ABB BALDOR RELIANCE

Customer information packet

VDRX050544

.5//.33HP, 1770//1475RPM, 3PH, 60//50HZ, 56C
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	TENV
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	.330 HP @ 50 HZ
	.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
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	2.000 A @ 230.0 V
	1.800 A @ 190.0 V
	1.000 A @ 460.0 V
	.900 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	-
Type	AC
Mech. spec.	35X727
Base	
Status	PRD/A
Elec. spec.	35WGK135
Layout	35LYX727
Eff. date	03-14-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	03-13-2025

Efficiency @ 100% Load	78.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.14 IN
Power Factor	62
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm
	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.	35X727K135G2			**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	2/1//1.8/.9			**MAG CUR**	1.6/.8						
RPM	1770//1475			**MX RPM**	2700						
HZ	60//50	**PH**	3	**CL**	F	**NOM.EFF.**	78.5				
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 # 111283
Preliminary Data Sheet

Winding: 35WGK135-R023	**Type:** 3512M	**Enclosure:** XPNV

Nameplate Data			
Rated Output (HP)			.5//.33
Volts			230/460//190/380
Full Load Amps			2/1//1.8/.9
R.P.M.			1770//1475
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	M
Service Factor (S.F.)			1
NEMA Nom. Eff.	78.5	**Power Factor**	62
Rating - Duty			40C AMB-CONT

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	1.49 LB-FT
Start Configuration	direct on line
Breakdown Torque	6.28 LB-FT
Pull-up Torque	3.26 LB-FT
Locked-rotor Torque	4.04 LB-FT
Starting Current	6.71 A
No-load Current	0.792 A
Line-line Res. @ 25ºC	43.2 Ω
Temp. Rise @ Rated Load	58°C
Locked-rotor Power Factor	70.8
Rotor inertia	0.0866 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

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

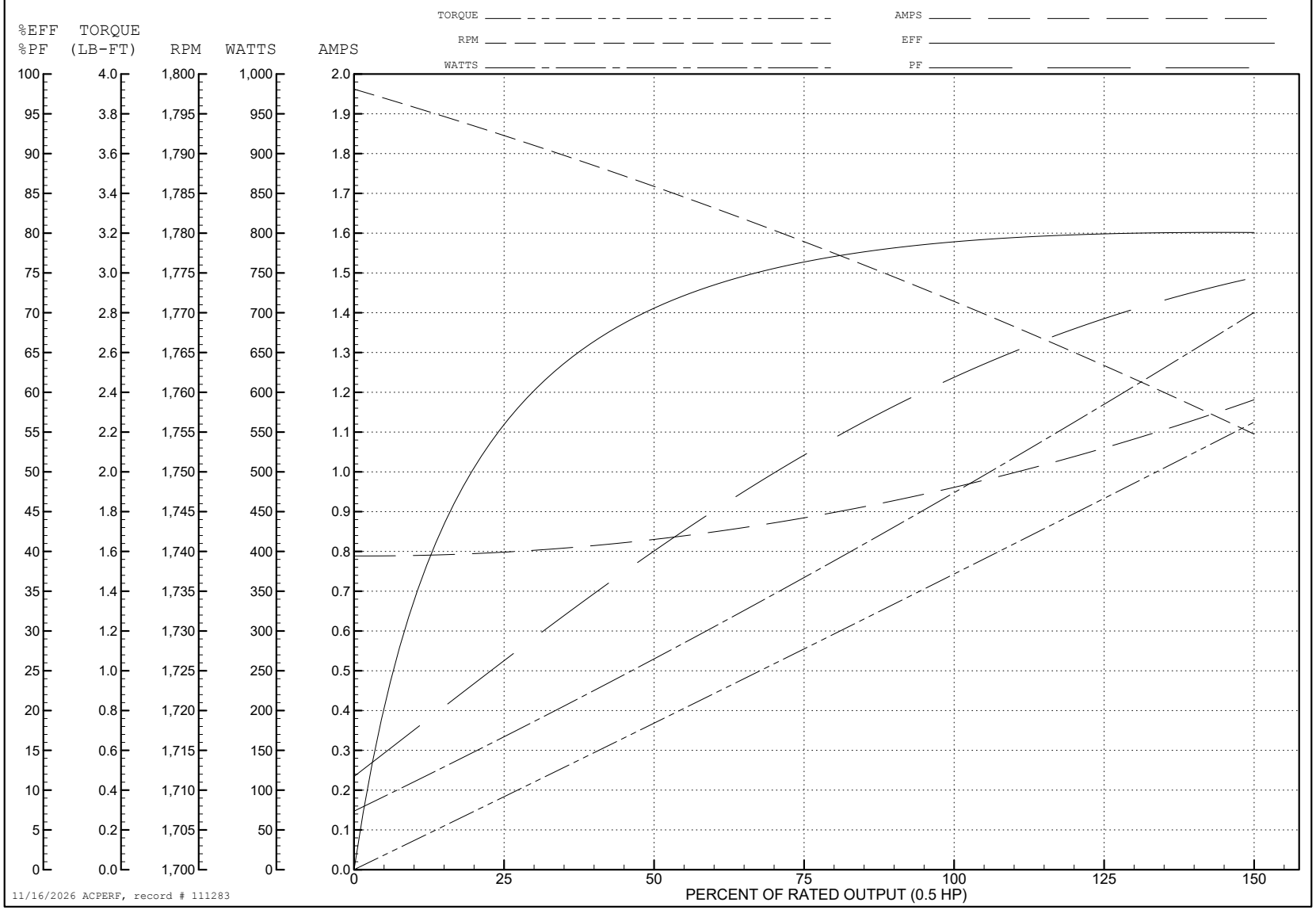
ABB Motors and Mechanical Inc.

WINDING # 35WGK135

0.5 HP 3 PH 60 HZ 1771 RPM 460 V 3512M

Typical performance - not guaranteed values.

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



11/16/2026 ACPERF, record # 111283

AC Induction Motor Performance Data
Record # 111284
Preliminary Data Sheet

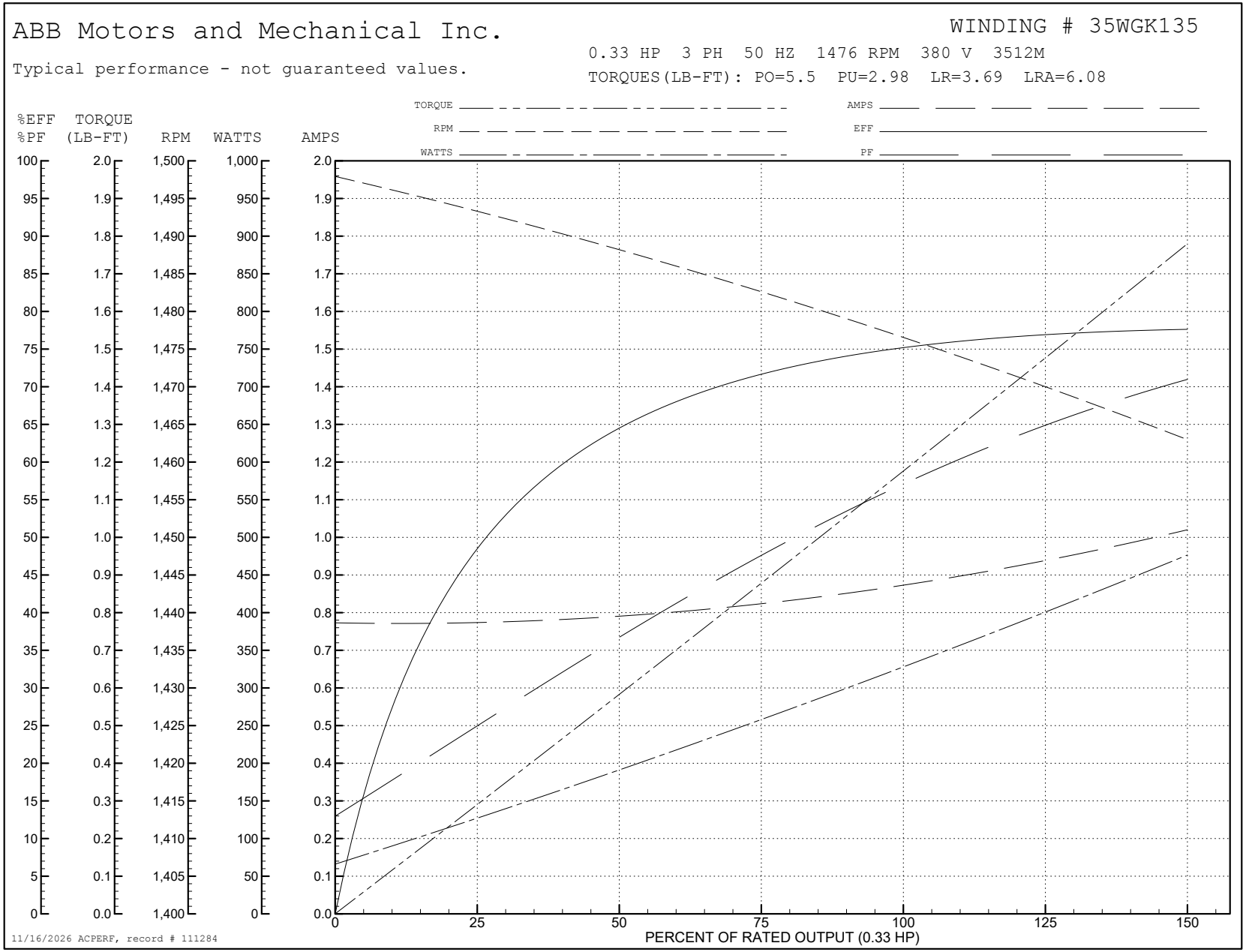
Winding: 35WGK135-R023	**Type:** 3512M	**Enclosure:** XPNV

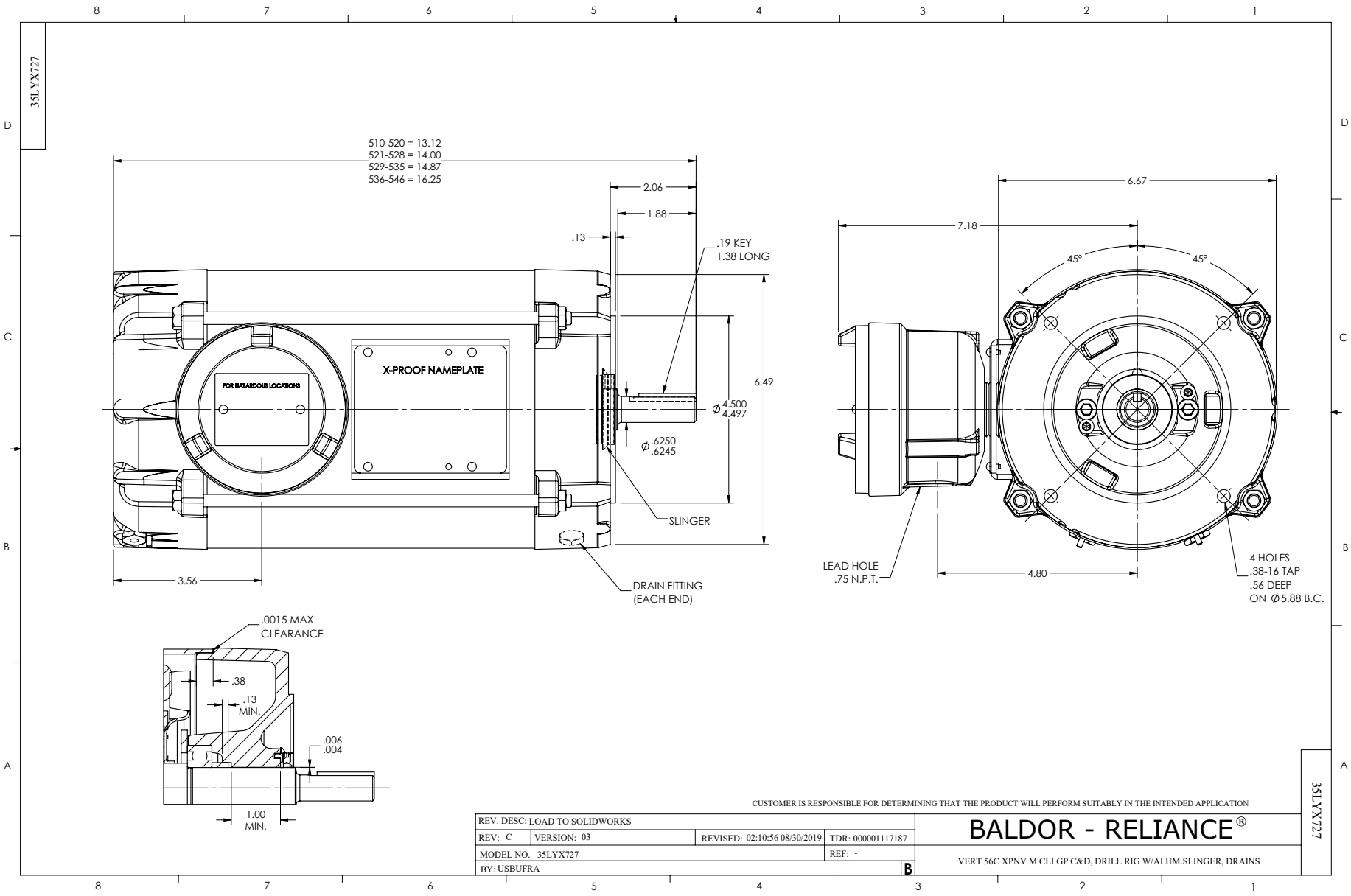
Nameplate Data			
Rated Output (HP)			.5//.33
Volts			230/460//190/380
Full Load Amps			2/1//1.8/.9
R.P.M.			1770//1475
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	M
Service Factor (S.F.)			1
NEMA Nom. Eff.	78.5	**Power Factor**	62
Rating - Duty			40C AMB-CONT

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	1.18 LB-FT
Start Configuration	direct on line
Breakdown Torque	5.5 LB-FT
Pull-up Torque	2.98 LB-FT
Locked-rotor Torque	3.69 LB-FT
Starting Current	6.08 A
No-load Current	0.775 A
Line-line Res. @ 25ºC	43.2 Ω
Temp. Rise @ Rated Load	49°C
Locked-rotor Power Factor	76
Rotor inertia	0.0866 lb-ft²

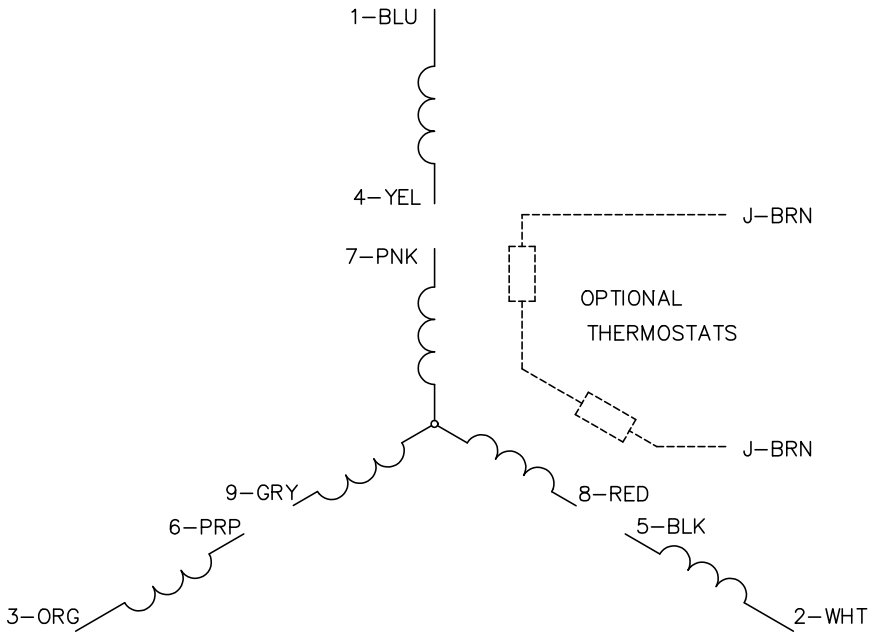
Load Characteristics 380 V, 50 Hz, 0.33 HP

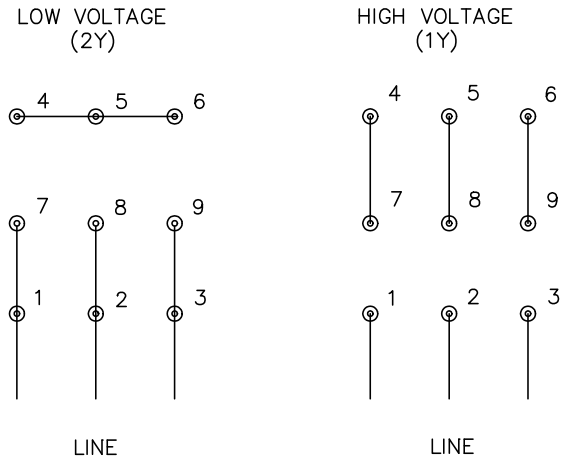
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	26	37	48	57	65	71
Efficiency	48.8	64.7	71.8	75.2	77	77.5
Speed	1493	1488	1483	1476	1470	1463
Line amperes	0.771	0.789	0.828	0.875	0.938	1.02


ABB Motors and Mechanical Inc.
WINDING # 35WGK135
Typical performance - not guaranteed values.
0.33 HP 3 PH 50 HZ 1476 RPM 380 V 3512M
TORQUES(LB-FT): PO=5.5 PU=2.98 LR=3.69 LRA=6.08
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.33 HP)
11/16/2026 ACPERF, record # 111284


35LYX727
510-520 = 13.12
521-528 = 14.00
529-535 = 14.87
536-546 = 16.25
2.06
1.88
.13
.19 KEY
1.38 LONG
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
6.49
Ø 4.500
4.497
Ø .6250
.6245
SLINGER
3.56
DRAIN FITTING
(EACH END)
6.67
7.18
45°
45°
LEAD HOLE
.75 N.P.T.
4.80
4 HOLES
.38-16 TAP
.56 DEEP
ON Ø 5.88 B.C.
.0015 MAX
CLEARANCE
.38
.13
MIN.
.006
.004
1.00
MIN.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD TO SOLIDWORKS
REV: C
VERSION: 03
REVISED: 02:10:56 08/30/2019
TDR: 000001117187
MODEL NO. 35LYX727
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
VERT 56C XPNV M CLI GP C&D, DRILL RIG W/ALUM.SLINGER, DRAINS
35LYX727

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS