



Customer information packet

VECP82334T-4

20HP, 1760RPM, 3PH, 60HZ, 256TC, 0964M, 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	CL I 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
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM 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
Constant Torque Speed Range	0-
Current @ Voltage	23.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part detail

Revision	Z
Type	AC
Mech. spec.	09K208
Base	
Status	PRD/A
Elec. spec.	09WGT417
Layout	09LYK208
Eff. date	12-02-2025
CD Diagram	CD0006
Poles	04
Leads	3#12
Proprietary	False
Created date	06-30-2017

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0964M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.28 IN
Power Factor	87
Product Family	Chem Process S/P 32-8 IEEE 841
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	No Slinger
Speed	1760 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

NP4332

STK.NO.	VECP82334T-4				P/N			ENCLOSURE			TEFC			
SPEC.	09K208T417			CC	010A	FRAME		256TC	S/N					
HP	20			CLASS	F	HZ	60	ODE BRG		6309	DE BRG	6309		
RPM	1760	RPM MAX	2700	PH	3	DES	B	D.E. BRG.		45BC03X30X				
VOLT	460			KVA-CODE		G	O.D.E. BRG.		45BC03X30X					
AMP	23			MOTOR WEIGHT			355	GREASE	POLYREX EM					
RATING	40C AMB-CONT				MAX. KVAR		3.6	BLANK						
NEMA-NOM-EFF	93	# OF ROTOR BARS			40	SER.F.	1.15	IP	56					
G.MIN.EFF	91.7	# OF STATOR SLOTS			48	PF	87	INV.TYPE	PWM					
TEMP CODE	T3C	INVERTER-TEMP-CODE			180									
TEMP =	160	C HP FR	60	C HP TO	90									
CT HZ FROM	1.3	CT HZ TO	60											
HTR-VOLTS		HTR-AMPS		HTR-WATTS			MAX. SPACE HEATER TEMP.				VT HZ FROM	O	VT HZ TO	60

AC Induction Motor Performance Data

Record # 92352

Typical performance - not guaranteed values

Winding: 09WGT417-R001				Type: 0964M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		20		Full Load Torque		59.51 LB-FT		
Volts		460		Start Configuration		direct on line		
Full Load Amps		23		Breakdown Torque		185 LB-FT		
R.P.M.		1760		Pull-up Torque		94.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		115 LB-FT		
NEMA Design Code		B		KVA Code	G	Starting Current		145 A
Service Factor (S.F.)		1.15		No-load Current		7 A		
NEMA Nom. Eff.		93	Power Factor	87	Line-line Res. @ 25°C		0.41873 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		60°C
S.F. Amps						Temp. Rise @ S.F. Load		76°C
						Locked-rotor Power Factor		29.4

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	85	88	88	88	88
Efficiency	91.4	93.8	93.9	93	92.3	91	92.7
Speed	1792.1	1783.4	1774.6	1764.6	1754	1740.6	1758
Line amperes	8.93	12.8	17.6	22.9	28.7	35.1	26.4

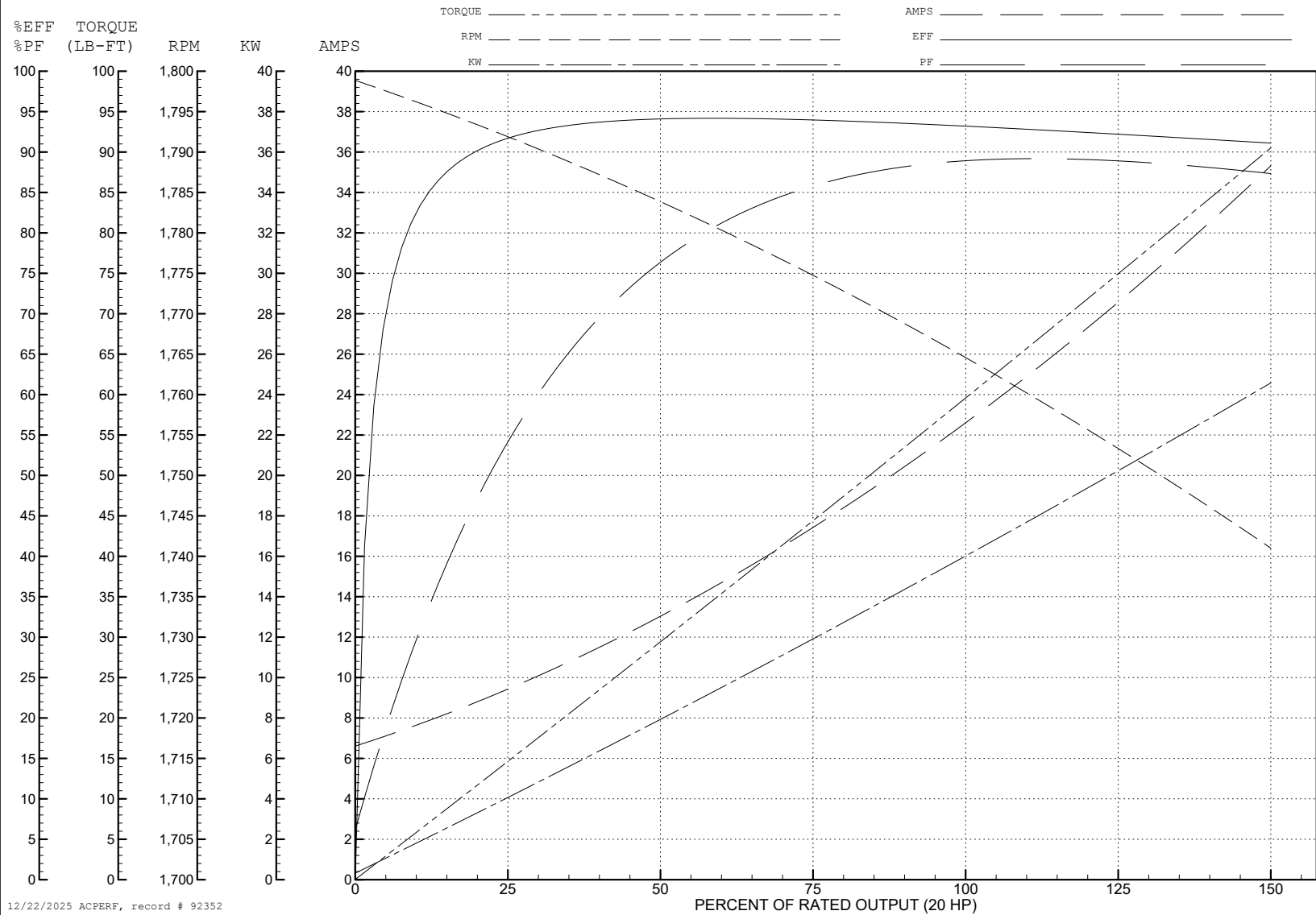
ABB Motors and Mechanical Inc.

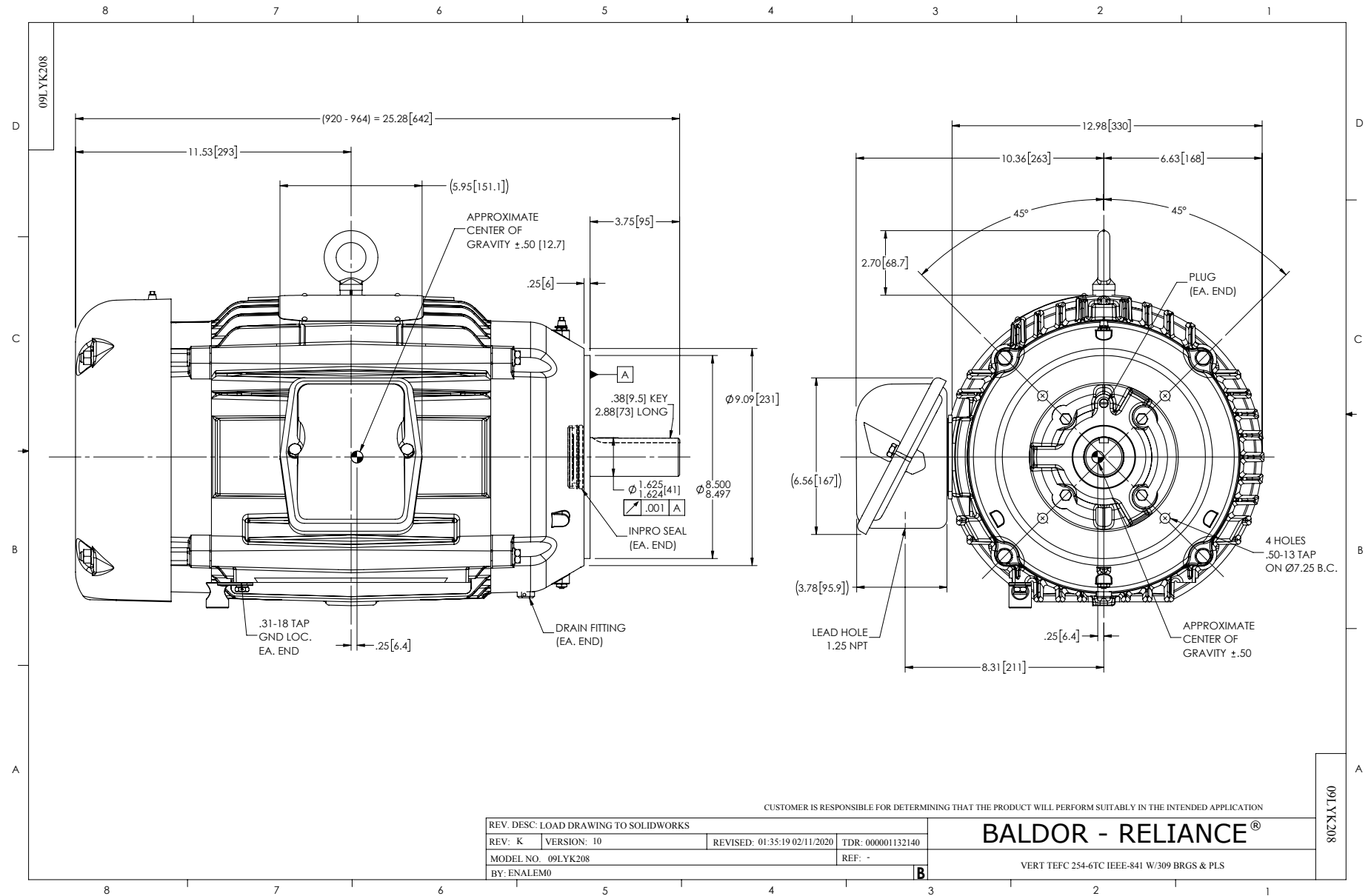
WINDING # 09WGT417

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1760 RPM 460 V 0964M

TORQUES (LB-FT): PO=185 PU=94.7 LR=115 LRA=145





CD0006

TYPICAL WYE-CONNECTED MOTOR

1-BLU

J-BRN

OPTIONAL THERMOSTATS

J-BRN

3-ORG

2-WHT

TYPICAL DELTA-CONNECTED MOTOR

1-BLU

J-BRN

2-WHT

OPTIONAL THERMOSTATS

J-BRN

3-ORG

1

2

3

LINE

NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.

2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.

3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.

4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE® 3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED SH 1 of 1
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10: 24: 49 02/19/2019	BY: ENBRIRO	
MTL: —			

CD0006

09WGZ111: Electrical Design

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