

# PRODUCT INFORMATION PACKET



Model No: LM34170  
Catalog No: LM34170  
1.50 HP General Purpose Motor, 3 phase, 1800 RPM, 230/460 V, 56HC Frame, TEFC  
General Purpose Motors



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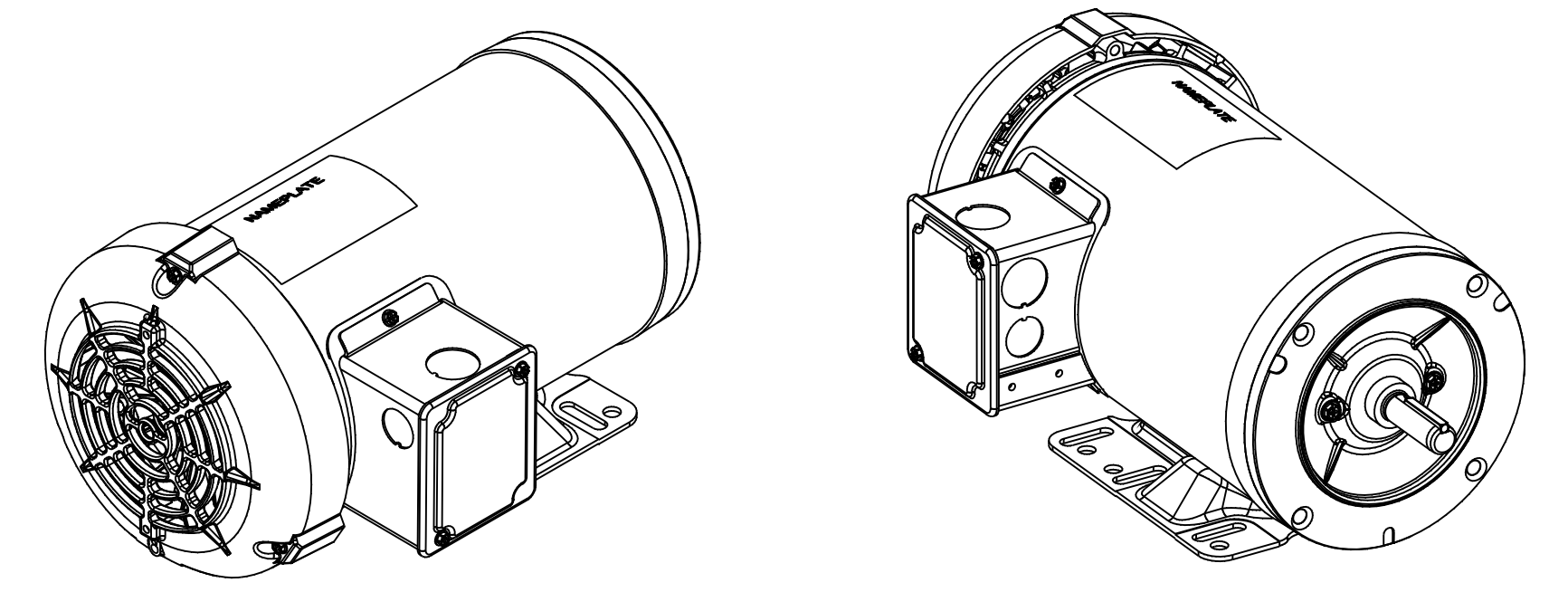
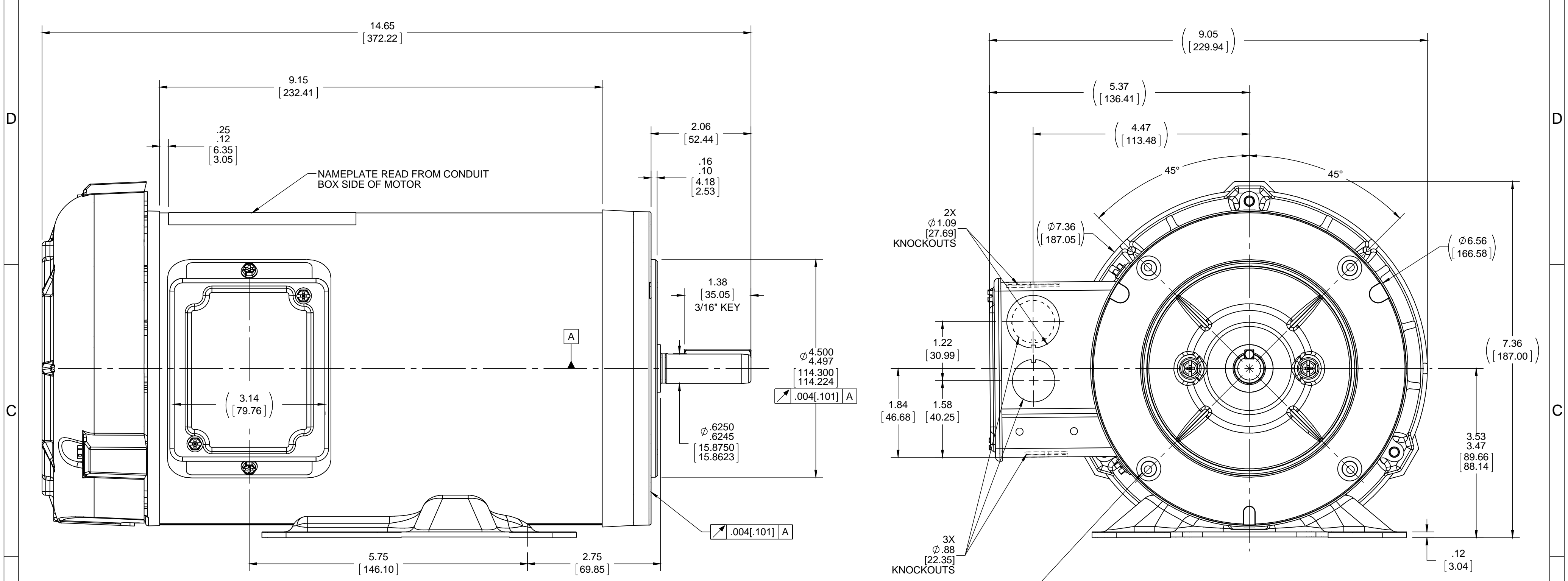
### Nameplate Specifications

Output HP	1.50 Hp	Output KW	1.1 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.6/2.3 A	Speed	1725 rpm
Service Factor	1.15	Phase	3
Efficiency	86.5 %	Power Factor	71
Duty	Continuous	Insulation Class	B
Design Code	A	KVA Code	P
Frame	56HC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	7.9 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	14.65 in
Frame Length	9.15 in	Shaft Diameter	0.625 in
Shaft Extension	1.88 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	OL56100133-001	Connection Drawing	CDTD127

4 3 2 1



DRAWING REVISION A		REVISION BY E. VILLA	DATE 08-26-2016	TOLERANCES UNLESS OTHERWISE SPECIFIED:		DRAWN BY		REGAL™ Regal Beloit America, Inc.			
ECO-0097986		APPROVED BY J. ORTEGA	DATE 08-26-2016	DEC.	INCH	mm	ANGLE	DATE	DESCRIPTION		
ECO DESCRIPTION				.X	±0.1	[±2.5]	±0.5°	APPROVED BY	OUTLINE		
NEW MODEL RELEASE				.XX	±0.02	[±0.51]		DATE	56H FR, TEFC, C-FACE, RIGID		
				.XXX	±0.005	[±0.127]		REFERENCE	LM25048	MATERIAL	PROCESS/FINISH
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				mm SHOWN IN [BRACKETS]		INCH		mm		C	OL56100133-001

4

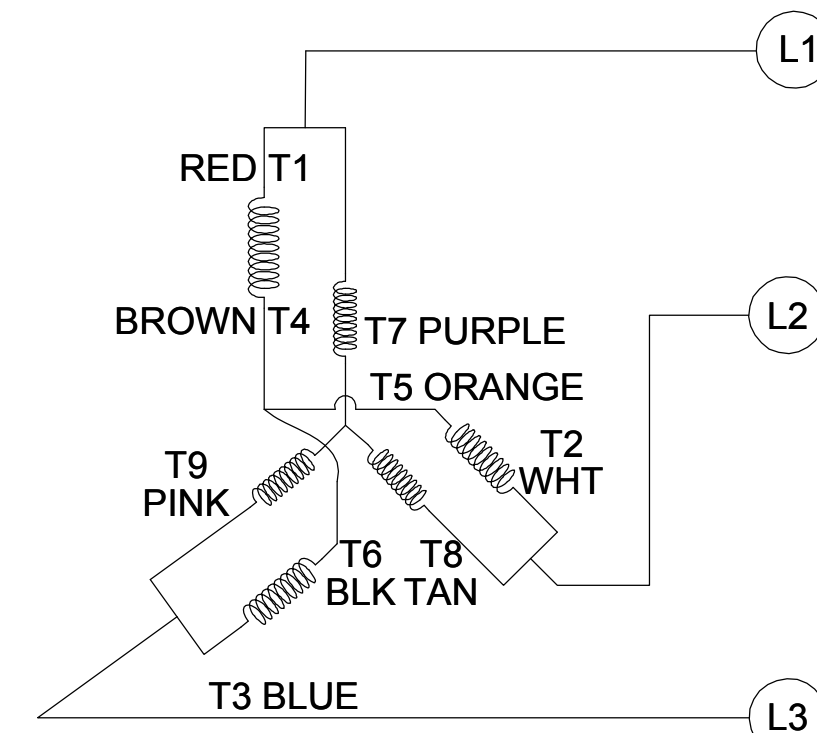
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1

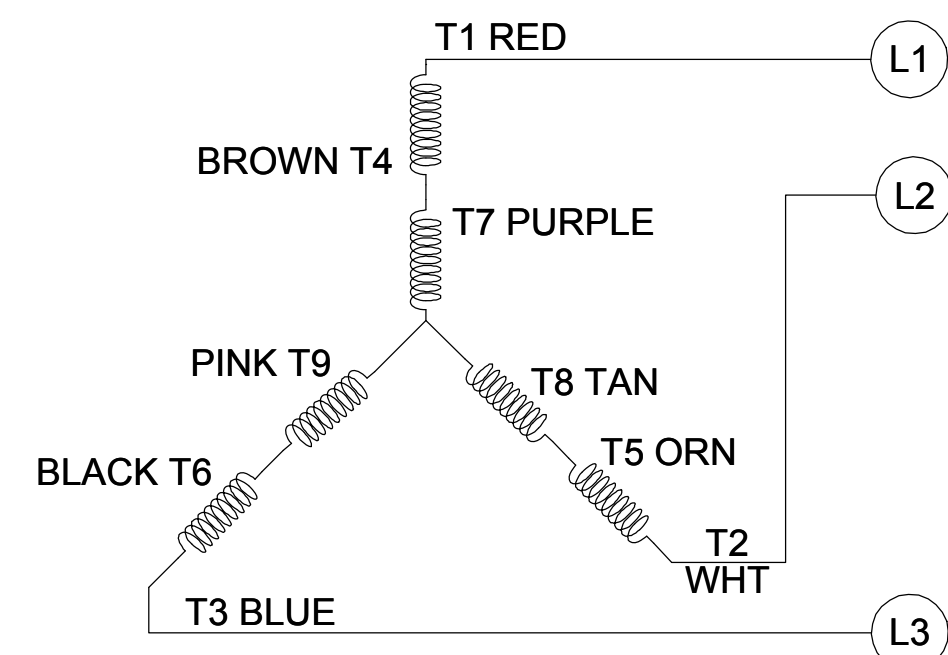
001

CCW LOW VOLTAGE



002

CCW HIGH VOLTAGE

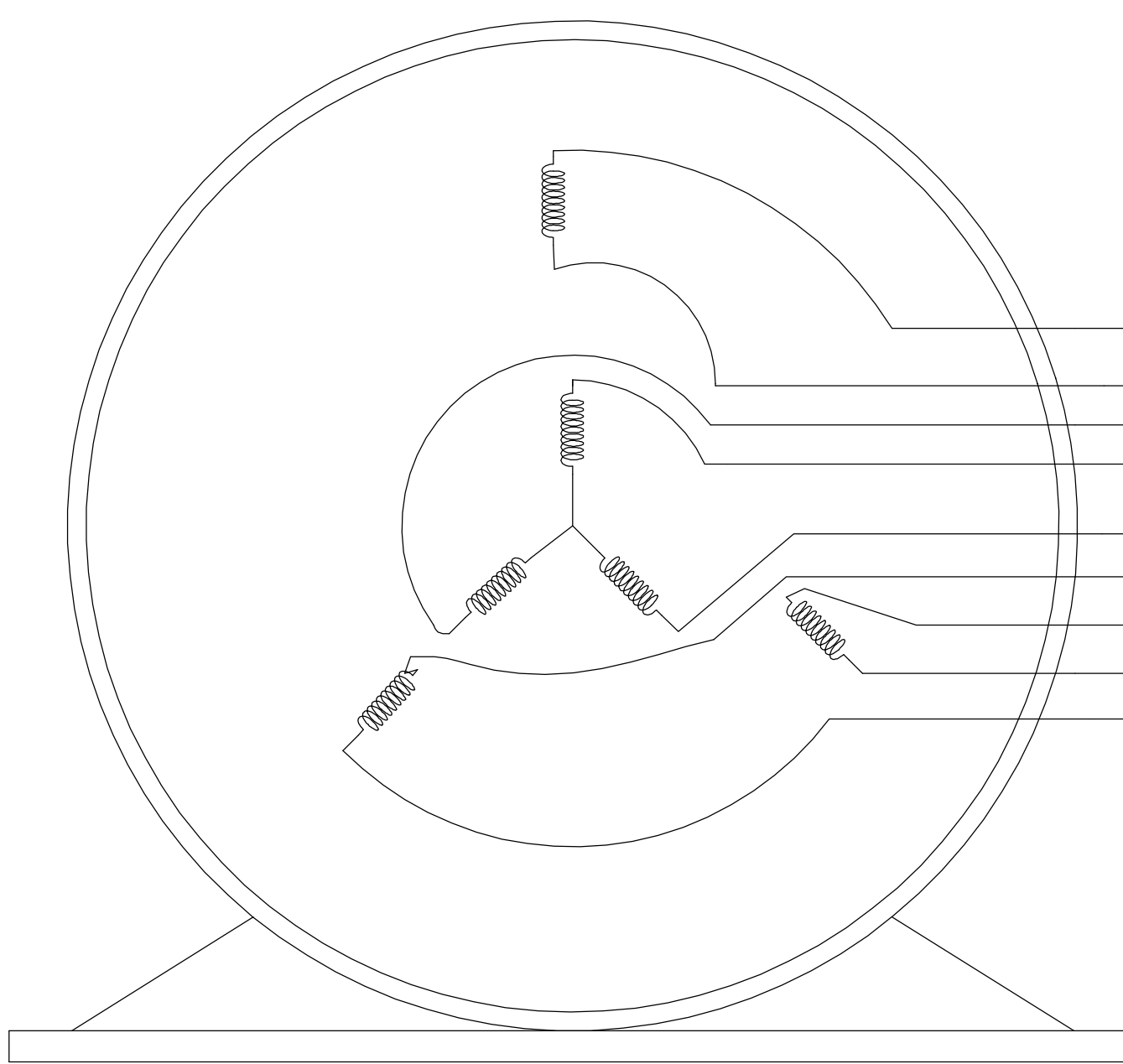


B

B

A

A



- T1 RED
- T4 BROWN
- T9 PINK
- T7 PURPLE
- T8 TAN
- T6 BLACK
- T5 ORANGE
- T2 WHITE
- T3 BLUE

VIEW OF TERMINAL END

NOTE:

1. TO REVERSE ROTATION, INTERCHANGE ANY TWO LINE CONNECTIONS TO L1, L2, OR L3.
2. CONNECTION DIAGRAM-NAMEPLATE DD10123-001 - CCWLE DD10199-001 - CWLE

DRAWING REVISION D	REVISION BY SHESHI	DATE 01/11/2019
ECO ECO-0159881	APPROVED BY CD	DATE 01/11/2019
ECO DESCRIPTION ADDED DD10199-001		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:		
DEC.	INCH	mm
.X	±0.1	[±2.5]
.XX	±0.01	[±0.25]
.XXX	±0.005	[±0.127]
.XXXX	±0.0005	[±0.0127]
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] CORNER FILLETS: .02 [.51] MACHINED SURFACES: 125 INCH 3.2 mm		
mm SHOWN IN [BRACKETS]		

DRAWN BY G. RODRIGUEZ	DATE 12-01-2017
APPROVED BY J. A. MORENO	DATE 12-01-2017
REFERENCE CDTD103	THIRD ANGLE PROJECTION

Regal Beloit America, Inc.	
DESCRIPTION CONN DIAGRAM-EXTERNAL	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER CDTD127
SHEET 1 OF 1	

4

3

2

1



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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: CDTD103  
OUTLINE: OL56100133-001  
WINDING #: ZT4256 FR 3

CATALOG : LM34170  
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2 & 1 1/2	1.12 & 1.12	1800	1725 & 1425	56HC	TEFC	P	A

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB °C
3	60/50	230/460 & 190-208/380-415	4.6/2.3 & 5.4-5.3/2.7-2.65	ACROSS THE LINE	CONTINUOUS	B3	1.15/1.0	40

FULL LOAD EFF:	86.5 & 85.5	3/4 LOAD EFF:	85.5	1/2 LOAD EFF:	82.5	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	71 & 75	3/4 LOAD PF:	62.5	1/2 LOAD PF:	49	84		SQ CAGE IND RUN	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE °C
4.5 LB-FT	48 / 24	21.2 LB-FT 471 %	26 LB-FT 578 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.14 LB-FT^2	10 LB-FT^2	20 SEC.	2	50 LBS.

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	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	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6205	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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<b>INVERTER TORQUE:</b> NONE
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> NONE NONE NONE NONE NONE PPR
<b>BRAKE:</b> NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

Data Sheet

Date: 1/31/2018

LM34170



Data @ **460 V**

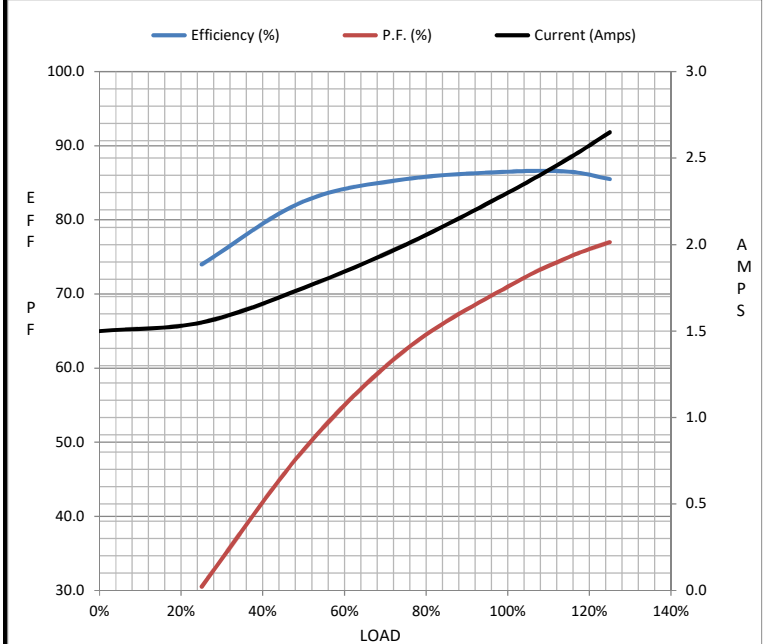
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.50	1.55	1.75	2.00	2.30	2.50	2.65	24.0
Torque (ft-lb)	0.00	1.10	2.20	3.5	4.5	5.2	5.7	21.2
RPM	1800	1790	1780	1765	1755	1750	1745	0
Efficiency (%)		74.0	82.5	85.5	86.5	86.5	85.5	
P.F. (%)	7.5	30.5	49.0	62.5	71.0	75.0	77.0	69.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	130	1190	1755	1800
Current (Amps)	24.0	23.3	16.0	2.30	1.50
Torque (ft-lb)	21.2	20.2	26.0	4.5	0.00

Information Block				
HP	1.5			
Sync. RPM	1800			
Frame	145			
Enclosure	TEFC			
Construction	TFR			
Voltage	230/460#190-208/380-415 V			
Frequency	60 Hz			
Design	A			
LR Code letter	P			
Service Factor	1.15			
Temp Rise @ FL	35 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.14 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT4256 FR			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	OL56100133-001			
Conn. Diag	CDTD103			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
4.8380	3.7800	7.1250	7.1630	189.6050



Speed - Torque Curve

