

BALDOR • RELIANCE

Customer information packet

VEM3158T

3HP, 3450RPM, 3PH, 60HZ, 145TC, 3528M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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
Current @ Voltage	8.000 A @ 208.0 V 7.600 A @ 230.0 V 3.800 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part detail

Revision	M
Type	AC
Mech. spec.	35Z413
Base	
Status	PRD/A
Elec. spec.	35WGL051
Layout	35LYZ413
Eff. date	09-19-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-15-2016

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	3.8 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	3528M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.25 IN
Power Factor	89
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.	VEM3158T						
SPEC.	35Z413L051G1						
HP	3						
VOLTS	230/460						
AMPS	7.6/3.8						
RPM	3450						
FRAME	145TC		HZ	60		PH	3
SF	1.15	CODE	K	DES	B	CLASS	F
NEMA NOM. EFF	85.5	PF	89				
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 3HP 190/380V 9/4.5A						SF1.0

AC Induction Motor Performance Data

Record # 48297

Typical performance - not guaranteed values

Winding: 35WGL051-R004		Type: 3528M		Enclosure: ODP	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	3	Full Load Torque	4.65 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	7.6/3.8	Breakdown Torque	18.7 LB-FT		
R.P.M.	3450	Pull-up Torque	12.2 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	17.3 LB-FT	
NEMA Design Code	B KVA Code	K	Starting Current	32 A	
Service Factor (S.F.)		1.15	No-load Current	1.36 A	
NEMA Nom. Eff.	85.5 Power Factor	89	Line-line Res. @ 25°C	4.7021 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load		

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	85	89	92	93	91
Efficiency	82.1	87	87.4	86.2	84.6	82.2	85.2
Speed	3566.3	3535	3499.4	3457.2	3415.1	3364.7	3432
Line amperes	1.63	2.16	2.88	3.74	4.57	5.58	4.24

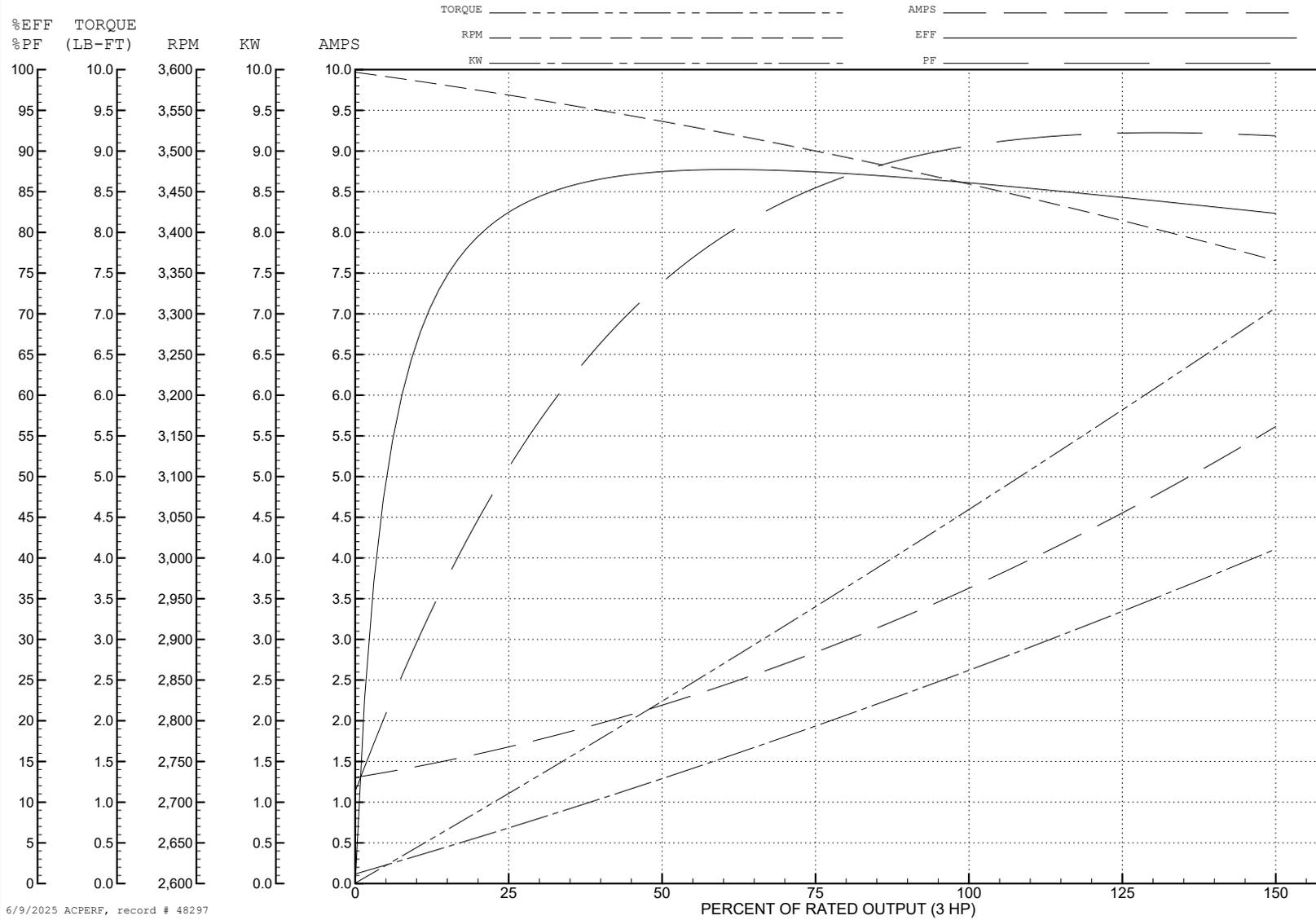
ABB Motors and Mechanical Inc.

WINDING # 35WGL051

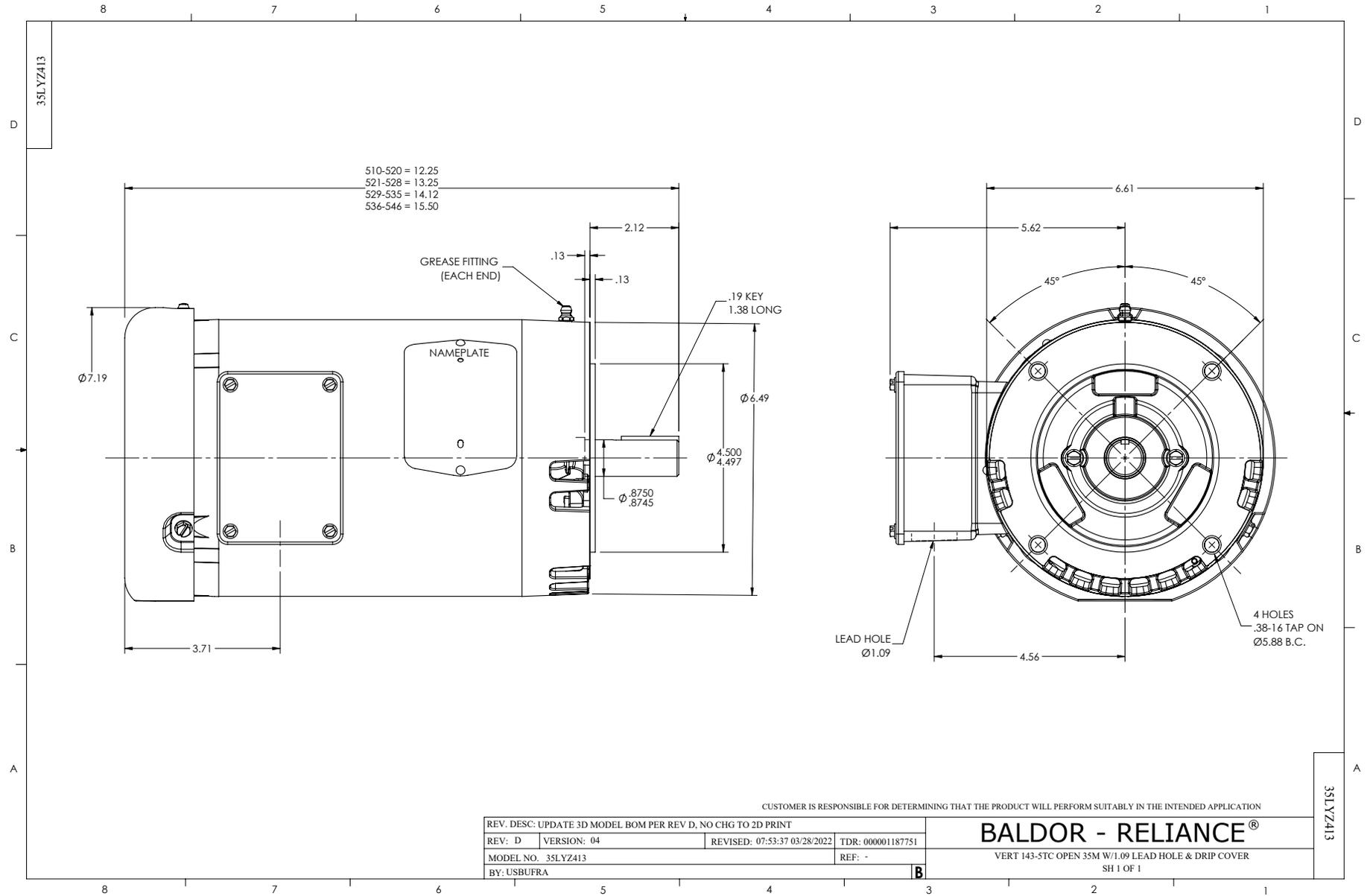
3 HP 3 PH 60 HZ 3450 RPM 460 V 3528M

Typical performance - not guaranteed values.

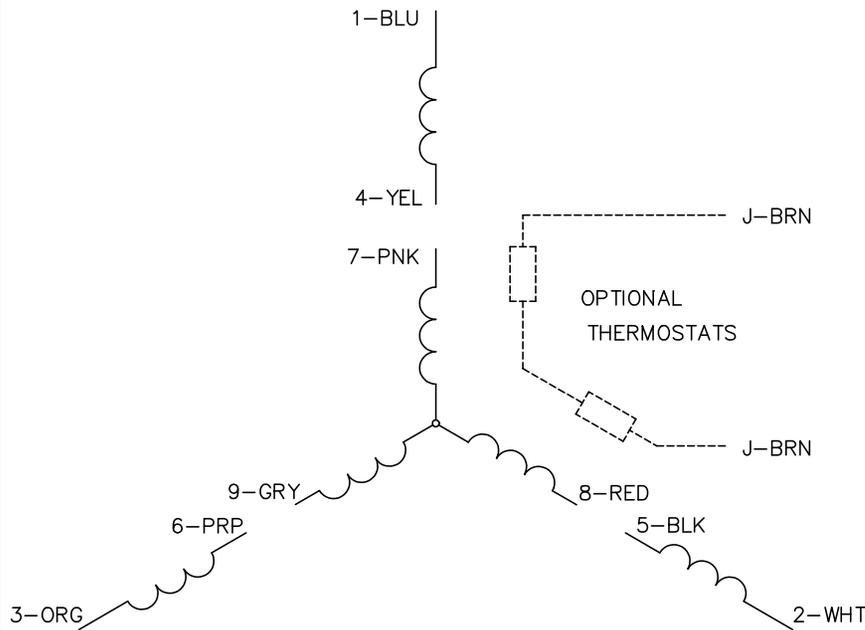
TORQUES (LB-FT): PO=18.7 PU=12.2 LR=17.3 LRA=32



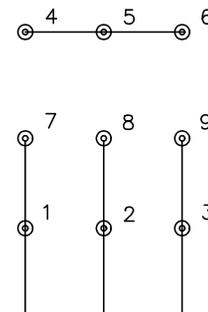
6/9/2025 ACPERF, record # 48297



CD0005

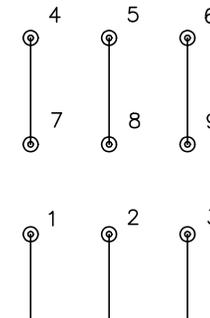


LOW VOLTAGE
(2Y)



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