

PRODUCT INFORMATION PACKET



Model No: LM24871
Catalog No: LM24871
1 HP General Purpose Motor, 3 phase, 1800 RPM, 230/460 V, 143T Frame, ODP
Three Phase ODP Motors



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The Regal logo is located in the bottom right corner. It features the word "REGAL" in a white, bold, sans-serif font, set against a dark grey, trapezoidal background. The background of the entire page on the right side is a blue gradient with a halftone dot pattern.



Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	3.0/1.5 A	Speed	1760 rpm
Service Factor	1.25	Phase	3
Efficiency	85.5 %	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	N
Frame	143T	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	205	Opp Drive End Bearing Size	203
UL	Recognized	CSA	Y
CE	Y	IP Code	22

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	13.6 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	12.99 in
Frame Length	9.16 in	Shaft Diameter	0.875 in
Shaft Extension	2.28 in	Assembly/Box Mounting	F1 ONLY

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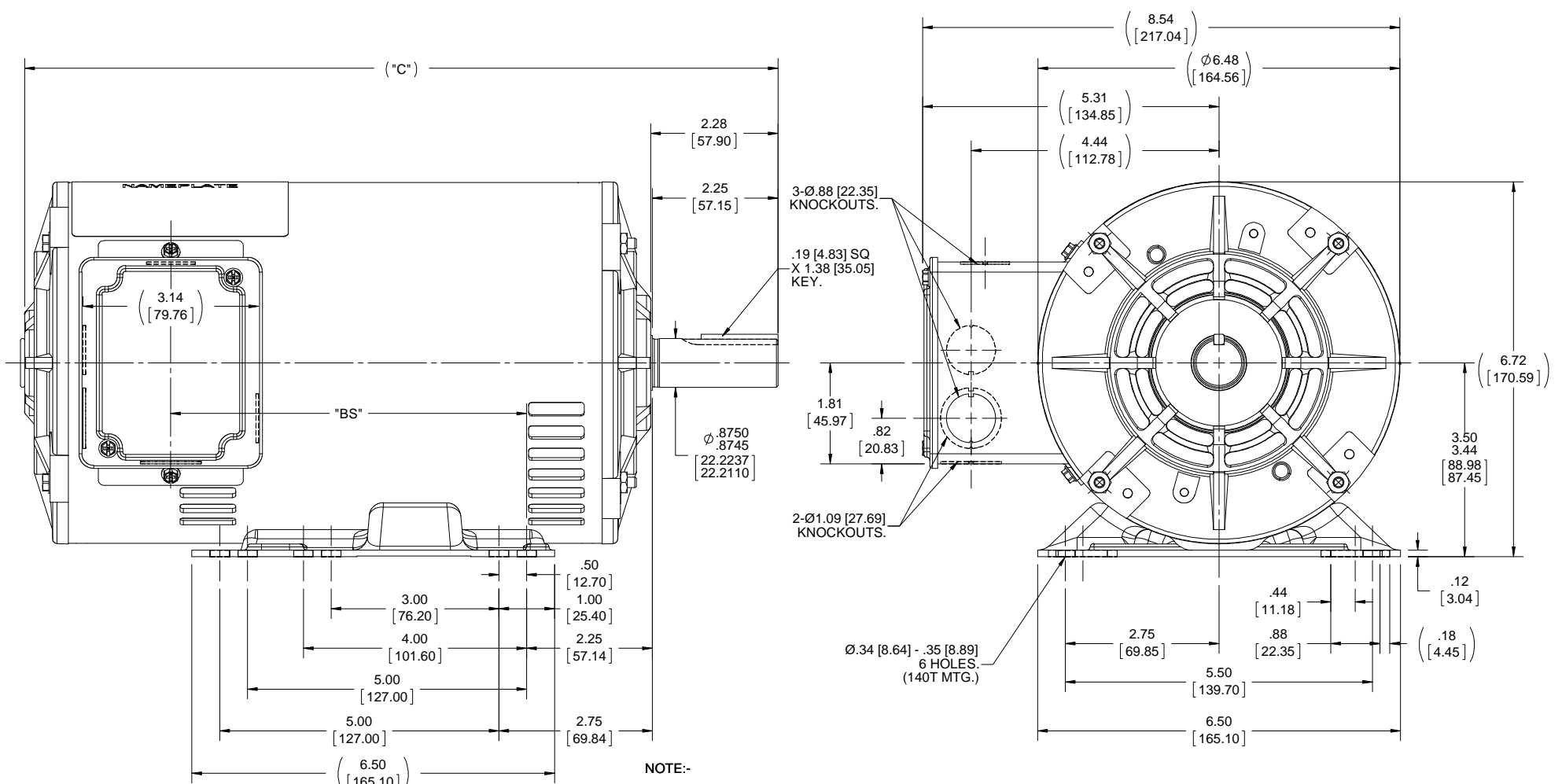
1

B

B

A

A



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]

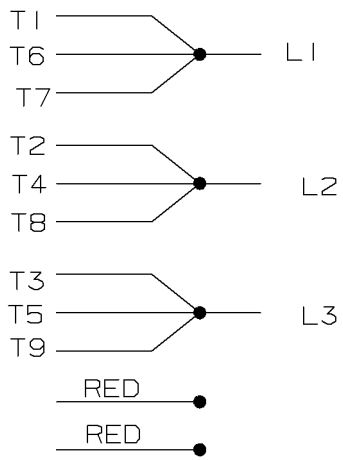
DRAWING REVISION C	REVISION BY A SUPPANAVAR	DATE 02/28/2018
ECO ECO-0136109	APPROVED BY PST	DATE 05/18/2018
ECO DESCRIPTION OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	+0.1	[+2.5]
.XX	+0.03	[+0.76]
.XXX	+0.005	[+0.127]
.XXXX	+0.0005	[+0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45°		
CORNER FILLETS: R.02 [51]		
MACHINED SURFACES: 200 $\sqrt{5.1}$ INCH mm		
mm SHOWN IN [BRACKETS]		

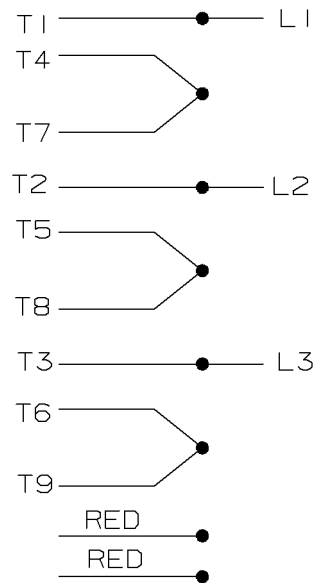
DRAWN BY BLR	DATE 06-07-1999
APPROVED BY	DATE
REFERENCE 100085LN	THIRD ANGLE PROJECTION

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

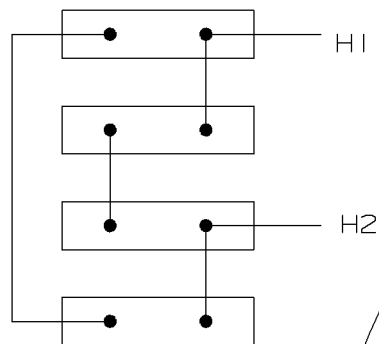
LOW VOLTAGE



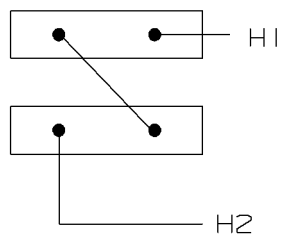
HIGH VOLTAGE



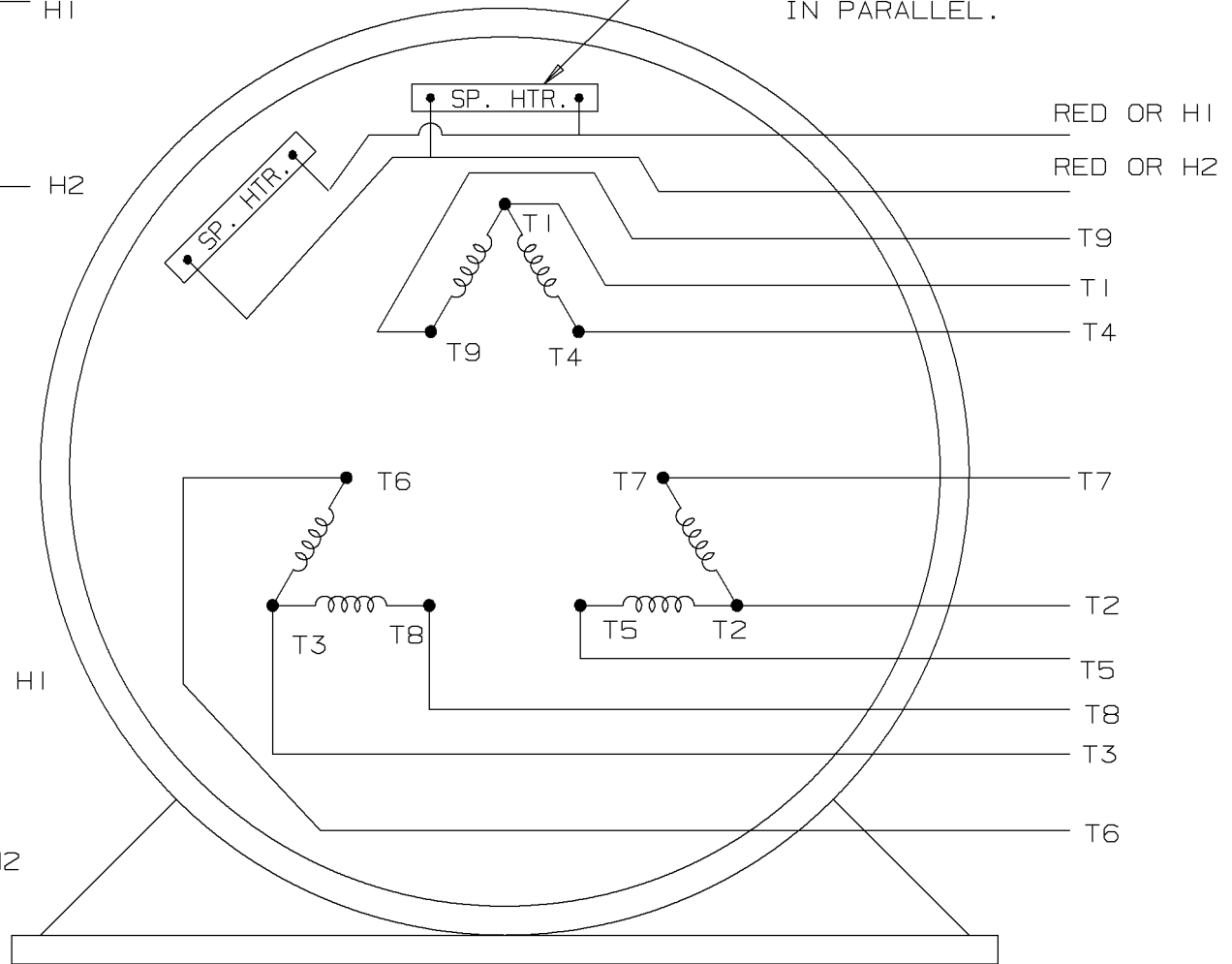
SPACE HEATERS CONNECTED IN SERIES PARALLEL



SPACE HEATERS CONNECTED IN SERIES



SPACE HEATER CONNECTED IN PARALLEL.



VIEW OF TERMINAL END

						✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .03 XXX± .005 XXXX± .0005 ANGLES± 7°30"			
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED		DRAWN BY CAV 04-14-2000	
						FINISH		CHKD BY DRS 04-14-2000	
04-14-2000		NEW DRAWING		CAV		MATERIAL		APPD BY TB 04-14-2000	
REV DATE CHANGE		MU30201		NAME		PART NAME CONNECTION DIAGRAM DELTA CONN. - 3Ø - 1-2CKT/SPACE HTR.		DRWG NO A- EE7308U-LN	
						PURCHASED		CADD FILE NO. EE7308U-LN	

ERROR: undefined
OFFENDING COMMAND: sc

STACK:

1

1

-savelevel-



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308-LN
 OUTLINE: A-100085LN-806
 WINDING: ZT4103

DR 3

CAT #: LM24871

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
1	0.75	1800	1740	143T	DP	TDR	M	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190-208/380-415	3.2/1.6&3.4-3.4/1.7-1.7	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	F.L. PF	3/4 LD EFF	3/4 LD PF	82.5	64.0	1/2 LD EFF	78.5	GTD EFF	81.5	ELECT. TYPE
84.0	72.0	3/4 LD EFF	3/4 LD PF	82.5	64.0	1/2 LD PF	78.5	51.0	81.5	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	11.5	LB-FT	383%	14.5	LB-FT	483%	F.L. RISE (° C)				
3.0	LB-FT	14.0	11.5	LB-FT	383%	14.5	LB-FT	27				
PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT					
56	dba	65	dba	0.09	LB-FT²	7	LB-FT²	20	SEC.	2	35	LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTS/VER
BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL	
DE ODE	POLYREX EM	T	NONE	NONE	1144	STRESSPROOF (C-223)	ROLLED STEEL	
BALL	203							

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
8.69	5.51	10.508	8.69	247.08	0.150	ODE

* INVERTER TORQUE: NONE	
* INV. HP SPEED RANGE: NONE	
ENCODER: NONE	
BRAKE: NONE	
FT-LB: N/A	
VOLTAGE: NONE	
UL: V-INS, CONST UL REC	

DATE: 9/10/2018	INVERTER TORQUE: NONE
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	BRAKE: NONE
	FT-LB: N/A
	VOLTAGE: NONE
	UL: V-INS, CONST UL REC



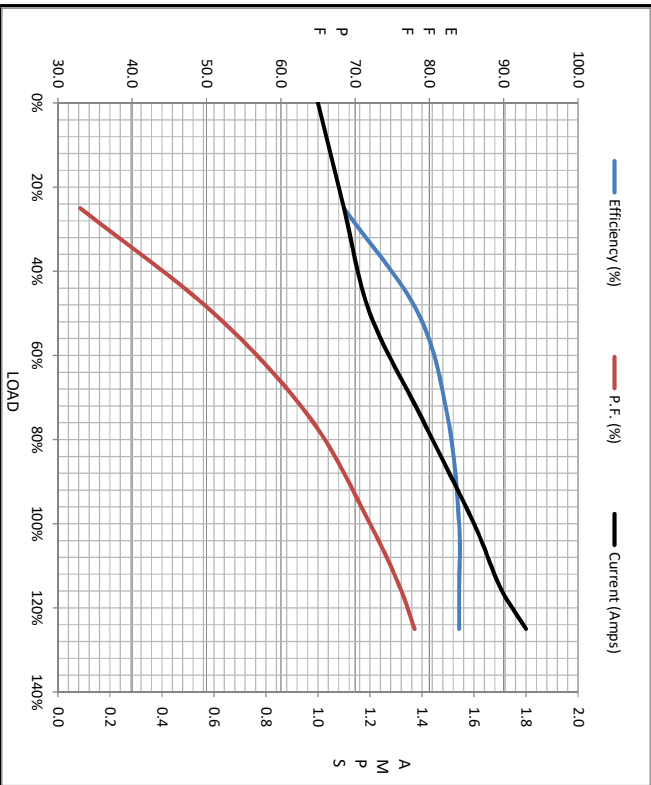
Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.00	1.10	1.20	1.40	1.60	1.70	1.80	14.0	
Torque (ft-lb)	0.00	0.75	1.50	2.30	3.0	3.5	3.8	11.5	
RPM	1800	1790	1780	1760	1740	1.730	1730	0	
Efficiency (%)		68.5	78.5	82.5	84.0	84.0	84.0		
P.F. (%)	10.5	33.0	51.0	64.0	72.0	76.0	78.0	68.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1500	1740	1800
Current (Amps)	14.0	12.5	9.0	1.60	1.00
Torque (ft-lb)	11.5	10.5	14.5	3.0	0.00

Information Block

HP	1.0
Sync. RPM	1800
Frame	143
Enclosure	DP
Construction	TDR
Voltage	230/460#190-208/380-415 V
Frequency	60 Hz
Design	B
LR Code letter	M
Service Factor	1.15
Temp Rise @ FL	27 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk ²	0.09 Lb-Ft ²
Ref Wdg	ZT4103 DR
Sound Pressure @ 1M	56 dBA
VFD Rating	NONE
Outline Dwg	A-100085LN-806
Conn. Diag	A-EE7308-1N
Additional Specifications:	
0	
0	
EQUIV CKT (OHMS / PHASE)	
R1	R2
8.6900	5.5100
X1	X2
10.5080	8.6900
Xm	
	247.0800



Speed - Torque Curve

