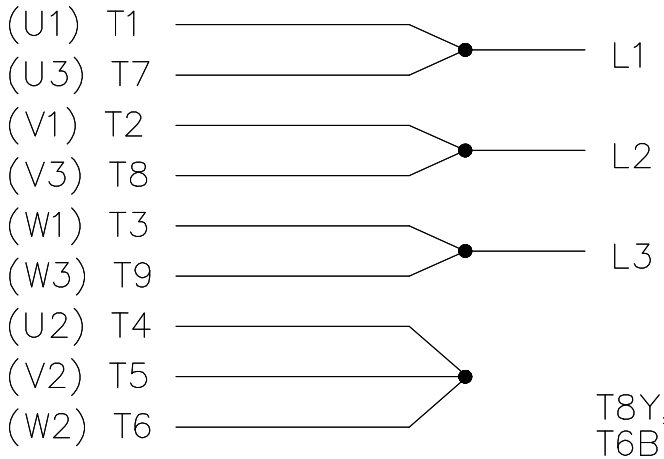
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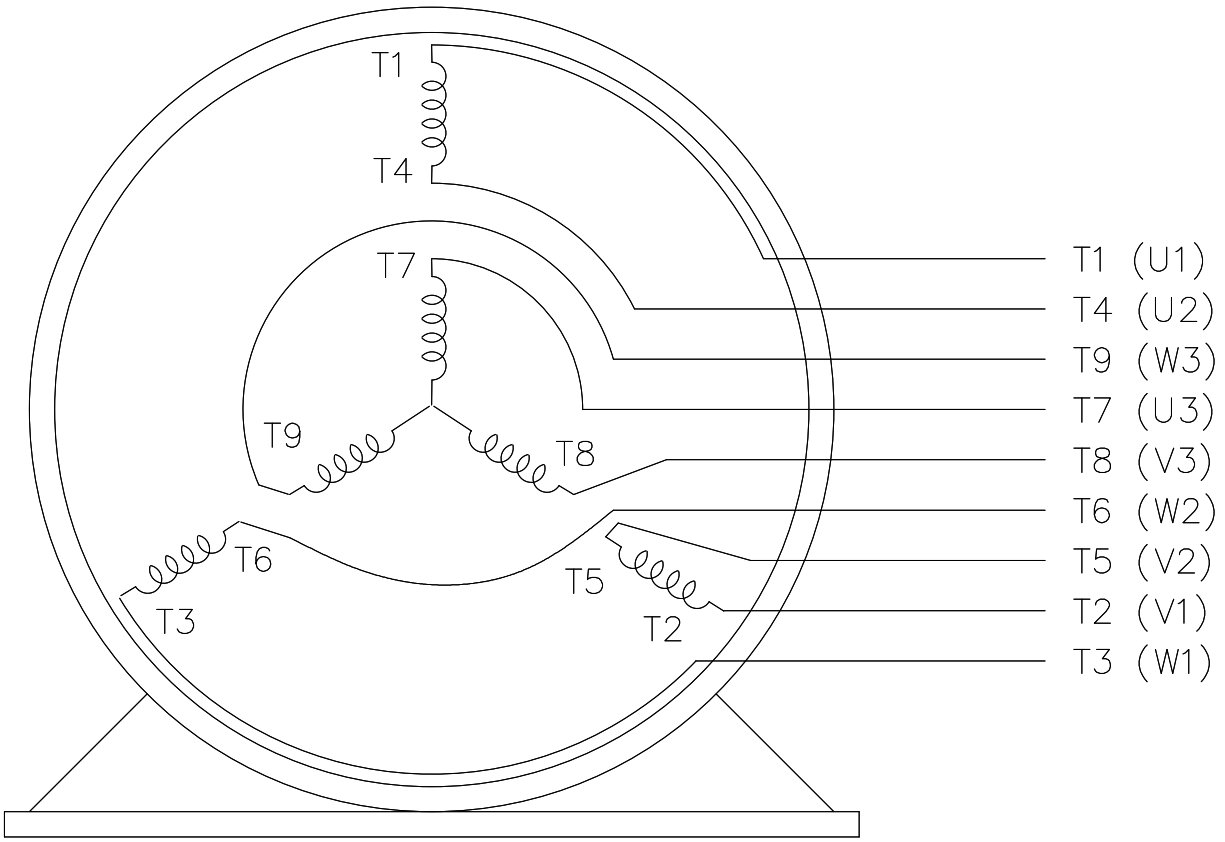
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE





VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION: J	REVISION BY: SB	REV DATE/ © DATE: 08/01/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025

REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED

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

DRAWN BY: RM	
DATE: 11/20/1990	
APPROVED BY: SAS	
DATE: 04/24/2003	
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	4 of 7 EE7308	1 OF 1

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Data Sheet

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

marathon® Motors

284TTDN16087

Submittal

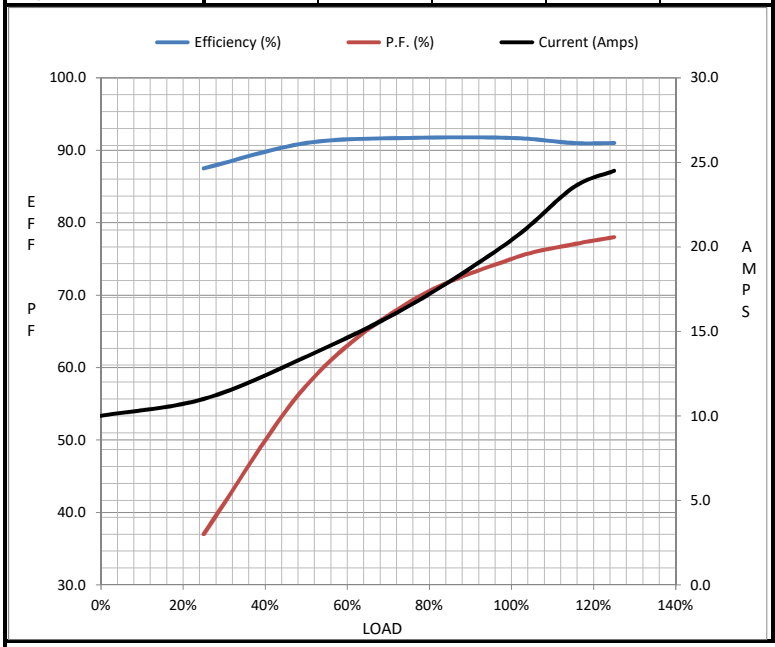
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.0	11.0	13.5	16.5	20.4	23.5	24.5	116	
Torque (ft-lb)	0.00	16.5	33.0	59.0	66.5	77.0	84.0	120	
RPM	1200	1194	1190	1184	1178	1,174	1172	0	
Efficiency (%)		87.5	91.0	91.7	91.7	91.0	91.0		
P.F. (%)	5.1	37.0	57.5	69.0	75.0	77.0	78.0	35.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	700	1085	1178	1200
Current (Amps)	116	110	75.5	20.4	10.0
Torque (ft-lb)	120	115	193	66.5	0.00



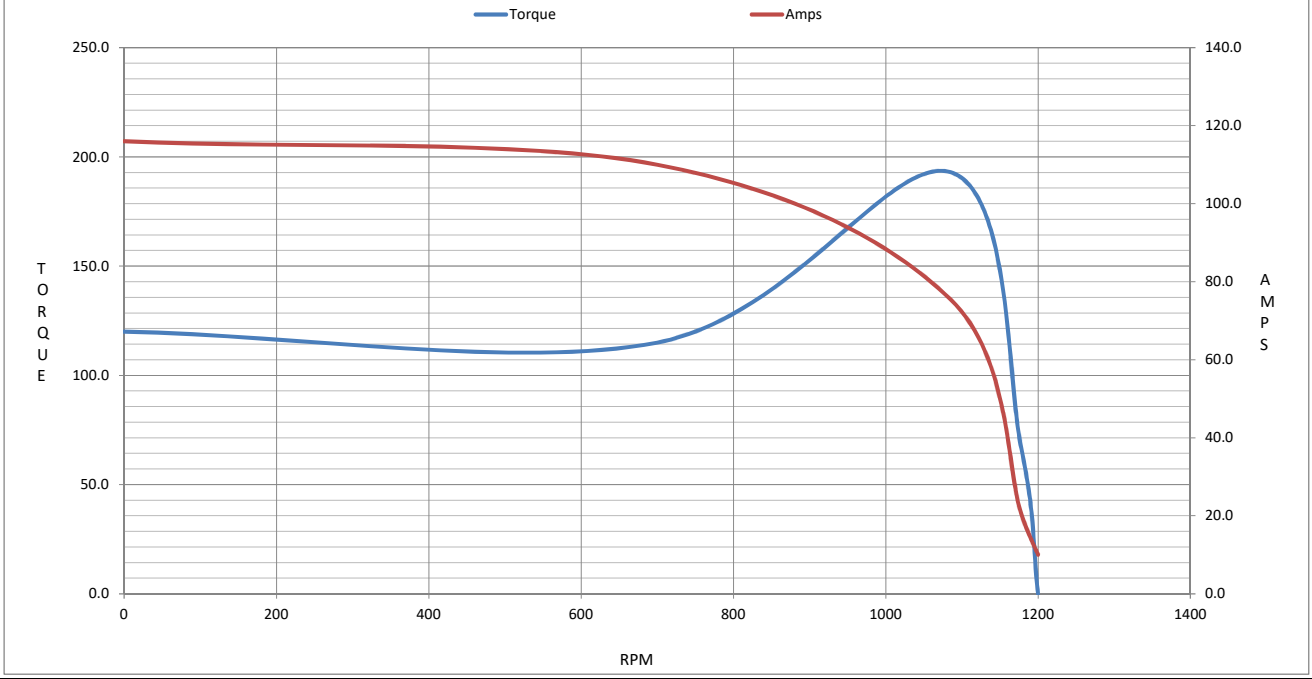
Information Block

HP	15.0	
Sync. RPM	1200	
Frame	284	
Enclosure	DP	
Construction	TDS	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	30	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	4.1	Lb-Ft²
Ref Wdg	284667 NONE	
Sound Pressure @ 1M	66	dBA
VFD Rating	NONE	
Outline Dwg	B-SS312773-1612	
Conn. Diag	A-EE7308	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3580	0.3580	1.8640	2.0430	28.8150

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	284TTDN16087 AA	**WINDING#:**	284667 NONE 3
CONN. DIAGRAM:	A-EE7308	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS312773-1612		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1200	1178	284HPV	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	41/20.4	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 75	3/4 LOAD PF: 69	1/2 LOAD PF: 57.5	90.2	SQ CAGE IND RUN	20 / 10

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
66.5 LB-FT	232 / 116	120 LB-FT 180	193 LB-FT 290	30

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
66 dBA	76 dBA	4.1 LB-FT^2	250 LB-FT^2	20 SEC.	2	400 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	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	DUPLEX TANDEM ANGULAR CONTACT	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	7311						

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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