BALDOR • RELIANCE

Customer information packet

HBAO2334T

20 AOHP, 1770RPM, 3PH, 60HZ, 256T, 0960M, TEAO
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEAO
Frame	256T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	48.000 A @ 230.0 V
	52.000 A @ 208.0 V
	24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	J
Type	AC
Mech. spec.	09T117
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYT117
Eff. date	11-14-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	01-06-2022

High Voltage Full Load Amps	24.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.75 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 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

NP4312A05M01L

CAT #	HBAO2334T		**SER #**			**CC**		**WGT**	322	**LBS**			
SPEC	09T117T459G1		**RATING**	40C AMB-CONT									
HZ	**VOLTS**		**AMPS**	**RPM**	**HP**	**SF**	**NEMA NOM EFF**						
60	230/460		48/24		1770	20AO	1.15	93					
PH	3	**CL**	H	**CODE**	J	**DES**	A	**ENCL**	TEAO	**IP**	54	**PF**	83
%	AIR OVER												
DE BRG	6309		**ODE BRG**	6208		**FRAME**	256T						
INV TYPE:	**VPWM**		**SL HZ**	1	**CHP**	60	**TO**	90	1.5:1				
WK2	2.62	**LB FT2**		**MAX RPM**	2700	**CT**	6	**TO**	60	10:1			
20.8/10.4			**VT**	3	**TO**	60	20:1						
SFA 54.4/27.2													

YR:

AC Induction Motor Performance Data
Record # 68093
Typical performance - not guaranteed values

Winding: 09WGT459-R013	**Type:** 0960M	**Enclosure:** TEFC

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		20	**Full Load Torque**	59.27 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		48/24	**Breakdown Torque**	232 LB-FT
R.P.M.		1770	**Pull-up Torque**	126 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	141 LB-FT
NEMA Design Code	A **KVA Code**	J	**Starting Current**	198 A
Service Factor (S.F.)		1.15	**No-load Current**	10.4 A
NEMA Nom. Eff.	93 **Power Factor**	83	**Line-line Res. @ 25ºC**	0.33814 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	58°C
S.F. Amps			**Temp. Rise @ S.F. Load**	70°C
			Locked-rotor Power Factor	26.5

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

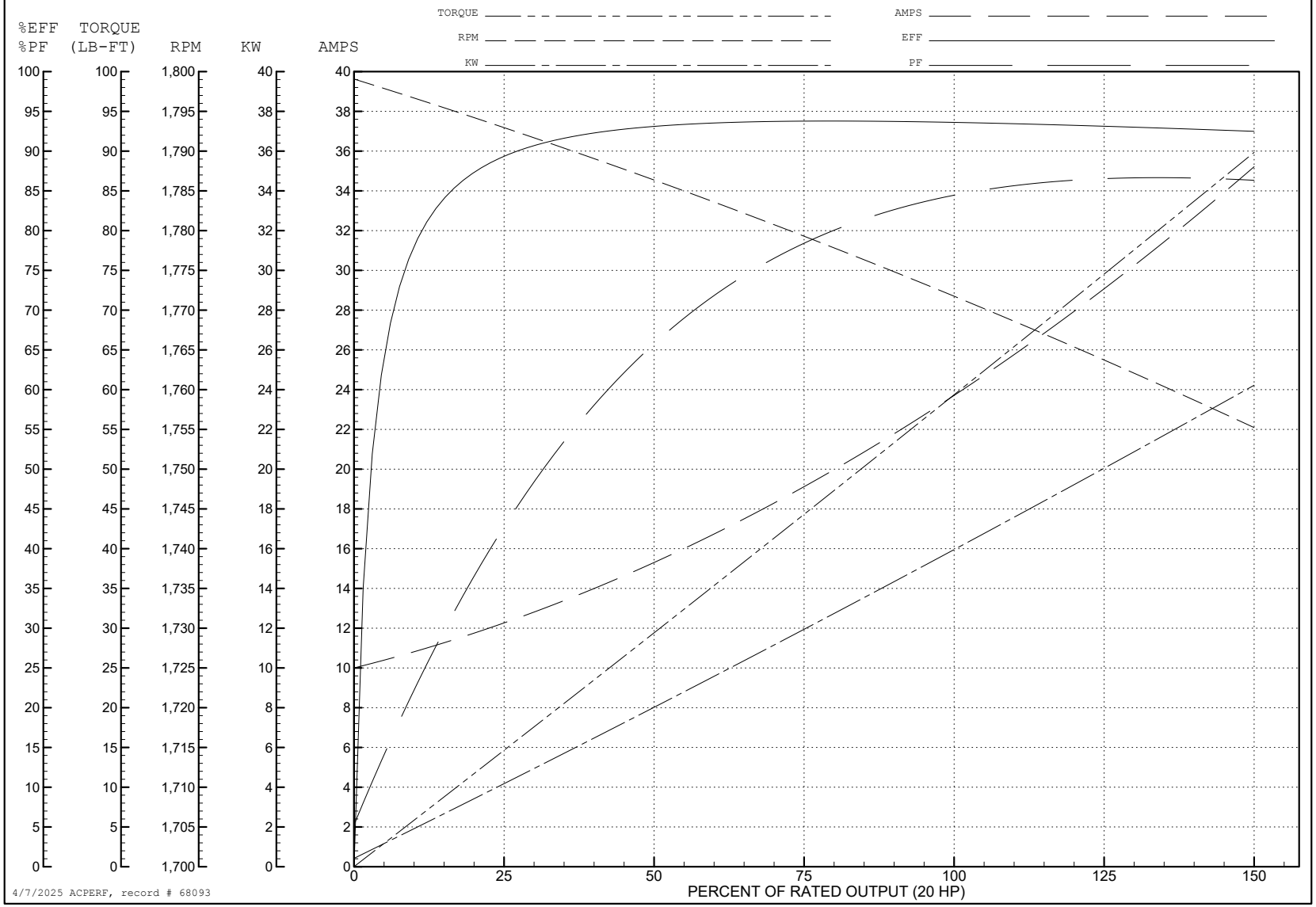
ABB Motors and Mechanical Inc.

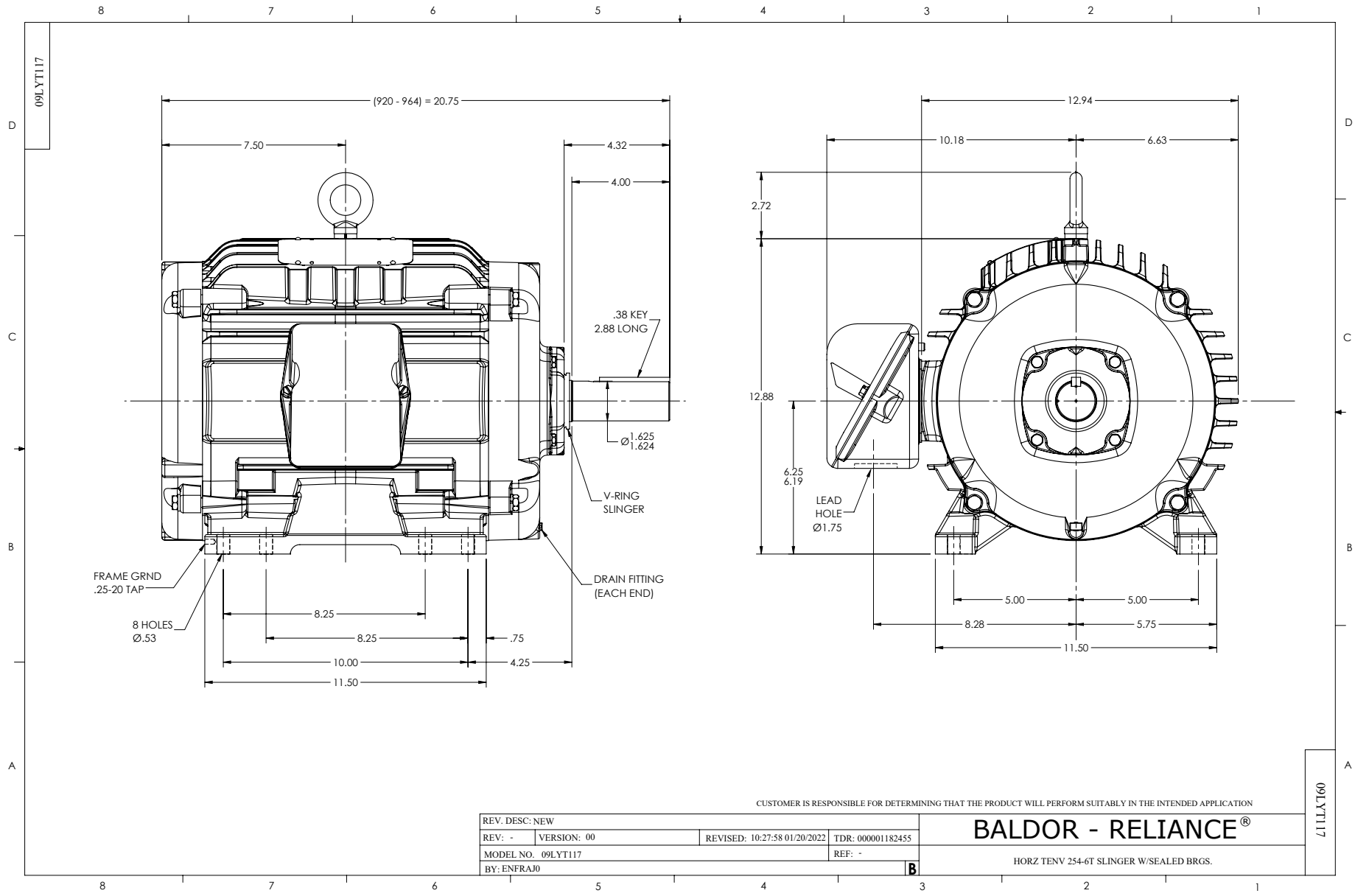
WINDING # 09WGT459

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

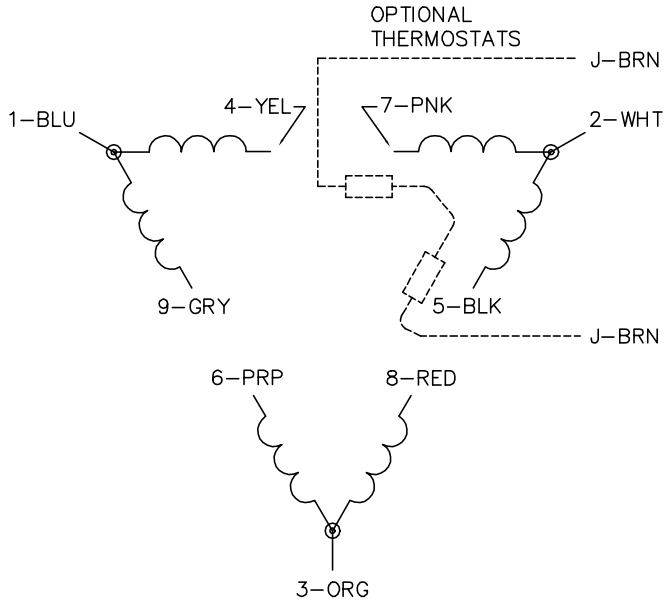
Typical performance - not guaranteed values.

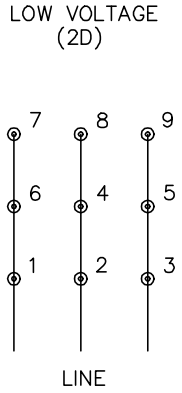
TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198

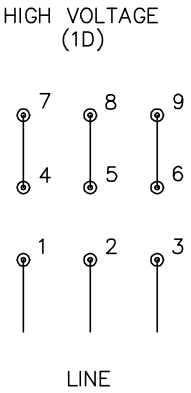



09LYT117
(920 - 964) = 20.75
7.50
4.32
4.00
.38 KEY
2.88 LONG
Ø1.625
1.624
V-RING
SLINGER
FRAME GRND
.25-20 TAP
8 HOLES
Ø.53
DRAIN FITTING
(EACH END)
8.25
8.25
.75
10.00
4.25
11.50
12.94
10.18
6.63
2.72
12.88
6.25
6.19
LEAD
HOLE
Ø1.75
5.00
5.00
8.28
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 10:27:58 01/20/2022 TDR: 000001182455
MODEL NO. 09LYT117 REF: -
BY: ENFRAJ0 B
BALDOR - RELIANCE®
HORZ TENV 254-6T SLINGER W/SEALED BRGS.
09LYT117

CD0180







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: ENBRIR0
MTL: –		

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1