

Inverter (Vector) Duty Motors

Model No: 215THTL7736

Catalog No: Y561

Inverter (Vector) Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215TC Frame, TENV

Product Information Packet: Model No: 215THTL7736, Catalog No: Y561 Inverter (Vector) Duty Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215TC Frame, TENV

Nameplate Specifications

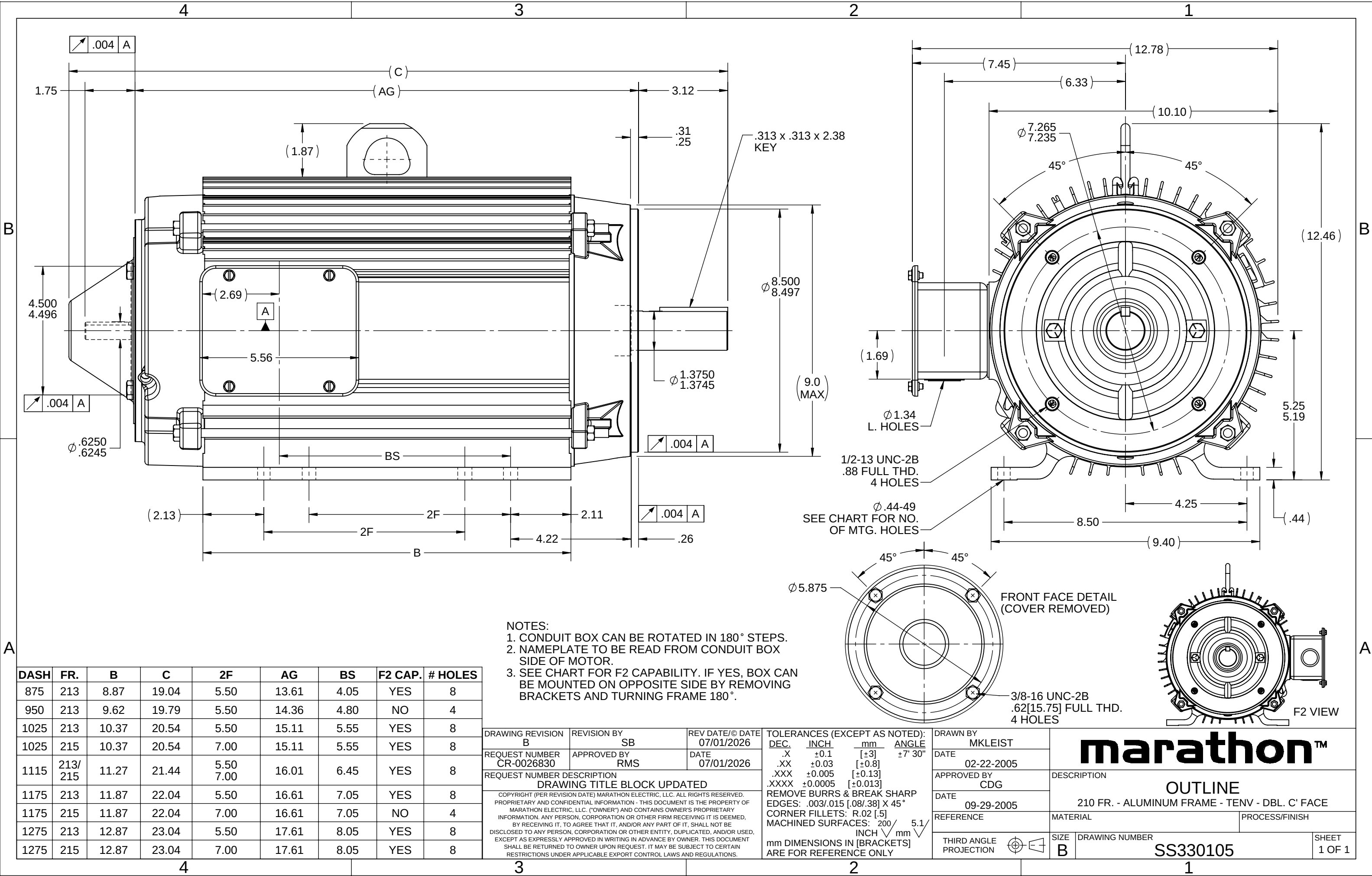
Phase	3	Output HP	10 Hp
Output KW	7.5 kW	Voltage	575 V
Speed	1774 r/min	Synchronous RPM	1800 r/min
Service Factor	1.0	Frame	215TC
Enclosure	Totally Enclosed Non Ventilated	Thermal Protection	Thermostat
Efficiency	90.2 %	Ambient Temperature	40 °C
Frequency	60 Hz	Current	10.8 A
Power Factor	76	Duty	Continuous
Insulation Class	F	Design Code	INV
KVA Code	M	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6206	UL	Recognized
CSA	Y	CE	Y
IP Code	43	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.59 O	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	23.04 in
Frame Length	12.75 in	Shaft Diameter	1 3/8 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	Constant 1000:1		

Drawings

Connection Drawing	A-EE7300T	Outline Drawing	B-SS330105-1275
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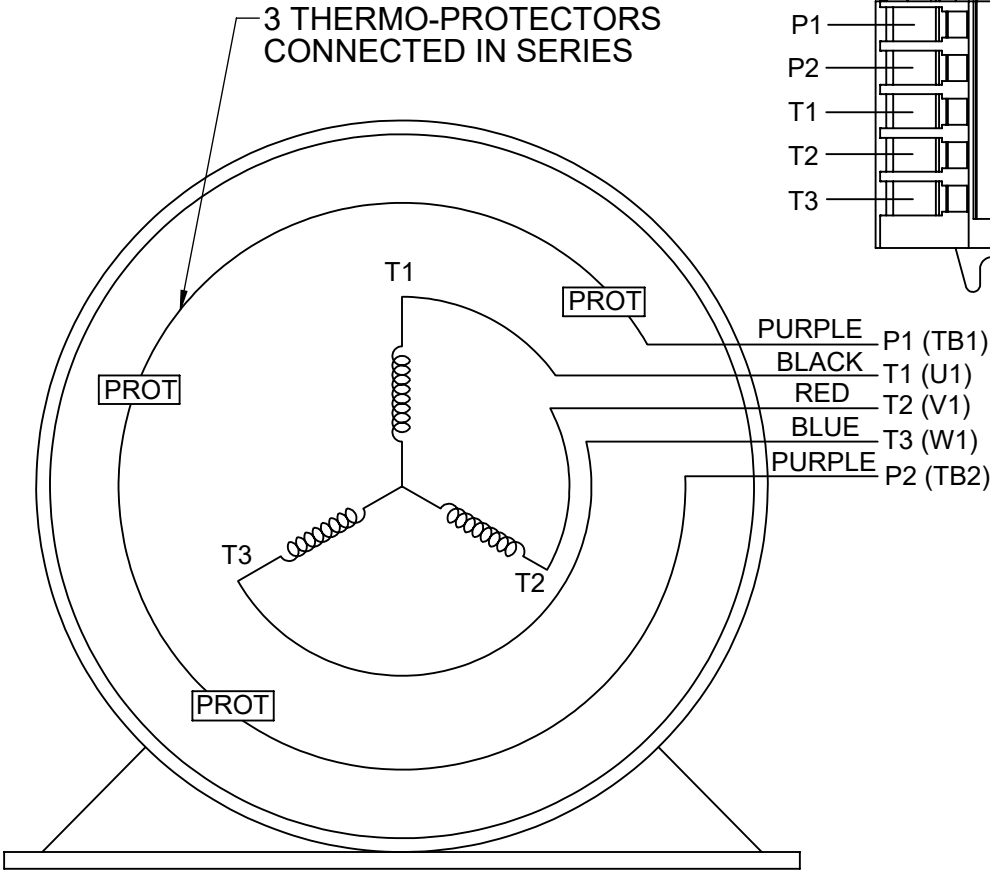
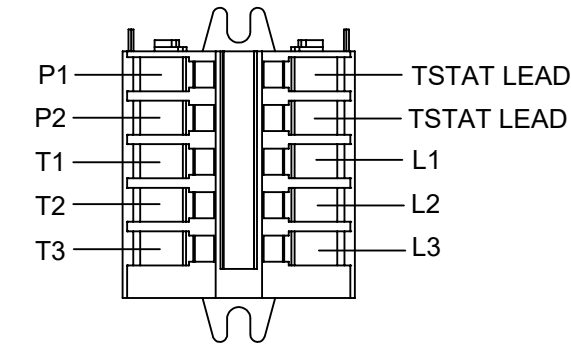


THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

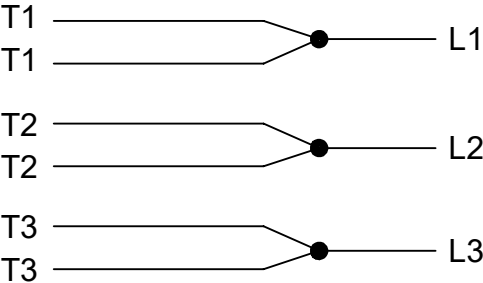
NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1

TERMINAL BLOCK WHEN SPECIFIED



T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A-9806 DECAL

DRAWING REVISION AC	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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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY LZ
DATE 01-04-1994
APPROVED BY GK
DATE 01-20-1994
REFERENCE
THIRD ANGLE PROJECTION

marathon™		
DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR		
MATERIAL	PROCESS/FINISH	
SIZE A	DRAWING NUMBER EE7300T	SHEET 1 OF 1

Data Sheet

Date: 6/20/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



215HTL7736

Submittal

Data @ 575 V

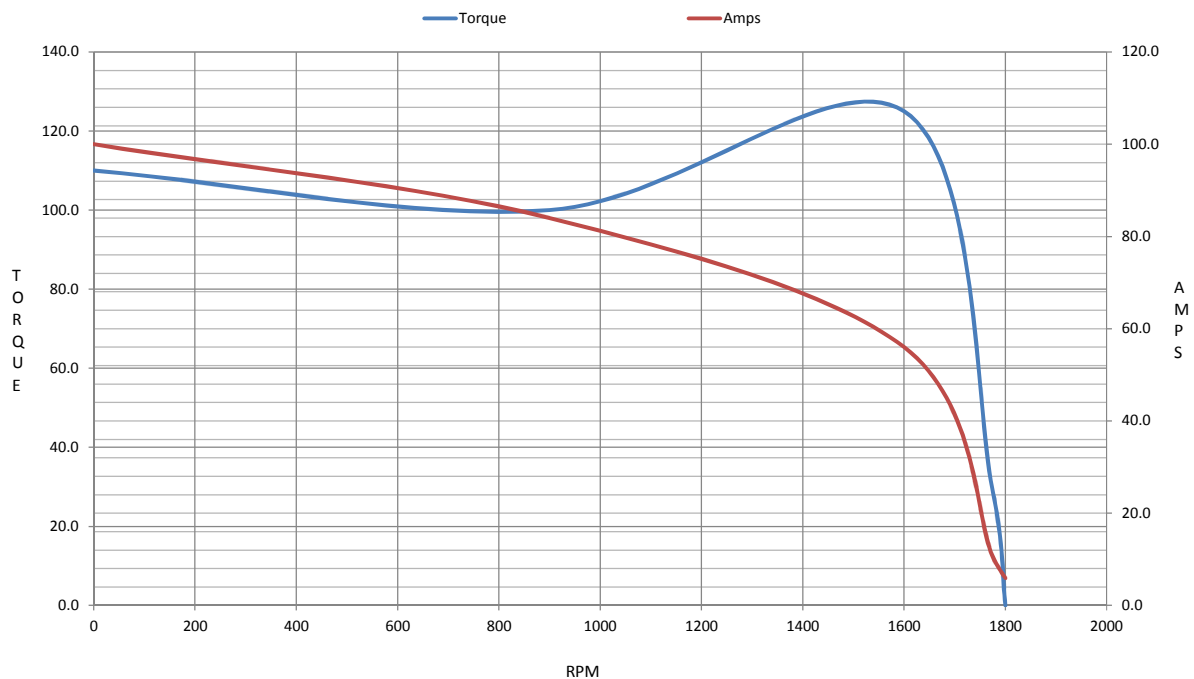
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.9	6.4	7.6	9.0	10.8	11.8	12.8	100	
Torque (ft-lb)	0.00	7.5	14.7	22.2	29.6	33.4	37.2	110	
RPM	1800	1792	1786	1780	1774	1,771	1766	0	
Efficiency (%)		82.5	87.5	90.2	90.2	90.2	90.2		
P.F. (%)	7.0	36.0	56.0	69.0	76.0	78.0	80.0	43.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																										
Speed (RPM)	0	900	1600	1774	1800																										
Current (Amps)	100	84.0	56.0	10.8	5.9																										
Torque (ft-lb)	110	100	125	29.6	0.00																										
Efficiency (%) P.F. (%) Current (Amps) <table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>82</td><td>35</td><td>6.0</td></tr><tr><td>50</td><td>88</td><td>55</td><td>7.0</td></tr><tr><td>75</td><td>90</td><td>70</td><td>8.5</td></tr><tr><td>100</td><td>90</td><td>78</td><td>10.0</td></tr><tr><td>125</td><td>90</td><td>80</td><td>12.5</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	82	35	6.0	50	88	55	7.0	75	90	70	8.5	100	90	78	10.0	125	90	80	12.5	Information Block	
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																						
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						HP		10.0																							
						Sync. RPM		1800																							
						Frame		215																							
						Enclosure		TENV																							
						Construction		TTL																							
						Voltage		575 V																							
						Frequency		60 Hz																							
						Design		A																							
						LR Code letter		M																							
						Service Factor		1.0																							
Temp Rise @ FL		90 ° C																													
Duty		CONT																													
Ambient		40 ° C																													
Elevation		1,000 feet																													
Rotor/Shaft wk²		1.30 Lb-Ft²																													
Ref Wdg		K2154304 NONE																													
Sound Pressure @ 1M		62 dBA																													
VFD Rating		CONSTANT 1000:1																													
Outline Dwg		B-SS330105-1275																													
Conn. Diag		A-EE7300T																													
Additional Specifications:																															
0																															
0																															
EQUIV CKT (OHMS / PHASE)																															
R1		R2		X1		X2		Xm																							
0.4440		0.4440		2.2190		3.5500		54.5810																							

Speed -Torque Curve



CERTIFICATION DATA SHEET

Model#: 215THTL7736 CC
 CONN. DIAGRAM: A-EE7300T
 OUTLINE: B-SS330105-1275

WINDING#: K2154304 NONE 5
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.50	1800	1774	215TC	TENV	M	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	10.8	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 76	3/4 LOAD PF: 69	1/2 LOAD PF: 56	88.5	SQ CAGE INV DUTY	5.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.6 LB-FT	100	110 LB-FT 372	125 LB-FT 422	90

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	1.3 LB-FT^2	0 LB-FT^2	0 SEC.	0	175 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.284	0.284	1.42	2.272	34.932

RM	ZREF	XR	TD	TD0
1417.16	28.4	3.8	0.01	0.29

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6309	6206	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE			
				NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: CONSTANT 1000:1
	INV. HP SPEED RANGE: 2.0 X BASE SPEED
	ENCODER: PROVISIONS ONLY
	NONE NONE NONE NONE PPR
	BRAKE: PROVISIONS ONLY NONE
	NONE P/N NONE

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/22/2017 07:08:59 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.