marathon®

Vertical Pump Motors

Model No: 505UTDS16101
Catalog No: M760

Vertical Pump Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 505 PV Frame, DP

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Product Information Packet: Model No: 505UTDS16101, Catalog No: M760 Vertical Pump Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 505 PV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**200 Hp**
Output KW	**149.0 kW**	Voltage	**460 V**
Speed	**886 r/min**	Synchronous RPM	**900 r/min**
Service Factor	**1.15**	Frame	**505 PV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**94.1 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**265.0 A**
Power Factor	**74**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**F**	Drive End Bearing Size	**6316**
Opp Drive End Bearing Size	**7319 2**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

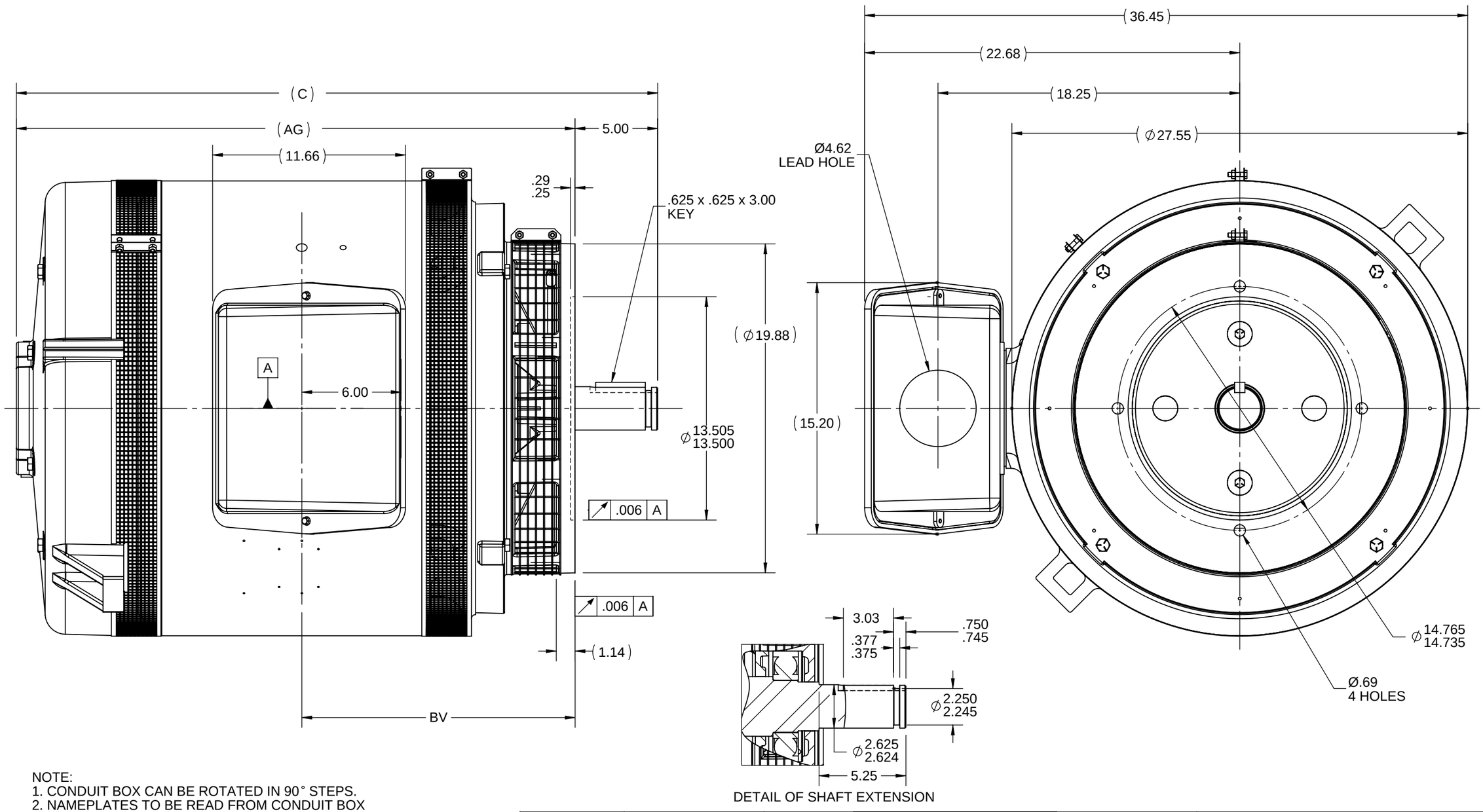
Technical Specifications

Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**8**	Rotation	**Reversible**
Resistance Main	**.032 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	**P**	Overall Length	**38.75 in**
Shaft Diameter	**2 5/8 in**	Shaft Extension	**5 in**
Assembly/Box Mounting	**F1/F2 Capable**		

Drawings

Connection Drawing	**A-EE7300U**	Outline Drawing	**B-SS510025-2100**

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DETAIL OF SHAFT EXTENSION

NOTE:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF THE MOTOR.

DASH	FRAME	C	AG	BV
2100	505P	38.77	33.77	16.52
2800	508P	45.77	40.77	20.02

DRAWING REVISION	REVISION BY	REV DATE/© DATE
L	SB	08/18/2026
REQUEST NUMBER	APPROVED BY	DATE
NMR-0240619	PD	08/18/2026

REQUEST NUMBER DESCRIPTION
MISSING DIA. ADDED FOR AK DIM

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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	SMC
DATE	08-01-1991
APPROVED BY	GK
DATE	08-01-1991
REFERENCE	

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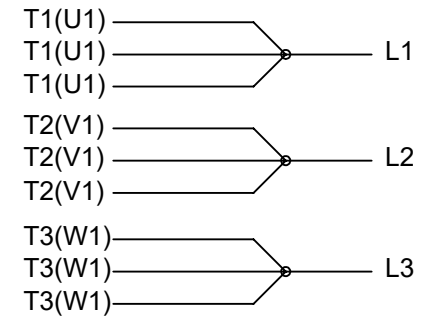
DESCRIPTION
OUTLINE
500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS

MATERIAL | PROCESS/FINISH

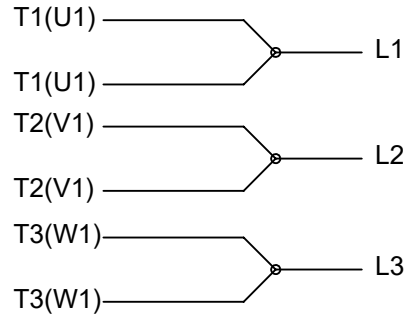
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS510025	1 OF 1

IF MOTOR HAS 9 LEADS

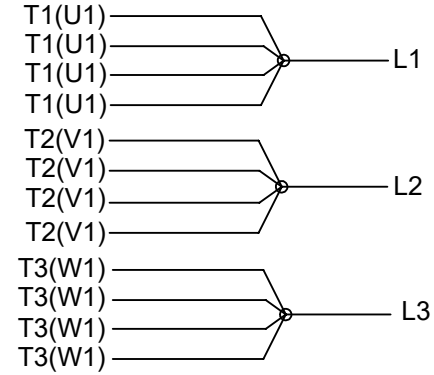


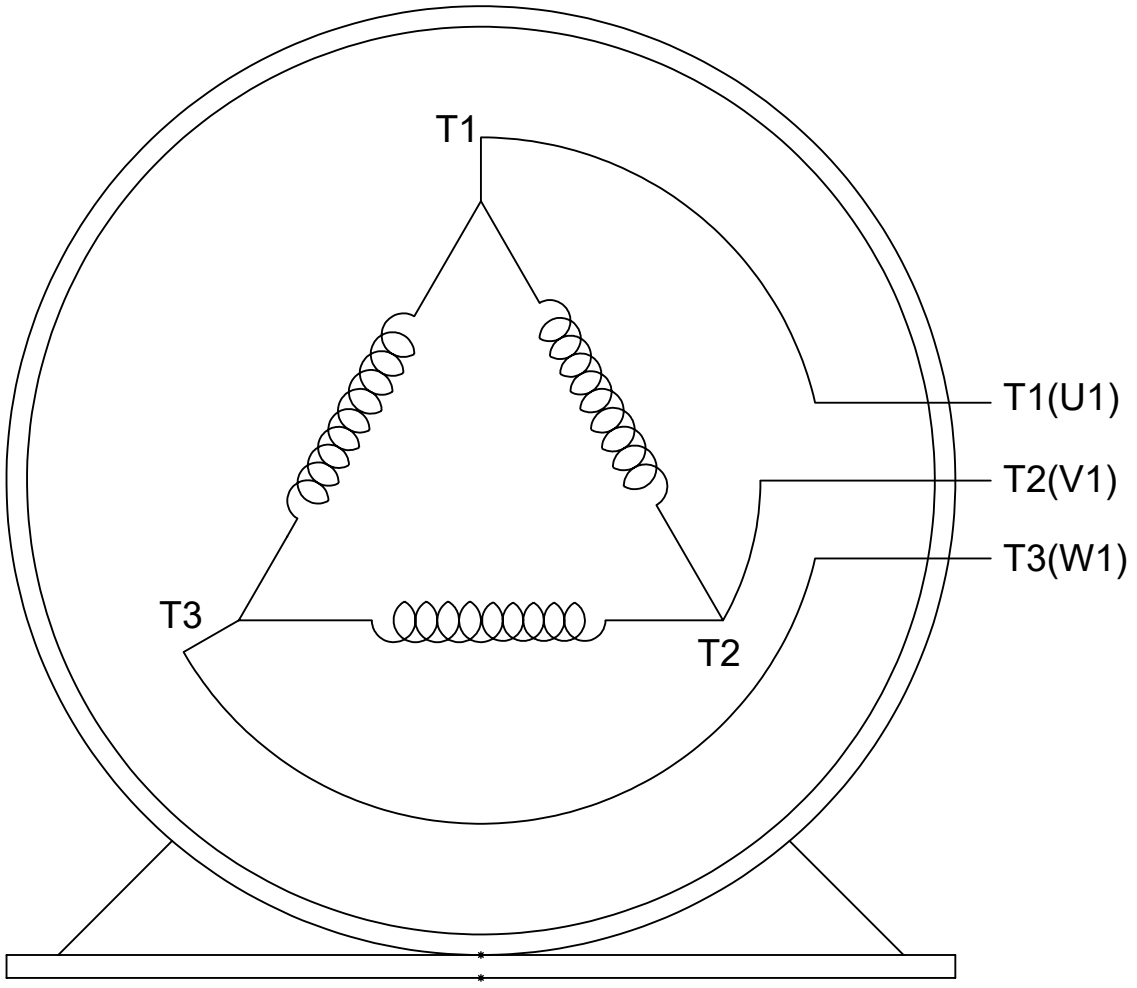
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

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

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
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DRAWN BY	DRS
DATE	09-27-1996
APPROVED BY	GK
DATE	09-30-1996
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø SINGLE VOLTAGE

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300U	1 OF 1

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Data Sheet

Date: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

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505UTDS16101

Submittal

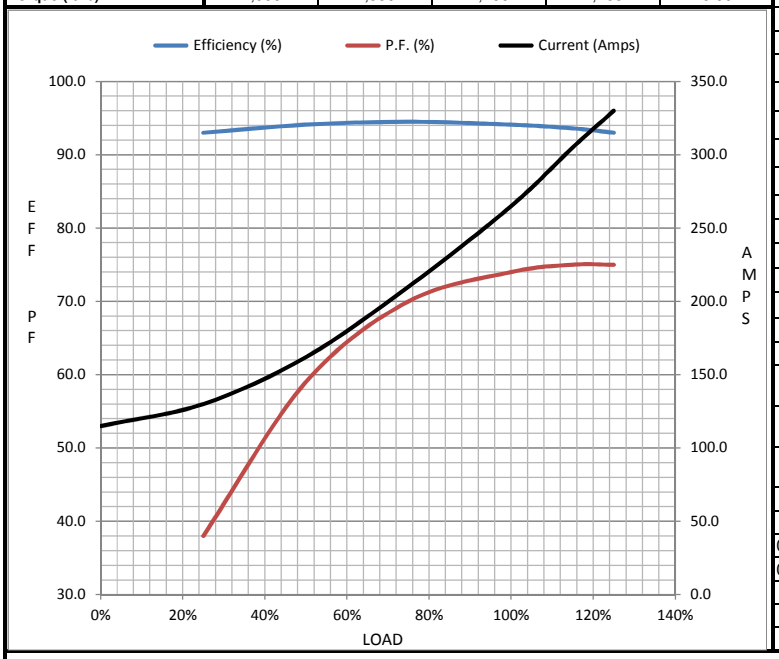
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	115	130	162	210	265	305	330	1,200	
Torque (ft-lb)	0.00	293	588	886	1,188	1,370	1,495	2,000	
RPM	900	896	894	890	886	884	882	0	
Efficiency (%)		93.0	94.1	94.5	94.1	93.6	93.0		
P.F. (%)	2.5	38.0	59.0	70.0	74.0	75.0	75.0	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	300	825	886	900
Current (Amps)	1,200	1,000	700	265	115
Torque (ft-lb)	2,000	1,550	2,400	1,188	0.00



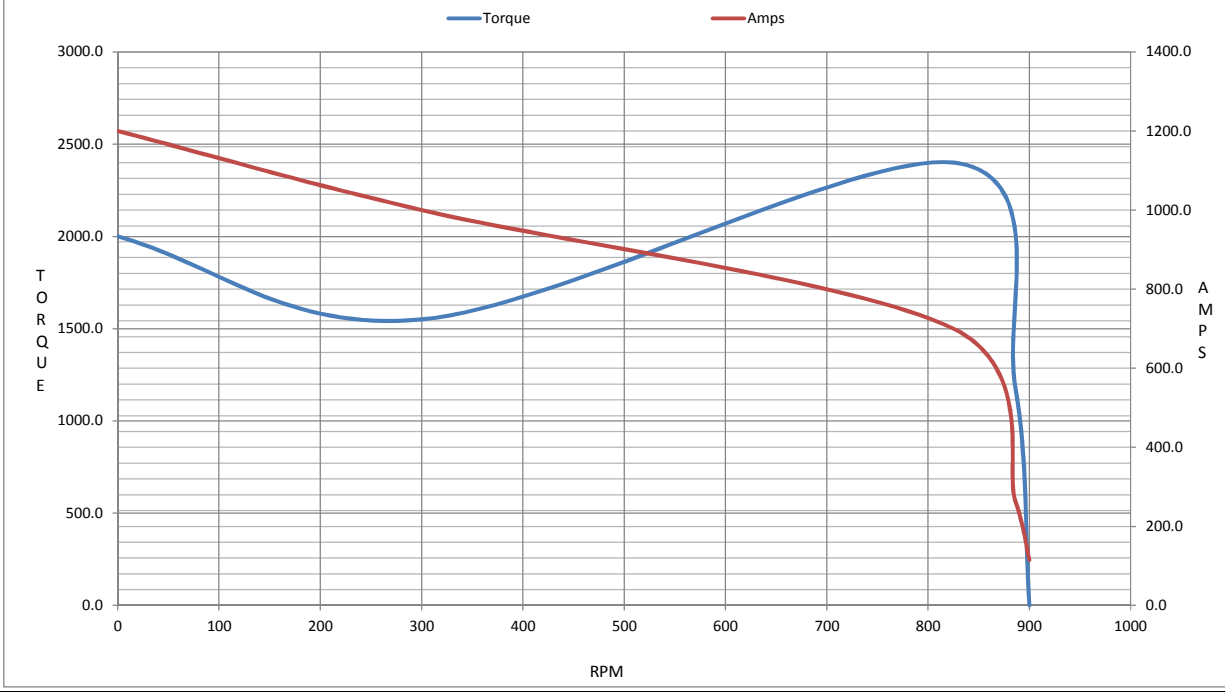
Information Block

HP	200.0
Sync. RPM	900
Frame	505
Enclosure	DP
Construction	TDS
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	F
Service Factor	1.15
Temp Rise @ FL	75 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	145 Lb-Ft²
Ref Wdg	T505836 NONE
Sound Pressure @ 1M	75 dBA
VFD Rating	NONE
Outline Dwg	B-SS510025-2100
Conn. Diag	A-EE7300U
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0200	0.0160	0.1310	0.2220	2.1660

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	505UTDS16101 AN	**WINDING#:**	T505836 NONE 1
CONN. DIAGRAM:	A-EE7300U	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS510025-2100		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
200	149	900	886	505 PV	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	265	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 94.1	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 74	3/4 LOAD PF: 70	1/2 LOAD PF: 59	93	SQ CAGE IND RUN	115

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
1188 LB-FT	1200	2000 LB-FT 170	2400 LB-FT 200	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	145 LB-FT^2	- LB-FT^2	15 SEC.	-	2200 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	P	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6316	7319 2						

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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