

# PRODUCT INFORMATION PACKET



Model No: C143T17FK24A

Catalog No: 121983.00

..1.5HP..1750RPM.143TC.TEFC.230/460V.3PH.60HZ.CONT.40C.1.15SF.RIGID-C  
FACE.C143T17FK24.....UNIT HANDLING.NONE.....

Unit Handling



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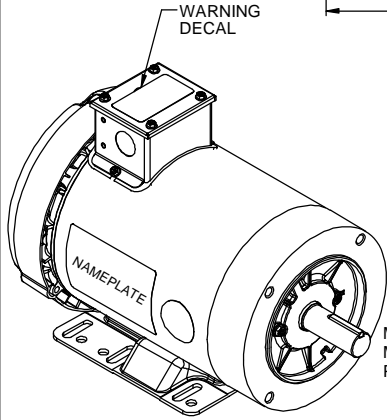
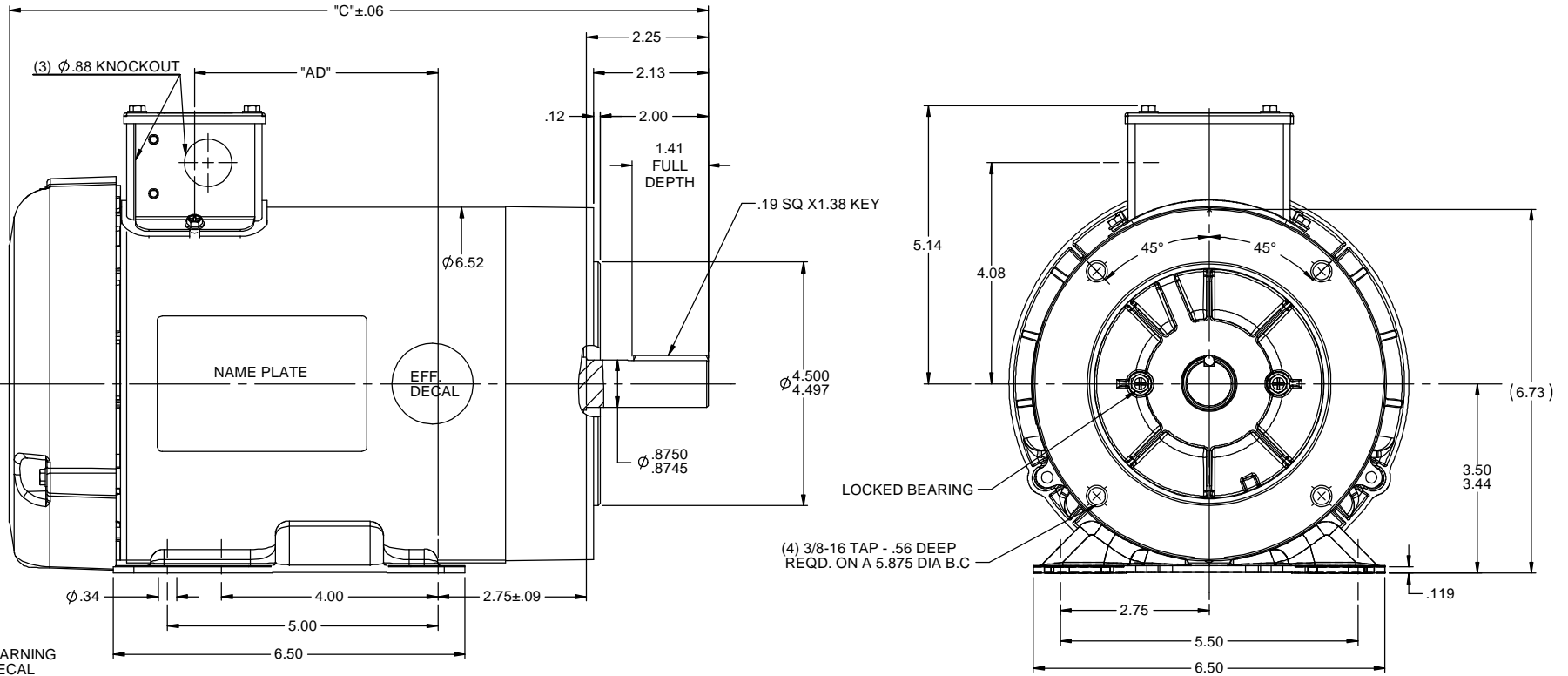
**Nameplate Specifications**

Output HP	<b>1.50 Hp</b>	Output KW	<b>1.1 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>208-230/460 V</b>
Current	<b>4.6-4.8/2.4 A</b>	Speed	<b>1750 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>L</b>	Frame	<b>145TC</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6205</b>
Opp Drive End Bearing Size	<b>6203</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>HORIZONTAL</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>Rolled Steel</b>	Shaft Type	<b>T</b>
Overall Length	<b>13.42 in</b>	Frame Length	<b>7.50 in</b>
Shaft Diameter	<b>0.875 in</b>	Shaft Extension	<b>2.25 in</b>
Assembly/Box Mounting	<b>F3</b>		
Outline Drawing	<b>607-0030-750</b>	Connection Diagram	<b>005010.20</b>

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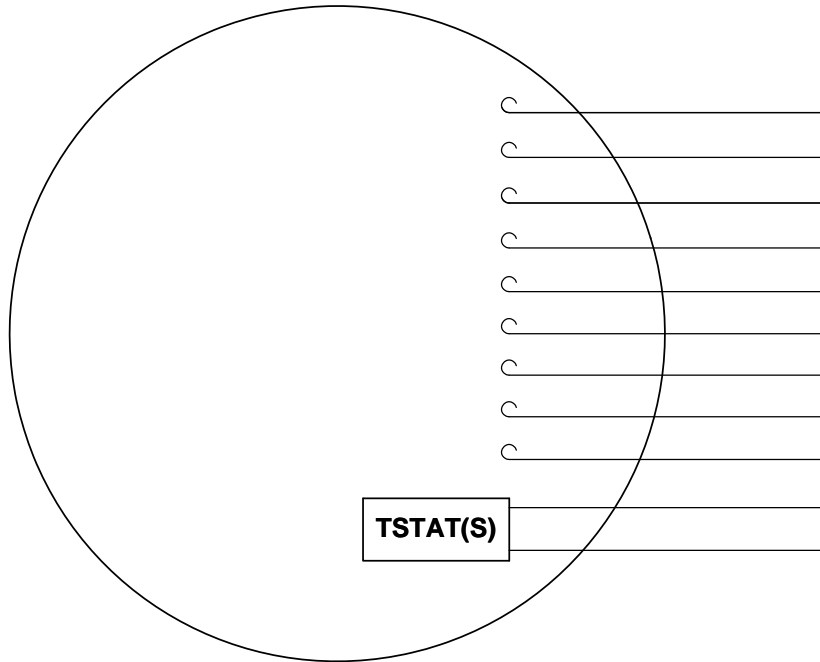
MAXIMUM FACE RUNOUT TO BE .004 T.I.R  
 MAXIMUM PILOT ECCENTRICITY .004 T.I.R  
 PERMISSIBLE SHAFT RUNOUT .002 T.I.R

DASH NO.	"C"	"AD"
700	12.92	4.50
750	13.42	5.00
800	13.92	5.50
850	14.42	6.00
900	14.92	6.50

NOTE:  
 1) GASKETS THROUGHOUT

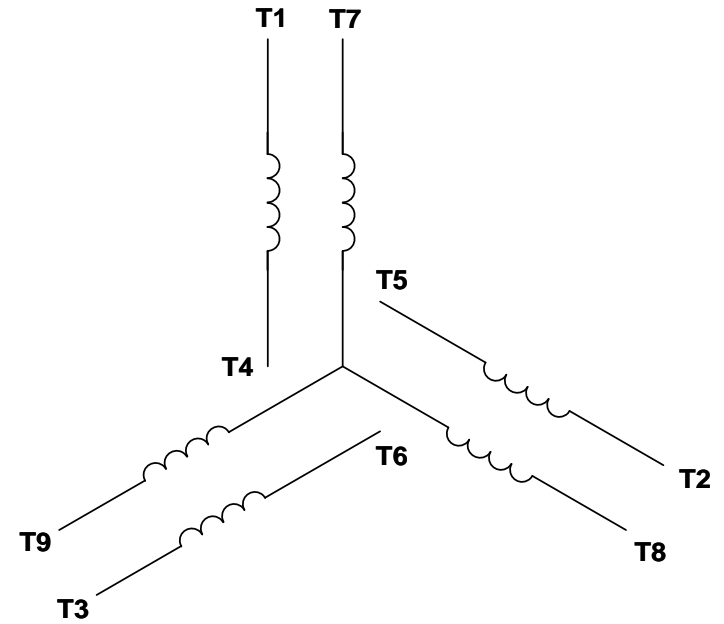
TOLERANCES UNLESS SPECIFIED				LEESON	ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN JD 11/05/2011
NO	CHK	BY & DATE	DEC INCHES			
			X ±.1			APPR
			XX ±.03	TITLE OUTLINE - 140TC FRAME	SCALE 1:2	
			XXX ±.005	TEFC-RIGID "C" FACE	REF 607-0029	
			XXXX ±.0005	MATL GENERAL PURPOSE	FMF 121982.00	
			FINISH ±1/2"		PAGE OF	
REVISION				PREV	SIZE B	DRAWING NO 607-0030
THIRD ANGLE PROJECTION				NETWORK FILE NAME 607-0030		REV

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END. Uncontrolled Copy



- T1
- T2
- T3
- T4
- T5
- T6
- T7
- T8
- T9
- RED(P1)
- RED(P2)

**LINE LEADS**



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

DRAWING REVISION <b>G</b>	REVISION BY <b>MVG</b>	DATE <b>04/05/2017</b>
ECO <b>ECO-0121253</b>	APPROVED BY <b>SM</b>	DATE <b>04/05/2017</b>

ECO DESCRIPTION  
**ADDED P1 & P2 FOR TSTAT**

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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

**REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°**  
**CORNER FILLETS: R.02 [.51]**  
**MACHINED SURFACES: 125/3.2 INCH/mm**  
**mm SHOWN IN [BRACKETS]**

DRAWN BY <b>DBT 12/16/97</b>
DATE
APPROVED BY <b>KH 12/17/97</b>
DATE
REFERENCE
THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**CONN DIAGRAM-EXTERNAL**  
3 PHASE WITH PROTECTOR

MATERIAL <b>DECAL - 004014 (TSTAT) - 080582</b>	PROCESS/FINISH <b>STOCK</b>
SIZE <b>A</b>	DRAWING NUMBER <b>00501020</b>
SHEET <b>1 OF 1</b>	



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: 005010.20  
OUTLINE: 607-0030-750  
WINDING: T634341

CAT #: 121983.00

FR 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
1.5	1.1	1800	1750	145TC	TEFC	TFR	L	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#208-230/460	4.3/2.15&4.85/2.4	ACROSS THE LINE	CONT	F	1.15	40	3300
	F.L. EFF	86.5	3/4 LD EFF	87.2	1/2 LD EFF	84.0	GTD EFF		ELECT. TYPE
	F.L. PF	67.7	3/4 LD PF	63.0	1/2 LD PF	55.0	0.0		SO CAGE IND RUN
	F.L. TORQUE	LR AMPS @ 460 V	17.2	LB-FT	382%	20.4	LB-FT	45	F.L. RISE (°C)
	4.5 LB-FT	18.5							
	PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT		
	65 DBA	74 DBA	0.14 LB-FT²	0.1 LB-FT²	10 SEC.	3	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	N - LEESON WATTS
BEARINGS DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
BALL 6205	BALL 6203	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)		ROLLED STEEL
THERMOSTATS TSTATS (N/C)	PROTECTORS	WIDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS		
	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 ODE		
0	0	0	0	0	0.080			

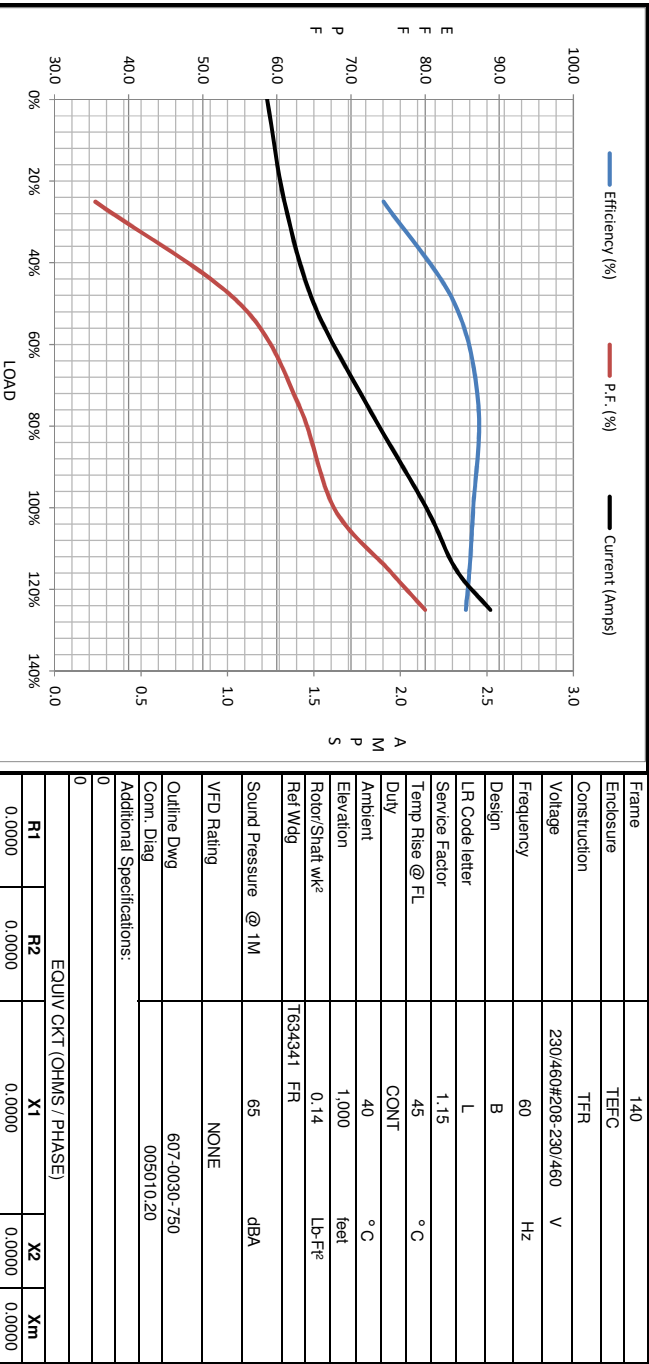
* N O T E S	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	BRAKE: NONE
	FT-LB: NA
	VOLTAGE: NONE
	UL: Y-(LEESON UL REC)

DATE: 1/19/2018	HZ:
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Motor Load Data						
Load	0%	25%	50%	75%	100%	LR
Current (Amps)	1.23	1.33	1.50	1.81	2.15	18.5
Torque (ft-lb)	0.00	1.10	2.25	3.4	4.5	17.2
RPM	1800	1785	1772	1760	1750	0
Efficiency (%)		74.4	84.0	87.2	88.5	
P.F. (%)	9.9	35.5	55.0	63.0	67.7	48.0

Motor Speed Data						Information Block																					
	LR	Pull-Up	BD	Rated	Idle	HP	Sync. RPM	Frame	Enclosure	Construction	Voltage	Frequency	Design	LR Code letter	Service Factor	Temp Rise @ FL	Duty	Ambient	Elevation	Rotor/Shaft wk <sup>2</sup>	Ref Wdg	Sound Pressure @ 1M	VFD Rating	Outline Dwg	Conn. Diag	Additional Specifications:	
Speed (RPM)	0	900	1600	1750	1800	1.5	1800	140	TEFC	TFR	230/460#208-230/460	60	B	L	1.15	45	CONT	40	1,000	0.14	T634341 FR	65	NONE	607-0030-750	005010.20		
Current (Amps)	18.5	16.1	12.1	2.15	1.23																						
Torque (ft-lb)	17.2	16.0	20.4	4.5	0.00																						



Parameter	R1	R2	X1	X2	Xm
EQUIV CKT (OHMS / PHASE)	0.0000	0.0000	0.0000	0.0000	0.0000

