

PRODUCT INFORMATION PACKET



Model No: LM21148
Catalog No: LM21148
1,1800,DP,143T,3/60/230/460
Speed Ratio Motors



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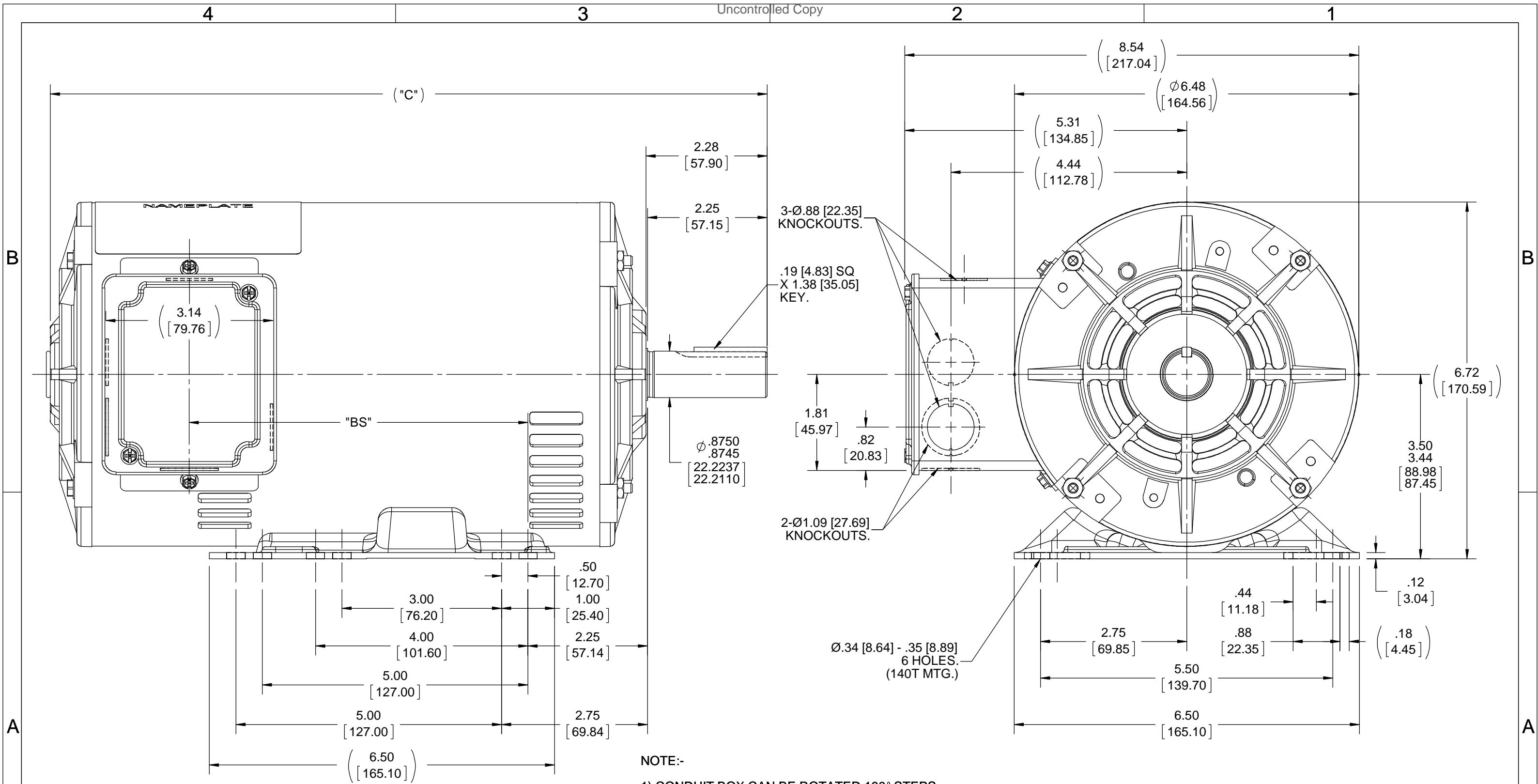
Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.1/1.6 A	Speed	1725 rpm
Service Factor	1	Phase	3
Efficiency	82.5 %	Power Factor	77
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	M
Frame	143T	Enclosure	Drip Proof
Thermal Protection	Thermostats (N/C)	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	N	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	3.68 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	12.49 in
Frame Length	8.56 in	Shaft Diameter	0.875 in
Shaft Extension	2.25 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	100085LN-856	Connection Drawing	EE7308T-LN

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NOTE:-
 1) CONDUIT BOX CAN BE ROTATED 180° STEPS.
 2) NAMEPLATE READ FROM CONDUIT BOX SIDE.

DASH.	"C"	"BS/140T"
706	10.99 [279.15]	3.88 [98.55]
756	11.49 [291.85]	4.38 [111.25]
806	11.99 [304.55]	4.88 [123.95]
856	12.49 [317.25]	5.38 [136.65]
906	12.99 [329.95]	5.88 [149.35]
956	13.49 [342.65]	6.38 [162.05]

DRAWING REVISION	REVISION BY	DATE
C	A SUPPANAVAR	02/28/2018
ECO	APPROVED BY	DATE
ECO-0136109	PST	05/18/2018

ECO DESCRIPTION
OUTLINE CONVERSION PROJECT
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30'
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

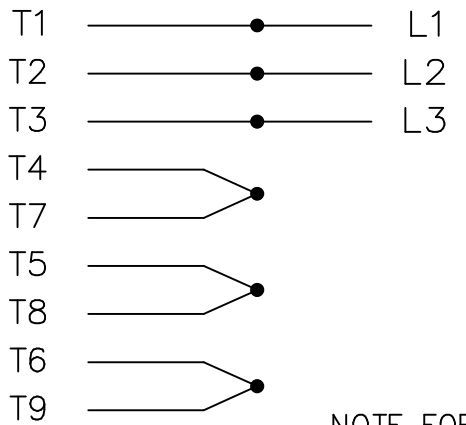
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [0.51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]

DRAWN BY	DATE
BLR	06-07-1999
APPROVED BY	DATE
REFERENCE	THIRD ANGLE PROJECTION
100085LN	

REGAL™ Regal Beloit America, Inc.	
DESCRIPTION	OUTLINE 140T & 56HZ - DR.PR.
MATERIAL	PROCESS/FINISH
SIZE	DRAWING NUMBER
B	100085LN
SHEET	1 OF 1

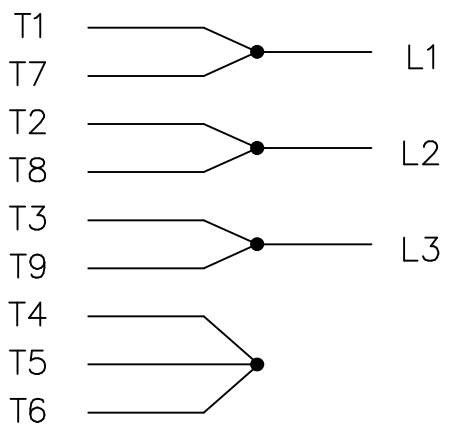
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

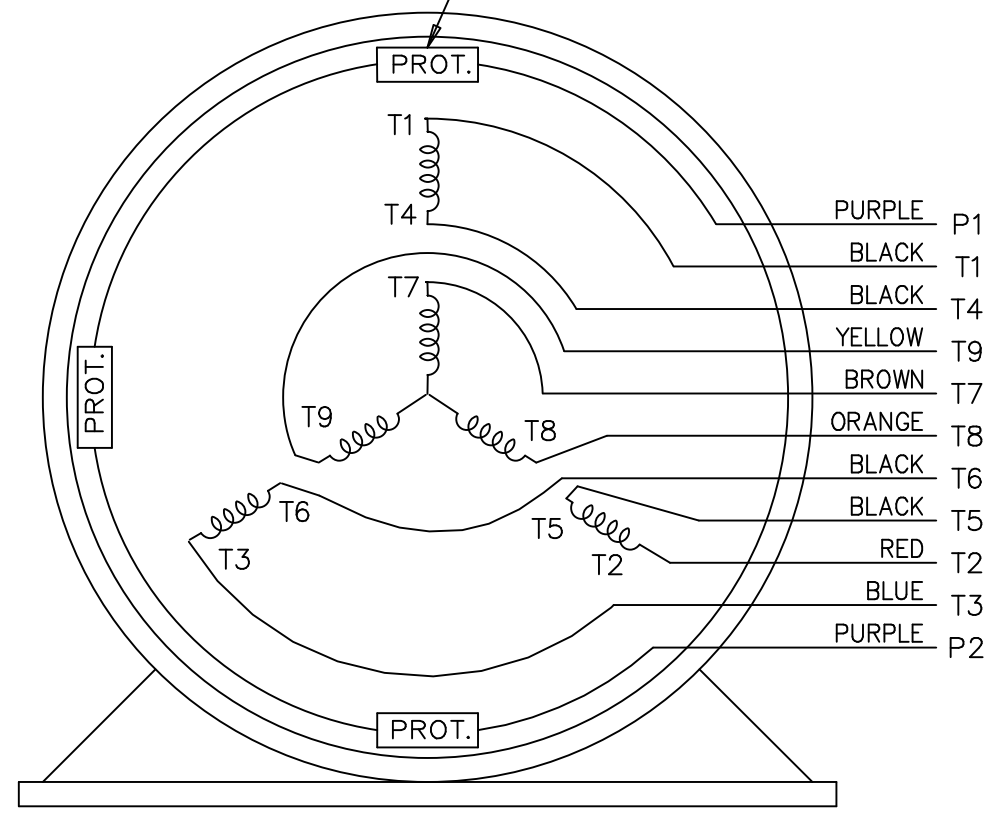


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED			DRAWN BJK 07-16-2002					
				DEC.	INCHES		CHK DRS 07-18-2002					
				.X	±.1		APPD GK 07-18-2002					
					.XX	±.02	SCALE 1=1					
2	ADDED COLORS TO "T & P" LEADS	CN 40494	MSG 08-08-2006	ML	.XXX	±.005	TITLE CONNECTION DIAGRAM 3 PHASE - DUAL VOLTAGE MOTOR					
1	NEW DRAWING		BJK 07-18-2002	DRS	.XXXX	±.0005	REF					
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"		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 ee7308t_ln			SIZE	DRAWING NO.	PAGE	OF	REV.
				DIST	LB			A	EE7308T-LN			2



**2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810**

CONN. DIAGRAM: A-EE7308T-LN

CATALOG #: LM21148

OUTLINE: A-100085LN-856

WINDING #: ZT419 R1 3

MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1	0.75	1800	1725	143T	DP	M	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	3.1/1.55	LINE OR INVERTER	CONTINUOUS	F3	1.0	40

FULL LOAD EFF:	82.5	3/4 LOAD EFF:	84	1/2 LOAD EFF:	81.5	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	77	3/4 LOAD PF:	70	1/2 LOAD PF:	55	80	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	26 / 13	10 LB-FT 333 %	13 LB-FT 433 %	22

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	0.11 LB-FT^2	- LB-FT^2	- SEC.	-	40 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	GRAY (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
205	203						

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

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INVERTER TORQUE: CONSTANT 2:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/23/2018

LM21148



Data @ **460 V**

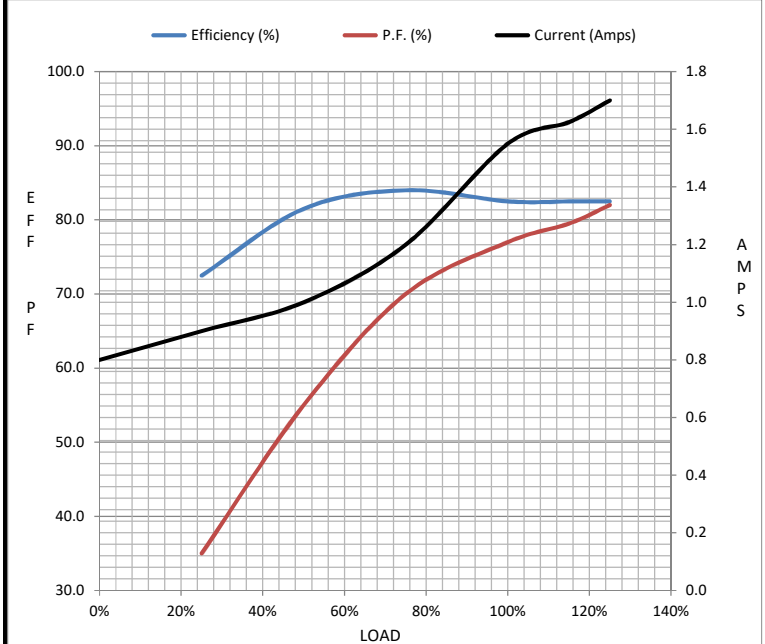
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.80	0.90	1.00	1.20	1.55	1.63	1.70	13.0
Torque (ft-lb)	0.00	0.75	1.50	2.20	3.0	3.4	3.8	10.0
RPM	1800	1785	1770	1750	1725	1.721	1715	0
Efficiency (%)		72.5	81.5	84.0	82.5	82.5	82.5	
P.F. (%)	0.0	35.0	55.0	70.0	77.0	79.5	82.0	66.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1550	1725	1800
Current (Amps)	13.0	12.0	8.5	1.55	0.80
Torque (ft-lb)	10.0	9.0	13.0	3.0	0.00

Information Block				
HP	1.0			
Sync. RPM	1800			
Frame	56			
Enclosure	DP			
Construction	TDR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	M			
Service Factor	1.15			
Temp Rise @ FL	22 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.11 Lb-Ft ²			
Ref Wdg	ZT419 R1			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	A-100085LN-856			
Conn. Diag	A-EE7308T-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
9.0250	6.1580	12.9980	11.5510	334.8840



Speed - Torque Curve

