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Severe Duty Motors

Model No: 365TTFCD16591
Catalog No: E643B

Severe Duty Motor, 50 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 365T Frame, TEFC

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Product Information Packet: Model No: 365TTFCD16591, Catalog No: E643B Severe Duty Motor, 50 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 365T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**50 Hp**
Output KW	**37.0 kW**	Voltage	**460 V**
Speed	**1188 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**365T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**94.1 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**60.5 A**
Power Factor	**82.5**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6313**
Opp Drive End Bearing Size	**6213**	UL	**Listed**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**
Hazardous Location	**DIVISION 2 T2B**		

Technical Specifications

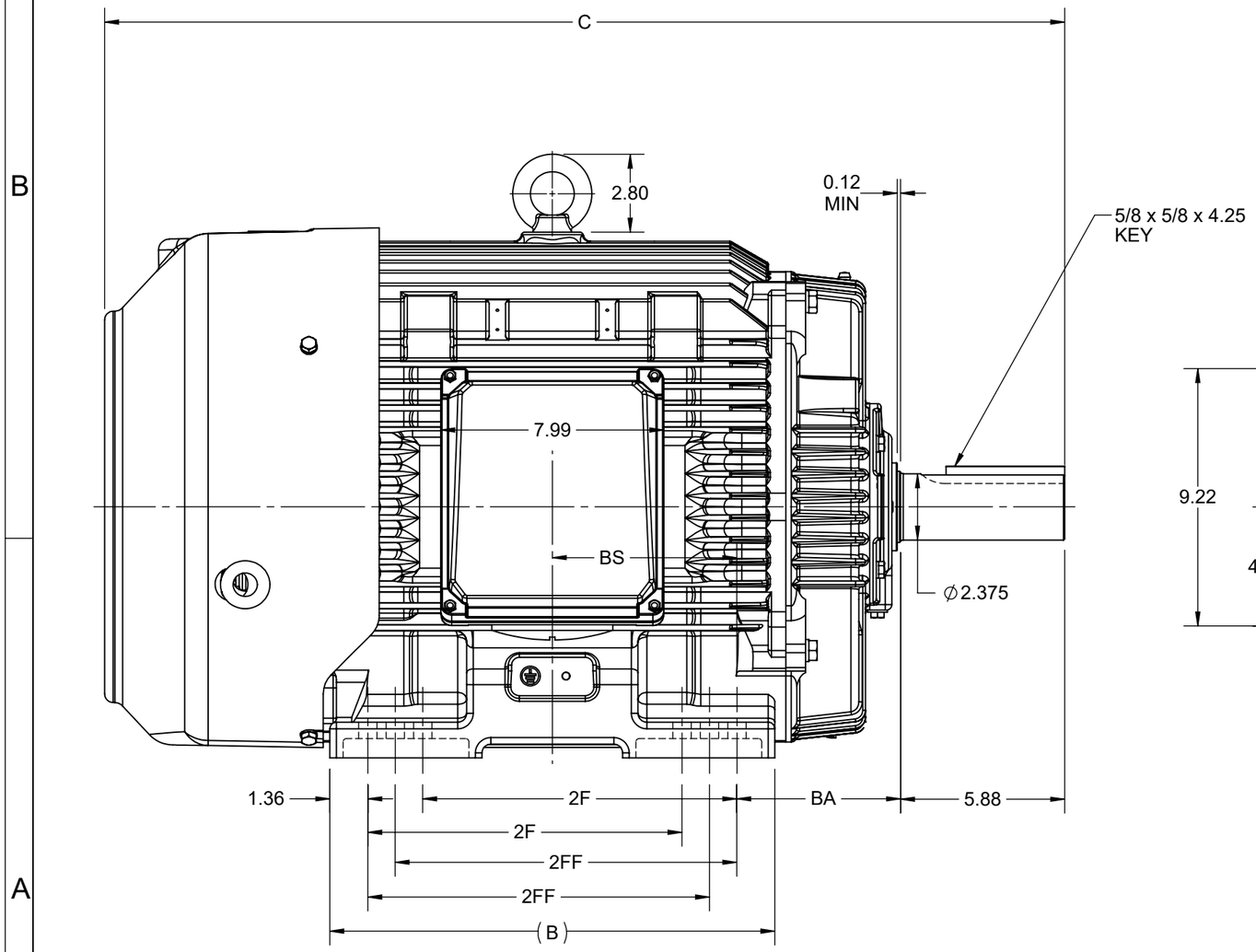
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.1329 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**2.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 10:1/Variable 20:1**

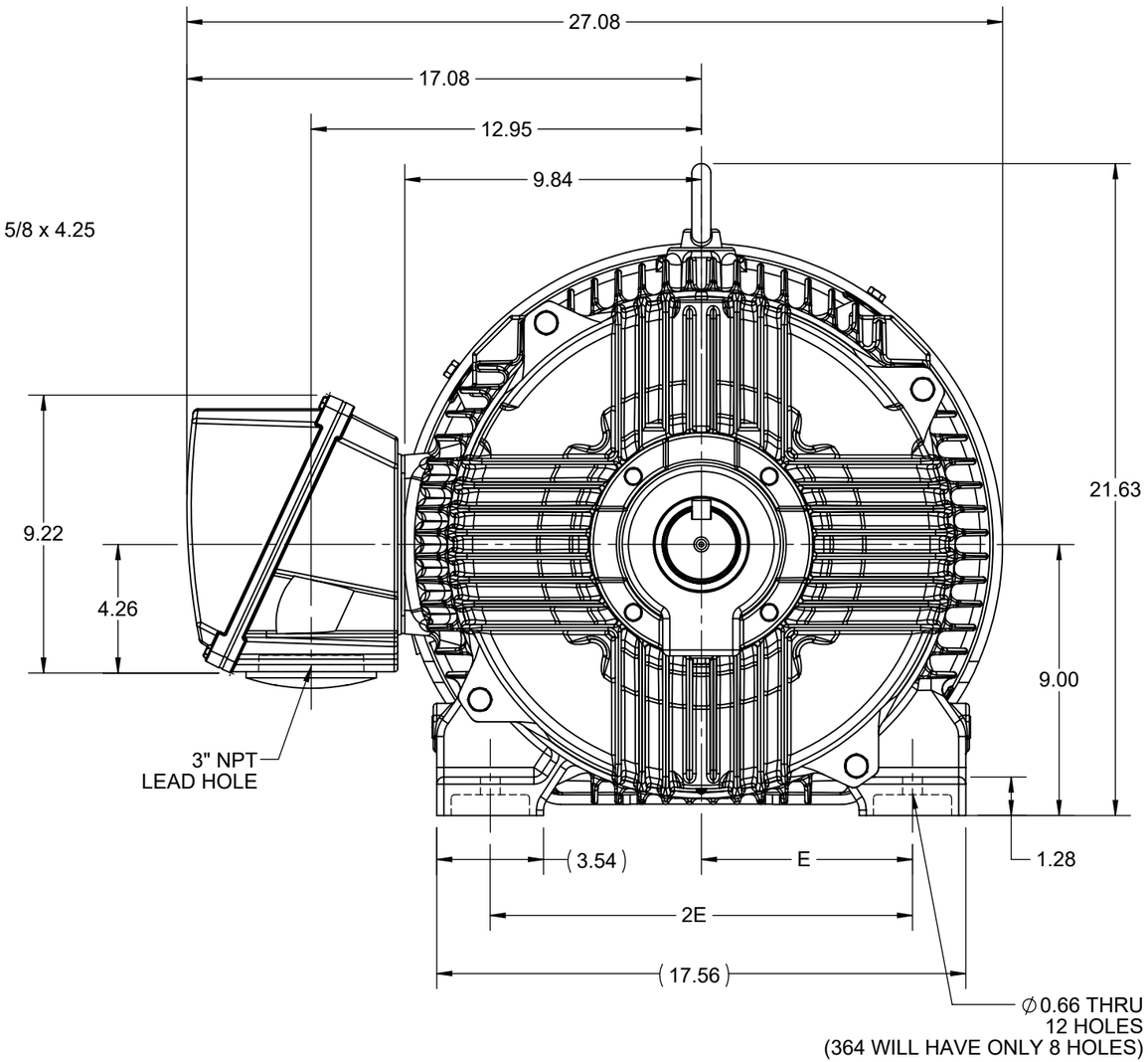
Drawings

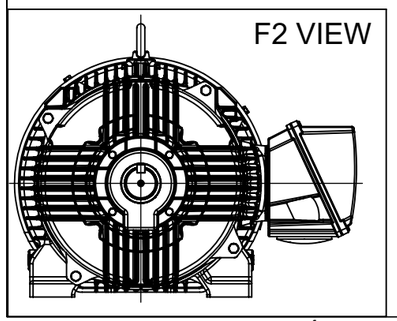
Connection Drawing	**EE7300U**	Outline Drawing	**SS557662-200**

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DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	14.96	33.40	7.00	14.00	-	11.25	5.88	6.12	F1 OR F2	364T
200	15.94	34.40			11.25	12.25		6.62		364/365T







DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	SB	07/24/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	07/24/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

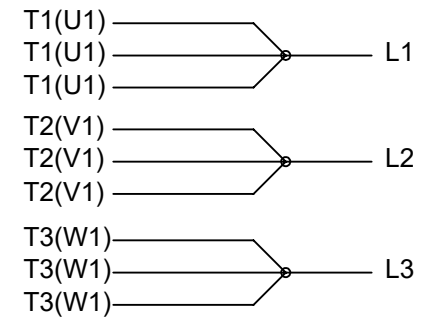
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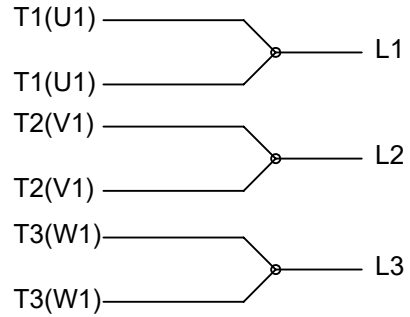
DRAWN BY	DESCRIPTION
BISWA	OUTLINE
DATE	364/365T FR-NEMA-SD & IEEE841
01/10/2018	
APPROVED BY	
SBD	
DATE	
01/10/2018	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B / DRAWING NUMBER SS557662 / SHEET 1 OF 1

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IF MOTOR HAS 9 LEADS

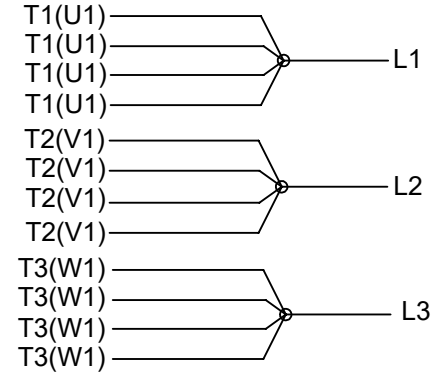


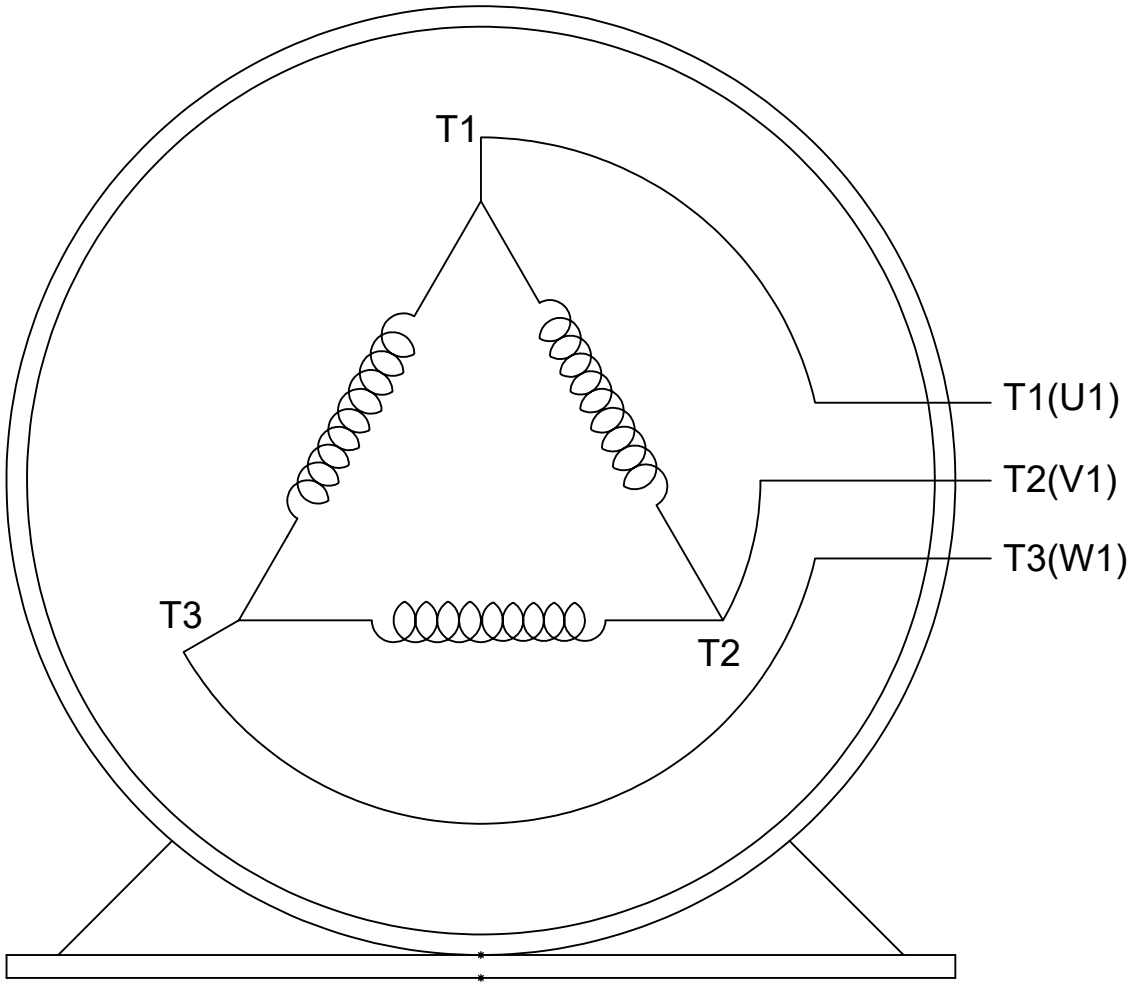
IF MOTOR HAS 6 LEADS



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
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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

Data Sheet

Date: 3/10/2020
Customer:
Attention:
Submitted by: ANUSHA M

marathon® Motors

365TTFCD16591

Submittal

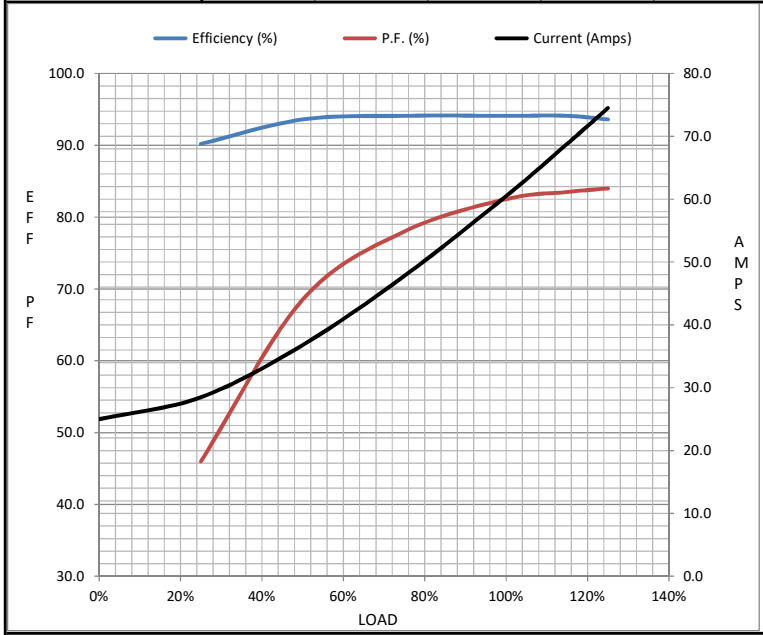
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	25.0	28.5	36.8	47.8	60.5	68.8	74.5	362	
Torque (ft-lb)	0.00	55.0	110	165	221	255	277	398	
RPM	1200	1198	1195	1190	1188	1,185	1184	0	
Efficiency (%)		90.2	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	5.0	46.0	68.5	78.0	82.5	83.5	84.0	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1135	1188	1200
Current (Amps)	362	290	215	60.5	25.0
Torque (ft-lb)	398	335	620	221	0.00



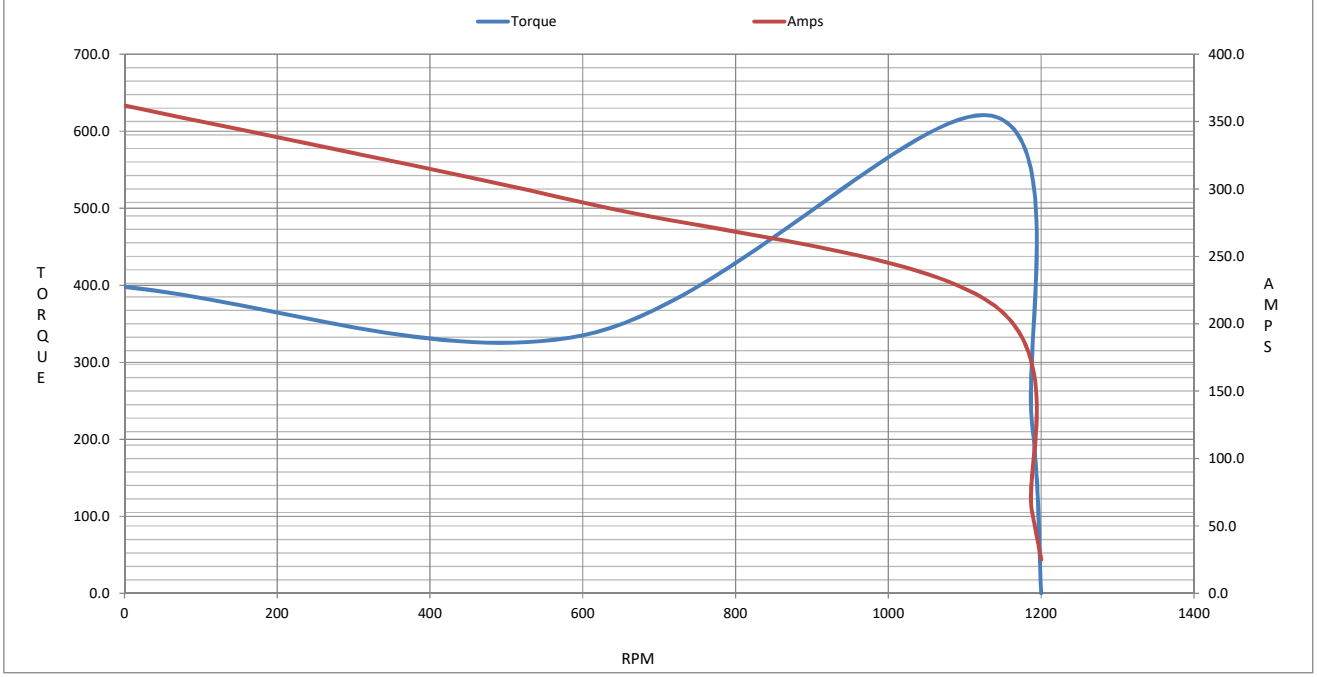
Information Block

HP	50.0	
Sync. RPM	1200	
Frame	365	
Enclosure	TEFC	
Construction	TFC	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	50	° C
Elevation	1,000	feet
Rotor/Shaft wk²	27.5	Lb-Ft²
Ref Wdg	HE32256004	NONE
Sound Pressure @ 1M	68	dBA
VFD Rating	CONSTANT 2:1	
Outline Dwg	SS557662-365T	
Conn. Diag	EE7300U	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0830	0.0500	0.3400	0.6290	10.5460

Speed -Torque Curve



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DATA VOLTS: 460

CERTIFICATION DATA SHEET

MODEL #: 365TTFCD16591
CONN. DIAGRAM: EE7300U
CAT #: E643B
OUTLINE: SS557662-365T
WINDING: HE32256004 NONE 1
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	1200	1188	365T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft)
3	60	460	60.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	94.1	3/4 LD EFF	94.1	1/2 LD EFF	93.6	GTD EFF	ELECT. TYPE
F.L. PF	82.5	3/4 LD PF	78.0	1/2 LD PF	68.5	93.6	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
221 LB-FT	362	398 LB-FT 180%	620 LB-FT 281%	65	

SOUND PRESSURE @	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR
68 dBA	77 dBA	27.5 LB-FT²	900 LB-FT²	20 SEC.	2	987	LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6313	BALL 6213	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	
0.083	0.05	0.34	0.629	10.546	0.080	

If Inverter equals NONE, contact factory for further information

*
NOTES
*

INVERTER TORQUE: CONSTANT 2:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**

PREPARED BY: ANUSHA M
DATE: 3/10/2020

FORM: 3531 REV_4 2/27/06
** Subject to change without notice.