

ABB BALDOR RELIANCE III

Customer information packet

VDRX051544

1.5//1HP, 1770//1475RPM, 3PH, 60//50HZ, 56C

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ 1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL
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
Constant Torque Speed Range	6
Current @ Voltage	4.300 A @ 208.0 V 4.600 A @ 230.0 V 4.000 A @ 190.0 V 2.300 A @ 460.0 V 2.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYX748
Eff. date	04-21-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.15 IN
Power Factor	76
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP1401XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE	T3C				
SPEC.	35-0000-1356					INV.TYPE	PWM				
CAT.NO.	VDRX051544					C HP FR	60	C HP TO	90		
HP	1.5//1					CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380					VT HZ FROM	6	VT HZ TO	60		
AMPS	4.6/2.3//4/2					MAG CUR	3/1.5				
RPM	1770//1475					MX RPM	2700				
HZ	60//50	PH	3	CL	F	NOM.EFF.	86.5				
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.174				
FRAME	56C	RATING	40C AMB-CONT								
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE					NEMA MG-1 PT 5, IP55					

AC Induction Motor Performance Data

Record # 95398

Typical performance - not guaranteed values

Winding: 35WGL955-R010			Type: 3524M			Enclosure: XPFC								
Nameplate Data						460 V, 60 Hz: High Voltage Connection								
Rated Output (HP)			1.5//1			Full Load Torque			4.48 LB-FT					
Volts			230/460//190/380			Start Configuration			direct on line					
Full Load Amps			4.6/2.3//4/2			Breakdown Torque			18.8 LB-FT					
R.P.M.			1770//1475			Pull-up Torque			9.6 LB-FT					
Hz			60//50			Phase			3					
NEMA Design Code			B			KVA Code			M					
Service Factor (S.F.)			1			No-load Current			1.51 A					
NEMA Nom. Eff.			86.5			Power Factor			72					
Rating - Duty			40C			AMB-CONT			Temp. Rise @ Rated Load			48°C		
									Locked-rotor Power Factor			58.4		
									Rotor inertia			0.173 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	31	49	63	72	78	81
Efficiency	75.1	83.5	86	86.5	85.8	84.8
Speed	1792	1785	1777	1769	1760	1750
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06

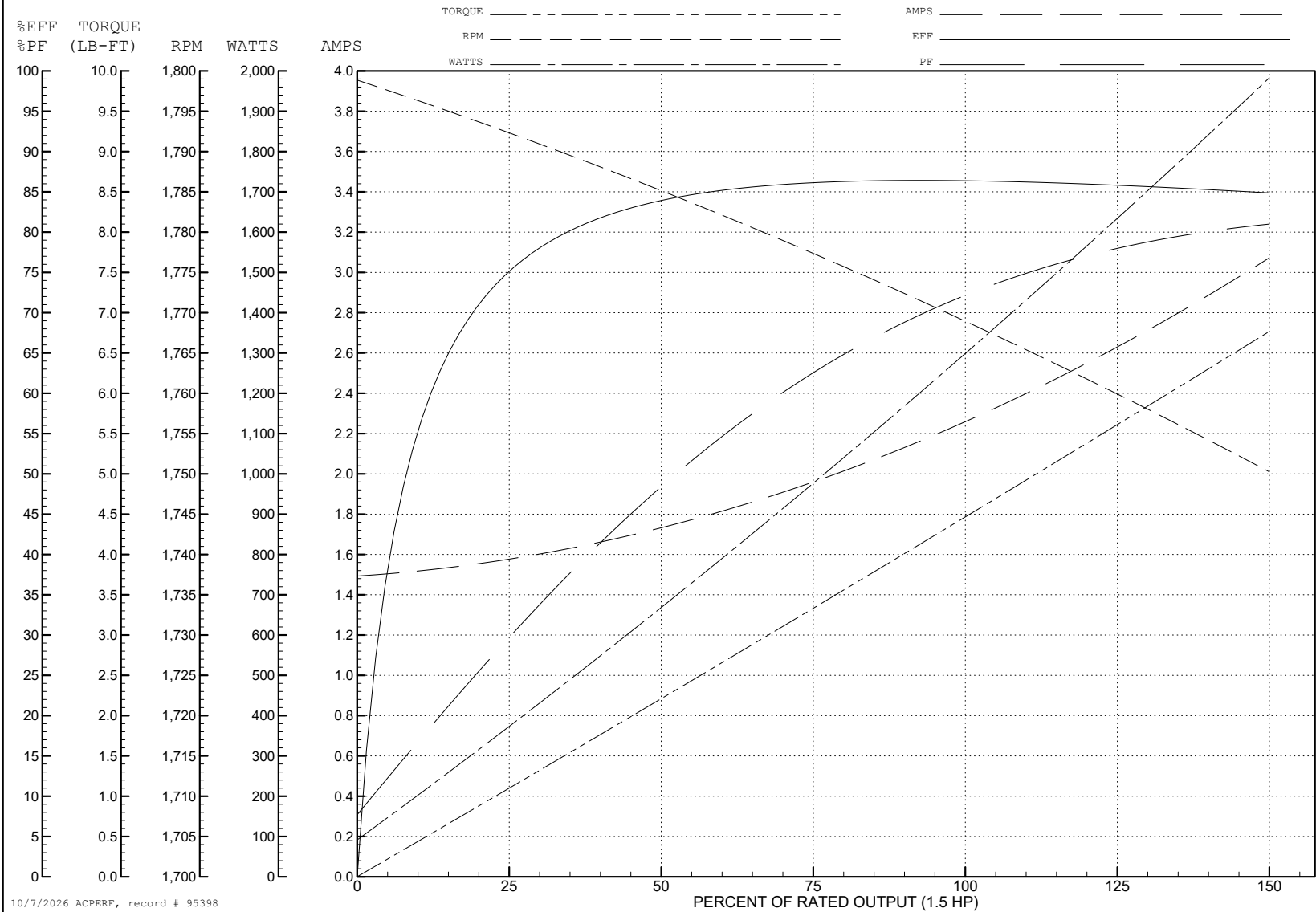
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WINDING # 35WGL955

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1769 RPM 460 V 3524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7



AC Induction Motor Performance Data

Record # 95399

Typical performance - not guaranteed values

Winding: 35WGL955-R010			Type: 3524M			Enclosure: XPFC			
Nameplate Data						380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)			1.5//1			Full Load Torque		3.58 LB-FT	
Volts			230/460//190/380			Start Configuration		direct on line	
Full Load Amps			4.6/2.3//4/2			Breakdown Torque		17 LB-FT	
R.P.M.			1770//1475			Pull-up Torque		9.2 LB-FT	
Hz		60//50	Phase		3	Locked-rotor Torque		12.1 LB-FT	
NEMA Design Code		B		KVA Code		M	Starting Current		18.4 A
Service Factor (S.F.)			1			No-load Current		1.48 A	
NEMA Nom. Eff.		86.5	Power Factor		72	Line-line Res. @ 25°C		11.8 Ω	
Rating - Duty			40C AMB-CONT			Temp. Rise @ Rated Load		39°C	
						Locked-rotor Power Factor		63.9	
						Rotor inertia		0.173 lb-ft²	

Load Characteristics 380 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	27	44	57	67	74	79
Efficiency	70.1	80.3	83.7	84.8	84.5	83.8
Speed	1493	1487	1481	1474	1467	1459
Line amperes	1.5	1.61	1.78	2	2.27	2.58

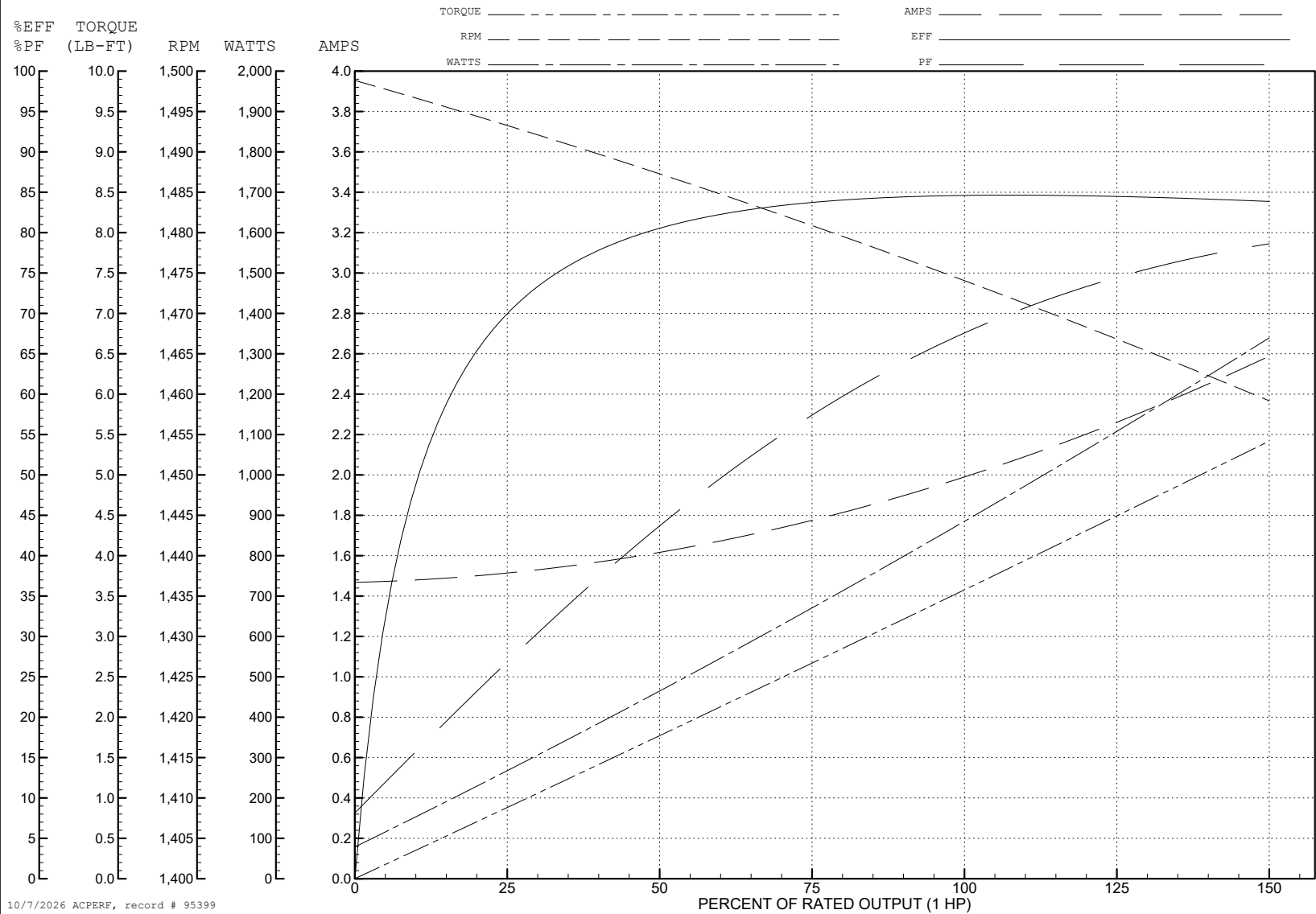
ABB Motors and Mechanical Inc.

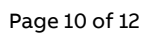
WINDING # 35WGL955

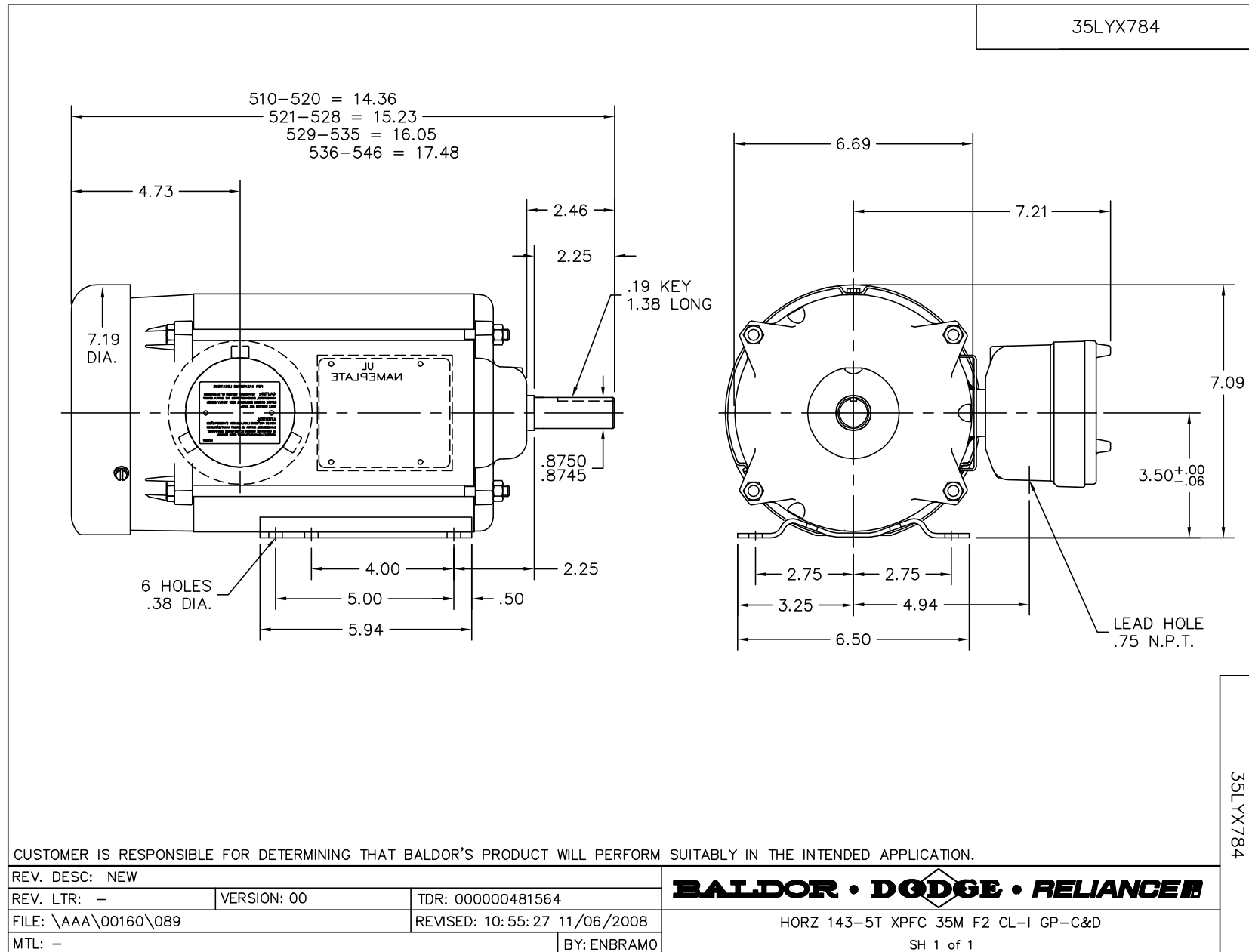
Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1474 RPM 380 V 3524M

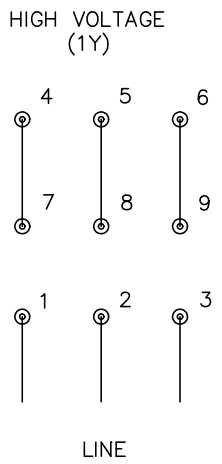
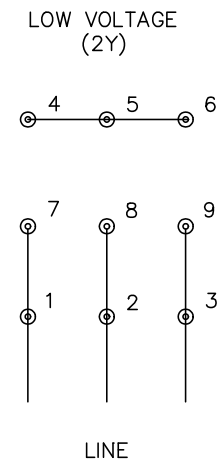
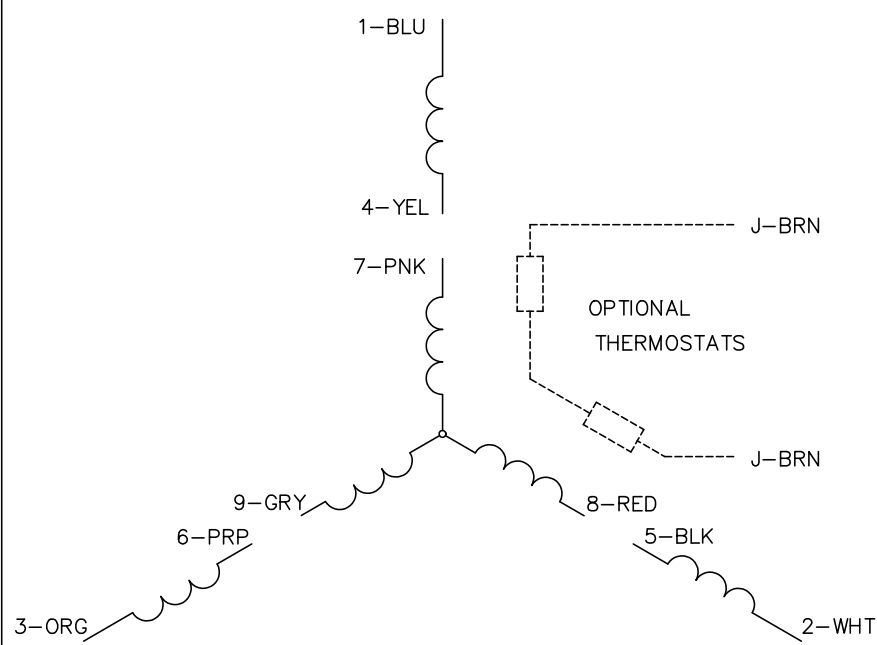
TORQUES (LB-FT): PO=17 PU=9.2 LR=12.1 LRA=18.4







CD0005



- 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: -
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BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005