

ABB BALDOR RELIANCE III

Customer information packet

VXM141542T

1.5//1HP, 1770//1475RPM, 3PH, 60//50HZ, 145T

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	145TC
Frame Material	Steel
Frequency	50.00 Hz 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	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	4.600 A @ 230.0 V 4.640 A @ 208.0 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	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYE380
Eff. date	08-14-2023
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	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.21 IN
Power Factor	72
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 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

NP0887XPSLEV													
NO.							CC	010A					
S/N							TEMP CODE		T3C				
SPEC.	35-0000-1369						INV.TYPE		PWM				
CAT.NO.	VXM141542T						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//4.0/2				MAG CUR		2.5/1.25						
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	145TC	RATING		40C AMB-CONT									

AC Induction Motor Performance Data

Record # 76732

Typical performance - not guaranteed values

Winding: 35WGM493-R023		Type: 3526M	Enclosure: XPFC
Nameplate Data		460 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	1.5	Full Load Torque	4.47 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	4.4/2.2//3.8/1.9	Breakdown Torque	19.2 LB-FT
R.P.M.	1760//1460	Pull-up Torque	9.4 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	13.4 LB-FT
NEMA Design Code	B KVA Code	Starting Current	18.3 A
Service Factor (S.F.)	1	No-load Current	1.37 A
NEMA Nom. Eff.	86.5 Power Factor	Line-line Res. @ 25°C	10.1 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C
		Locked-rotor Power Factor	51.5
		Rotor inertia	0.154 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	31	51	65	73	79	83
Efficiency	76.2	84.4	86.9	87.1	86.4	85.3
Speed	1791	1781	1771	1760	1748	1735
Line amperes	1.44	1.61	1.86	2.19	2.58	2.98

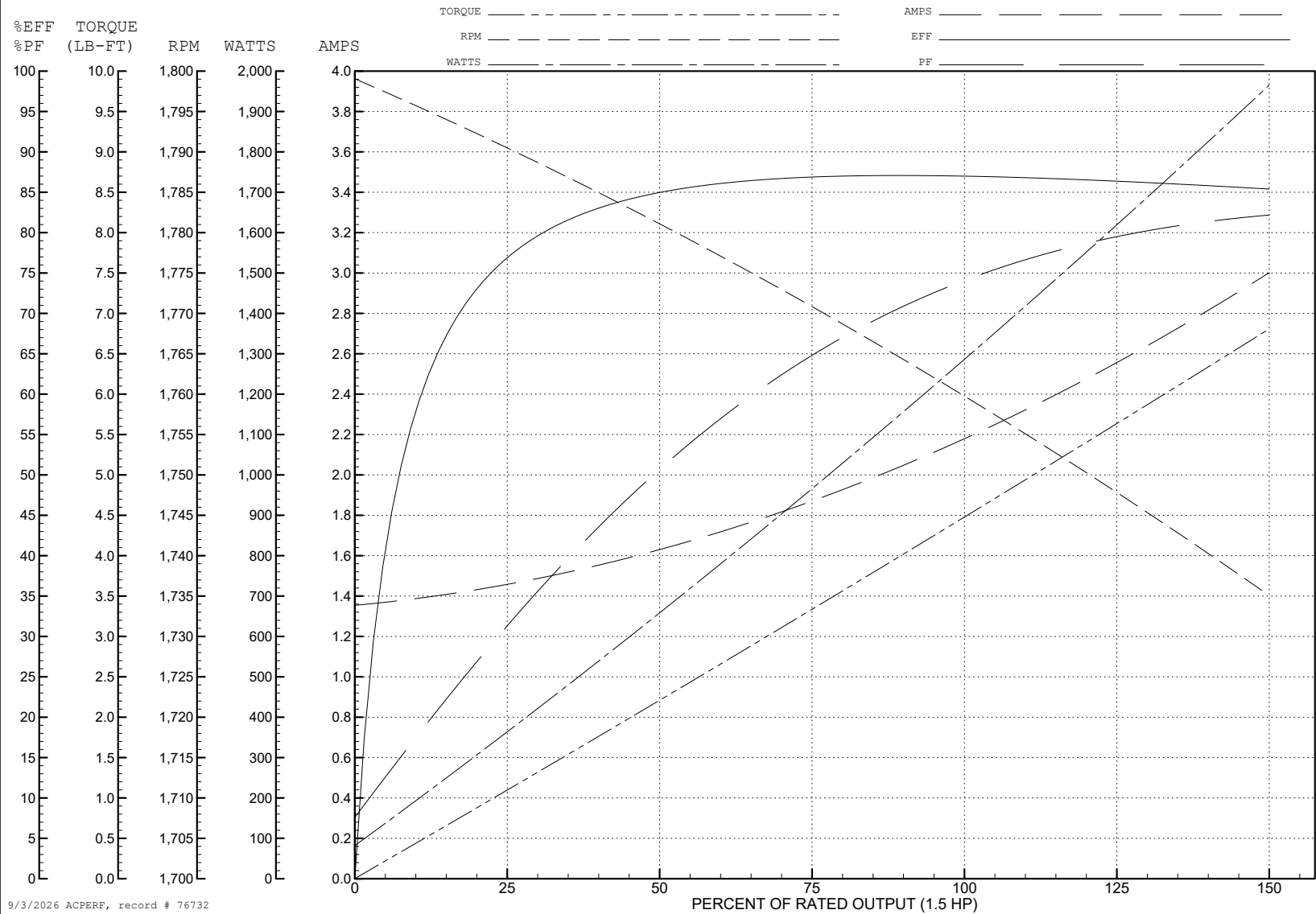
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WINDING # 35WGM493

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1760 RPM 460 V 3526M

TORQUES (LB-FT): PO=19.2 PU=9.4 LR=13.4 LRA=18.3



AC Induction Motor Performance Data

Record # 87533

Typical performance - not guaranteed values

Winding: 35WGL955-R010			Type: 3522M		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		4.4/2.2//3.8/1.9		Breakdown Torque		15.38 LB-FT	
R.P.M.		1760//1475		Pull-up Torque		8.71 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		10.69 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		16.78 A
Service Factor (S.F.)		1		No-load Current		1.23 A	
NEMA Nom. Eff.		86.5	Power Factor	73	Line-line Res. @ 25°C		13.4 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
				Locked-rotor Power Factor		67.3	
				Rotor inertia		0.159 lb-ft²	

Load Characteristics 380 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	32	50	63	72	78	82
Efficiency	71.4	81.1	84.2	85.1	84.7	83.7
Speed	1493	1487	1481	1475	1467	1460
Line amperes	1.28	1.41	1.62	1.87	2.16	2.49

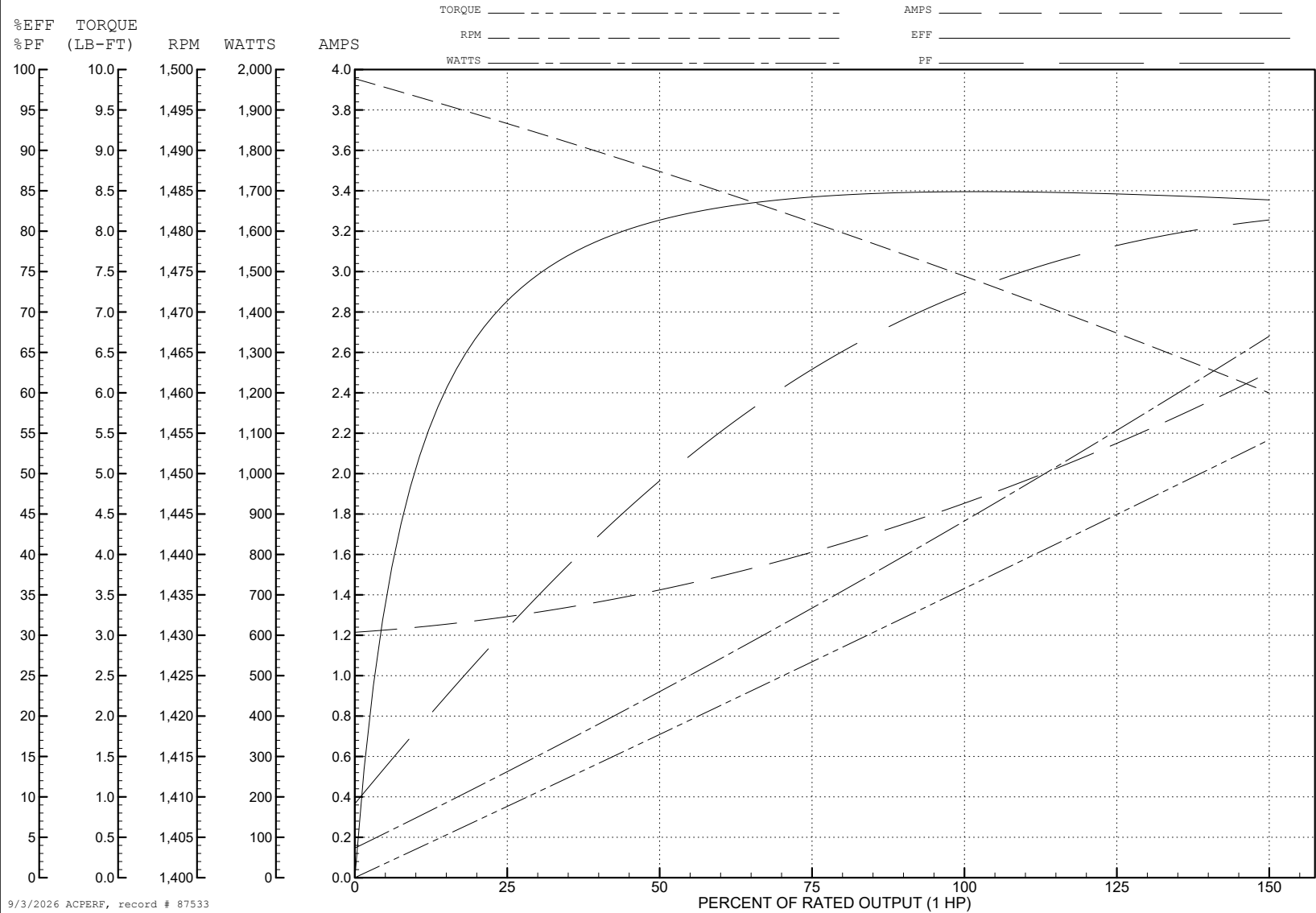
ABB Motors and Mechanical Inc.

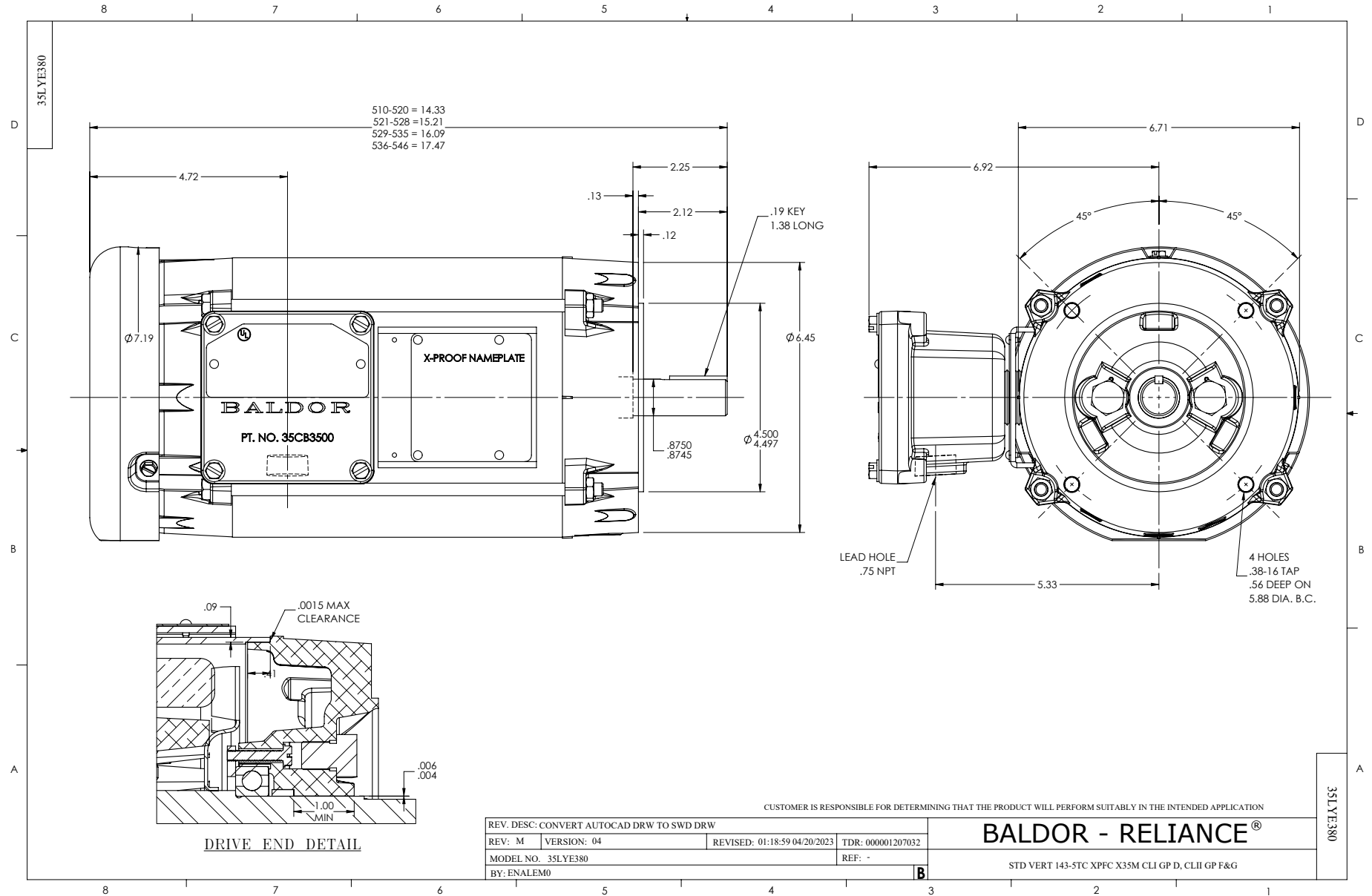
WINDING # 35WGL955

Typical performance - not guaranteed values.

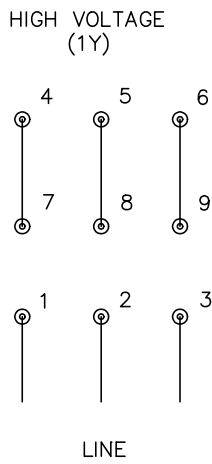
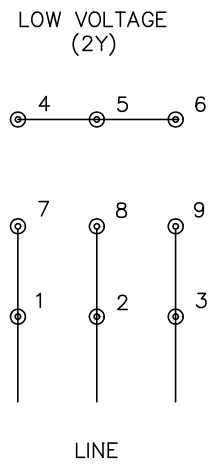
1 HP 3 PH 50 HZ 1475 RPM 380 V 3522M

TORQUES (LB-FT): PO=15.38 PU=8.71 LR=10.69 LRA=16.78





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: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005