



Customer information packet

VL3509

1HP, 3450RPM, 1PH, 60HZ, 56C, 3520L, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	11.800 A @ 115.0 V 5.900 A @ 230.0 V 6.100 A @ 208.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	68.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	AS
Type	AC
Mech. spec.	35C013
Base	
Status	PRD/A
Elec. spec.	35WGX964
Layout	35LYC013
Eff. date	12-17-2024
CD Diagram	CD0001
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	06-21-2007

High Voltage Full Load Amps	5.9 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.25 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP1256L									
CAT.NO.	VL3509								
SPEC.	35C013X964								
HP	1								
VOLTS	115/230								
AMP	11.8/5.9								
RPM	3450								
FRAME	56C		HZ	60		PH	1		
SER.F.	1.25	CODE	K	DES	N	CLASS	B		
NEMA-NOM-EFF	68	PF	82						
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	TEFC	SN							
	SFA 14/7								

AC Induction Motor Performance Data

Record # 10114

Typical performance - not guaranteed values

Winding: 35WGX964-R001		Type: 3520L		Enclosure: TEFC	
Nameplate Data			230 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1		Full Load Torque	1.5 LB-FT	
Volts	115/230		Start Configuration	direct on line	
Full Load Amps	11.8/5.9		Breakdown Torque	4.25 LB-FT	
R.P.M.	3450		Pull-up Torque	3.5 LB-FT	
Hz	60	Phase	1	Locked-rotor Torque	4.75 LB-FT
NEMA Design Code	N	KVA Code	K	Starting Current	38 A
Service Factor (S.F.)	1.25		No-load Current	3.2 A	
NEMA Nom. Eff.	68	Power Factor	82	Line-line Res. @ 25°C	2 Ω A Ph 1.77 Ω B Ph
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	72°C	
S.F. Amps	14/7		Temp. Rise @ S.F. Load	90°C	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	64	72	80	84	86	84
Efficiency	50	61	67	68	67	64.5	67
Speed	3560	3525	3485	3450	3400	3340	3400
Line amperes	3.5	4.2	5	5.9	7	8.4	7

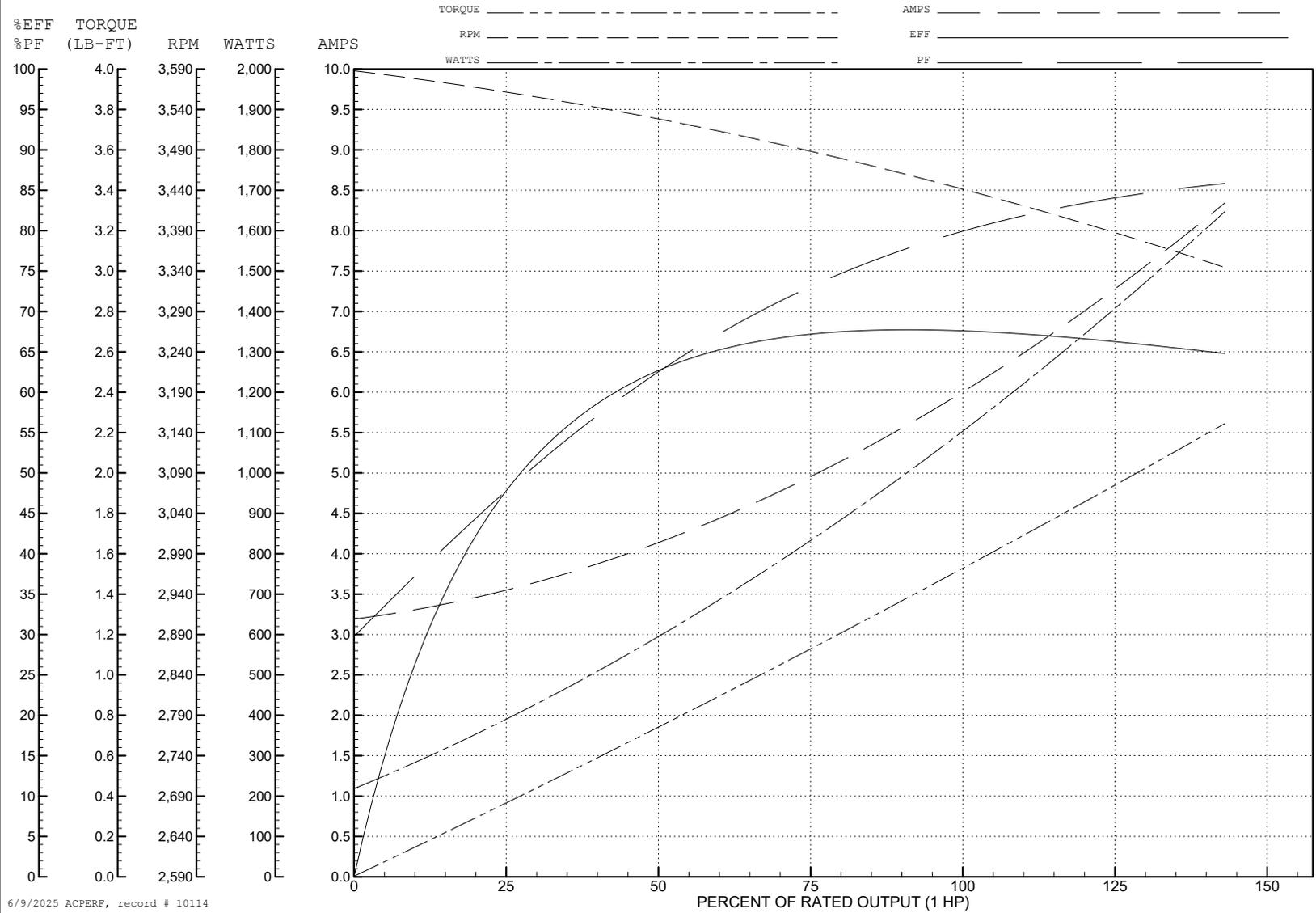
ABB Motors and Mechanical Inc.

WINDING # 35WGX964

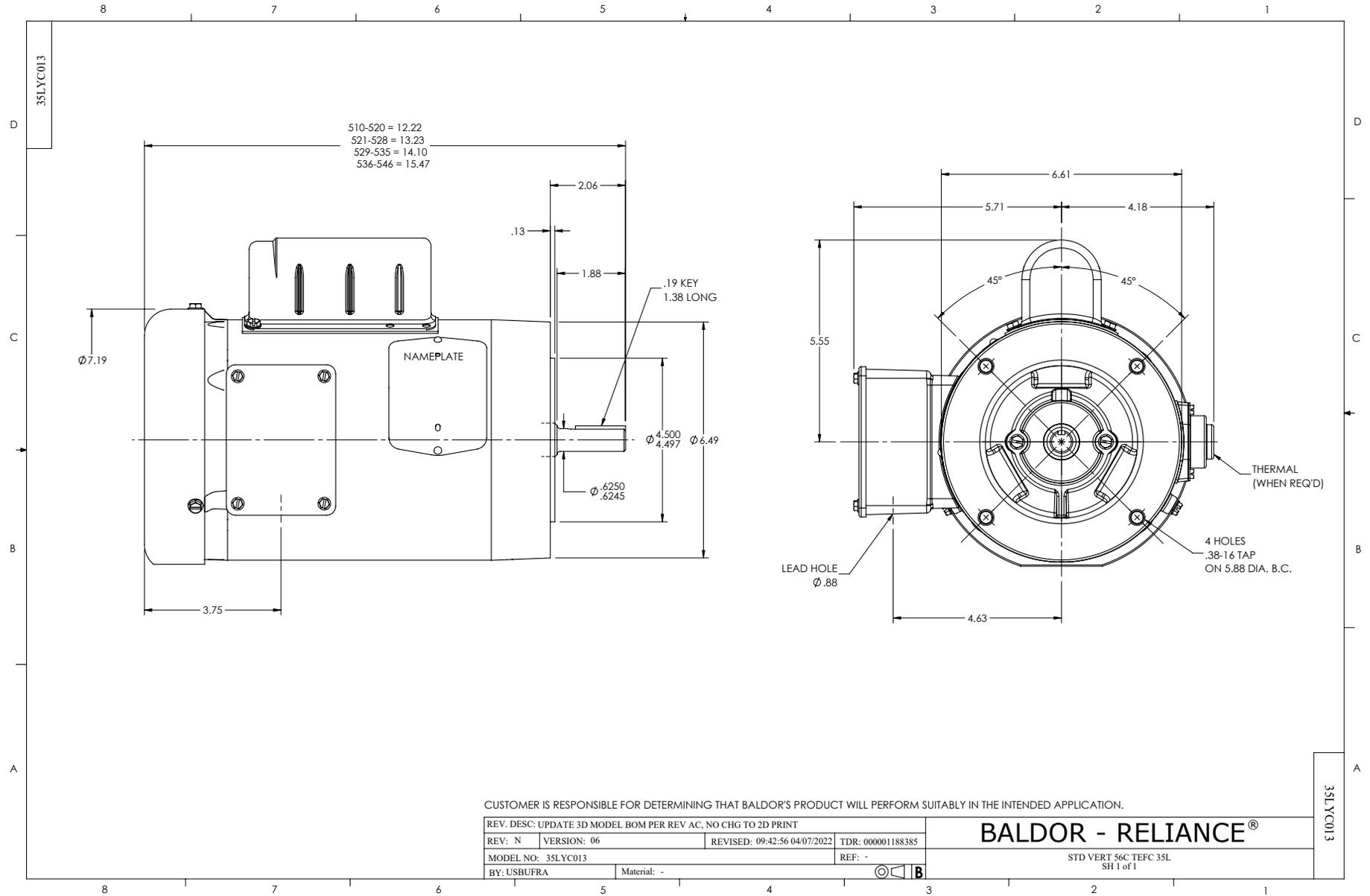
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1 HP 1 PH 60 HZ 3450 RPM 230 V 3520L

TORQUES (LB-FT): PO=4.25 PU=3.5 LR=4.75 LRA=38



6/9/2025 ACPERF, record # 10114



CD0001

