

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VHEM2514T**

**20HP,3520RPM,3PH,60HZ,254HP,0936M,OPEN,F**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGZ601	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	09G625	Layout:	09LYG625	Poles:	02	Created Date:	07-13-2015
Base:	N	Eff. Date:	04-24-2020	Leads:	9#12		

Specs			
Catalog Number:	VHEM2514T	Heater Indicator:	No Heater
Enclosure:	OPEN	Insulation Class:	F
Frame:	254HP	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Output @ Frequency:	20.000 HP @ 60 HZ	Lifting Lugs:	Vertical Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 12 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	0936M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	89
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	P-Base
Base Indicator:	No Mounting	Pulley Shaft Indicator:	P-Base Groove & Key
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	23.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	46.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	50.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Drip Cover Mounting	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP1259L										
CAT.NO.	VHEM2514T									
SPEC.	09G625Z601G1									
HP	20									
VOLTS	230/460									
AMP	46/23									
RPM	3520									
FRAME	254HP				HZ	60			PH	3
SER.F.	1.15		CODE	H	DES	A		CL	F	
NEMA-NOM-EFF	91		PF	89						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			50		
DE	6312				ODE	6208				
ENCL	OPEN		SN							

Parts List		
Part Number	Description	Quantity
SA303803	SA 09G625Z601G1	1.000 EA
RA290944	RA 09G625Z601G1	1.000 EA
09CB3002A45	KOBX: 1.50 NPT LD HL, 2.63 MTG .28 DIA	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
09AD2003	AIR DEFLECTOR, 309 OPEN P-BASE	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	3.000 EA
09EP1203A01P4	FREP, MACH W/FINISH PAINT ONLY	1.000 EA
10XN3816K40	3/8-16 X 2.50 HEX HD CAP SCREW, GRADE 5	2.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW4600B61	SEAL,V70A FORSH/400700 CR	1.000 EA
10XN3118K68	5/16 18 X 4 1/4 HEX HEAD CAP	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
09EP1508A06	ENDPLATE, MACH W/312 BRG	1.000 EA
10XN3816K40	3/8-16 X 2.50 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09FH1502A01	DRIP COVER, MACH	1.000 EA
HW3201A11	.38-16 EYEBOLT W/4.00 SHANK	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1000A38	WASHER, 3/8" FLAT, SAE Z/P	2.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	2.000 EA
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
HW2501E18	KEY, 1/4 SQ X 2.000	1.000 EA
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MG1025G05	WILKOFASST, 789.227, MED. GRAY CHAR. MET.	0.200 GA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LC0005E02	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 EA
NP1259L	ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM	1.000 EA
42PA1016	PACKAGING GROUP, 09 LARGE FACE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

**AC Induction Motor Performance Data**

Record # 78405 - Typical performance - not guaranteed values

<b>Winding:</b> 09WGZ601-R005	<b>Type:</b> 0936M	<b>Enclosure:</b> OPEN
-------------------------------	--------------------	------------------------

Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	20			Full Load Torque	29.6 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	46/23			Breakdown Torque	111 LB-FT
R.P.M.	3520			Pull-up Torque	39.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	49.6 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	161 A
Service Factor (S.F.)	1.15			No-load Current	7.17 A
NEMA Nom. Eff.	91	Power Factor	89	Line-line Res. @ 25°C	0.447 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	76°C
S.F. Amps				Temp. Rise @ S.F. Load	95°C
				Locked-rotor Power Factor	29
				Rotor inertia	0.92 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	90	90
Efficiency	88.5	91.9	92.2	91.6	90.5	89.1	90.9
Speed	3580	3562	3541	3520	3495	3468	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values

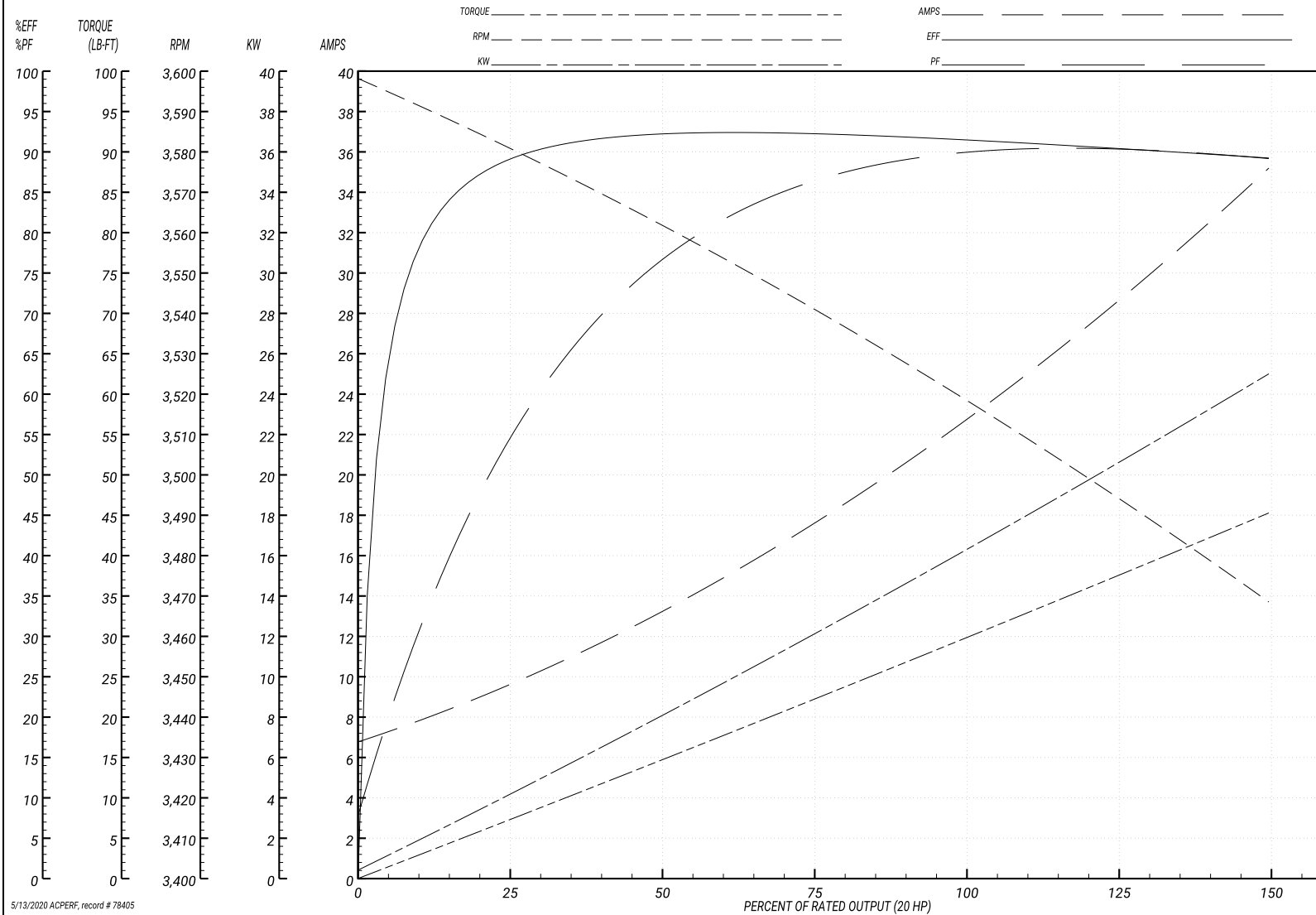
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

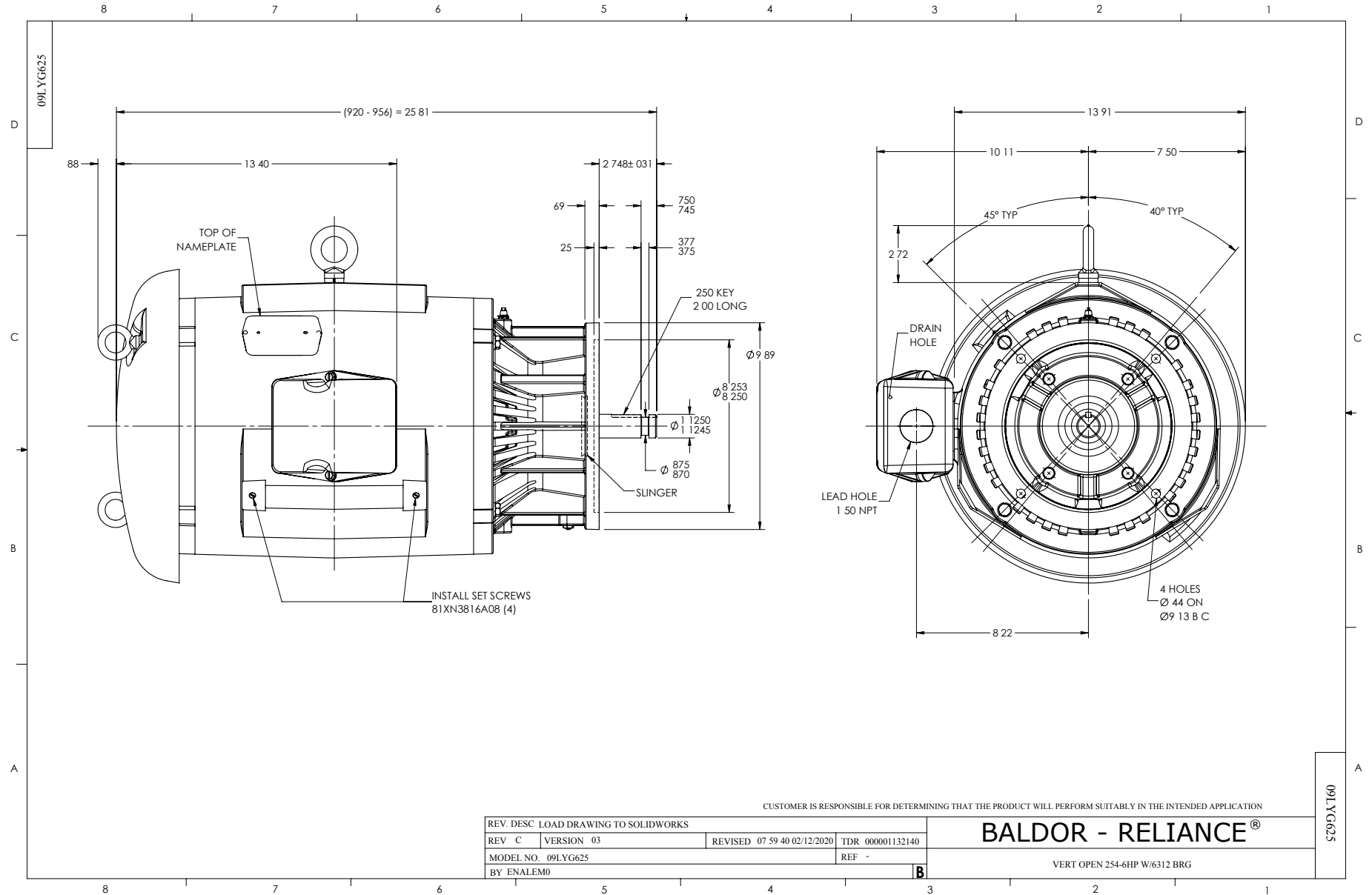
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

TORQUES(LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



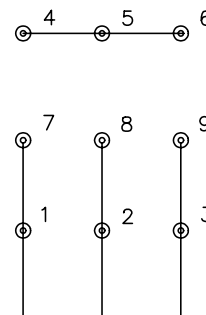
5/13/2020 ACPERF, record # 78405



CD0005

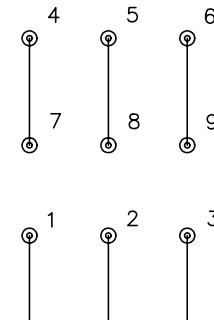


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>