

ABB BALDOR RELIANCE III

Customer information packet

XM050542A

0.5HP, 1725RPM, 3PH, 60HZ, 56, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.000 A @ 460.0 V 2.000 A @ 230.0 V 2.100 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	74.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	34WG1543
Layout	34LY5323
Eff. date	05-01-2024
CD Diagram	CD0007
Poles	04
Leads	12#18
Proprietary	False
Created date	08-06-2020

High Voltage Full Load Amps	1.0 a
Insulation Class	B
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3416M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.22 IN
Power Factor	63
Product Family	Hazardous Location Motor
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1725 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	Automatic Thermal Overload
Winding Thermal 1 Location	EP
Winding Thermal 2	None

Nameplate

NP0016XPSL									
NO.		CC							
SER. #									
SPEC	34-0000-0390								
CAT.NO.	XM050542A								
H.P.	.5		T. CODE	T3C					
VOLTS	208-230/460								
AMPS	2.1-2/1								
R.P.M.	1725 34WG1543								
HZ	60		PH	3	CLASS	B			
SER.F.	1.00		DES	B	CODE	L			
RATING	40C AMB-CONT								
FRAME	56		NEMA NOM. EFF	74					
		PF	63						
BLANK	NEMA MG-1 PART 5, IP54								

AC Induction Motor Performance Data

Record # 6627

Typical performance - not guaranteed values

Winding: 34WG1543-R002			Type: 3416M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5		Full Load Torque		1.5 LB-FT		
Volts		208-230/460		Start Configuration		direct on line		
Full Load Amps		2.1-2/1		Breakdown Torque		6.5 LB-FT		
R.P.M.		1725		Pull-up Torque		4.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.6 LB-FT		
NEMA Design Code		B	KVA Code	L		Starting Current	6.7 A	
Service Factor (S.F.)		1		No-load Current		0.89 A		
NEMA Nom. Eff.		74	Power Factor	63		Line-line Res. @ 25°C		33 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		59°C

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	27	39	51	60	67	72
Efficiency	49.8	65	71.7	74.5	75.6	75.5
Speed	1785	1770	1756	1737	1724	1705
Line amperes	0.9	0.94	0.98	1	1.15	1.27

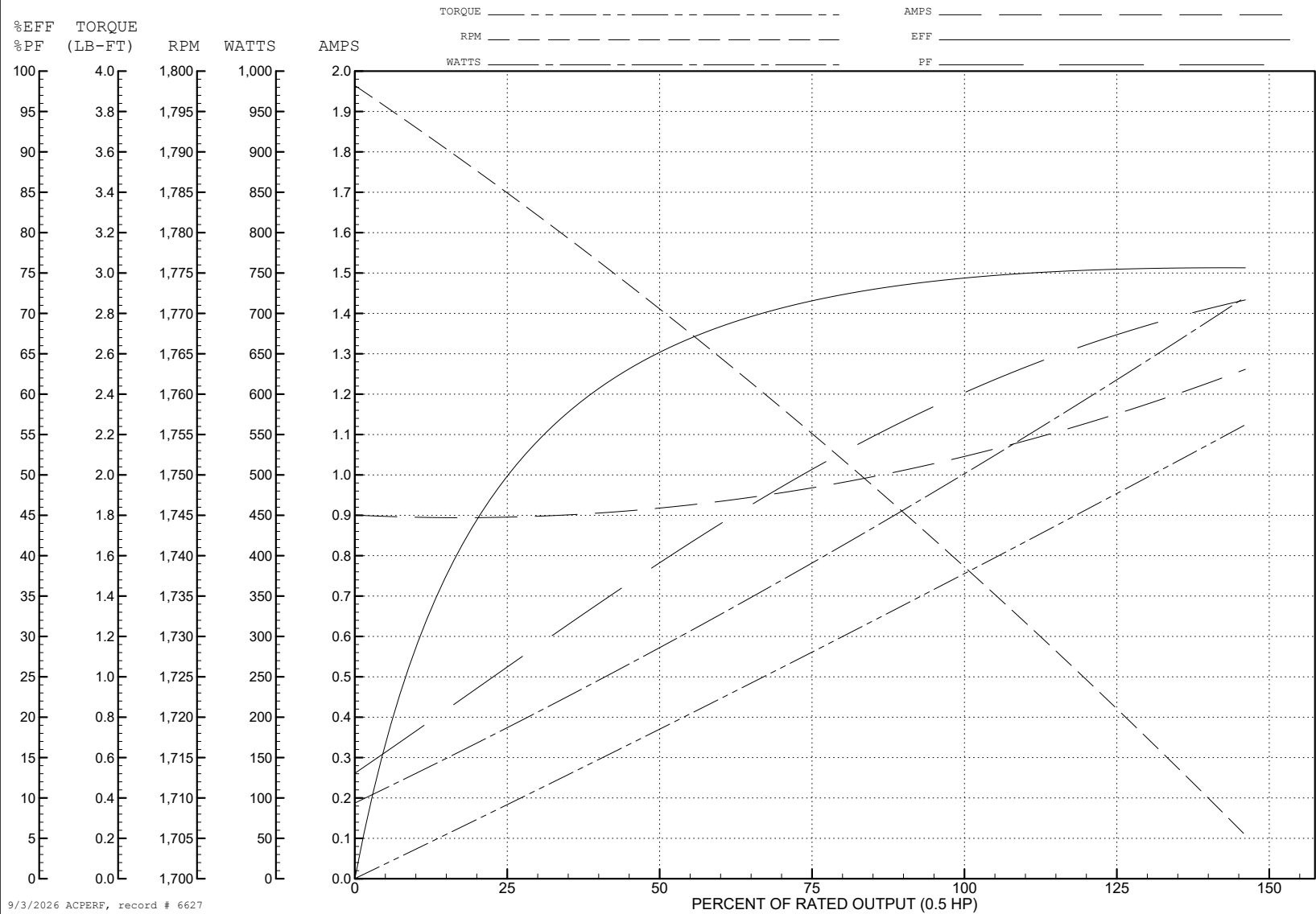
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WINDING # 34WG1543

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1725 RPM 460 V 3416M

TORQUES (LB-FT): PO=6.5 PU=4.5 LR=5.6 LRA=6.7



AC Induction Motor Performance Data

Record # 20790

Typical performance - not guaranteed values

Winding: 34WG1543-R002			Type: 3416M		Enclosure: XPFC		
Nameplate Data			208 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		.5	Full Load Torque		1.51 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		2.1-2/1	Breakdown Torque		5.25 LB-FT		
R.P.M.		1725	Pull-up Torque		3.56 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		4.43 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		11.8 A	
Service Factor (S.F.)		1	No-load Current		1.39 A		
NEMA Nom. Eff.		74	Power Factor	Line-line Res. @ 25°C		8.35 Ω	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		50°C
					Locked-rotor Power Factor		65
					Rotor inertia		0.0381 LB-FT2

Load Characteristics 208 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	37	52	65	77	79	81
Efficiency	49.3	64.9	71.8	74.4	75.5	75.5
Speed	1782	1765	1748	1725	1707	1683
Line amperes	1.43	1.54	1.67	1.79	2.14	2.47

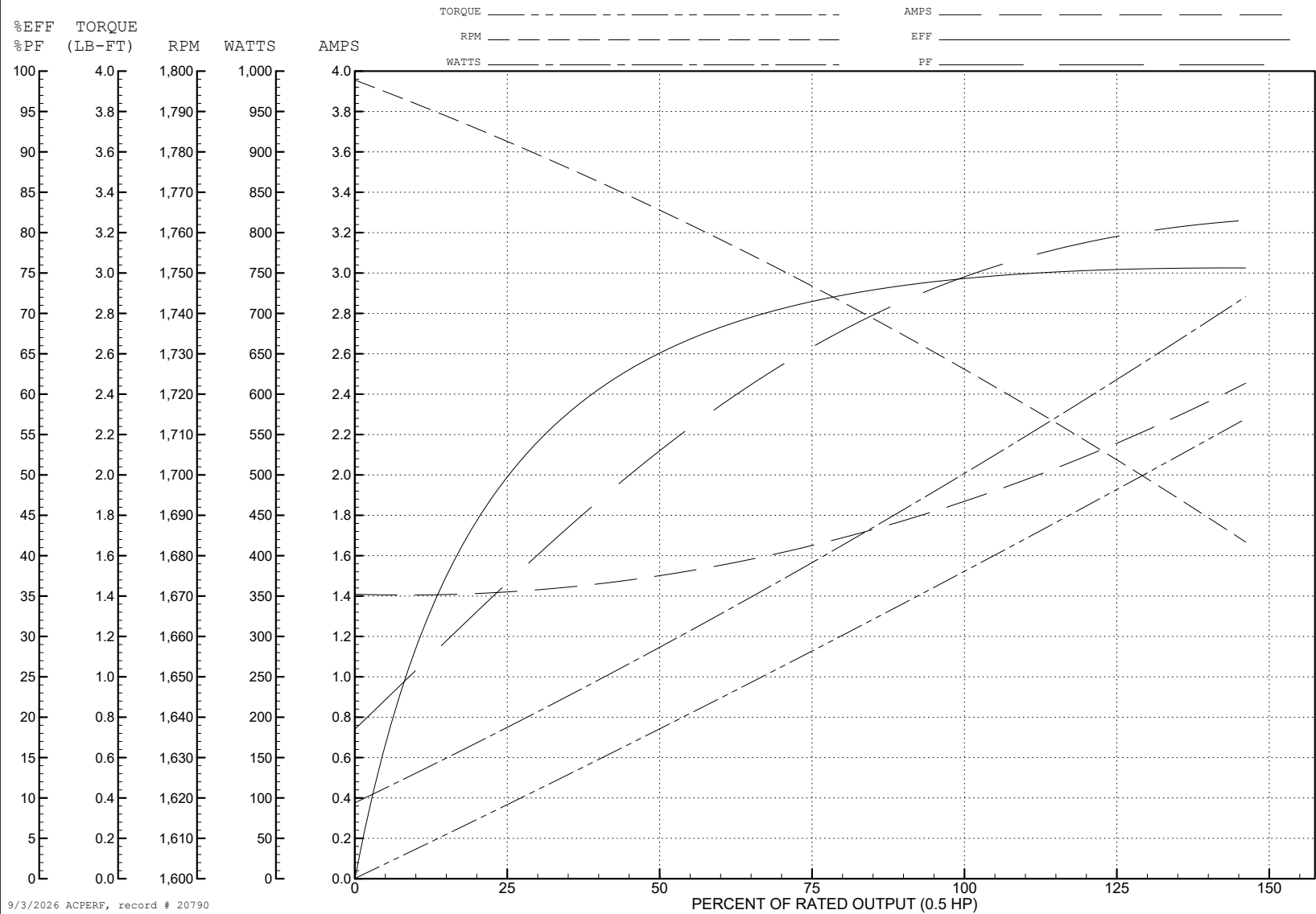
ABB Motors and Mechanical Inc.

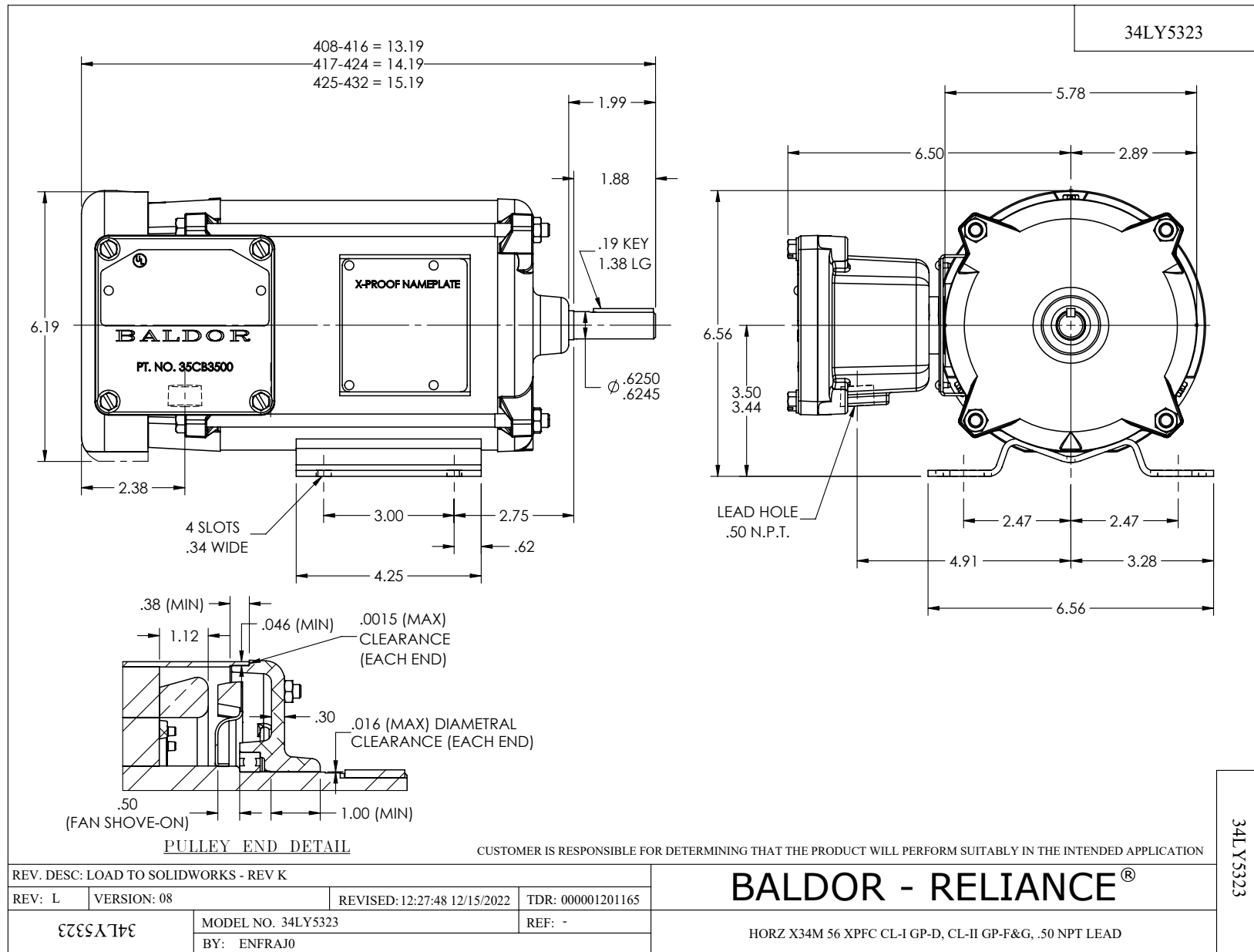
WINDING # 34WG1543

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1725 RPM 208 V 3416M

TORQUES (LB-FT): PO=5.25 PU=3.56 LR=4.43 LRA=11.8





CD0007

