

Severe Duty Motors

Model No: 256TTFCD6578

Catalog No: E685A

Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 256T Frame, TEFC

Product Information Packet: Model No: 256TTFCD6578, Catalog No: E685A Severe Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 256T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	10 Hp
Output KW	7.5 kW	Voltage	575 V
Speed	1180 r/min	Synchronous RPM	1200 r/min
Service Factor	1.15	Frame	256T
Enclosure	Totally Enclosed Fan Cooled	Thermal Protection	No Protection
Efficiency	91 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	10.3 A
Power Factor	80.5	Duty	Continuous
Insulation Class	H	Design Code	B
KVA Code	G	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6209	UL	Listed
CSA	Y	CE	Y
IP Code	55	Number of Speeds	1
Hazardous Location	DIVISION 2 T2B		

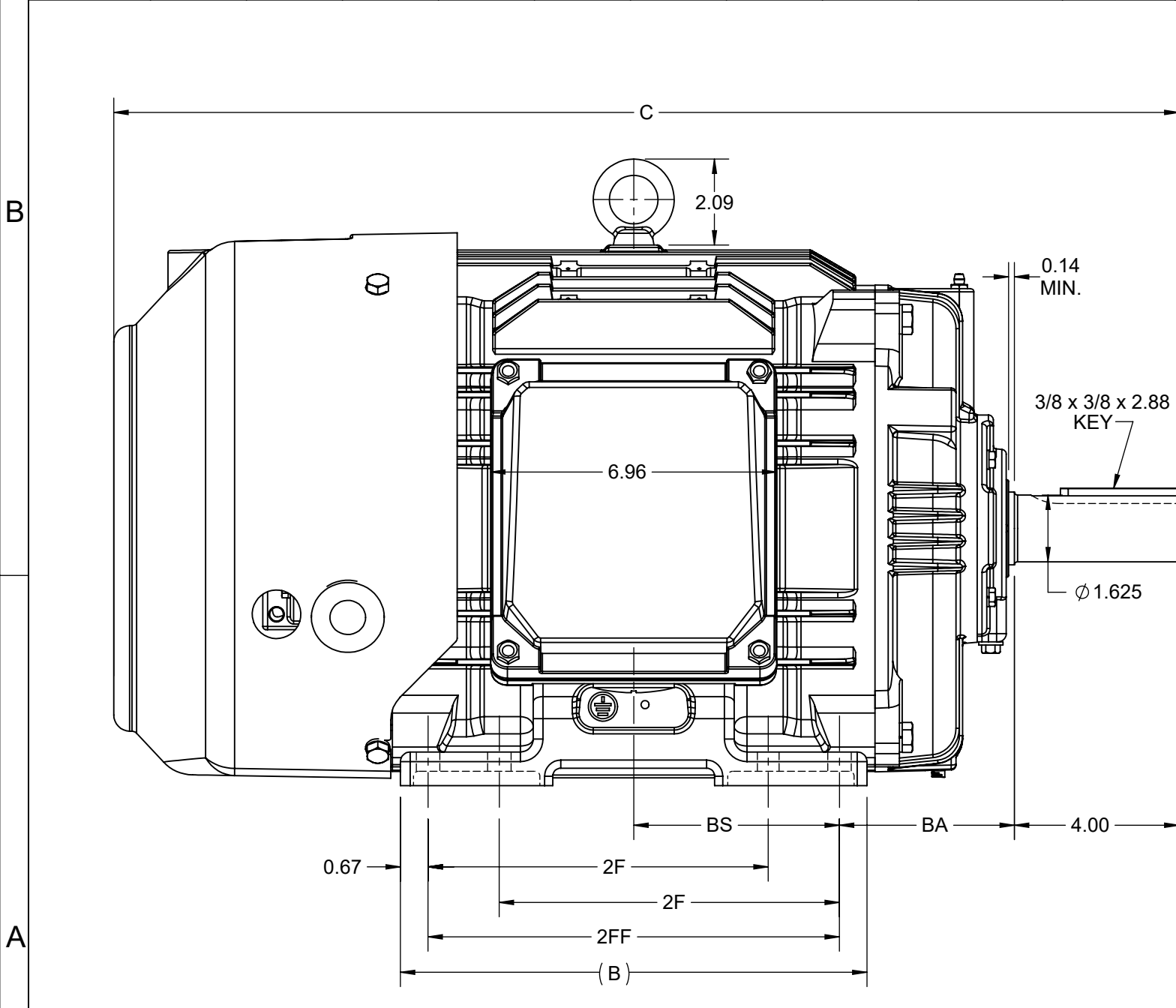
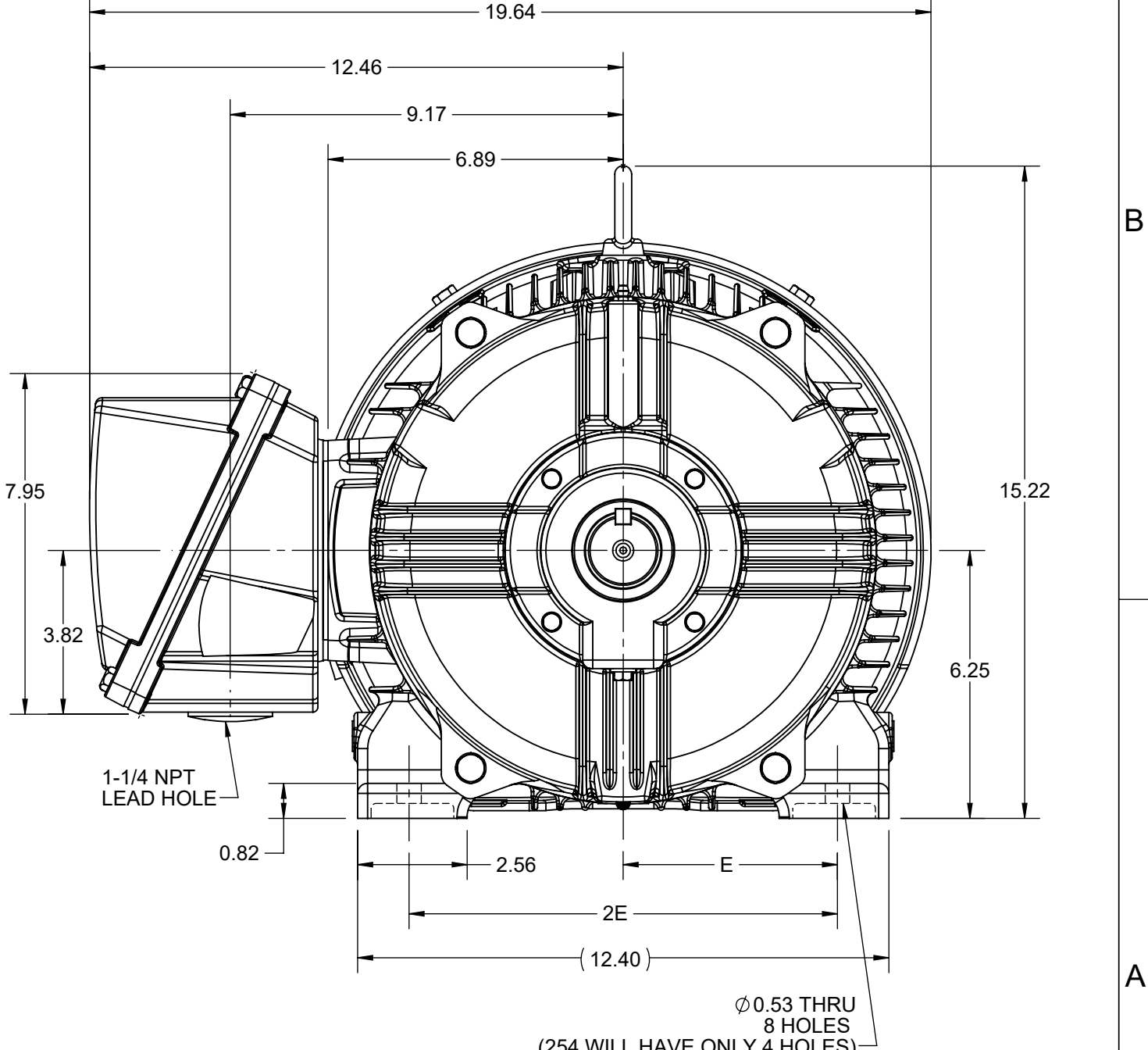
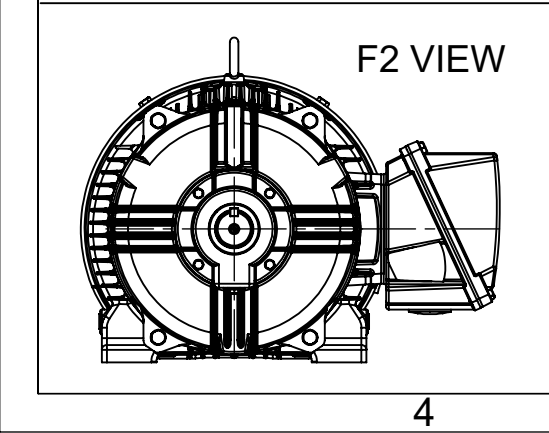
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	1.21 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	1.625 in
Assembly/Box Mounting	F1/F2 Capable	Inverter Load	Constant 10:1/Variable 10:1

Drawings

Connection Drawing	EE7300	Outline Drawing	SS208560-200
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4					3					
DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	9.60	24.15	5.00	10.00	-	8.25	4.25	4.13	F1 OR F2	254T
200	11.34	25.89			8.25	10.00		5.00		254/256T



DRAWING REVISION F	REVISION BY SB	REV DATE/© DATE 07/23/2025
REQUEST NUMBER CR-0023556	APPROVED BY SBD	DATE 07/23/2025
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED		
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DRAWN BY BISWA	marathon™		
DATE 26/09/2018			
APPROVED BY SBD	DESCRIPTION OUTLINE		
DATE 26/09/2018	254T/256T FR-NEMA-SD & IEEE841		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS208560	SHEET 1 OF 1

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

IF MOTOR HAS 9 LEADS

T1(U1) T1(U1) T1(U1) → L1

T2(V1) T2(V1) T2(V1) → L2

T3(W1) T3(W1) T3(W1) → L3

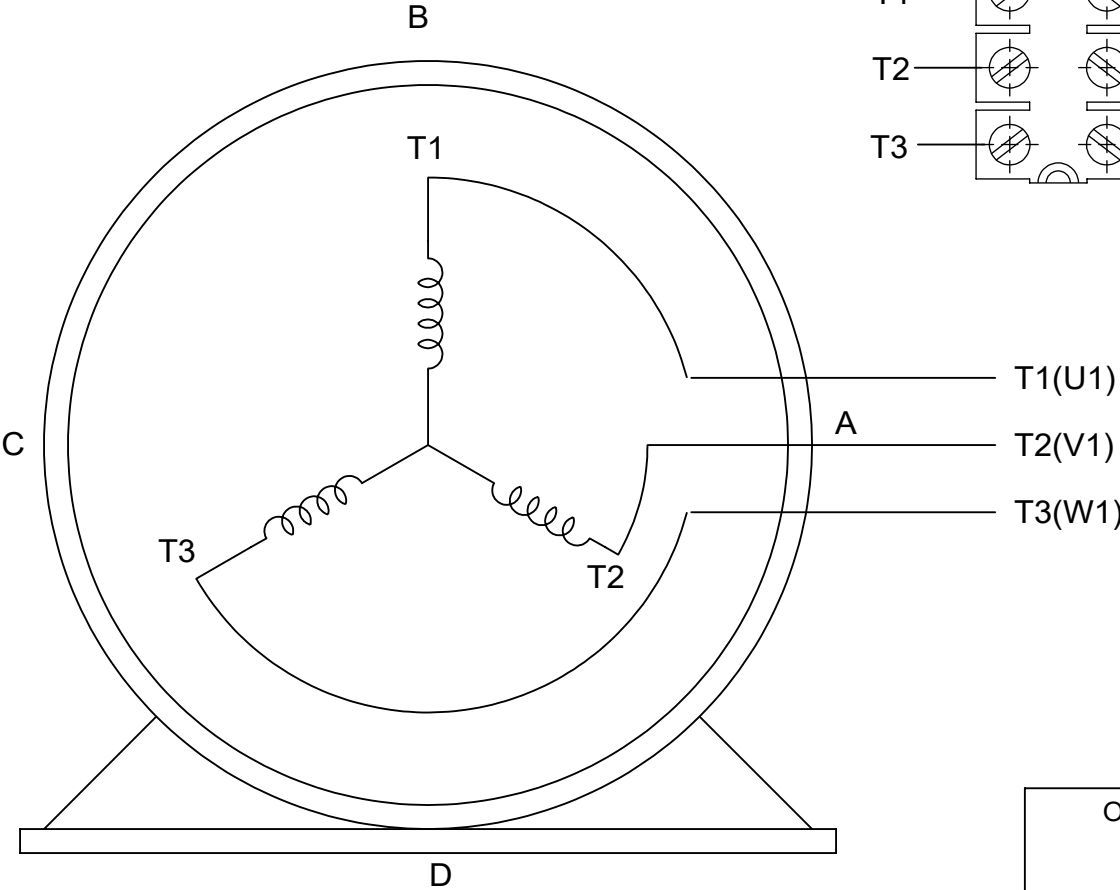
IF MOTOR HAS 6 LEADS

T1(U1) T1(U1) → L1

T2(V1) T2(V1) → L2

T3(W1) T3(W1) → L3

A-9806 DECAL



VIEW OF TERMINAL END

OPTIONAL CORD CONNECTION	
L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AD	REVISION BY SB	REV DATE/© DATE 08/01/2025
REQUEST NUMBER CR-0023654	APPROVED BY SBD	DATE 08/01/2025
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DRAWN BY DA	DATE 03-26-1993
APPROVED BY TB	
DATE 03-26-1993	REFERENCE
THIRD ANGLE PROJECTION	

marathon™		
DESCRIPTION CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR		
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____

marathon
 Motors

256TTFC06578

Submittal

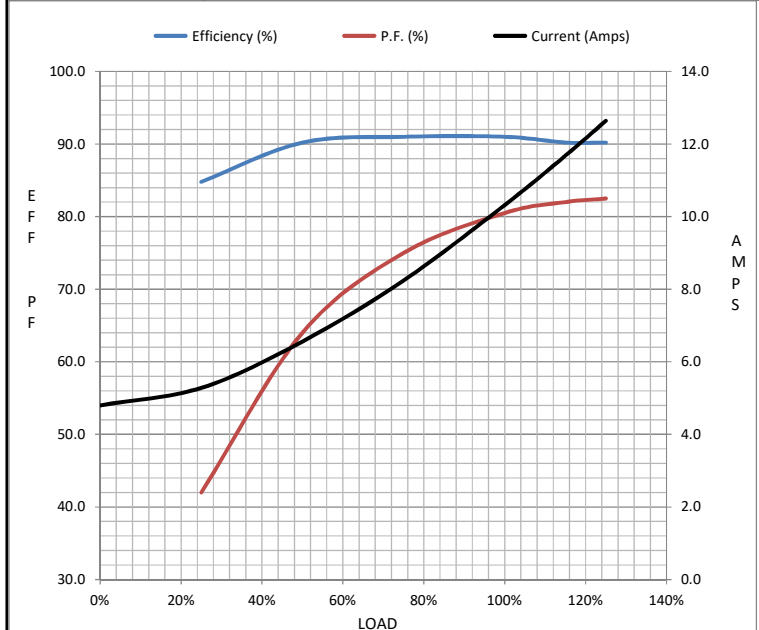
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.8	5.3	6.6	8.2	10.3	11.7	12.6	60.8	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.5	51.5	56.0	87.0	
RPM	1200	1195	1190	1185	1180	1,180	1172	0	
Efficiency (%)		84.8	90.2	91.0	91.0	90.2	90.2		
P.F. (%)	6.5	42.0	64.0	75.0	80.5	82.0	82.5	45.0	

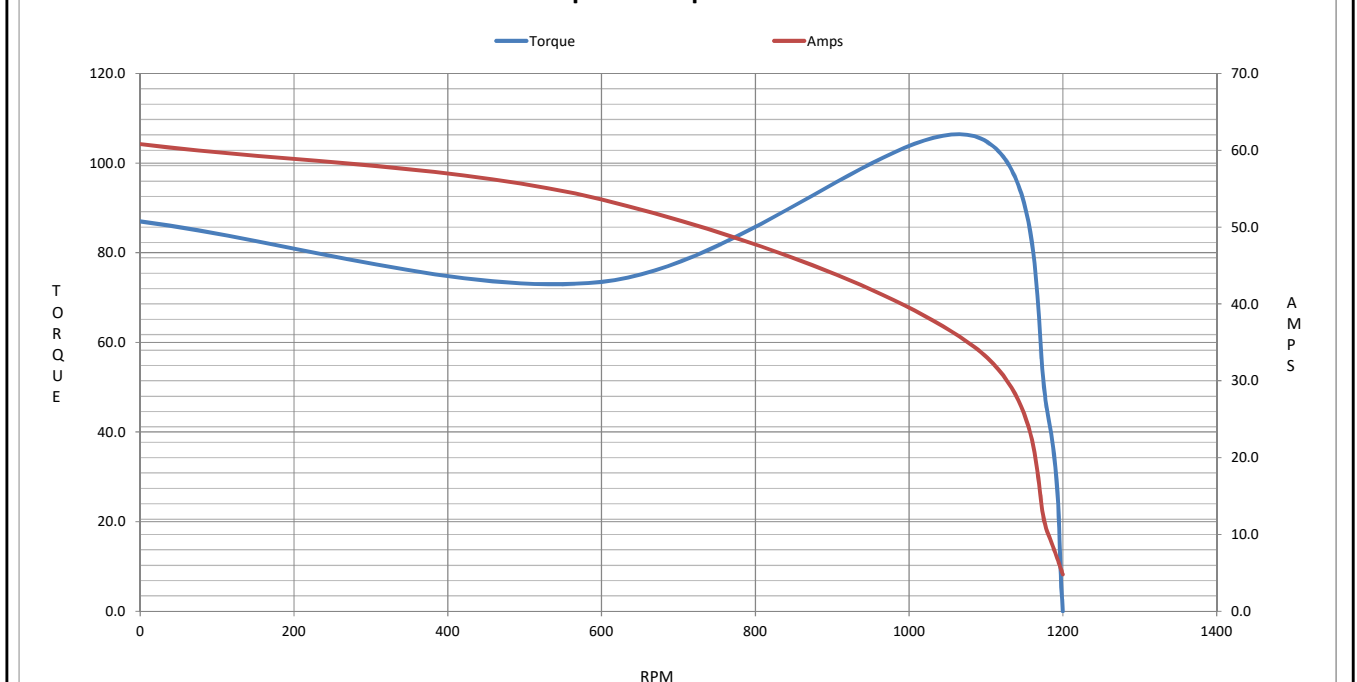
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1085	1180	1200
Current (Amps)	60.8	53.6	34.4	10.3	4.8
Torque (ft-lb)	87.0	73.5	106	44.5	0.00



Information Block				
HP		10.0		
Sync. RPM		1200		
Frame		256		
Enclosure		TEFC		
Construction		TFC		
Voltage		575	V	
Frequency		60	Hz	
Design		B		
LR Code letter		G		
Service Factor		1.15		
Temp Rise @ FL		45	° C	
Duty		CONT		
Ambient		40	° C	
Elevation		3,300	feet	
Rotor/Shaft wk²		2.90	Lb-Ft²	
Ref Wdg		HE31606006 NONE		
Sound Pressure @ 1M		56	dBA	
VFD Rating		CONSTANT 10:1/VARIABLE 10:1		
Outline Dwg		SS208560-256T		
Conn. Diag		EE7300		
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.1660	0.6120	3.0800	4.1130	67.5420

Speed -Torque Curve





DATA VOLTS: 575

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 256TTFC6578
 OUTLINE: SS208560-256T
 CAT #: E685A
 WINDING: HE31606006 NONE 3
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
10	7.5	1200	1180	256T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	575	10.3	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	90.2	GTD EFF	ELECT. TYPE
F.L. PF	80.5	3/4 LD PF	75.0	1/2 LD PF	64.0	90.2	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
44.5 LB-FT	60.8	87.0 LB-FT 196%	106 LB-FT 238%	45

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
56 dBA	65 dBA	2.90 LB-FT²	200 LB-FT²	20 SEC.	2	317 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	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE ODE							
BALL BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)		CAST IRON
6309 6209							

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)	FLOAT
1.821875	0.95625	4.8125	6.4265625	105.534375	0.080	ODE

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE PPR	

PREPARED BY:	BRAKE: NONE
DATE: 5/13/2020	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

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