

PRODUCT INFORMATION PACKET



Model No: LM20043
Catalog No: LM20043
100 HP Special Voltage Motor, 3 phase, 3600 RPM, 575 V, 405TSC Frame, TEFC
Special Voltage Motors



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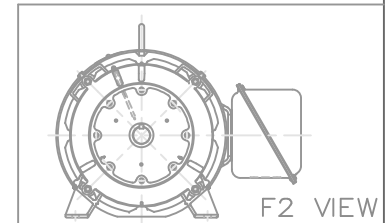
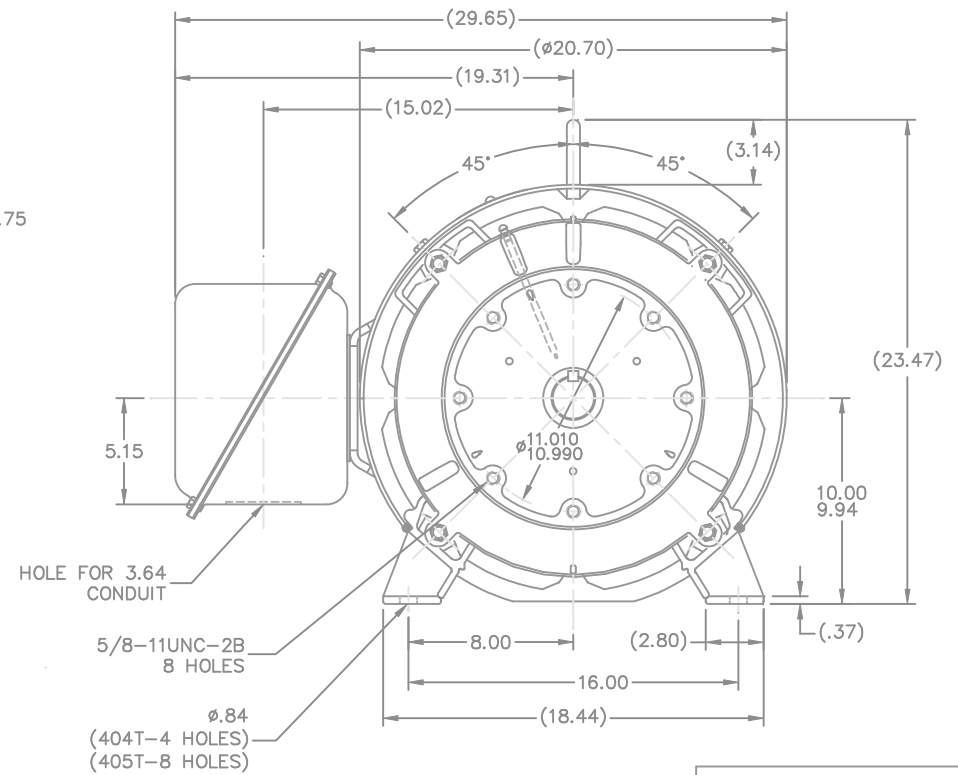
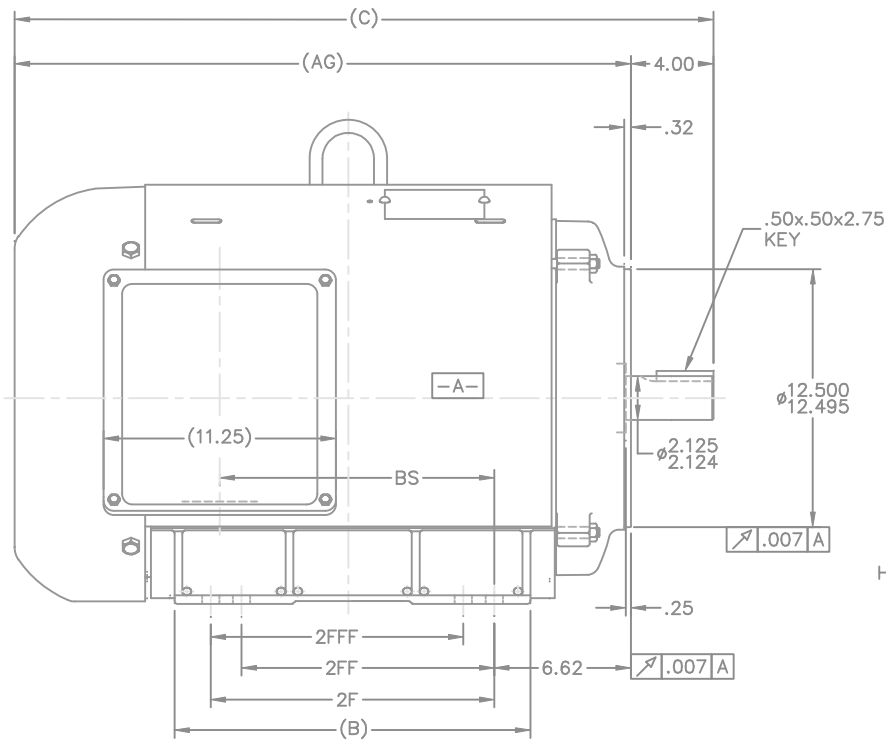
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	575 V
Current	84.0 A	Speed	3570 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	91.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405TSC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	315	Opp Drive End Bearing Size	313
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.049 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	TS	Overall Length	33.87 in
Frame Length	20.19 in	Shaft Diameter	2.125 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7340-LN	Outline Drawing	XJ2F1SC2-1946

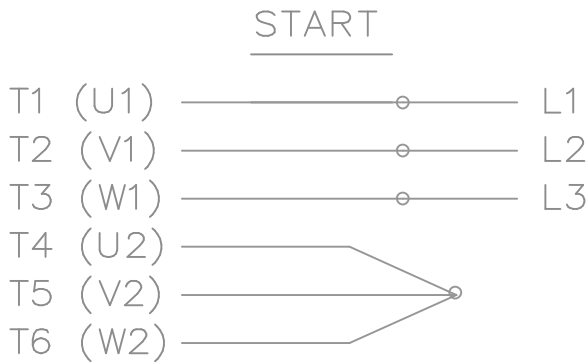
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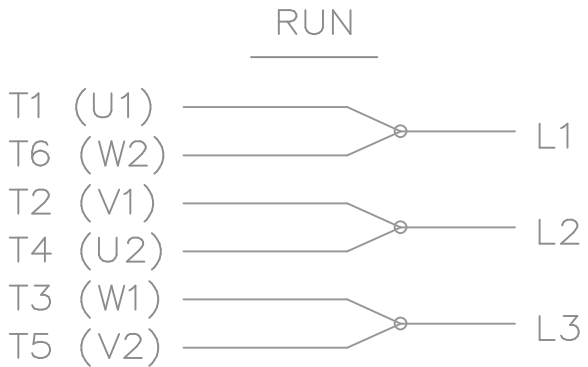
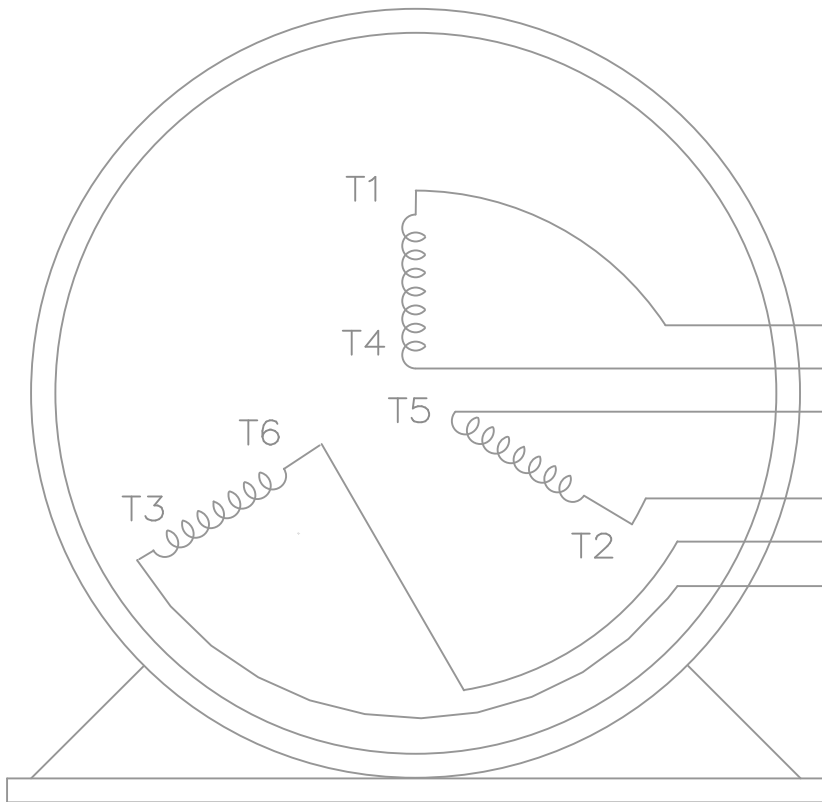
NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

															TOLERANCES UNLESS SPECIFIED				DRAWN TJB 11-28-2001						
															DEC. INCHES				CHK ML 11-28-2001						
															.X ±.1				APPD GK 11-28-2001						
DASH	FRAME	C	AG	B	2F	2FF	2FFF	BS							.XX ±.03		TITLE OUTLINE		SCALE 1=6						
1796	404TSC	32.37	28.37	15.75	12.25	---	---	11.81	2	REVISED KEY 2.75 WAS 2.78 MU81883	TJW 9/17/2007	MSG	.XXX ±.005			400TSC -TEFC -UEI -D.E. C' FACE		RFM							
									1		NEW DRAWING		TJB 11-28-2001		.XXXX ±.0005		MAT'L		PREV						
									NO.		REVISION		BY & DATE		CHK ANG ±7'30"		FINISH								
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED														RFP 11-28-2001		CAD FILE xj2f1sc2		SIZE B		DRAWING NO. XJ2F1SC2		PAGE OF 2		REV. 2	
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THREE PHASE — Y START
 Δ RUN MOTOR



T1 (U1)
 T4 (U2)
 T5 (V2)
 T2 (V1)
 T6 (W2)
 T3 (W1)

T6CK
 T6BM
 T4CC
 T2DL
 T4C

NOTE:
 IEC LEAD MARKINGS ARE NOTED
 IN PARENTHESES

VIEW OF TERMINAL END

			TOLERANCES UNLESS SPECIFIED			DRAWN BLR 10-04-1999		
			DEC.	INCHES		CHK DRS 10-04-1999		
			.X	±.1		APPD TB 10-04-1999		
3	REVISED TO MATCH M.E. ORIGINAL	TAT 07-25-2005	ML	.XX	±.02	TITLE CONNECTION DIAGRAM 3Ø — WYE START DELTA RUN	SCALE 1=1	
2	REVISED DRAWING MISTAKE CN 29200-2980	ERH 05-15-2003	ML	.XXX	±.005		REF	
1	NEW DRAWING	BLR 10-09-1999		.XXXX	±.0005	MAT'L.	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±'30"	FINISH	PREV	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT — DO NOT SCALE THIS PRINT			RFP	CAD FILE ee7340_In		SIZE A	DRAWING NO. EE7340-LN	PAGE OF 3
			DIST	WA-LB-SB				



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7340-LN
OUTLINE: XJ2F1SC2-1946
WINDING: L4052011

CAT #: LM20043

NONE 2

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	3600	3570	405TSC	TEFC	TFR	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	84	HYE START DELTA RUN	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.1	1/2 LD EFF	93.0	GTD EFF		ELECT. TYPE	
F.L. PF	91.5	3/4 LD PF	91.0	1/2 LD PF	89.0	93.6		SQ CAGE IND RUN	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
147 LB-FT	566	210 LB-FT 143%	375 LB-FT 255%	70

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA		0.00 LB-FT²	0 LB-FT²	0 SEC.	0	0 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTSaver

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
315 313						

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
0.059	0.035	0.448	0.315	24.406	0.150	ODE

* N O T E S *			INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE ENCODER: NONE NONE NONE NONE PPR

DATE: 9/5/2018	BRAKE: NONE	
	NONE	NONE
	FT-LB: NA	
VOLTAGE: NONE		HZ:
UL: V-INS, CONST UL REC		

Data Sheet

Date: 9/5/2018

LM20043



Data @ 575 V

Motor Load Data

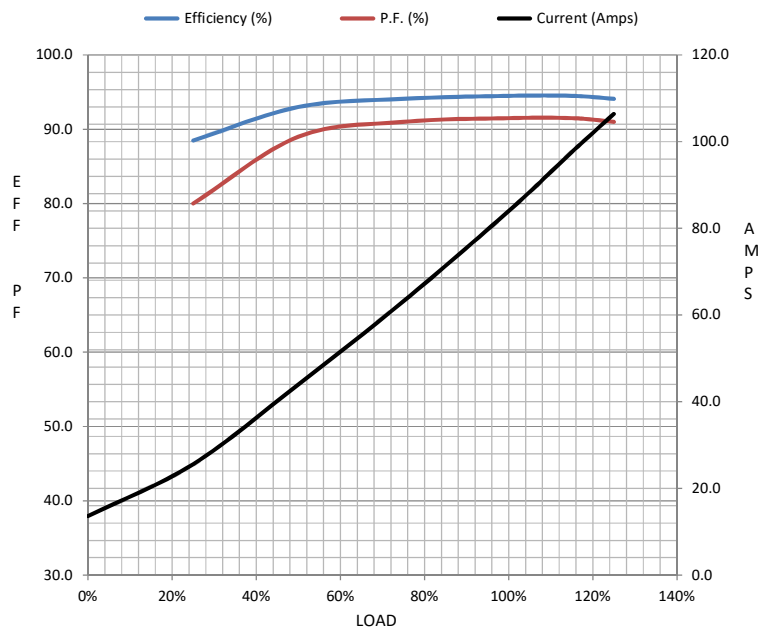
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	13.6	25.6	44.0	63.2	84.0	97.6	106	566	
Torque (ft-lb)	0.00	36.5	73.0	110	147	170	184	210	
RPM	3600	3590	3585	3575	3570	3,565	3560	0	
Efficiency (%)		88.5	93.0	94.1	94.5	94.5	94.1		
P.F. (%)	13.5	80.0	89.0	91.0	91.5	91.5	91.0	25.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3330	3570	3600
Current (Amps)	566	512	376	84.0	13.6
Torque (ft-lb)	210	190	375	147	0.00

Information Block

HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFR			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	L4052011 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	NONE			
Outline Dwg	XJ2F1SC2-1946			
Conn. Diag	A-EE7340-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0590	0.0350	0.4480	0.3150	24.4060



Speed - Torque Curve

