

BALDOR® • RELIANCE 

Product Information Packet

CEM31108

.5HP,1725RPM,3PH,60HZ,56C,3424M,OPEN,F1

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	34WGX110	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	34F010	Layout:	34LYF010	Poles:	04	Created Date:	10-03-2014
Base:	RG	Eff. Date:	04-22-2021	Leads:	9#18		

Specs			
Catalog Number:	CEM31108	Inverter Code:	Not Inverter
Enclosure:	OPEN	KVA Code:	J
Frame:	56C	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	Locked Bearing
Output @ Frequency:	.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	460.0 V @ 60 HZ	Motor Type:	3424M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	78
Agency Approvals:	C UR US ENERGY	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	C-Face
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS COMPLIANT
Current @ Voltage:	.800 A @ 460.0 V	Shaft Extension Location:	Pulley End
	1.600 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding

	2.100 A @ 208.0 V	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Electrically Isolated Bearing:	Not Electrically Isolated	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	B	Winding Thermal 2:	None

Nameplate NP3155L										
CAT.NO.	CEM31108									
SPEC.	34F010X110G1									
HP	.5									
VOLTS	230/460									
AMP	1.6/.8									
RPM	1725									
FRAME	56C				HZ	60			PH	3
SER.F.	1.25		CODE	J	DES	B		CL	B	
F.L. AVG. EFF.	78.2		PF	78						
RATING	40C AMB-CONT									
CC								USABLE AT 208V	2.1	
DE	6203				ODE	6203				
ENCL	OPEN		SN							
	SFA 2/1									

Parts List		
Part Number	Description	Quantity
SA288048	SA 34F010X110G1	1.000 EA
RA274249	RA 34F010X110G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
34CB3002A	CB CAST W/.88 DIA HOLE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
34EP3210A01SP	FR ENDPLATE, MACH	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
34EP3401A01SP	PU ENDPLATE, MACH	1.000 EA
34AD2000	BAFFLE PLATE, STAMPED	1.000 EA
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 EA
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 EA
34CB4517	CB LID 4 MTG HOLES .22 DIA STAMPED, FOR	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.014 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
HA3100A45	THRUBOLT 10-32 X 8.875	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 EA
NP3155L	ALUM SUPER-E UL CSA CC "SEMS"	1.000 EA
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA

AC Induction Motor Performance Data

Record # 47467

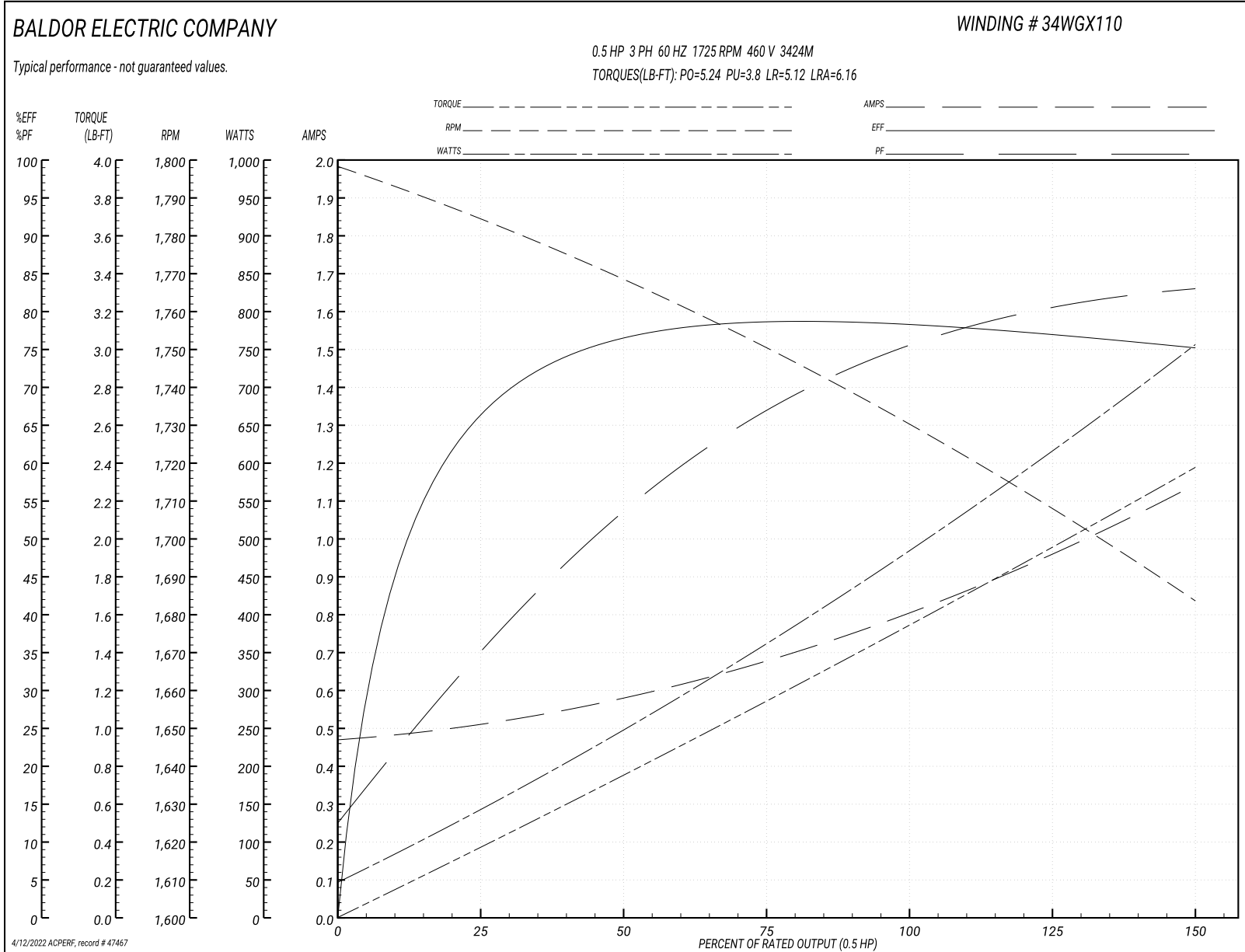
Typical performance - not guaranteed values

Winding: 34WGX110-R011		Type: 3424M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	.5	Full Load Torque	1.57 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	1.6/.8	Breakdown Torque	5.24 LB-FT		
R.P.M.	1725	Pull-up Torque	3.8 LB-FT		
Hz	60 Phase	Locked-rotor Torque	5.12 LB-FT		
NEMA Design Code	B	Starting Current	6.16 A		
Service Factor (S.F.)	1.25	No-load Current	0.474 A		
NEMA Nom. Eff.	78.2	Line-line Res. @ 25°C	30.994 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	25°C		
S.F. Amps	2/1	Temp. Rise @ S.F. Load	34°C		
		Locked-rotor Power Factor	53		
		Rotor inertia	0.0572 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	55	68	76	80	83	80
Efficiency	67.3	76.6	78.9	78.7	77.2	74.9	77.2
Speed	1782.6	1766.4	1749.5	1729.5	1707.4	1683.2	1707
Line amperes	0.509	0.586	0.687	0.815	0.971	1.14	0.971

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 49381

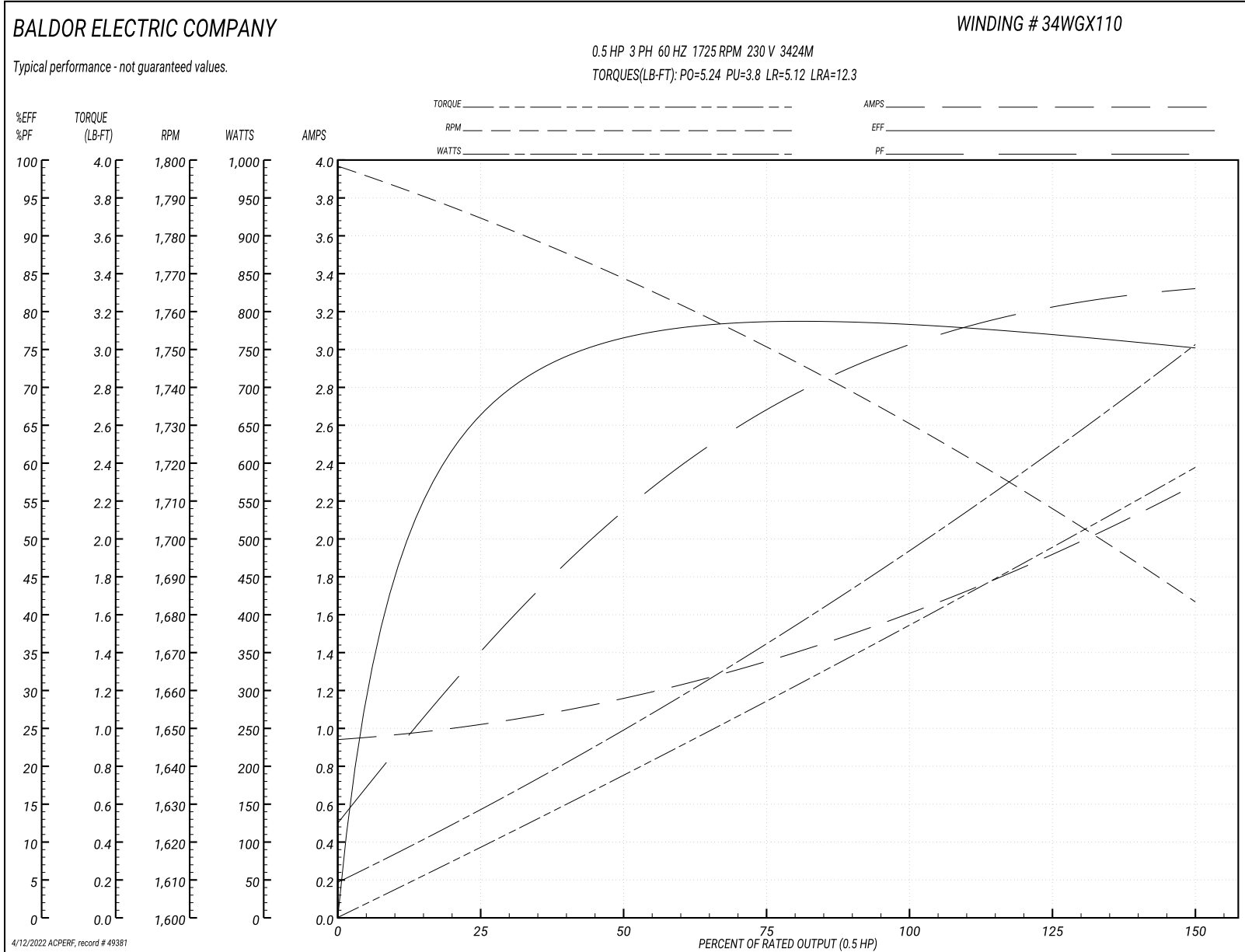
Typical performance - not guaranteed values

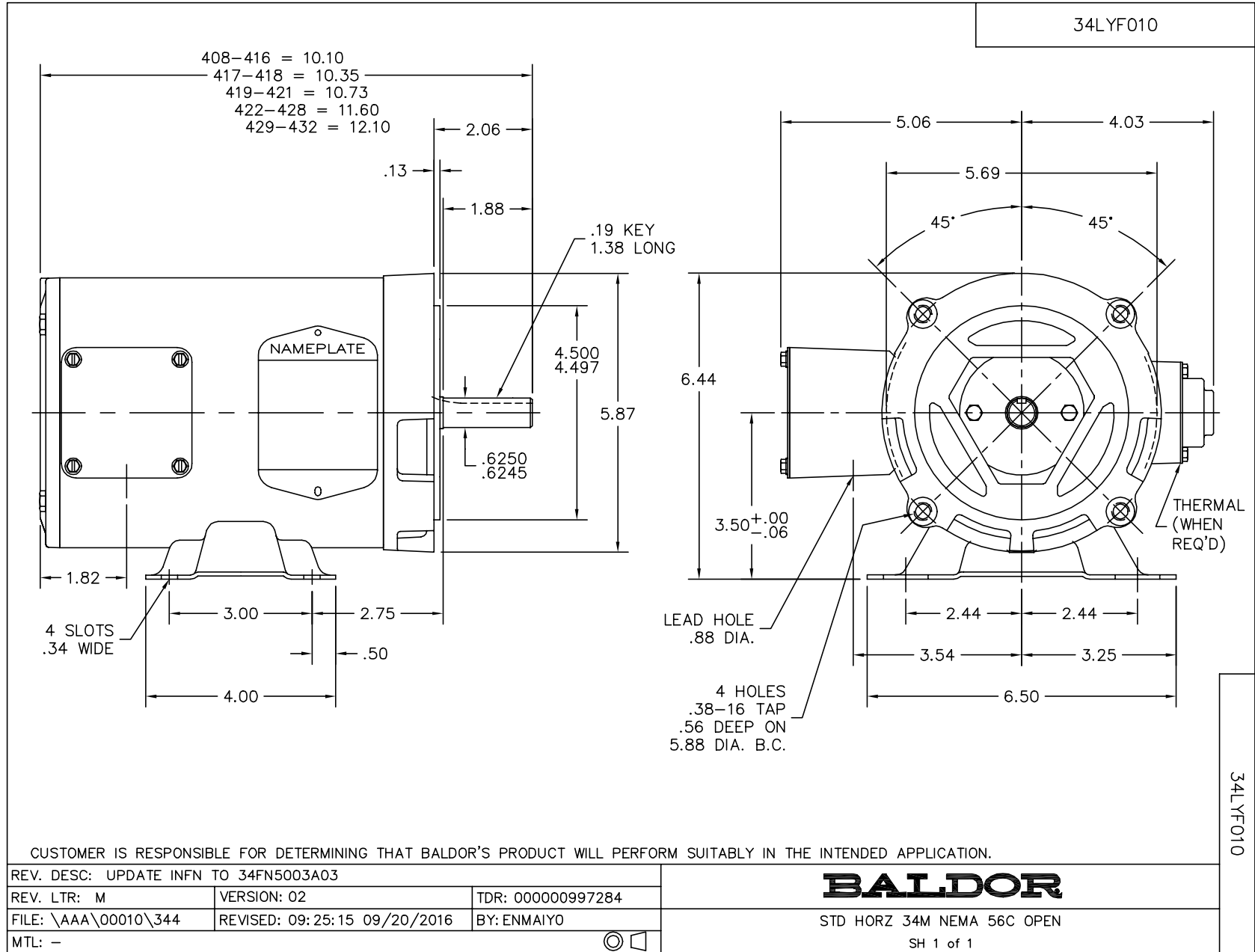
Winding: 34WGX110-R011		Type: 3424M		Enclosure: OPEN	
Nameplate Data			230 V, 60 Hz: Low Voltage Connection		
Rated Output (HP)	.5	Full Load Torque	1.57 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	1.6/.8	Breakdown Torque	5.24 LB-FT		
R.P.M.	1725	Pull-up Torque	3.8 LB-FT		
Hz	60 Phase	Locked-rotor Torque	5.12 LB-FT		
NEMA Design Code	B	Starting Current	12.3 A		
Service Factor (S.F.)	1.25	No-load Current	0.948 A		
NEMA Nom. Eff.	78.2	Line-line Res. @ 25°C	7.28 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	25°C		
S.F. Amps	2/1	Temp. Rise @ S.F. Load	31°C		
		Locked-rotor Power Factor	52.9		
		Rotor inertia	0.0572 LB-FT ²		

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	56	68	76	80	83	80
Efficiency	67.5	76.4	78.6	78.6	77.1	75.1	77.1
Speed	1783	1766	1750	1730	1707	1683	1707
Line amperes	1.02	1.17	1.37	1.63	1.94	2.28	1.94

Performance Graph at 230V, 60Hz, 0.5HP Typical performance - Not guaranteed values

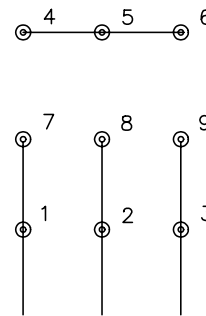




CD0005

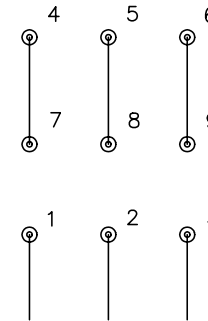


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005