

ABB BALDOR RELIANCE III

Customer information packet

VL3503

.5HP, 3450RPM, 1PH, 60HZ, 56C, 3413L, 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	.500 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	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.500 A @ 230.0 V 4.100 A @ 208.0 V 7.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.5 a

Part Detail

Revision	U
Type	AC
Mech. spec.	34H578
Base	
Status	PRD/A
Elec. spec.	34WGX716
Layout	34LYH578
Eff. date	10-25-2024
CD Diagram	CD0001
Poles	02
Leads	6#18
Proprietary	False
Created date	01-01-0001

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3413L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.35 IN
Power Factor	72
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.	VL3503								
SPEC.	34H578X716								
HP	.5								
VOLTS	115/230								
AMP	7/3.5								
RPM	3450								
FRAME	56C		HZ	60			PH	1	
SER.F.	1.25	CODE	L	DES	N	CLASS	B		
NEMA-NOM-EFF	66	PF	72						
RATING	40C AMB-CONT								
CC									
DE	6203		ODE	6203					
ENCL	TEFC	SN							
	SFA 8/4								

AC Induction Motor Performance Data

Record # 7566

Typical performance - not guaranteed values

Winding: 34WGX716-R001				Type: 3413L		Enclosure: TEFC	
Nameplate Data				230 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.5		Full Load Torque		0.75 LB-FT	
Volts		115/230		Start Configuration		direct on line	
Full Load Amps		7/3.5		Breakdown Torque		2.3 LB-FT	
R.P.M.		3450		Pull-up Torque		2 LB-FT	
Hz	60	Phase	1	Locked-rotor Torque		2.2 LB-FT	
NEMA Design Code		N	KVA Code	Starting Current		21 A	
Service Factor (S.F.)		1.25		No-load Current		2.76 A	
NEMA Nom. Eff.		66	Power Factor	Line-line Res. @ 25°C		4.163 Ω A Ph 4.624 Ω B Ph	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		67°C	
S.F. Amps		8/4		Temp. Rise @ S.F. Load		84°C	

Load Characteristics 230 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	48	60	69	76	78	76
Efficiency	50.7	58.5	64.8	66.2	65.8	64.6	65.8
Speed	3548	3520	3489	3449	3405	3346	3405
Line amperes	2.78	2.88	3.13	3.5	3.95	4.64	3.95

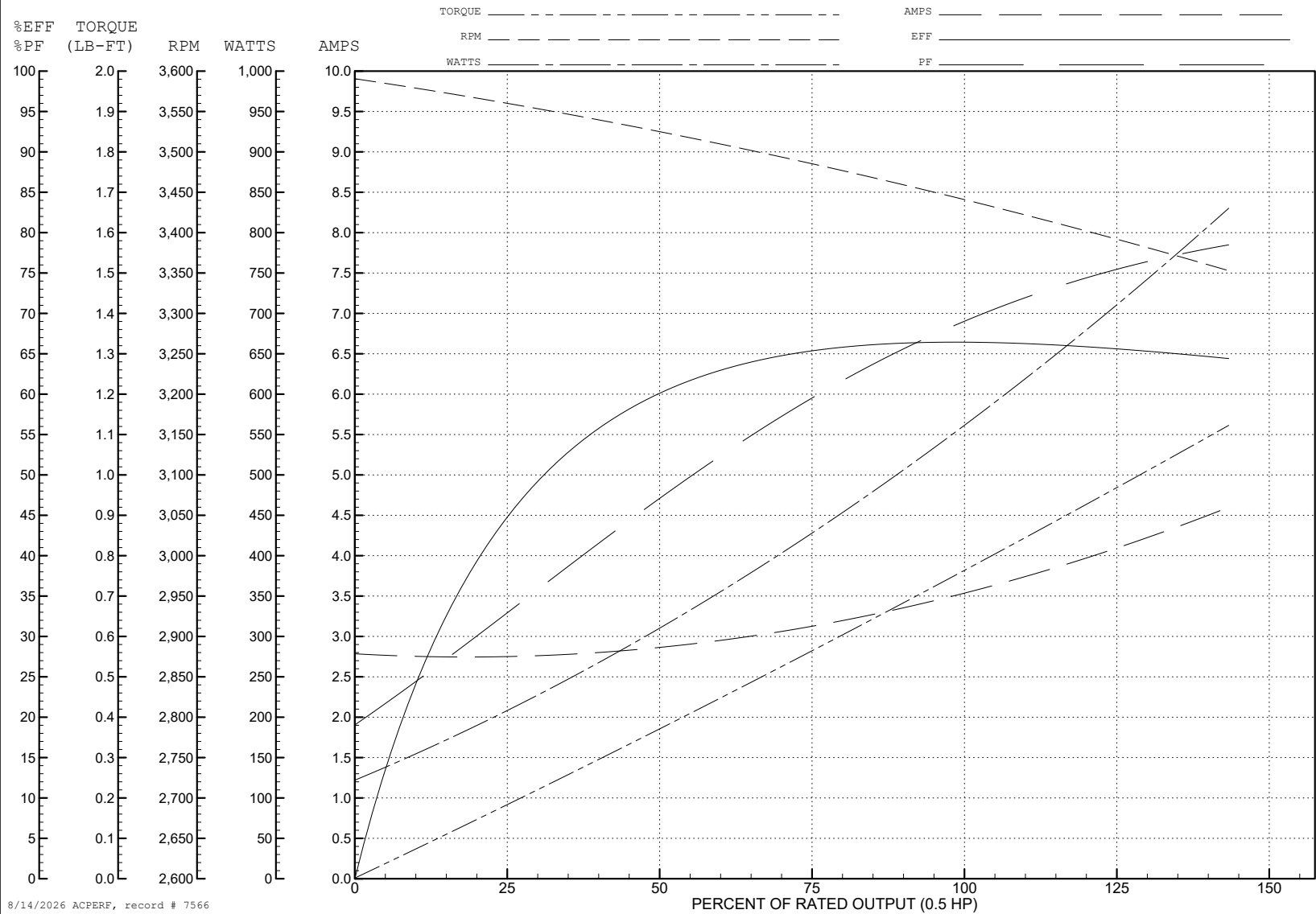
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WINDING # 34WGx716

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 3450 RPM 230 V 3413L

TORQUES (LB-FT) : PO=2.3 PU=2 LR=2.2 LRA=21



AC Induction Motor Performance Data

Record # 95820

Typical performance - not guaranteed values

Winding: 34WGX716-R001			Type: 3413L		Enclosure: TEFC		
Nameplate Data			115 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		0.75 LB-FT		
Volts		115/230	Start Configuration		direct on line		
Full Load Amps		7/3.5	Breakdown Torque		2.3 LB-FT		
R.P.M.		3450	Pull-up Torque		2 LB-FT		
Hz	60	Phase	1	Locked-rotor Torque		2.2 LB-FT	
NEMA Design Code		N	KVA Code		L		
Service Factor (S.F.)		1.25	Starting Current		42 A		
NEMA Nom. Eff.		66	Power Factor		72		
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		67°C
S.F. Amps		8/4			Temp. Rise @ S.F. Load		77°C
					Locked-rotor Power Factor		90.1
					Rotor inertia		0.0121 lb-ft²

Load Characteristics 115 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	48	60	69	76	78	76
Efficiency	51	58	65	66	66	64	66
Speed	3548	3520	3489	3449	3405	3346	3405
Line amperes	5.56	5.76	6.26	7	7.9	9.28	7.9

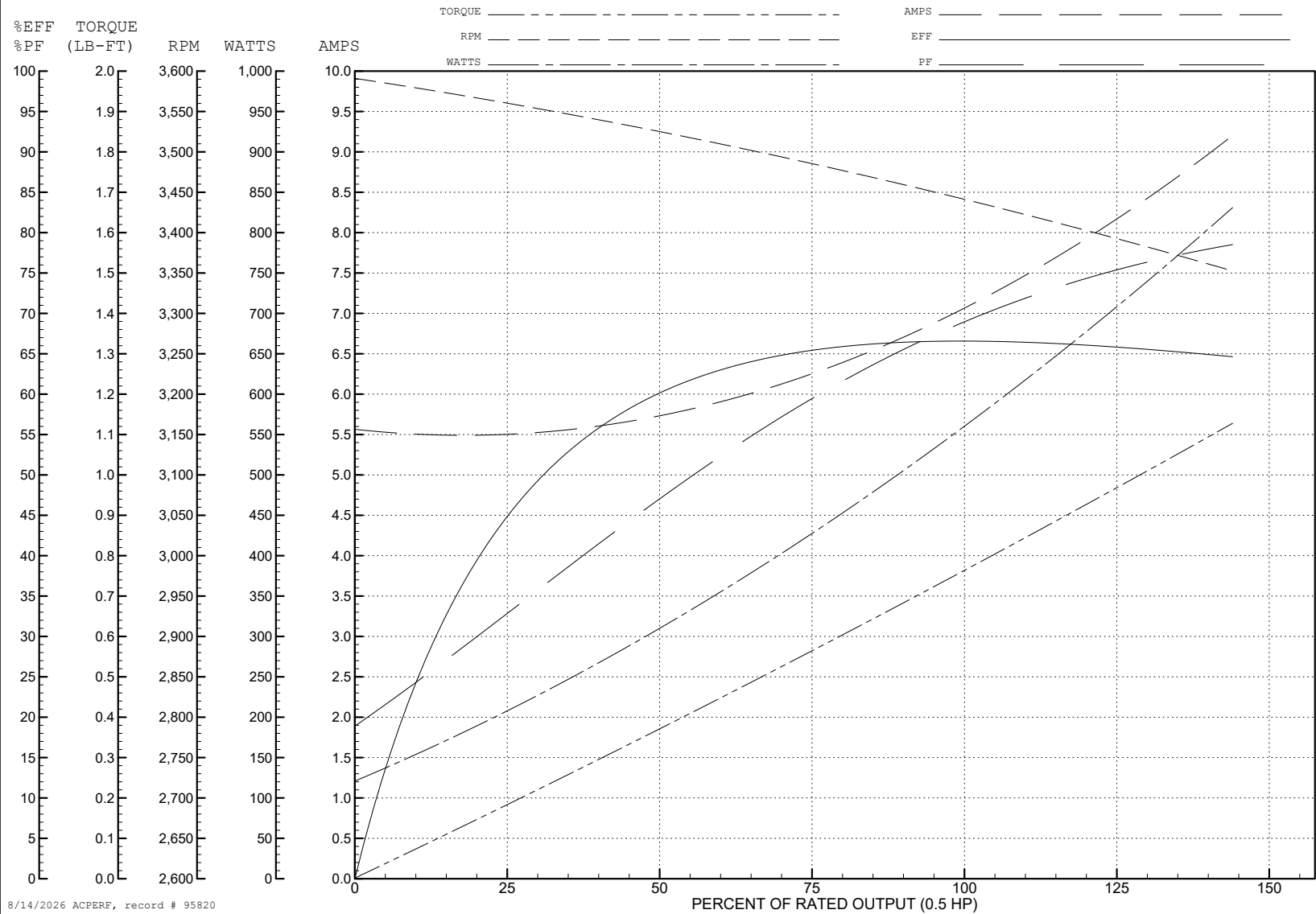
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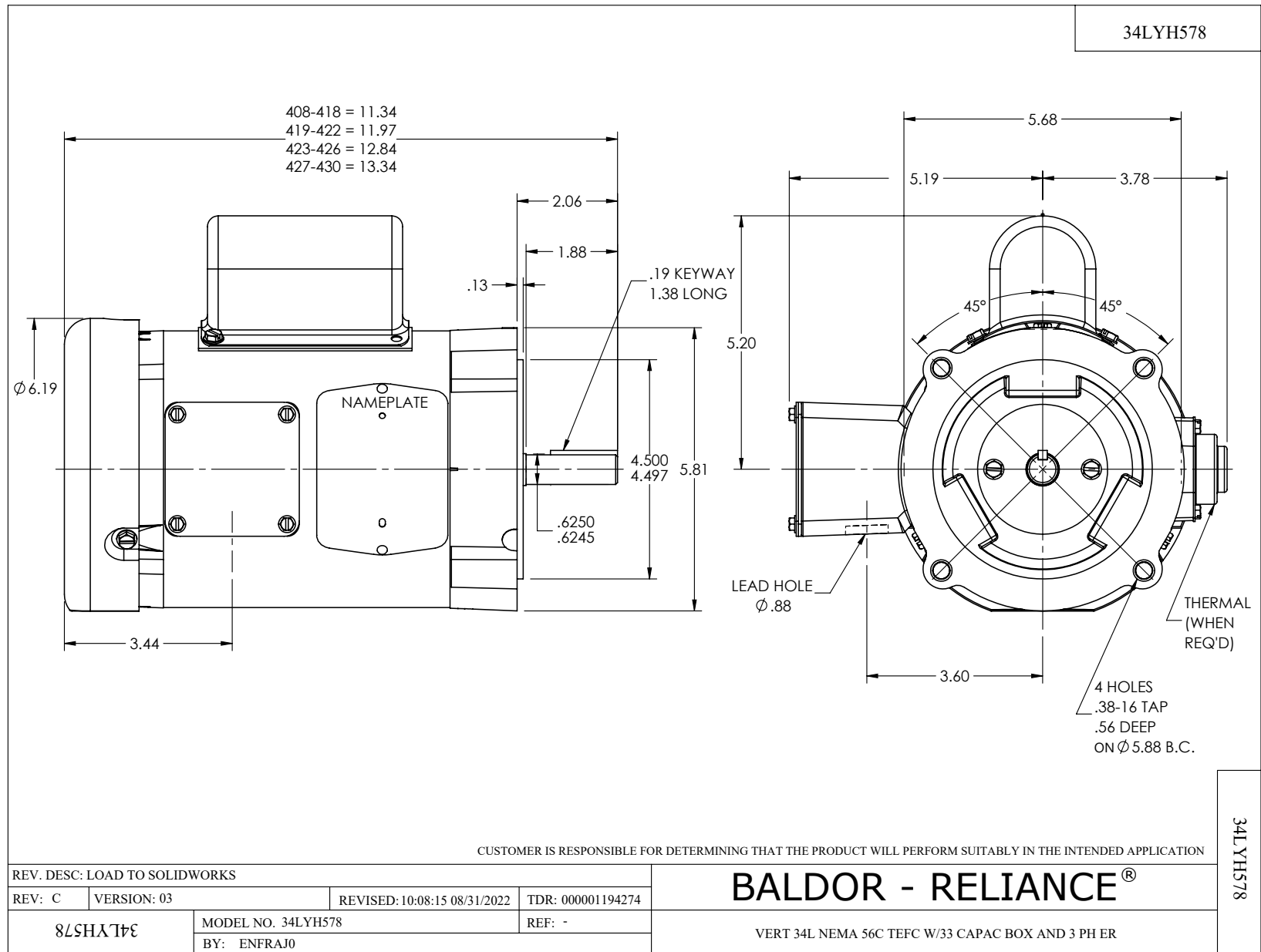
WINDING # 34WGX716

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 3450 RPM 115 V 3413L

TORQUES (LB-FT) : PO=2.3 PU=2 LR=2.2 LRA=42





CD0001

