marathon®

Close-Coupled Pump Motors

Model No: 254TTDBD6008
Catalog No: GT0561

Close-Coupled Pump Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 254JM Frame, DP

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Product Information Packet: Model No: 254TTDBD6008, Catalog No: GT0561 Close-Coupled Pump Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 254JM Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**20 Hp**
Output KW	**14.9 kW**	Voltage	**575 V**
Speed	**3552 r/min**	Synchronous RPM	**3600 r/min**
Service Factor	**1.15**	Frame	**254JM**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**91 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**19.2 A**
Power Factor	**85.5**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**F**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6208**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

Technical Specifications

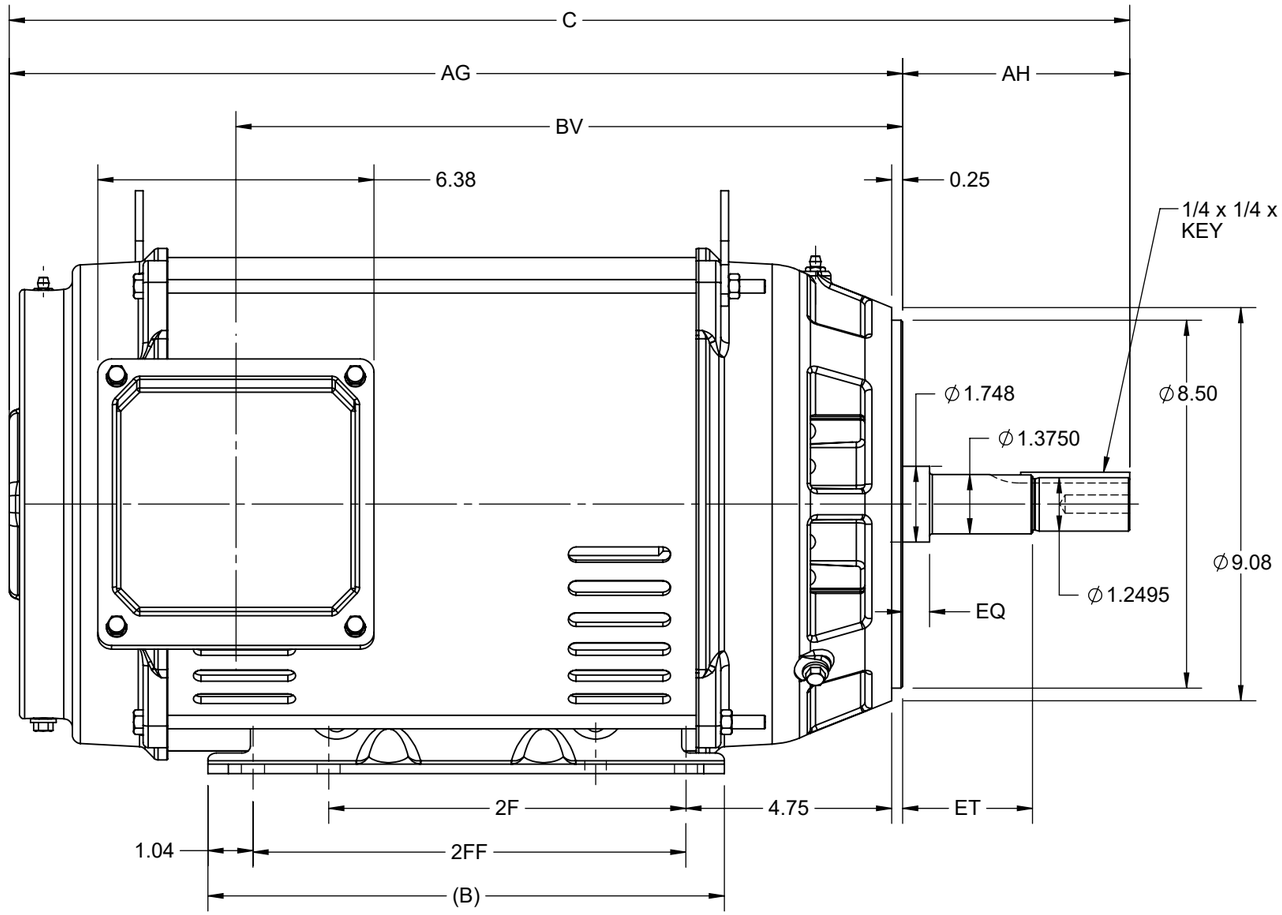
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**2**	Rotation	**Reversible**
Resistance Main	**.64 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Rolled Steel**
Shaft Type	**JM**	Overall Length	**24.41 in**
Frame Length	**10.62 in**	Shaft Diameter	**1.249 in**
Shaft Extension	**5.5 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 2:1/Variable 10:1**		

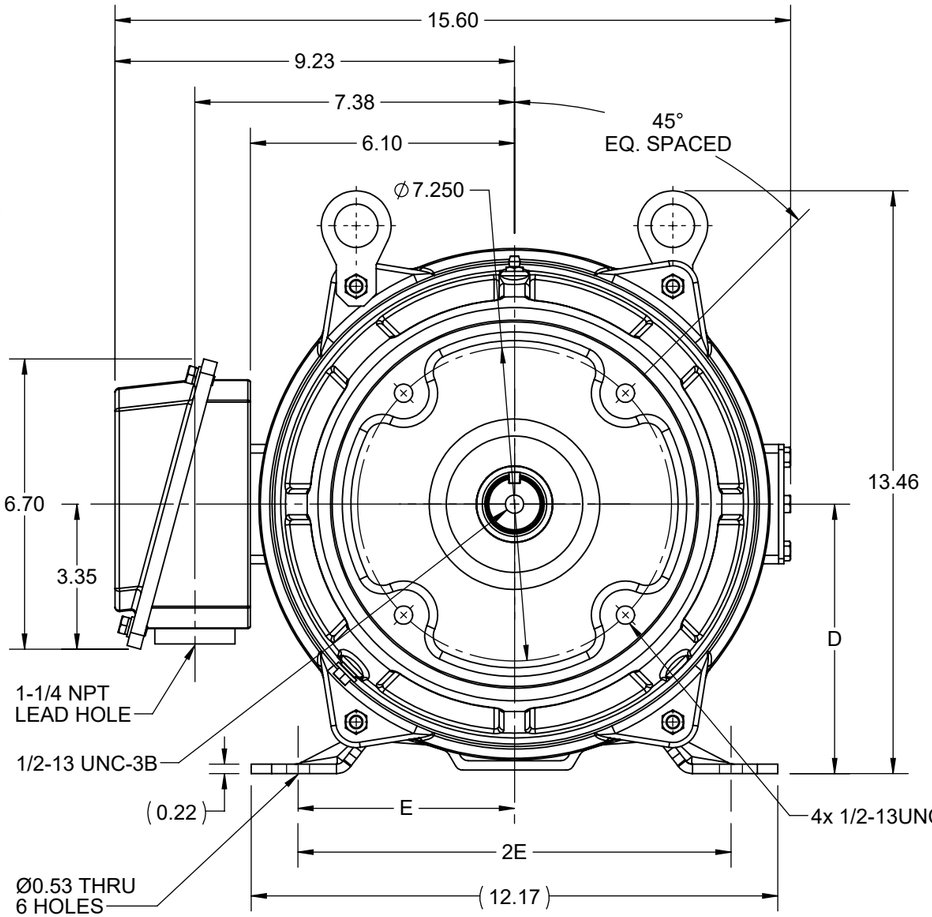
Drawings

Connection Drawing	**EE7300**	Outline Drawing	**SS620822-100**

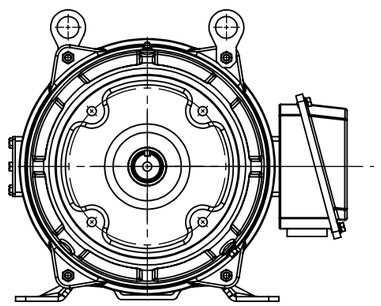
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DASH NO.	B	C	D	E	2E	2F	2FF	AG	AH	BV	EQ	ET	MOUNTING	FRAME
100	11.93	24.31	6.25	5.00	10.00	8.25	10.00	19.06	5.248	13.82	0.63	3.00	F1 OR F2	254JM
200		25.88						20.63		15.40				256JM





F2 VIEW



DRAWING REVISION	REVISION BY	REV DATE/© DATE
E	MN	07/10/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023491	VS	07/10/2025

REQUEST NUMBER DESCRIPTION
F2 MOUNTING PLATE ADDED

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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/ 5.1/ INCH/mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	
VS	
DATE	
12-02-2021	
APPROVED BY	
GNK	
DATE	
12-02-2021	
REFERENCE	

THIRD ANGLE PROJECTION

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DESCRIPTION
OUTLINE
254/256JM FR NEMA ODP RS

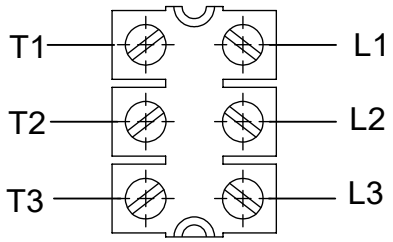
MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS620822	1 OF 1

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

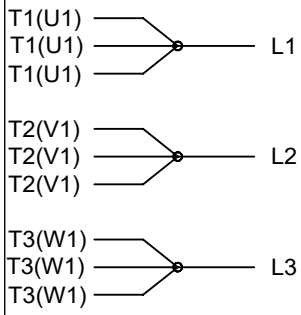
TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

TERMINAL BLOCK WHEN SPECIFIED

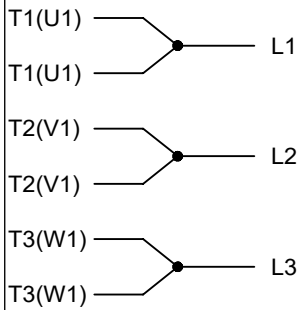


VIEW OF TERMINAL END

IF MOTOR HAS
9 LEADS



IF MOTOR HAS
6 LEADS



A-9806 DECAL

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

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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DRAWN BY: DA	
DATE: 03-26-1993	
APPROVED BY: TB	
DATE: 03-26-1993	
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300	1 OF 1

Data Sheet

Date: 12/2/2021
Customer:
Attention:
Submitted by:

marathon® Motors

254TTDBD6008

Submittal

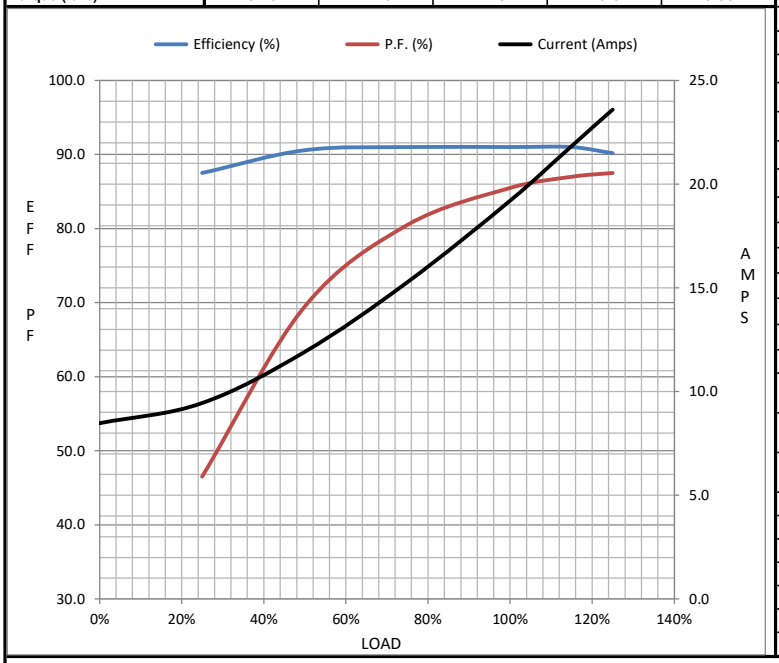
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.5	9.4	11.9	15.3	19.2	21.8	23.6	110	
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.6	34.2	37.2	52.0	
RPM	3600	3588	3578	3566	3552	3,545	3540	0	
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2		
P.F. (%)	7.0	46.5	69.5	80.5	85.5	87.0	87.5	39.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	110	97.6	66.4	19.2	8.5
Torque (ft-lb)	52.0	44.0	74.0	29.6	0.00



Information Block

HP	20.0	
Sync. RPM	3600	
Frame	254	
Enclosure	DP	
Construction	TDB	
Voltage	575	V
Frequency	60	Hz
Design	B	
LR Code letter	F	
Service Factor	1.15	
Temp Rise @ FL	45	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	1.10	Lb-Ft²
Ref Wdg	HA31602015 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 20:1	
Outline Dwg	SS620822-100	
Conn. Diag	EE7300	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.6160	0.2330	1.8100	1.3670	41.3210

Speed -Torque Curve

