

ABB BALDOR RELIANCE III

Customer information packet

CXM050742

0.75//0.5HP, 1765//1470RPM, 3PH, 60//50HZ, 5

Class - CLI GP D; CLII GP F,G

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 D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 50 HZ .750 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	2.280 A @ 230.0 V 2.400 A @ 208.0 V 2.000 A @ 190.0 V 1.140 A @ 460.0 V 1.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG069
Layout	35LYE2098
Eff. date	03-08-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.30 IN
Power Factor	74
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	1765 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

NP0887XPSL												
NO.							CC					
S/N							TEMP CODE	T3C				
SPEC.	35-0000-1371						INV.TYPE	PWM				
CAT.NO.	CXM050742						C HP FR	60	C HP TO	90		
HP	.75//0.5						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	2.4/1.2//2.2/1.1				MAG CUR		1.7/0.85					
RPM	1765//1470				MX RPM							
HZ	60//50	PH	3	CL	F	NOM.EFF.	82.5					
SER.F.	1.00	DES	B	SL HZ		WK2	0.101					
FRAME	56C	RATING	40C AMB-CONT									

Parts List

Part number	Description	Quantity
SA400012	SA 35-0000-1371	1.000 ea
RA391151	RA 35-0000-1371	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP0887XPSL	SS XP INV UL CSA CC CL-I GP-D CL-II GP-F	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP0018F	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 ea
35FH4005A01SP	IEC FH NO GREASER W/PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
51XB1214A16	12-14X1.00 HWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A06	THRUBOLT 5/16-18 X 8.50 OHIO ROD	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35EP3700A01SP	FR ENDPLATE, XPFC	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3702A01SP	PU EP-205 BRG-35X-56C-143-5TC	1.000 ea
HA3013A01	1/2-20X5/8 SPL.HX BOLT	2.000 ea
84XN1032J20	SCREW, SOC 10-32 X 1 1/4"BMH4602	2.000 ea
HW3021C06	3/32 DI X .625 PIN (F/S)	2.000 ea
35CB3001A02SP	EXPL PROOF CONDUIT BOX, 3/4"PIPE TAP LEA	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35CB3500A01SP	CONDUIT BOX LID, MACH	1.000 ea
51XN2520A16	SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00	4.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea

HA7000A04

KEY RETAINER 0.625 DIA SHAFTS

1.000 ea

AC Induction Motor Performance Data

Record # 89842

Typical performance - not guaranteed values

Winding: 35WGG069-R027			Type: 3514M		Enclosure: XPFC			
Nameplate Data					460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75//.5		Full Load Torque		2.24 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		2.4/1.2//2.2/1.1		Breakdown Torque		8 LB-FT		
R.P.M.		1765//1470		Pull-up Torque		4.4 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		5.1 LB-FT	
NEMA Design Code		B		KVA Code	K	Starting Current		8.4 A
Service Factor (S.F.)		1		No-load Current		0.85 A		
NEMA Nom. Eff.		82.5	Power Factor	74	Line-line Res. @ 25°C		30.3 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		25°C		
				Locked-rotor Power Factor		66.8		
				Rotor inertia		0.101 lb-ft²		

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	30	48	61	70	77	81
Efficiency	68.4	79.2	82.1	82.9	82.4	81.1
Speed	1791	1783	1775	1766	1757	1745
Line amperes	0.87	0.95	1.06	1.21	1.4	1.61

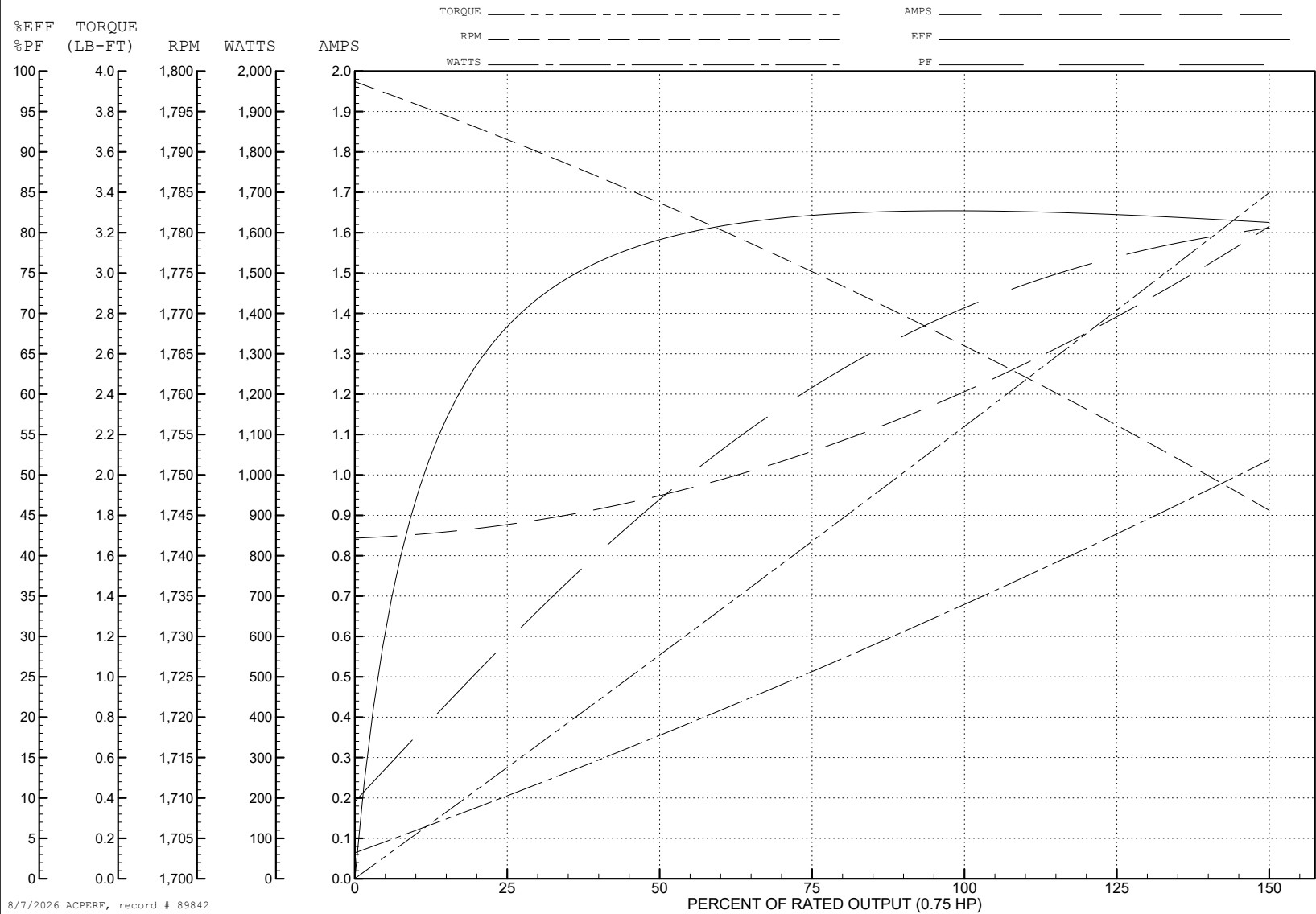
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WINDING # 35WGG069

0.75 HP 3 PH 60 HZ 1766 RPM 460 V 3514M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4



AC Induction Motor Performance Data

Record # 89843

Typical performance - not guaranteed values

Winding: 35WGG069-R027			Type: 3514M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		.75//.5		Full Load Torque		1.79 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		2.4/1.2//2.2/1.1		Breakdown Torque		7.1 LB-FT		
R.P.M.		1765//1470		Pull-up Torque		4.1 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		4.8 LB-FT	
NEMA Design Code		B		KVA Code	K	Starting Current		7.7 A
Service Factor (S.F.)		1		No-load Current		0.83 A		
NEMA Nom. Eff.		82.5	Power Factor		74	Line-line Res. @ 25°C		30.3 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		21°C
						Locked-rotor Power Factor		72.2
						Rotor inertia		0.101 lb-ft²

Load Characteristics 380 V, 50 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	43	56	66	73	78
Efficiency	63.5	75.7	79.7	81.1	81.1	80.2
Speed	1492	1486	1480	1472	1465	1456
Line amperes	0.84	0.89	0.97	1.07	1.21	1.37

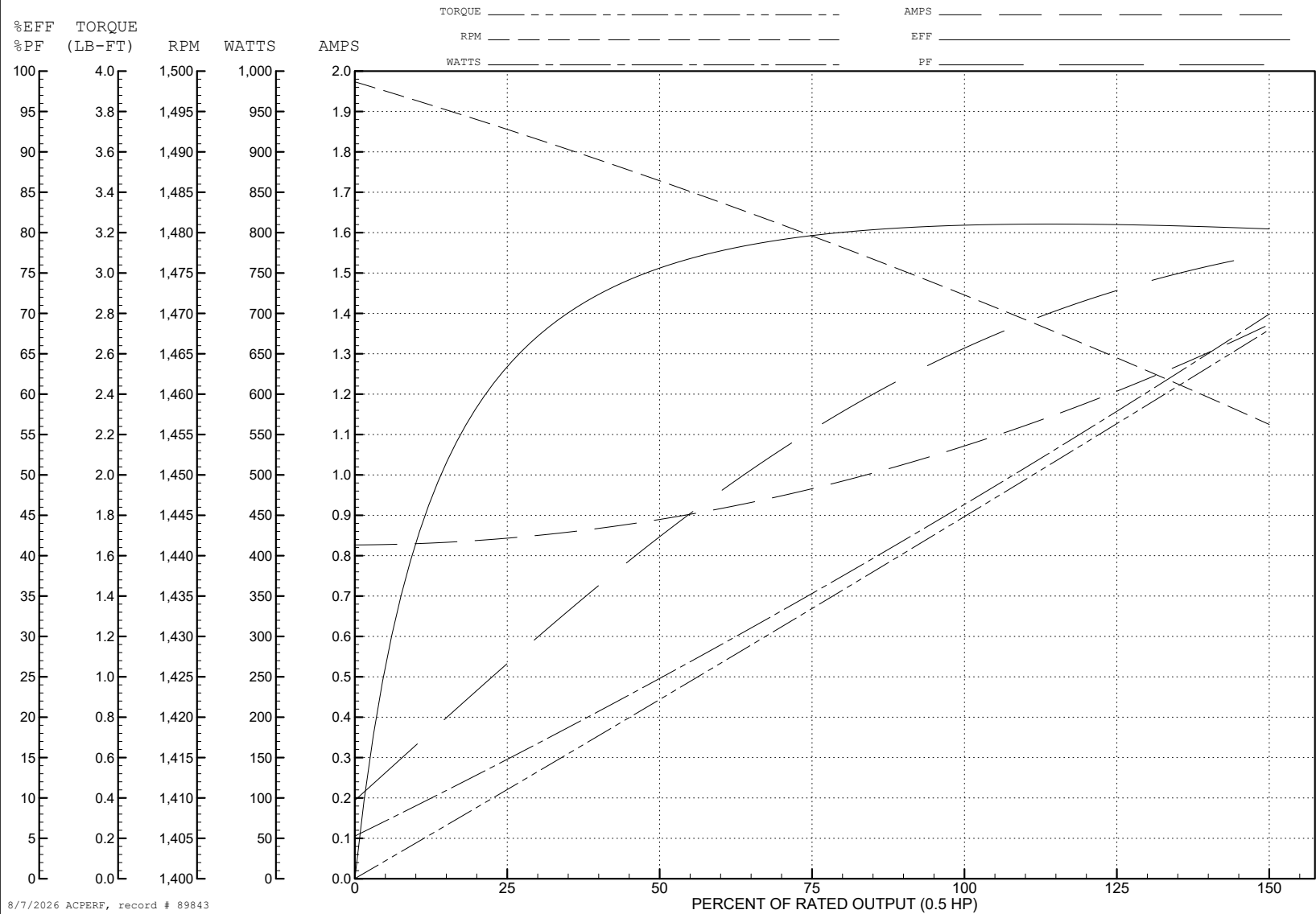
ABB Motors and Mechanical Inc.

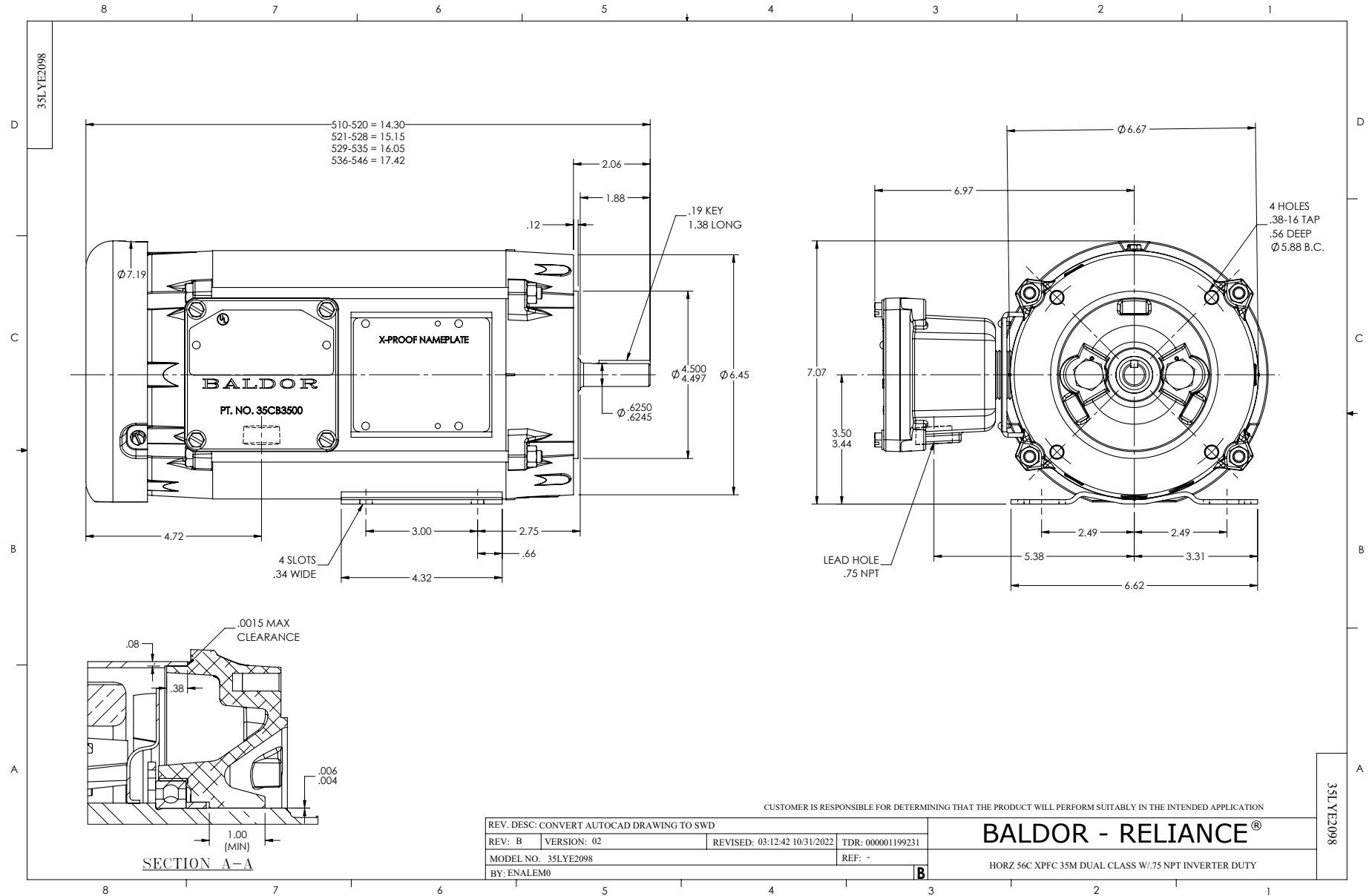
WINDING # 35WGG069

Typical performance - not guaranteed values.

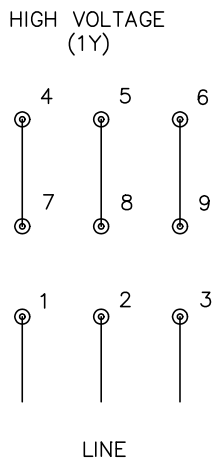
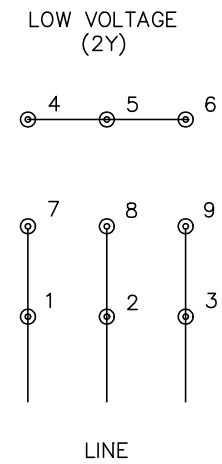
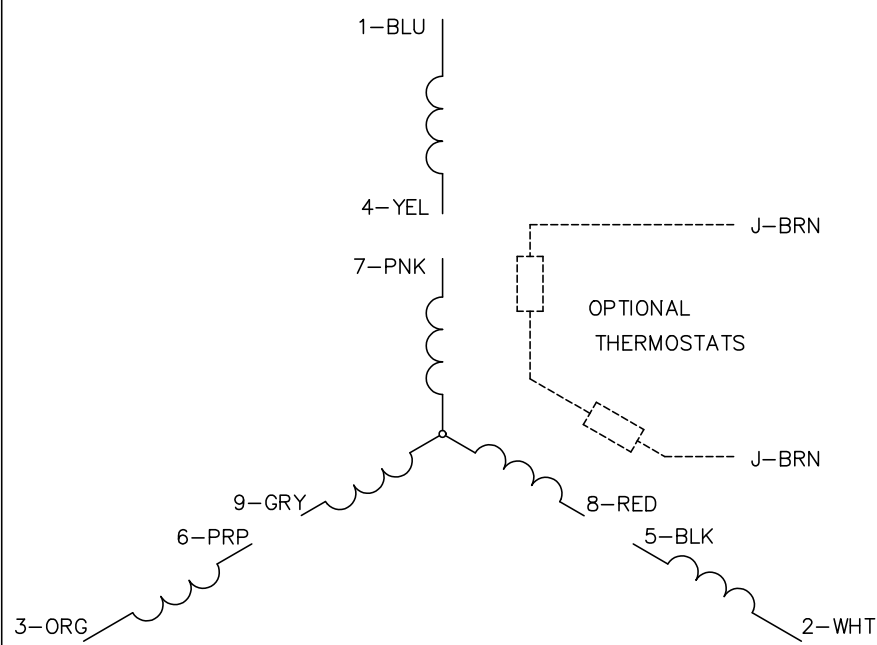
0.5 HP 3 PH 50 HZ 1472 RPM 380 V 3514M

TORQUES (LB-FT): PO=7.1 PU=4.1 LR=4.8 LRA=7.7





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