

BALDOR® • RELIANCE™

Customer information packet

VDRX050544

0.5HP, 1770//1475RPM, 3PH, 60//50HZ, 56C, 351

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPNV
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	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA UL
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	1.900 A @ 208.0 V 1.800 A @ 230.0 V 1.740 A @ 190.0 V .900 A @ 460.0 V .870 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG155
Layout	35LYX727
Eff. date	10-09-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.12 IN
Power Factor	65
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

NP1401XPSL									
NO.		CC							
S/N		TEMP CODE	T3C						
SPEC.	35-0000-1348	INV.TYPE	PWM						
CAT.NO.	VDRX050544	C HP FR	60	C HP TO	90				
HP	.5//.33	CT HZ FROM	6	CT HZ TO	60				
VOLTS	230/460//190/380	VT HZ FROM	6	VT HZ TO	60				
AMPS	1.8/0.9//1.74/0.87	MAG CUR	1.58/0.79						
RPM	1770//1475	MX RPM	2700						
HZ	60//50	PH	3	CL	F	NOM.EFF.	80		
SER.F.	1.00	DES	B	SL HZ	1	WK2	0.087		
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 # 87252

Preliminary Data Sheet

Winding: 35WGG155-R031		Type: 3512M	Enclosure: XPNV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	.5	Full Load Torque	1.49 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	1.8/9	Breakdown Torque	6.28 LB-FT	
R.P.M.	1770	Pull-up Torque	3.26 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	4.04 LB-FT
NEMA Design Code	B KVA Code	M	Starting Current	6.71 A
Service Factor (S.F.)		1.25	No-load Current	0.792 A
NEMA Nom. Eff.	80 Power Factor	65	Line-line Res. @ 25°C	43.2 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	58°C
S.F. Amps		2/1	Temp. Rise @ S.F. Load	68°C
			Locked-rotor Power Factor	70.8
			Rotor inertia	0.0866 lb-ft ²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	41	52	62	69	75	69
Efficiency	56.5	70.7	76.5	78.9	80	80	80
Speed	1792	1786	1779	1771	1763	1755	1763
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18	1.06

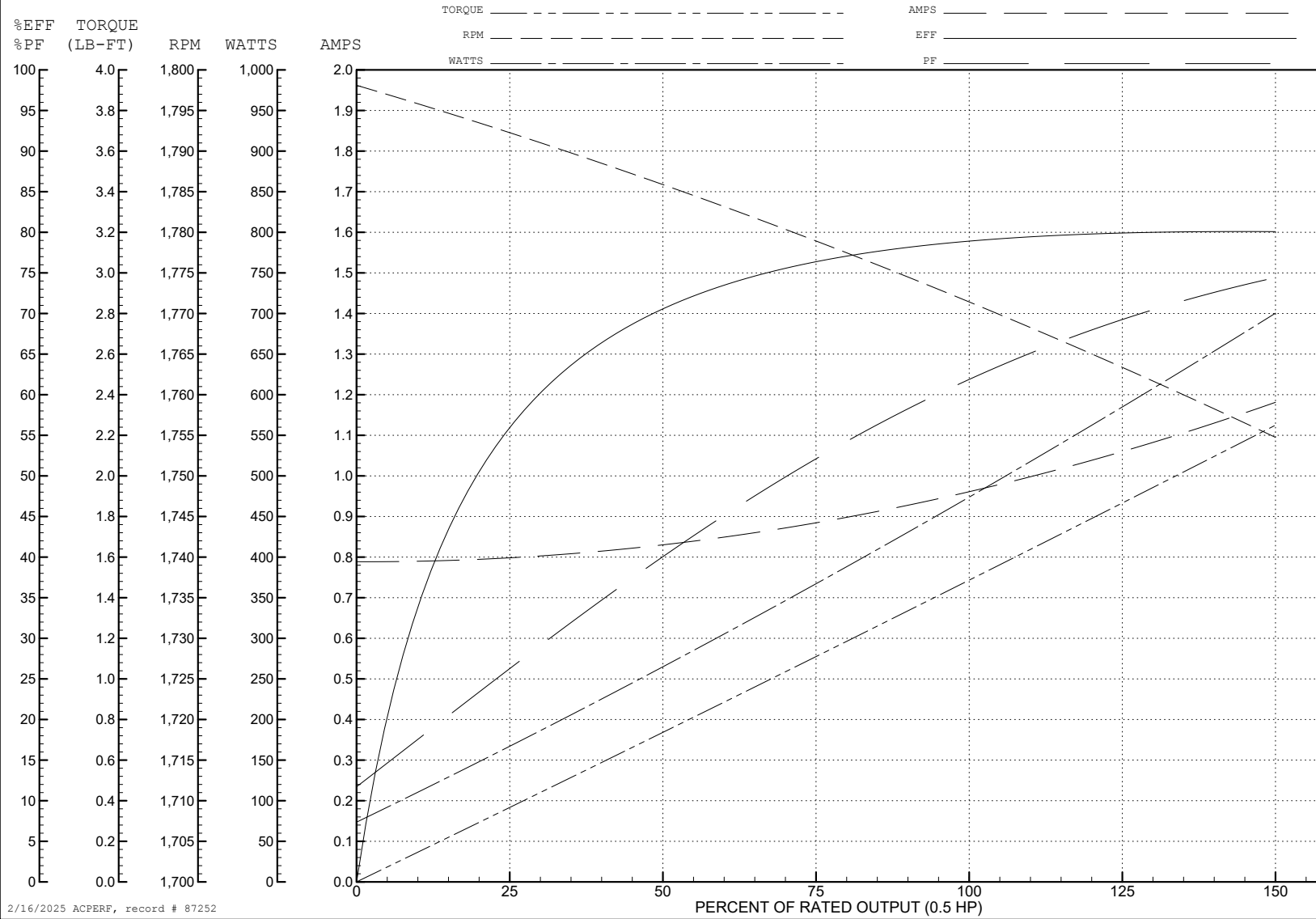
ABB Motors and Mechanical Inc.

WINDING # 35WGG155

0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71



2/16/2025 ACPERF, record # 87252

AC Induction Motor Performance Data

Record # 87463

Preliminary Data Sheet

Winding: 35WGG155-R031		Type: 3512M	Enclosure: XPNV			
Nameplate Data			380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)	.5//.33		Full Load Torque	1.18 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	1.8/.9//1.74/.87		Breakdown Torque	5.5 LB-FT		
R.P.M.	1770//1475		Pull-up Torque	2.98 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	3.69 LB-FT	
NEMA Design Code	B		KVA Code	M	Starting Current	6.08 A
Service Factor (S.F.)	1.25		No-load Current	0.775 A		
NEMA Nom. Eff.	80	Power Factor	65			
Rating - Duty	40C		AMB-CONT	Temp. Rise @ Rated Load	49°C	
S.F. Amps	2/1		Temp. Rise @ S.F. Load	55°C		
			Locked-rotor Power Factor	76		
			Rotor inertia	0.0866 lb-ft ²		

Load Characteristics 380 V, 50 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	26	37	48	57	65	71	65
Efficiency	48.8	64.7	71.8	75.2	77	77.5	77
Speed	1493	1488	1483	1476	1470	1463	1470
Line amperes	0.771	0.789	0.828	0.875	0.938	1.02	0.938

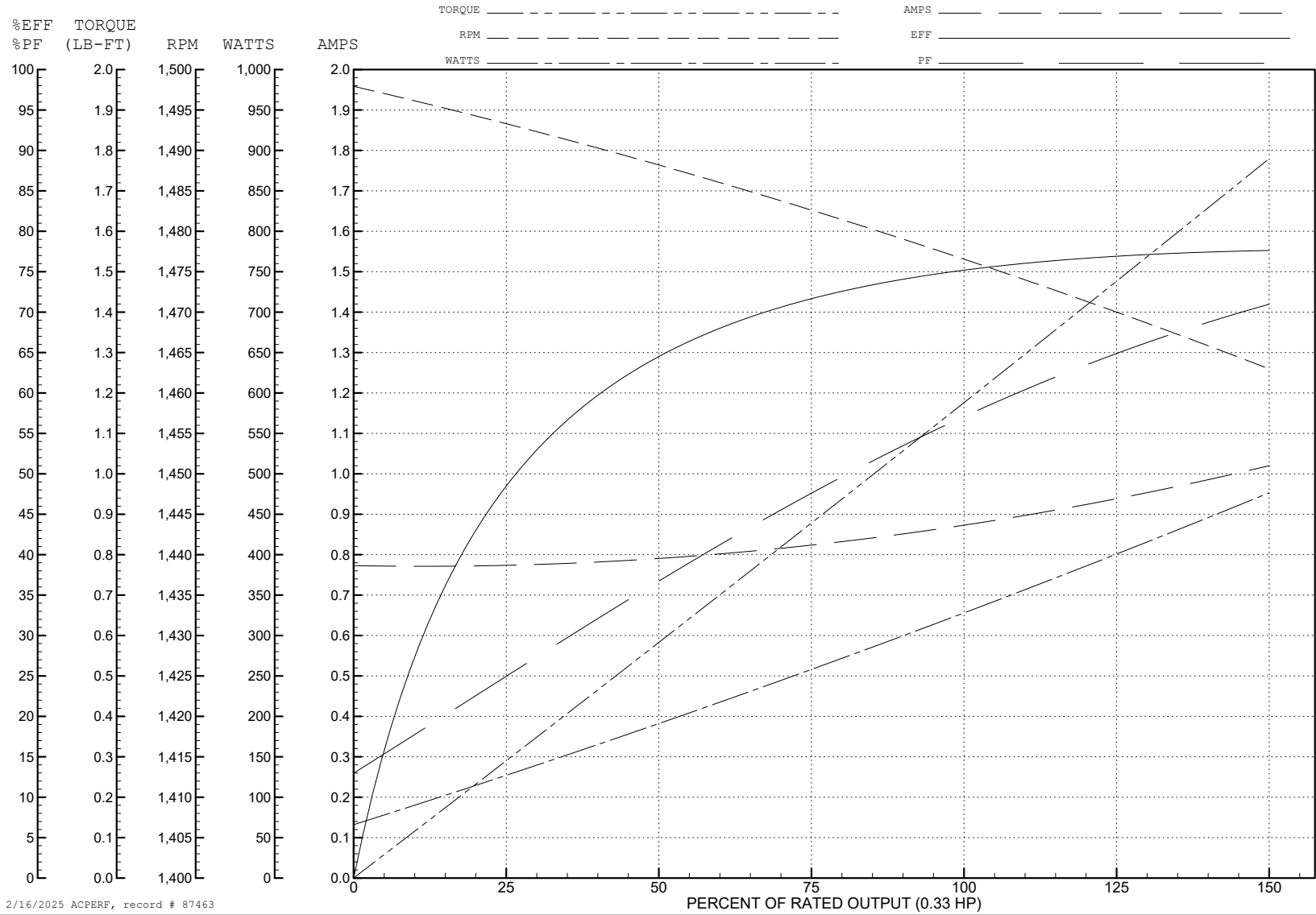
ABB Motors and Mechanical Inc.

WINDING # 35WGG155

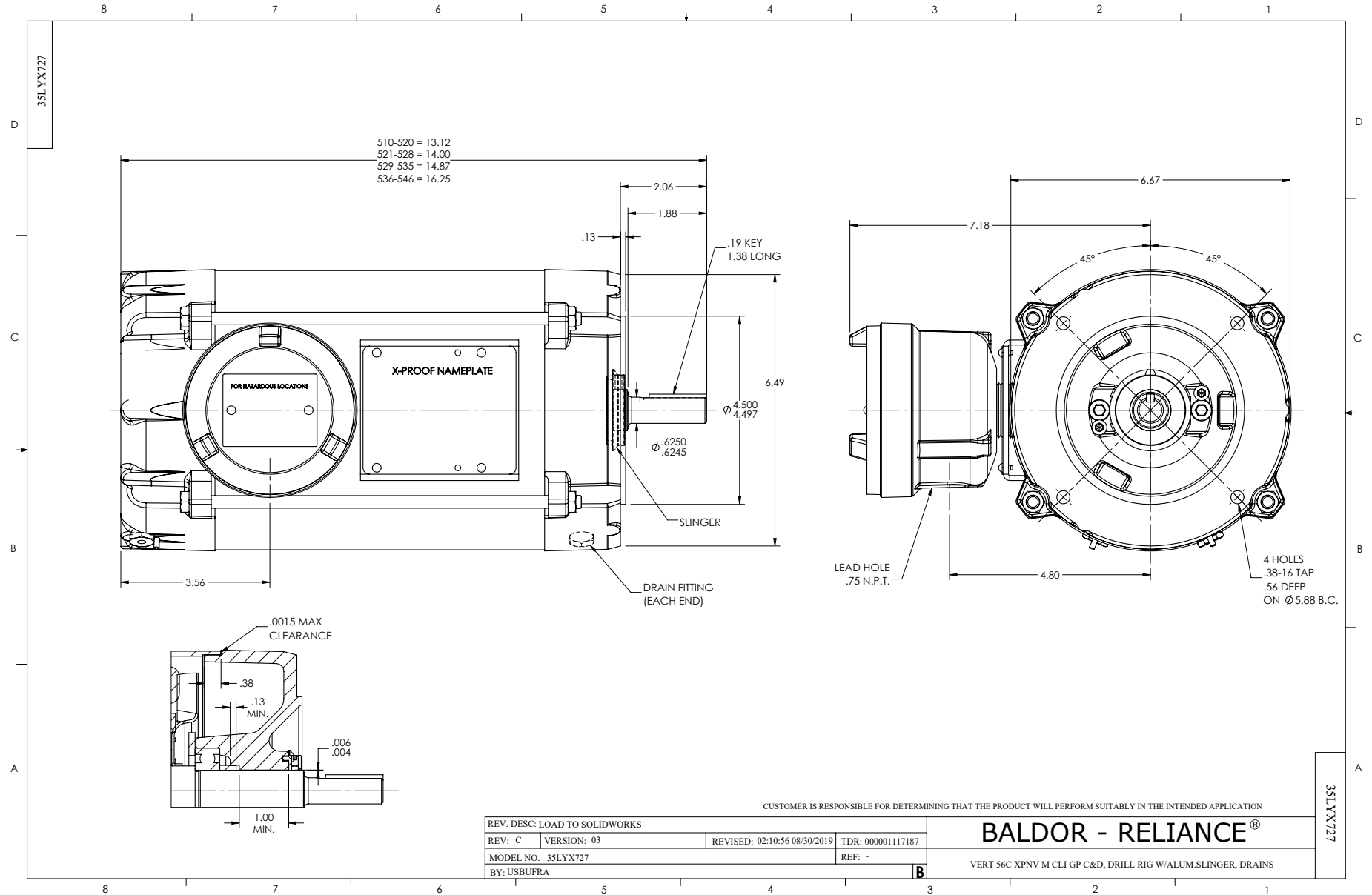
0.33 HP 3 PH 50 HZ 1476 RPM 380 V 3512M

Typical performance - not guaranteed values.

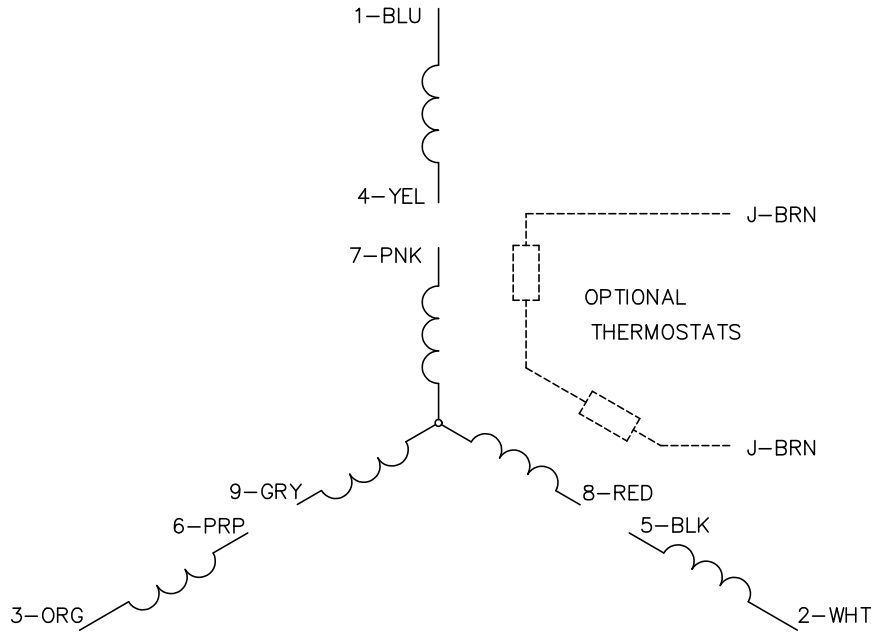
TORQUES (LB-FT): PO=5.5 PU=2.98 LR=3.69 LRA=6.08



2/16/2025 ACPERF, record # 87463



CD0005

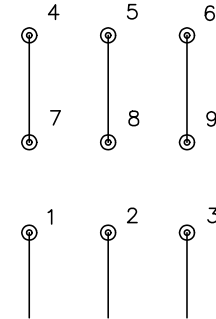


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS