PRODUCT INFORMATION PACKET

Model No: 324TSTDC6001
Catalog No: U776
General Purpose Motor, 50 & 50 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 200/400 V, 3600 & 3000 RPM, 324TS Frame, DP

Nameplate Specifications

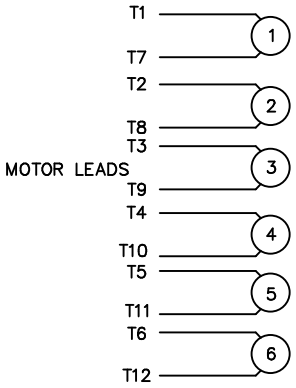
Phase	3	Output HP	50 & 50 Hp
Output KW	37.0 & 37.0 kW	Voltage	208-230/460 & 200/400 V
Speed	3560 & 2955 rpm	Service Factor	1.15 & 1.0
Frame	324TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	94.1 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	123-112/56 & 129/64.5 A	Power Factor	88.6
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6212	Opp Drive End Bearing Size	6212
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

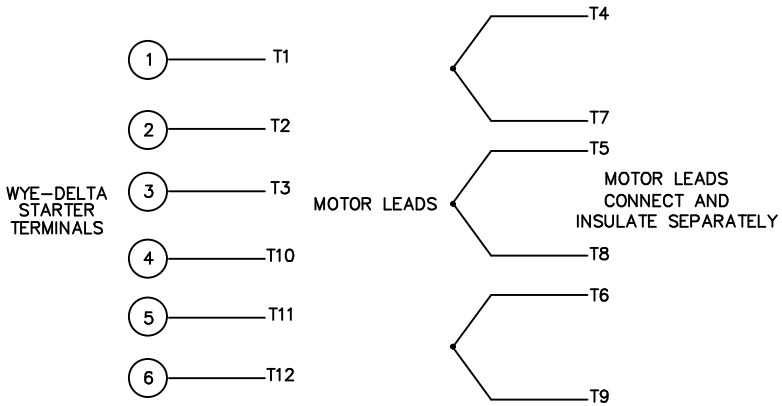
Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.137 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	24.53 in
Shaft Diameter	1.880 in	Shaft Extension	3.75 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	16955560ME	Connection Drawing	004172-01ME

WYE – DELTA STARTING USEABLE ON 2, 4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

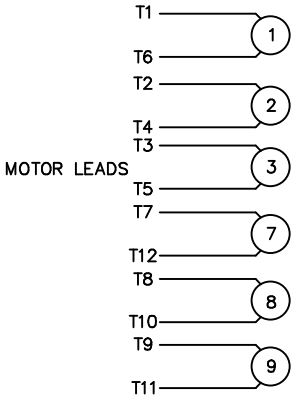


HIGH VOLTAGE CONNECTION



REFER TO THE WYE–DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

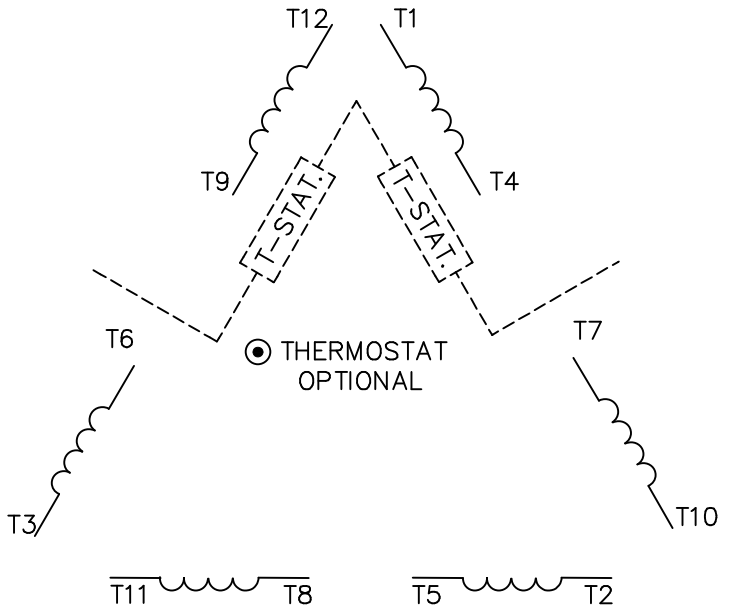
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER–HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

LINE LEADS



ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS

⦿ RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

MARATHON ELECTRIC

TITLE DELTA – WYE CONNECTION DIAGRAM

MAT'L.

FINISH

CAD FILE 004172-01ME

RFP 07-19-2007

DIST LB

DRAWN	RJW 07-19-2007
CHK	ML 07-19-2007
APPD	GK 07-19-2007
SCALE	1=1
REF	MU61151
FMF	
PREV	

SIZE A | DRAWING NO. 004172-01ME | PAGE 1 OF 1 | REV.

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CERTIFICATION DATA SHEET

Model#:	324TSTDC6001 AA	**WINDING#:**	T16102007 NONE 3
CONN. DIAGRAM:	004172-01ME	**ASSEMBLY:**	F1 ONLY
OUTLINE:	16955560ME		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
50&50	37&37	3600	3560&2955	324TS	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	208-230/460#200/400	123-112/56&129/64.5	ACROSS THE LINE	CONTINUOUS	F2	1.15/1.0	40	3300

FULL LOAD EFF: 94.1&92.4	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.6&90.2	3/4 LOAD PF: 86.5	1/2 LOAD PF: 80	93.6	SQ CAGE IND RUN	32 / 16

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74.9 LB-FT	724 / 362	143 LB-FT 191	207.1 LB-FT 276	38

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
85 dBA	95 dBA	- LB-FT^2	- LB-FT^2	- SEC.	-	548 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6212	BALL 6212	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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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FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 12/13/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

324TSTDC6001

Submittal

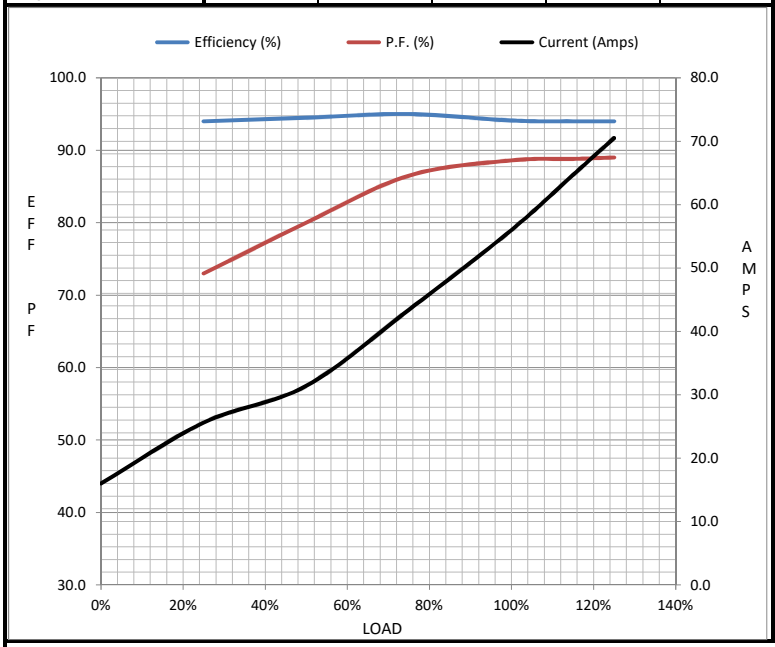
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	16.0	25.6	31.4	43.4	56.0	64.7	70.5	362	
Torque (ft-lb)	0.00	27.5	37.4	56.0	74.9	86.1	93.4	143	
RPM	3600	3585	3580	3570	3560	3,550	3545	0	
Efficiency (%)		94.0	94.5	95.0	94.1	94.0	94.0		
P.F. (%)	5.3	73.0	80.0	86.5	88.6	88.8	89.0	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3330	3560	3600
Current (Amps)	362	333	240	56.0	16.0
Torque (ft-lb)	143	124	207	74.9	0.00



Information Block

HP	50.0
Sync. RPM	3600
Frame	324
Enclosure	DP
Construction	TDC
Voltage	208-230/460#200/400 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	38 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.00 Lb-Ft²
Ref Wdg	T16102007 NONE
Sound Pressure @ 1M	85 dBA
VFD Rating	NONE
Outline Dwg	16955560ME
Conn. Diag	004172_01

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve