

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VHM2514T**

**20HP,3510RPM,3PH,60HZ,254HP,0928M,OPEN**

Part Detail							
Revision:	H	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGY943	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	09G625	Layout:	09LYG625	Poles:	02	Created Date:	
Base:	N	Eff. Date:	03-08-2016	Leads:	9#12		

Specs			
Catalog Number:	VHM2514T	Heater Indicator:	No Heater
Enclosure:	OPEN	Insulation Class:	F
Frame:	254HP	Inverter Code:	Not Inverter
Frame Material:	Iron	KVA Code:	G
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:	0928M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA	Power Factor:	88
Auxillary Box:	No Auxillary Box	Product Family:	General Purpose
Auxillary Box Lead Termination:	None	Pulley End Bearing Type:	Ball
Base Indicator:	No Mounting	Pulley Face Code:	P-Base
Bearing Grease Type:	Polyrex EM (-20F +300F)	Pulley Shaft Indicator:	P-Base Groove & Key
Blower:	None	Rodent Screen:	None
Current @ Voltage:	23.500 A @ 460.0 V	Shaft Extension Location:	Pulley End

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

Nameplate NP1256L										
CAT.NO.	VHM2514T									
SPEC.	09G625Y943									
HP	20									
VOLTS	230/460									
AMP	47/23.5									
RPM	3510									
FRAME	254HP				HZ	60			PH	3
SER.F.	1.15		CODE	G	DES	B		CLASS	F	
NEMA-NOM-EFF	90.2		PF	88						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			51		
DE	6312				ODE	6208				
ENCL	OPEN		SN							

Parts List		
Part Number	Description	Quantity
SA124444	SA 09G625Y943	1.000 EA
RA114865	RA 09G625Y943	1.000 EA
09CB3002A19	CB MACH - 1.50 N.P.T. LEAD HOLE	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
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	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
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
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 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	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 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
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
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.200 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP1256L	ALUM UL CSA CC INDUSTRIAL MOTOR A60	1.000 EA
42PA1016	PACKAGING GROUP, 09 LARGE FACE	1.000 EA

**AC Induction Motor Performance Data**

Record # 17392 - Typical performance - not guaranteed values

<b>Winding:</b> 09WGY943-R001	<b>Type:</b> 0928M	<b>Enclosure:</b> OPEN
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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	47/23.5			Breakdown Torque	111 LB-FT
R.P.M.	3510			Pull-up Torque	36.1 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	50.6 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	153 A
Service Factor (S.F.)	1.15			No-load Current	8.61 A
NEMA Nom. Eff.	90.2	Power Factor	88	Line-line Res. @ 25°C	0.512 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	44°C
S.F. Amps				Temp. Rise @ S.F. Load	54°C
				Locked-rotor Power Factor	30
				Rotor inertia	0.715 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	52	74	83	87	89	89	88
Efficiency	84.7	90.1	91.2	91	90.1	89.1	90.5
Speed	3581	3563	3544	3522	3496	3472	3506
Line amperes	10.2	13.9	18.1	23.3	29.1	35	26.78

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

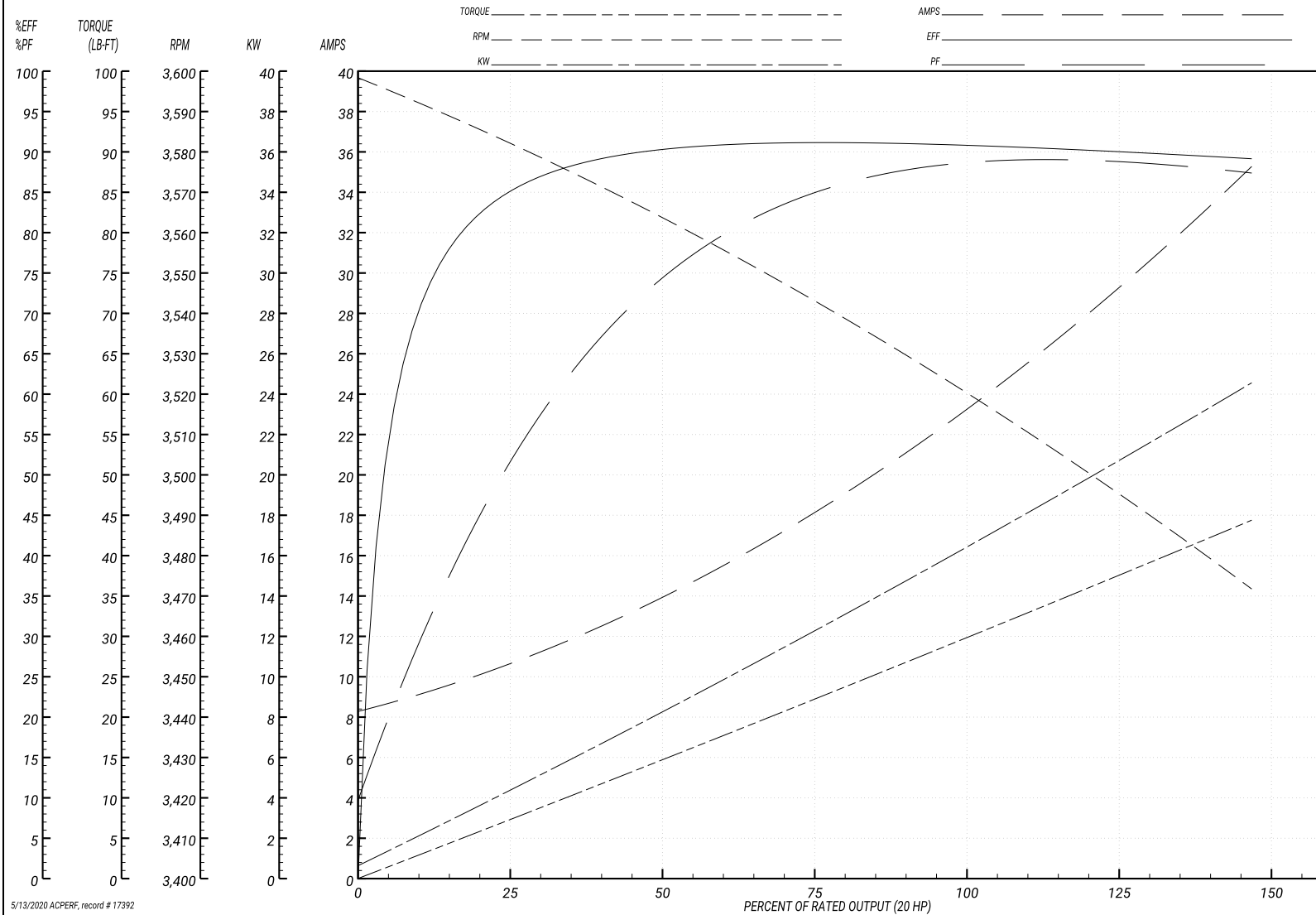
ABB Motors and Mechanical Inc.

WINDING # 09WGY943

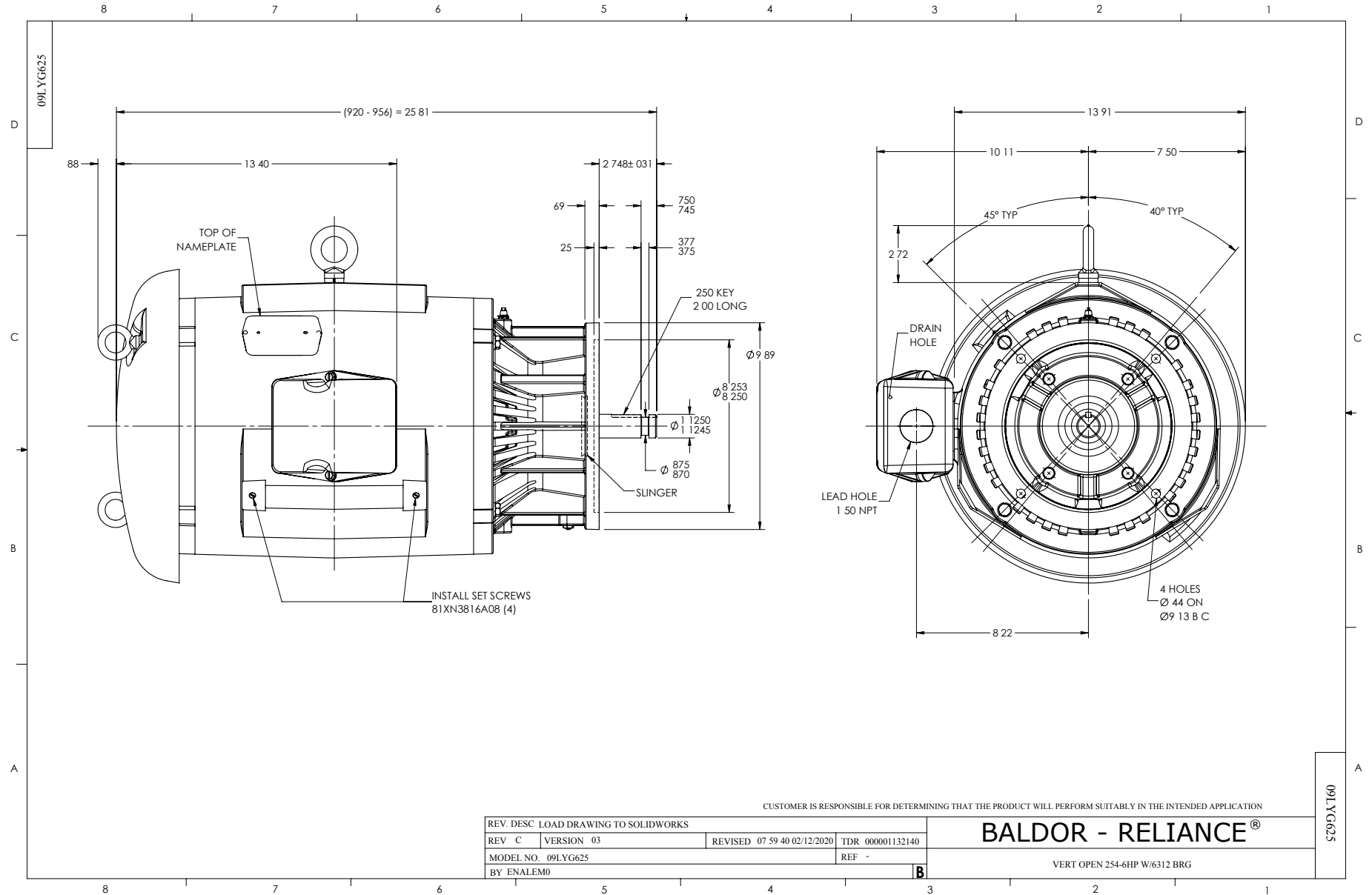
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3510 RPM 460 V 0928M

TORQUES(LB-FT): PO=111 PU=36.1 LR=50.6 LRA=153



5/13/2020 ACPERF, record # 17392



CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
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FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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