marathon®

Inverter (Vector) Duty Motors

Model No: 182THTCD8028
Catalog No: Y527A

Inverter (Vector) Duty Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182TC Frame, TENV

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Product Information Packet: Model No: 182THTCD8028, Catalog No: Y527A Inverter (Vector) Duty Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182TC Frame, TENV

Nameplate Specifications

Phase	**3**	Output HP	**3 Hp**
Output KW	**2.2 kW**	Voltage	**230/460 V**
Speed	**1765 r/min**	Synchronous RPM	**1800 r/min**
Service Factor	**1.00**	Frame	**182TC**
Enclosure	**Totally Enclosed Non Ventilated**	Thermal Protection	**Thermostat**
Efficiency	**89.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**8.0/4.0 A**
Power Factor	**79**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**INV**
KVA Code	**L**	Drive End Bearing Size	**6206**
Opp Drive End Bearing Size	**6306**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**

Technical Specifications

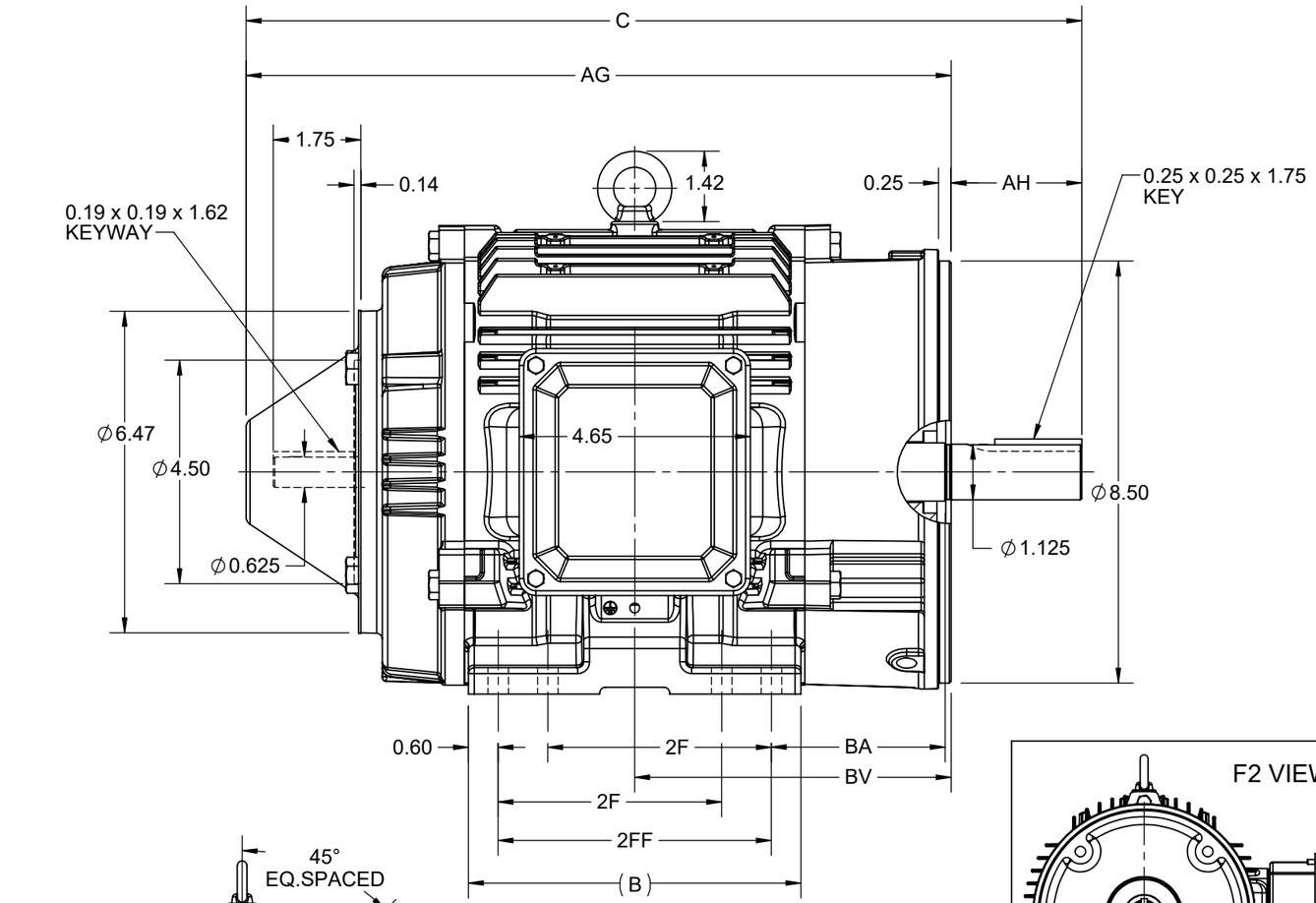
Electrical Type	**Squirrel Cage Inverter Duty**	Starting Method	**Inverter Only**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**3.542 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.125 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2000:1**

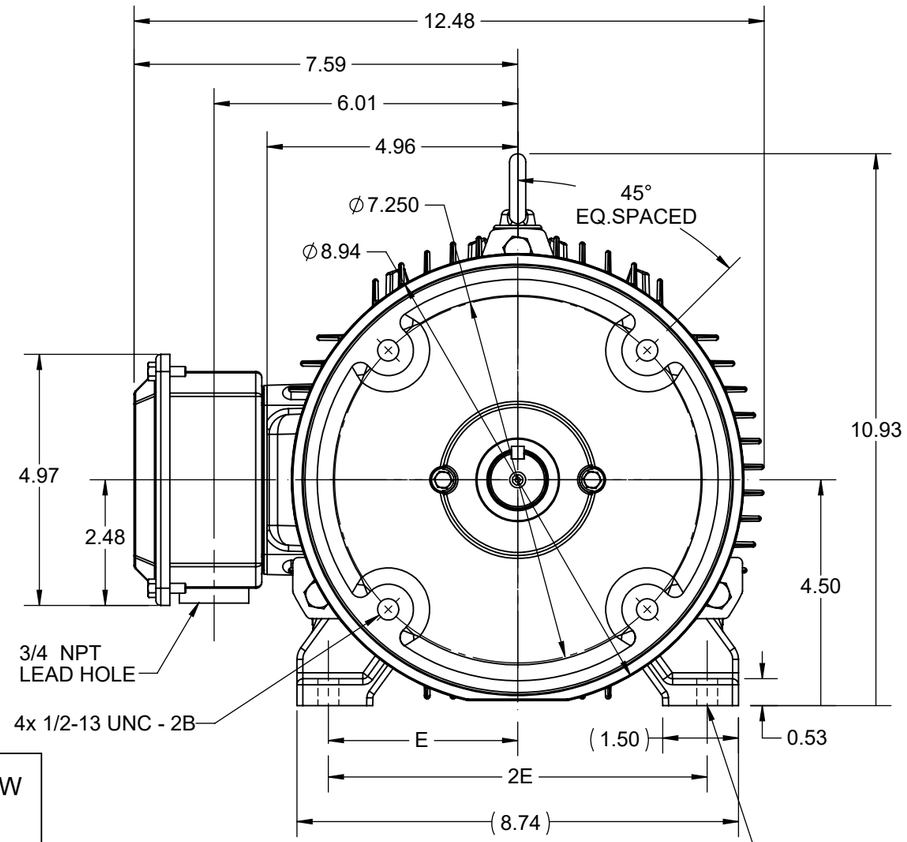
Drawings

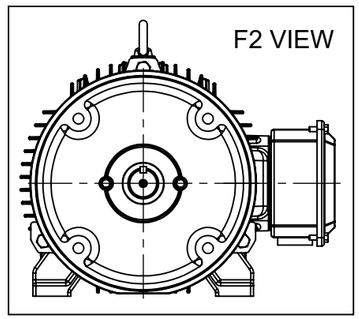
Connection Drawing	**EE7308T**	Outline Drawing	**SS600239-100**

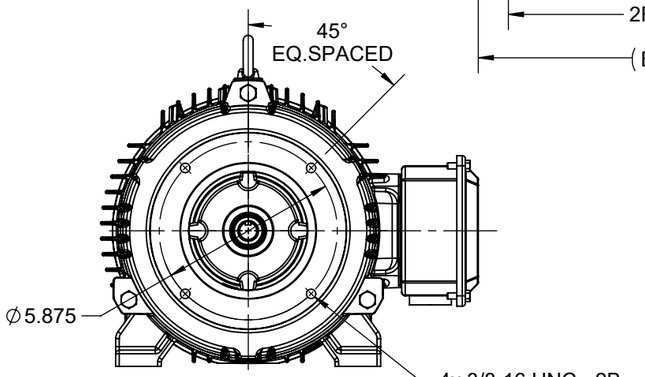
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DASH NO.	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	5.67	15.81	3.75	7.50	---	4.50	13.19	2.62	3.50	5.87	F1 OR F2	182TC
200	6.69	16.81			4.50	5.50	14.19			6.37		182/184TC









ODE VIEW
COVER REMOVED

DRAWING REVISION	REVISION BY	REV DATE/© DATE
B	SB	07/23/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023556	SBD	07/23/2025

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

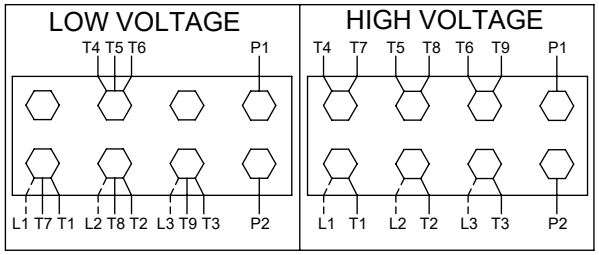
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PRIMARY DIMENSIONS ARE INCH
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ARE FOR REFERENCE ONLY

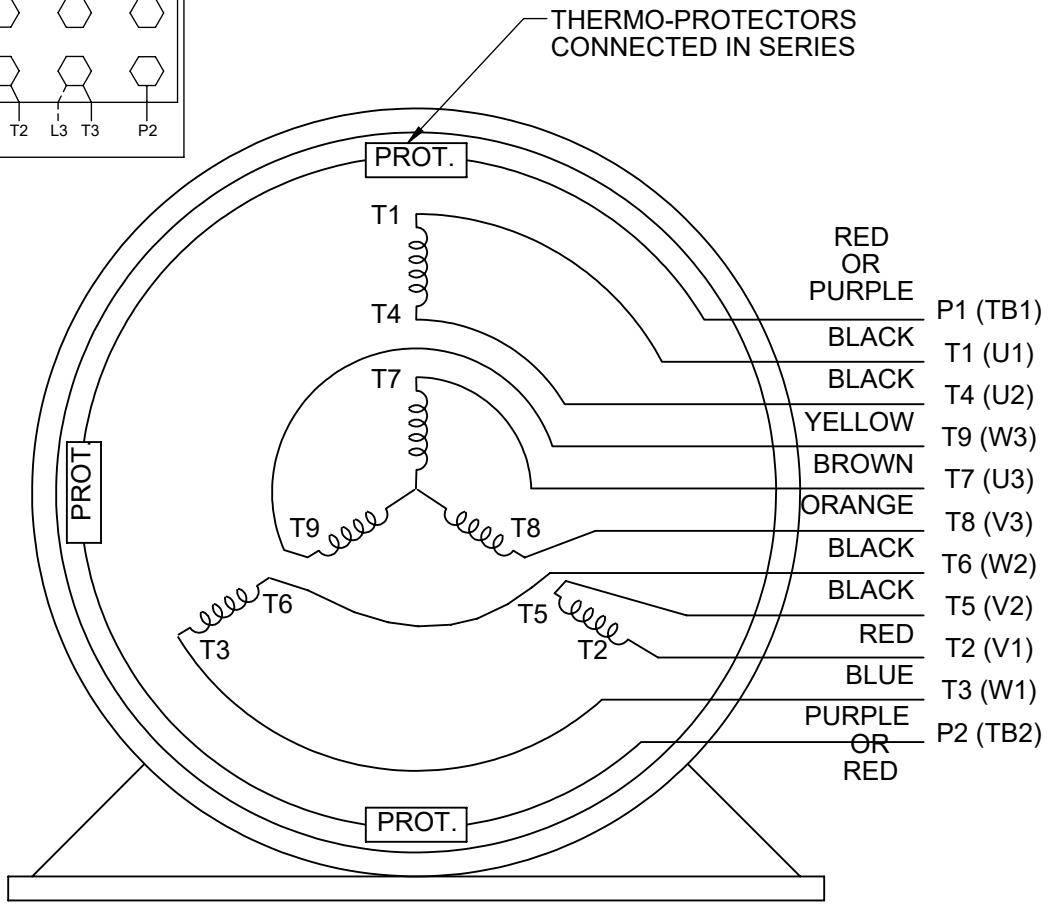
DRAWN BY	DESCRIPTION
VS	OUTLINE
DATE	182/184TC NEMA-ODE 4.5 AK BRKT-TENV
28-01-2021	
APPROVED BY	
MSH	
DATE	
28-01-2021	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B / DRAWING NUMBER SS600239 / SHEET 1 OF 1

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9



THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR IMG PLANT

DRAWING REVISION: U	REVISION BY: SB	REV DATE/© DATE: 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY: SMC	marathon™
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025		DATE: 05-13-1992	
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-EXTERNAL — 3 PHASE - DUAL VOLTAGE MOTOR
				DATE: 05-13-1992	
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

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Data Sheet

Date: 7/26/2022
Customer:
Attention:
Submitted by:

marathon® Motors

182THTCD8028

Submittal

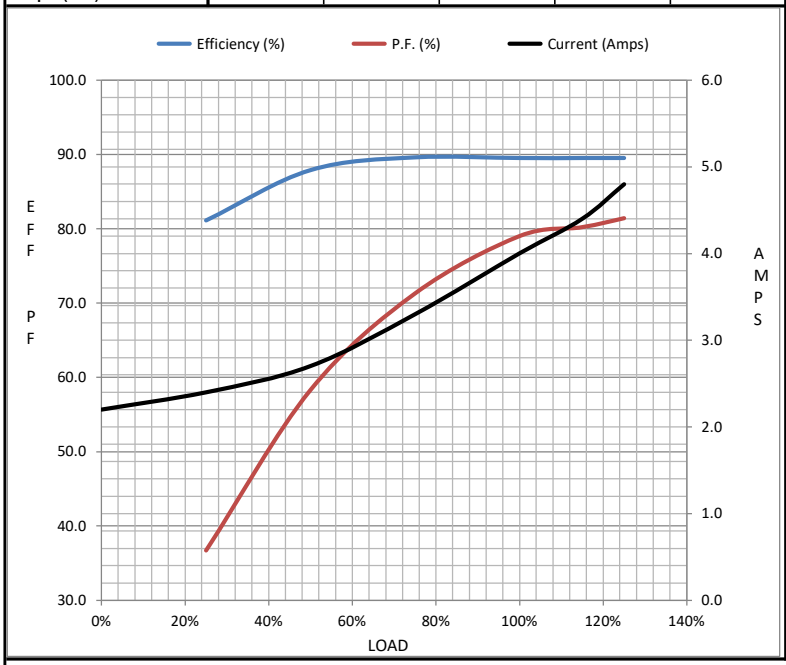
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.20	2.40	2.70	3.3	4.0	4.4	4.8	34.5	
Torque (ft-lb)	0.00	2.20	4.4	6.6	8.9	10.0	11.0	23.0	
RPM	1800	1792	1785	1775	1765	1,763	1760	0	
Efficiency (%)		81.1	87.9	89.6	89.5	89.5	89.5		
P.F. (%)	6.8	36.7	58.3	71.3	79.0	80.2	81.4	45.8	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	330	1565	1765	1800
Current (Amps)	34.5	33.5	19.0	4.0	2.20
Torque (ft-lb)	23.0	17.0	34.9	8.9	0.00



Information Block

HP	3.0	
Sync. RPM	1800	
Frame	182	
Enclosure	TENV	
Construction	TTC	
Voltage	230/460	V
Frequency	60	Hz
Design	INV	
LR Code letter	L	
Service Factor	1.0	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	0.40	Lb-Ft²
Ref Wdg	HA31124032 NONE	
Sound Pressure @ 1M	62	dBA
VFD Rating	CONSTANT 2000:1	
Outline Dwg		
Conn. Diag	EE7308T	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
2.1750	1.4660	5.0110	5.3890	125.7520

Speed -Torque Curve

