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# Customer information packet

## VECP2334T

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

## Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
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	CCSA US 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
Constant Torque Speed Range	1.0
Current @ Voltage	52.000 A @ 208.0 V 48.000 A @ 230.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated

## Part detail

Revision	N
Type	AC
Mech. spec.	09H181
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYH181
Eff. date	02-01-2024
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-27-2017

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
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	27.41 IN
Power Factor	83
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 rpm
Speed Code	Single Speed

<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3995ABEL**

<b>CAT #</b>	VECP2334T		<b>SER</b>			<b>CC</b>	010A				
<b>SPEC</b>	09H181T459G1		<b>RATING</b>	40C AMB-CONT							
<b>HZ</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>RPM</b>	<b>HP</b>	<b>CODE</b>	<b>SF</b>	<b>DES</b>	<b>PF</b>	<b>NEMA NOM. EFF</b>		
60	230/460	48/24	1770	20	J	1.15	A	83 %	93 %		
								%	%		
<b>PH</b>	3	<b>CL</b>	F	<b>MAX RPM</b>	2700	<b>MAX CORR KVAR</b>	5.35	<b>USABLE AT 208V</b>	N/A		
IP55	<b>FR</b>	256TC	<b>ENCL</b>	TEFC	<b>DE BRG</b>	6309	<b>ODE BRG</b>	6309			
<b>GREASE</b>	POLYREX EM		<b>MTR WT</b>	354	<b>LBS</b>						
<b>USABLE AT</b>	50HZ 15HP 190/380V 44/22A			SF1.0							
<b>CL I DIV 2 GRPS A,B,C,D</b>			<b>CL I ZONE 2 GRPS</b>			<b>IIA,IIB,IIC</b>		<b>TEMP T</b>	160	<b>C</b>	
<b>1.0 SF ON PWM INVERTER</b>			<b>POWER</b>	<b>INV TEMP CL</b>		180	<b>C</b>				
<b>CHP</b>	60-90	<b>HZ</b>	1.5:1	<b>CT</b>	1.0-60	<b>HZ</b>	60:1	<b>VT</b>	0-60	<b>HZ</b>	1000:1
<b>SPACE HEATER LEADS H1-H2:</b>				<b>TIE LIKE NUMBERS</b>			<b>TOGETHER</b>				
<b>V</b>		<b>A</b>		<b>W</b>		<b>MAX SPACE HEATER TEMP</b>					

**AC Induction Motor Performance Data**

Record # 68075

Typical performance - not guaranteed values

Winding: 09WGT459-R011		Type: 0960M	Enclosure: TEFC		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
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. @ 25°C	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

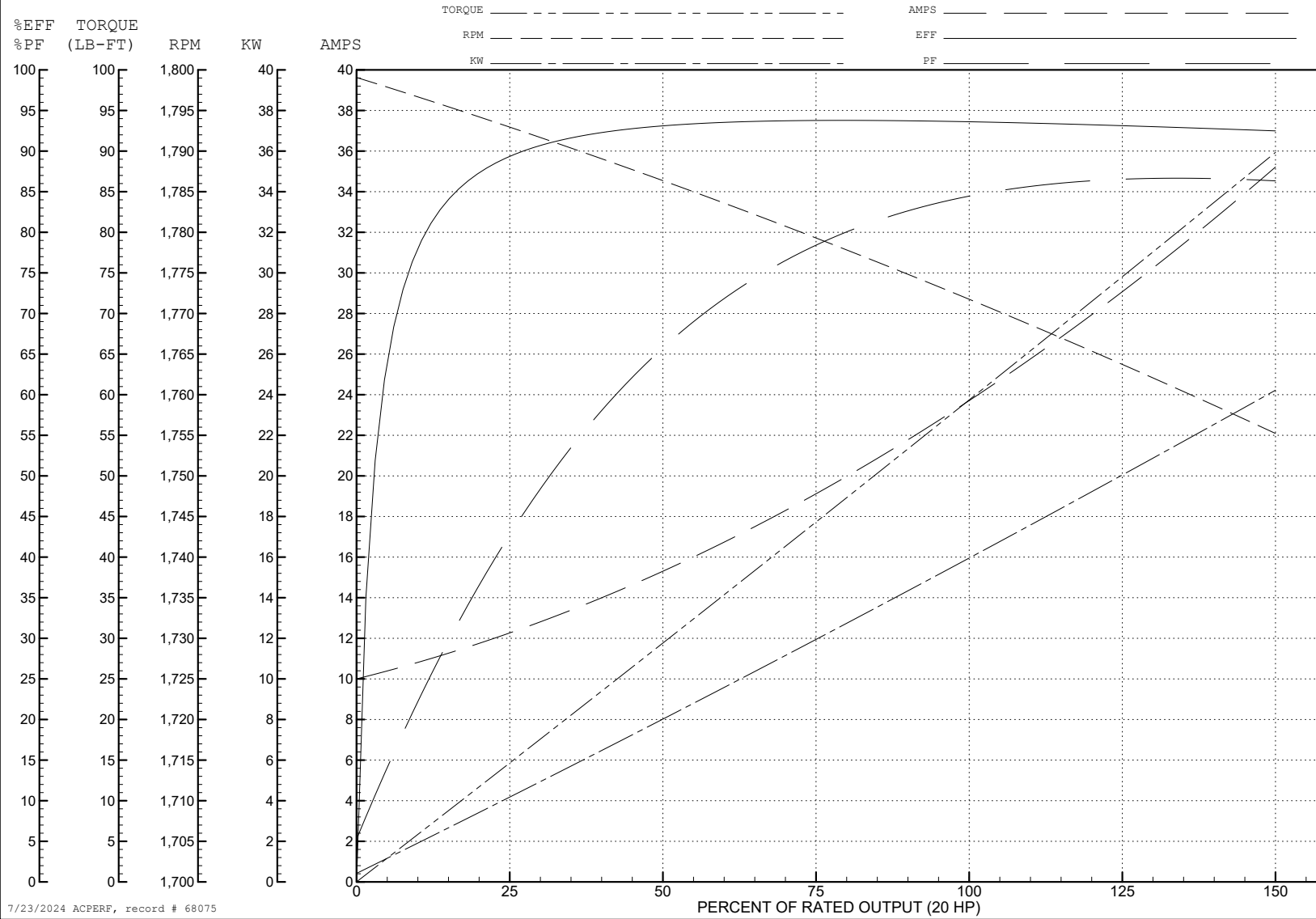
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

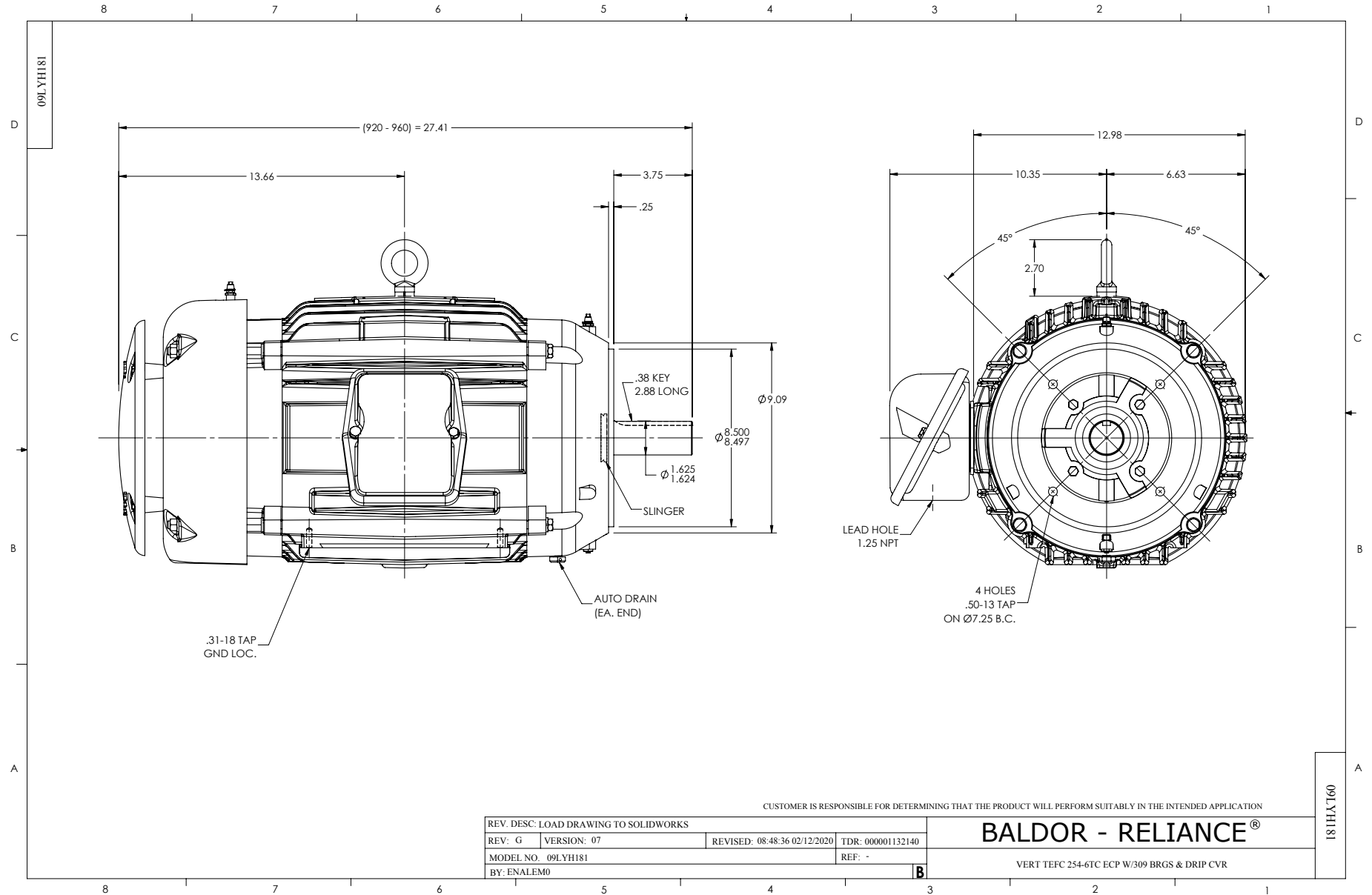
20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

Typical performance - not guaranteed values.

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

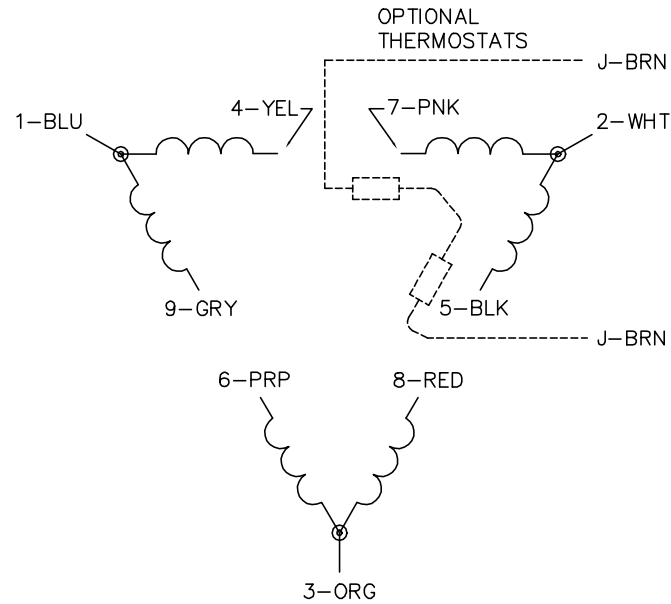


7/23/2024 ACPERF, record # 68075

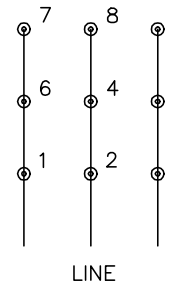




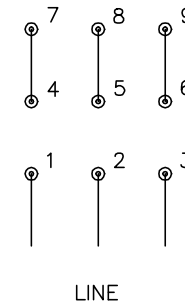
CD0180



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

SH 1 of 1