ABB BALDOR RELIANCE

Customer information packet

VEM3155T

2HP, 3450RPM, 3PH, 60HZ, 143TC, 3524M, ODP, F1
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/9/2026 7:04:37 PM

Specifications

Enclosure	OPEN
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
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
Current @ Voltage	5.500 A @ 208.0 V
	5.000 A @ 230.0 V
	2.500 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	U
Type	AC
Mech. spec.	35Z413
Base	
Status	PRD/A
Elec. spec.	35WGS095
Layout	35LYZ413
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	04-24-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	2.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.25 IN
Power Factor	90
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3553LUA										
CAT.NO.	VEM3155T									
SPEC.	35Z413S095G1									
HP	2									
VOLTS	208-230/460									
AMPS	5.5-5/2.5									
RPM	3450									
FRAME	143TC	**HZ**	60			**PH**	3			
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	F			
NEMA NOM. EFF	86.5	**PF**	90							
RATING	40C AMB-CONT									
CC	010A									
ENCL	OPEN	**SN**								
DE	6205	**ODE**	6203							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 2HP 190/380V 6/3A									SF1.0

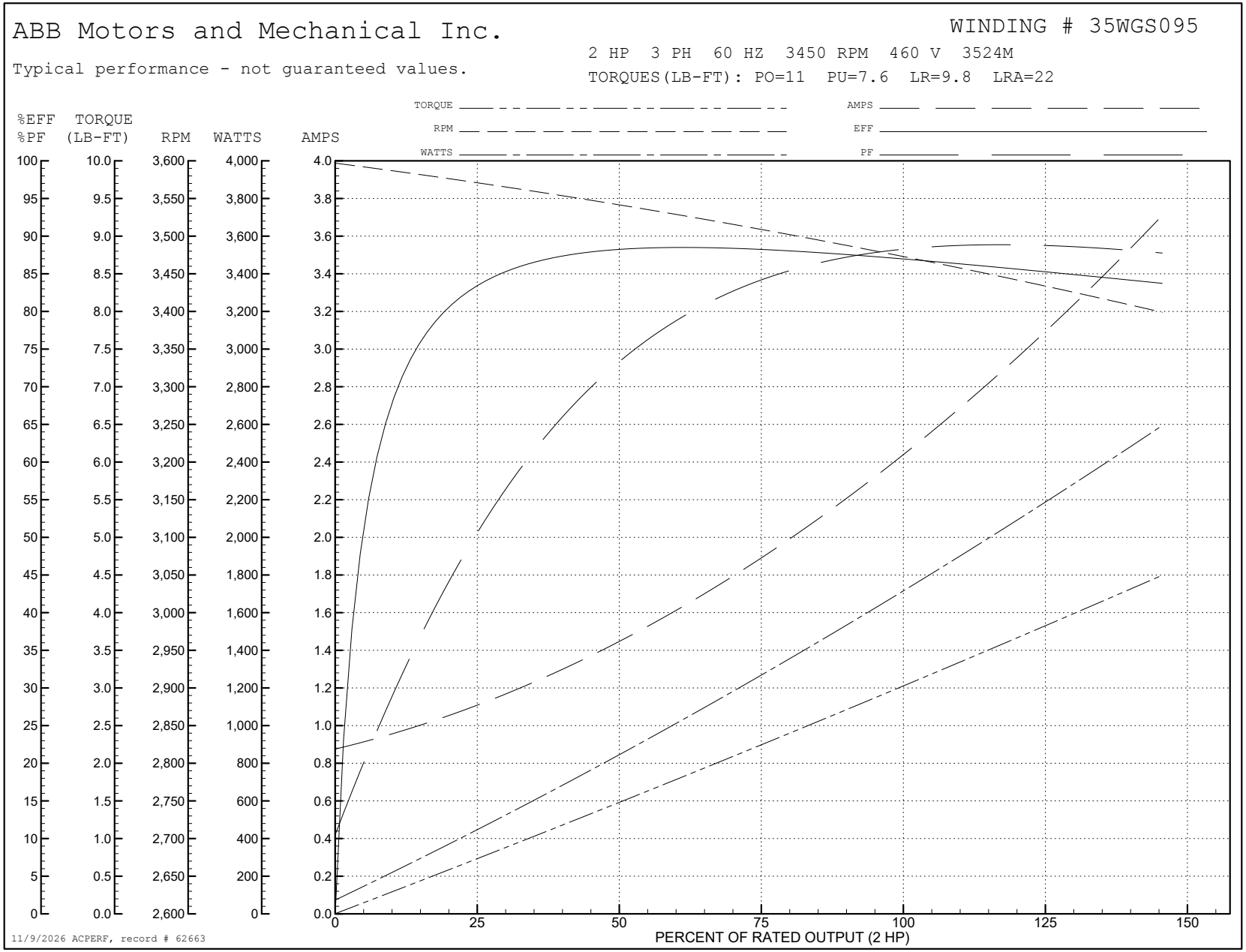
AC Induction Motor Performance Data
Record # 62663
Typical performance - not guaranteed values

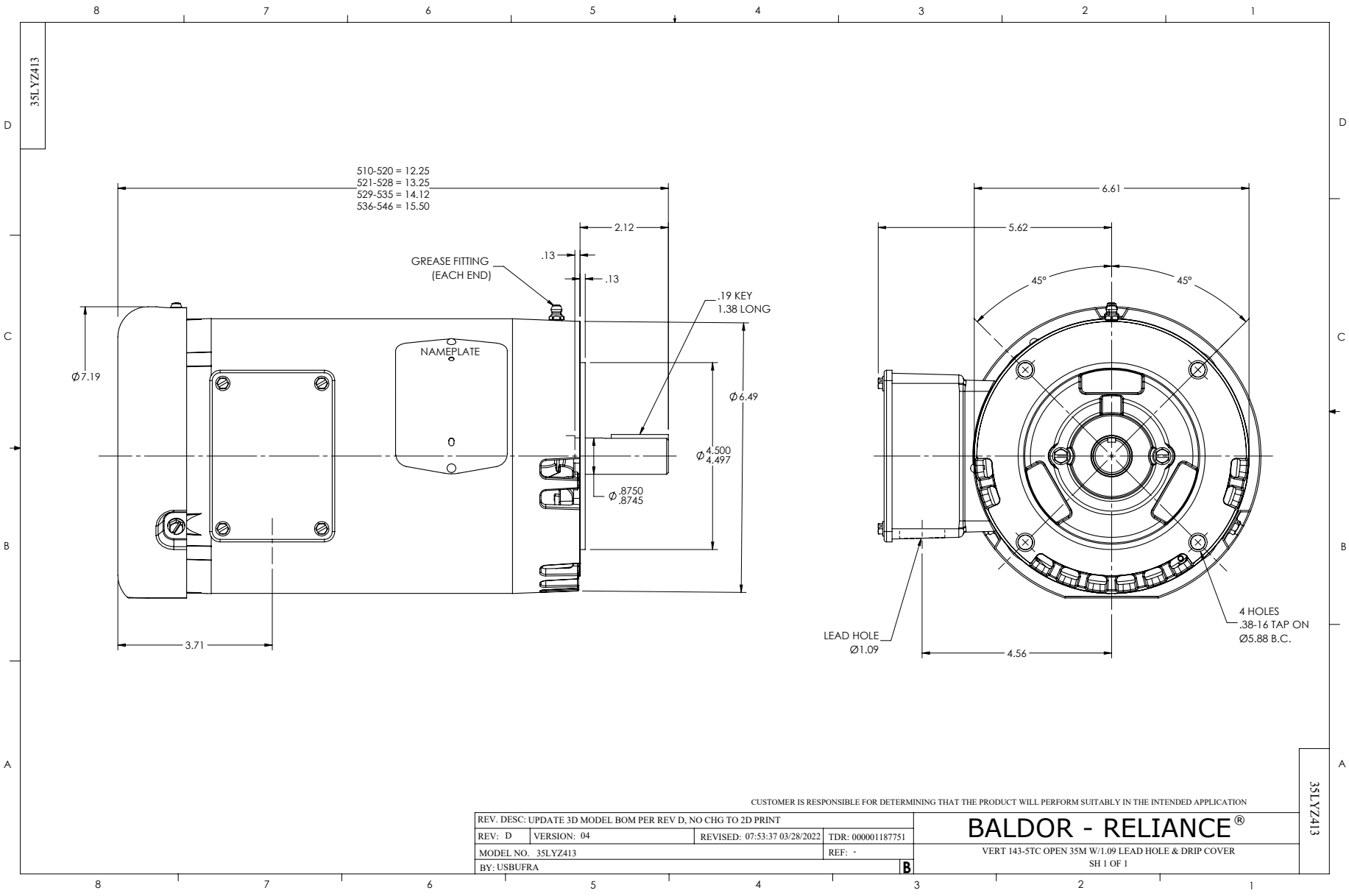
Winding: 35WGS095-R006	**Type:** 3524M	**Enclosure:** ODP

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	3 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			5.5-5/2.5	**Breakdown Torque**	11 LB-FT
R.P.M.			3450	**Pull-up Torque**	7.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.8 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	22 A
Service Factor (S.F.)			1.15	**No-load Current**	0.9 A
NEMA Nom. Eff.	86.5	**Power Factor**	90	**Line-line Res. @ 25ºC**	7.37 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	23°C
S.F. Amps				**Temp. Rise @ S.F. Load**	28°C
				Locked-rotor Power Factor	48.6
				Rotor inertia	0.0664 LB-FT2

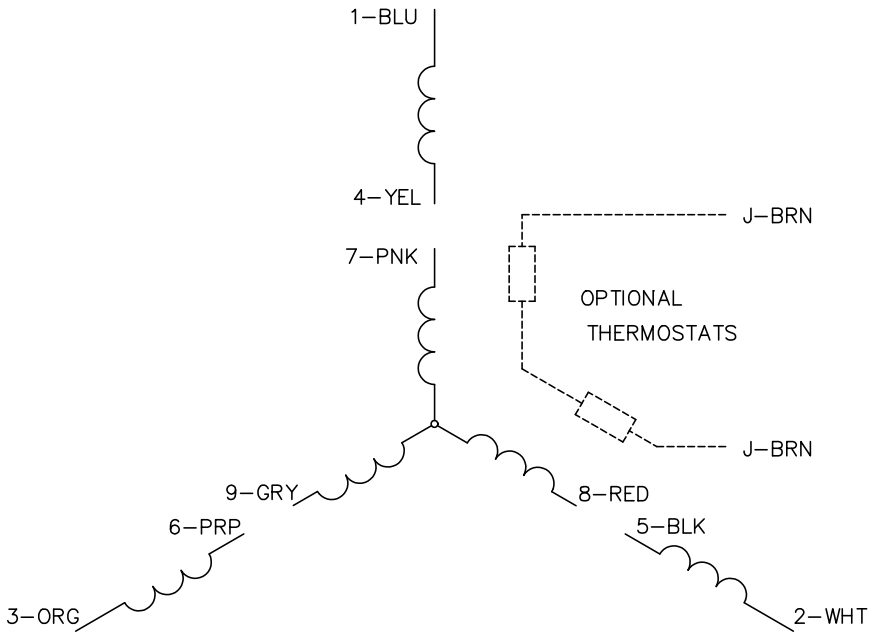
Load Characteristics 460 V, 60 Hz, 2 HP

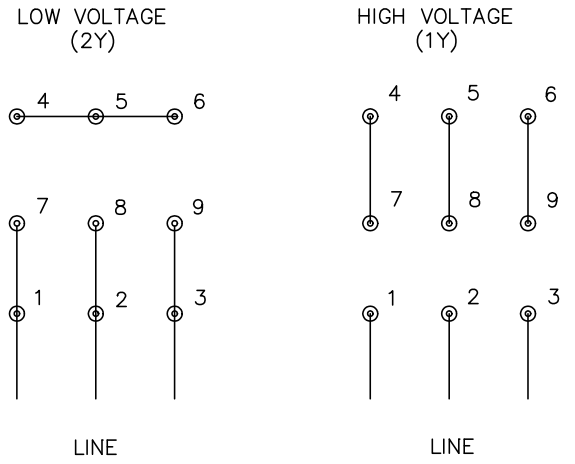
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	52	77	84	85	89	88	87
Efficiency	83.8	87.8	88.1	87.2	85.6	83.6	86.2
Speed	3569	3540	3509	3475	3438	3398	3453
Line amperes	1.1	1.4	1.9	2.5	3	3.7	2.8


ABB Motors and Mechanical Inc.
WINDING # 35WGS095
2 HP 3 PH 60 HZ 3450 RPM 460 V 3524M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=11 PU=7.6 LR=9.8 LRA=22
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (2 HP)
11/9/2026 ACPERF, record # 62663


35LYZ413
510-520 = 12.25
521-528 = 13.25
529-535 = 14.12
536-546 = 15.50
2.12
.13
.13
GREASE FITTING
(EACH END)
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
Ø6.49
Ø4.500
4.497
Ø .8750
.8745
3.71
6.61
5.62
45°
45°
LEAD HOLE
Ø1.09
4.56
4 HOLES
.38-16 TAP ON
Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV D, NO CHG TO 2D PRINT
REV: D
VERSION: 04
REVISED: 07:53:37 03/28/2022
TDR: 000001187751
MODEL NO. 35LYZ413
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
VERT 143-5TC OPEN 35M W/1.09 LEAD HOLE & DRIP COVER
SH 1 OF 1
35LYZ413

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