

ABB BALDOR RELIANCE III

Customer information packet

VHECP4106T

20HP, 3540RPM, 3PH, 60HZ, 256HP, 0944M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256HP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	46.000 A @ 230.0 V 51.000 A @ 208.0 V 23.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AM
Type	AC
Mech. spec.	09G604
Base	
Status	PRD/A
Elec. spec.	09WGY613
Layout	09LYG604
Eff. date	02-01-2024
CD Diagram	CD0180
Poles	02
Leads	9#12
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0944M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	25.73 IN
Power Factor	89
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3540 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

NP1260											
CAT.NO.	VHECP4106T										
SPEC.	09G604Y613G1										
HP	20										
VOLTS	230/460										
AMP	46/23										
RPM	3540										
FRAME	256HP		HZ	60			PH		3		
SER.F.	1.15		CODE	K	DES	A		CL		F	
NEMA-NOM-EFF	92.4		PF	89							
RATING	40C AMB-CONT										
CC	010A										
DE	6311		ODE	6208							
ENCL	TEFC		SN								

AC Induction Motor Performance Data

Record # 38114

Typical performance - not guaranteed values

Winding: 09WGY613-R001				Type: 0944M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		20		Full Load Torque		29.7 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		46/23		Breakdown Torque		147 LB-FT	
R.P.M.		3540		Pull-up Torque		60.6 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		76.3 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		223 A	
Service Factor (S.F.)		1.15		No-load Current		8.26 A	
NEMA Nom. Eff.		92.4	Power Factor	Line-line Res. @ 25°C		0.32708 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		60°C	
S.F. Amps				Temp. Rise @ S.F. Load		71°C	
				Locked-rotor Power Factor		28	
				Rotor inertia		1.12 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	53	75	85	88	91	91	90
Efficiency	87.7	92.3	93.3	93.4	93	92.4	93.2
Speed	3584.9	3571.9	3557.8	3543.8	3528.7	3512.5	3535
Line amperes	9.98	13.5	17.8	22.7	27.7	33.3	25.7

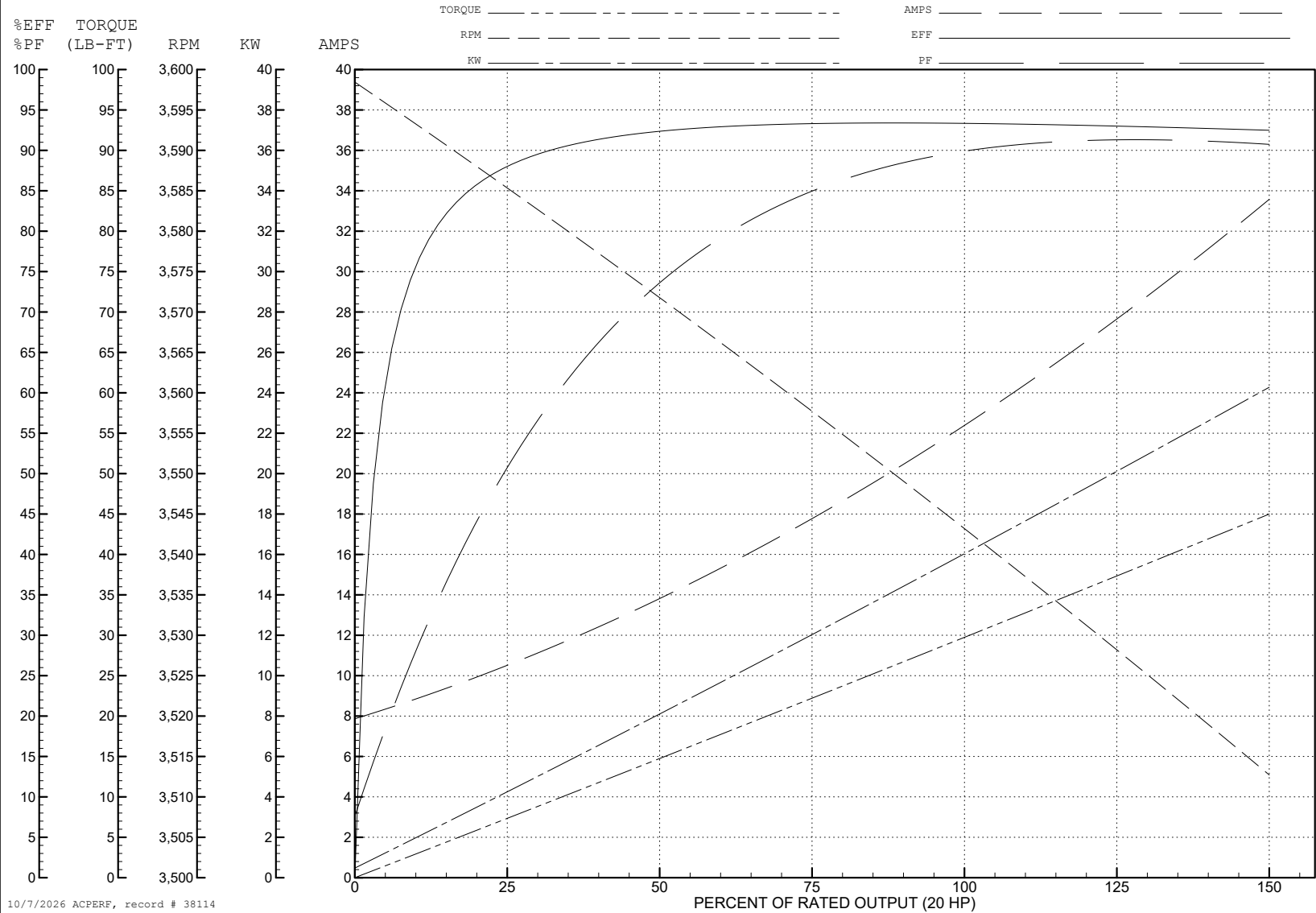
ABB Motors and Mechanical Inc.

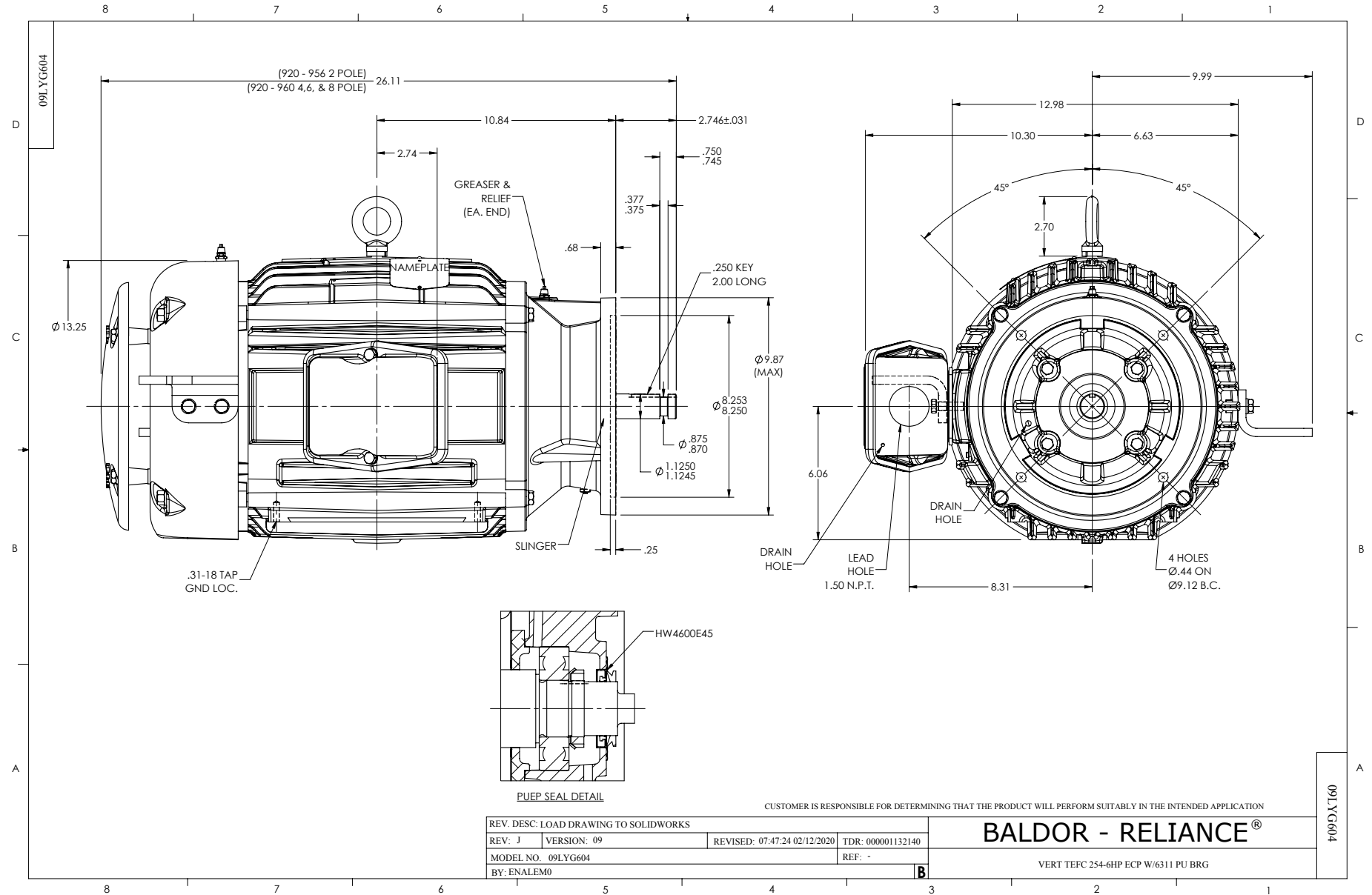
WINDING # 09WGY613

Typical performance - not guaranteed values.

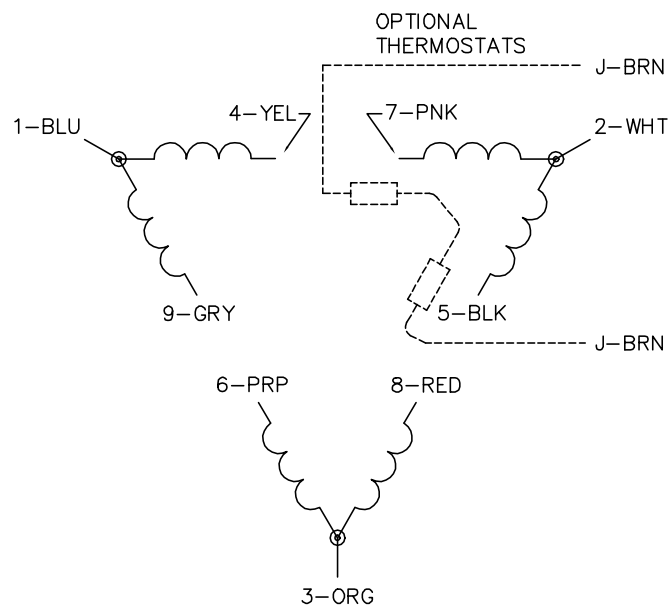
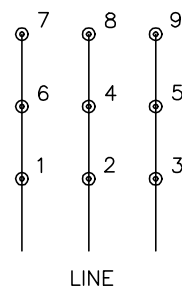
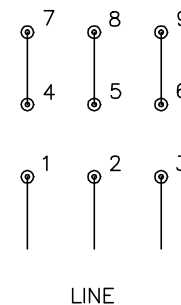
20 HP 3 PH 60 HZ 3540 RPM 460 V 0944M

TORQUES (LB-FT): PO=147 PU=60.6 LR=76.3 LRA=223





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

REV. LTR: D

VERSION: 01

TDR: 000001099922

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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