BALDOR • RELIANCE

Customer information packet

VECP2334T

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F
Class - CLI GP A,B,C,D
Division - Division II

12/22/2025 10:05:34 PM

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
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	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	P
Type	AC
Mech. spec.	09H181
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYH181
Eff. date	09-16-2025
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

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

NP3995ABEL

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

AC Induction Motor Performance Data
Record # 68075
Typical performance - not guaranteed values

Winding: 09WGT459-R011 **Type:** 0960M **Enclosure:** TEFC

Nameplate Data		
Rated Output (HP)		20
Volts		230/460
Full Load Amps		48/24
R.P.M.		1770
Hz	60 **Phase**	3
NEMA Design Code	A **KVA Code**	J
Service Factor (S.F.)		1.15
NEMA Nom. Eff.	93 **Power Factor**	83
Rating - Duty		40C AMB-CONT
S.F. Amps		

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	59.27 LB-FT
Start Configuration	direct on line
Breakdown Torque	232 LB-FT
Pull-up Torque	126 LB-FT
Locked-rotor Torque	141 LB-FT
Starting Current	198 A
No-load Current	10.4 A
Line-line Res. @ 25ºC	0.33814 Ω
Temp. Rise @ Rated Load	58°C
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

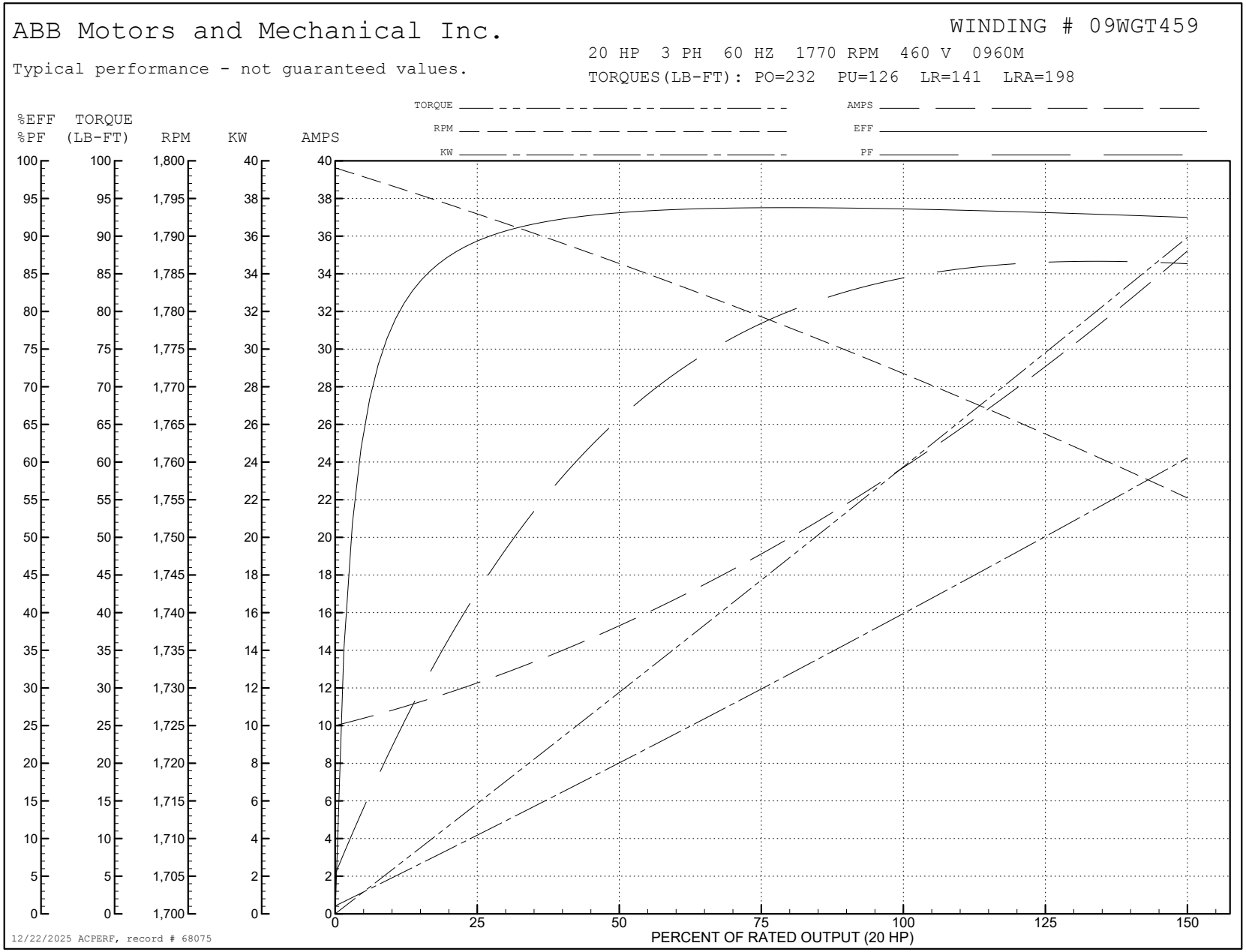


ABB Motors and Mechanical Inc.
WINDING # 09WGT459
20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (20 HP)
12/22/2025 ACPERF, record # 68075

AC Induction Motor Performance Data
Record # 114686
Typical performance - not guaranteed values

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

Nameplate Data				**400 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			15	**Full Load Torque**	44.44 LB-FT
Volts			200/400	**Start Configuration**	direct on line
Full Load Amps			40.6/20.3	**Breakdown Torque**	172 LB-FT
R.P.M.			1770	**Pull-up Torque**	91 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	102 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	168 A
Service Factor (S.F.)			1.15	**No-load Current**	7.96 A
NEMA Nom. Eff.	92.4	**Power Factor**	83	**Line-line Res. @ 25ºC**	0.332 Ω
Rating - Duty			50C AMB-CONT	**Temp. Rise @ Rated Load**	43°C
S.F. Amps				**Temp. Rise @ S.F. Load**	51°C
				Locked-rotor Power Factor	27
				Rotor inertia	2.65 lb-ft²

Load Characteristics 400 V, 60 Hz, 15 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	49	70	80	85	87	88	86
Efficiency	88.6	92.6	93.5	93.5	93	92.4	93.2
Speed	1793	1787	1779	1772	1764	1756	1767
Line amperes	9.41	12.38	16.14	20.34	24.94	29.8	23.1

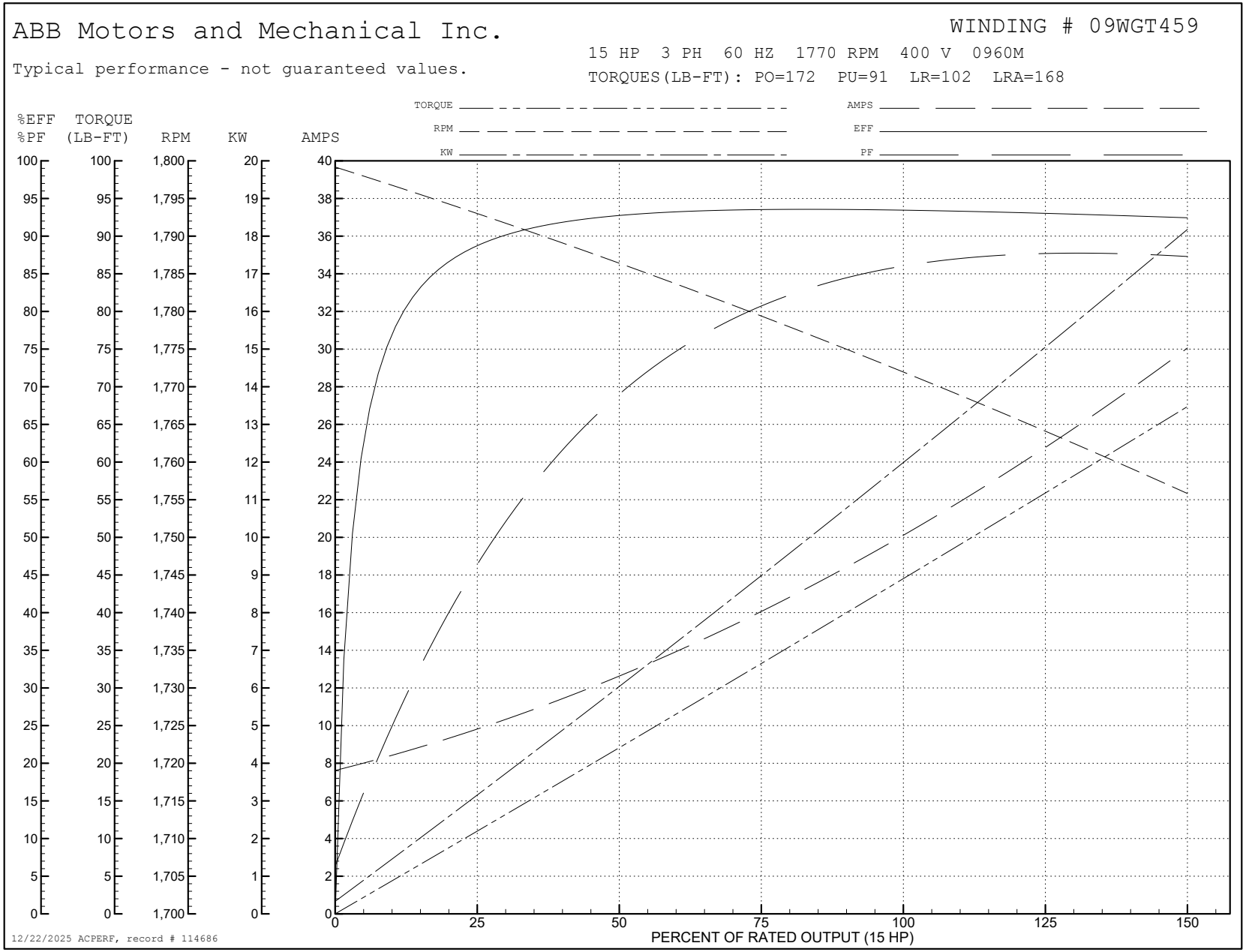
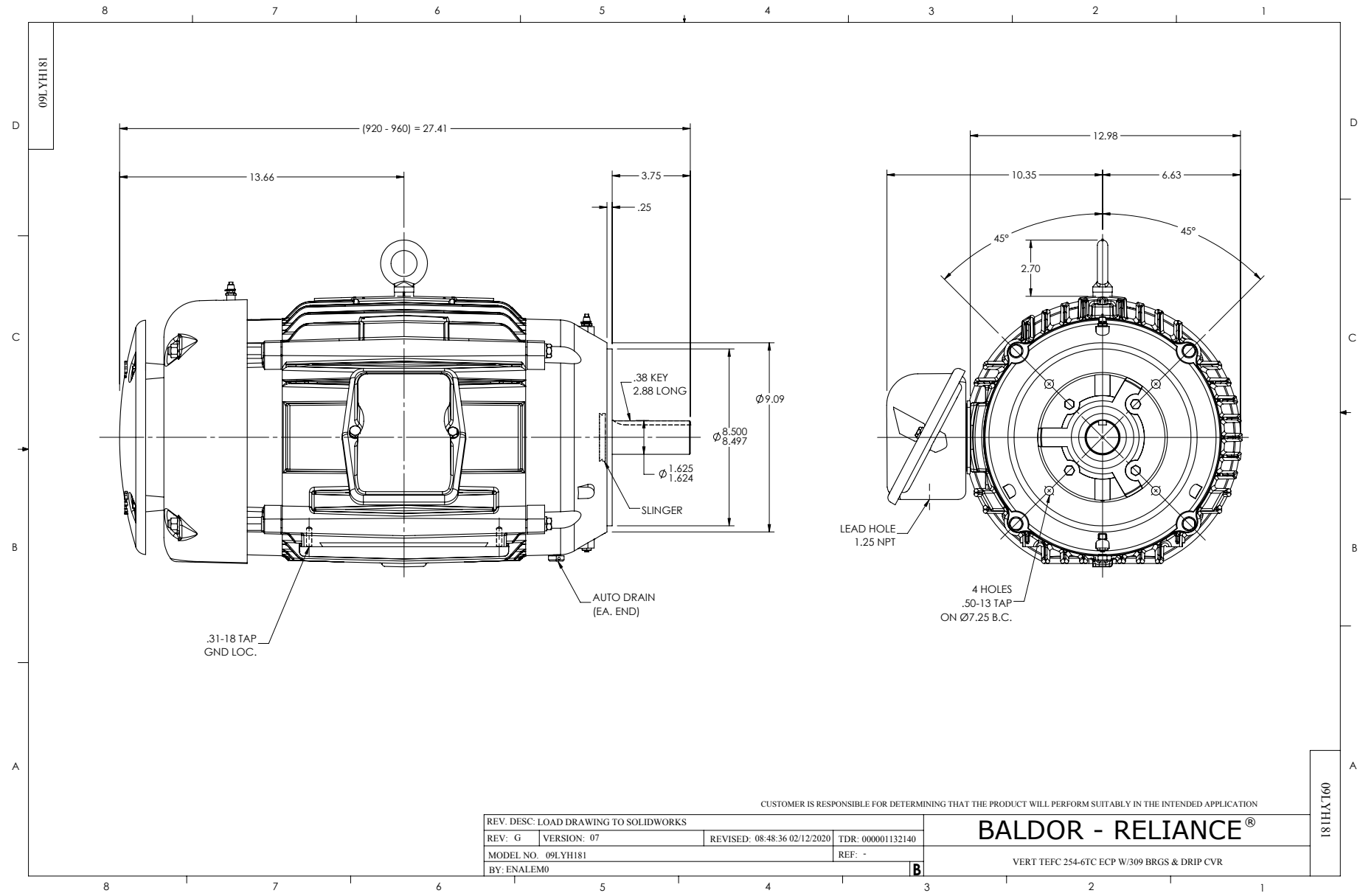
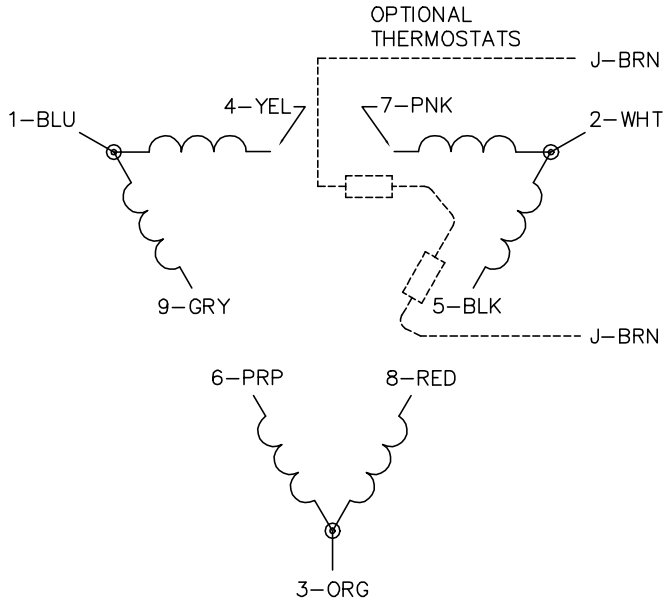
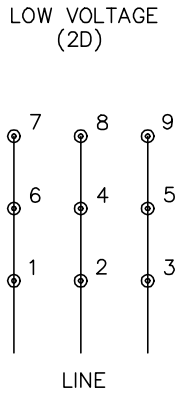


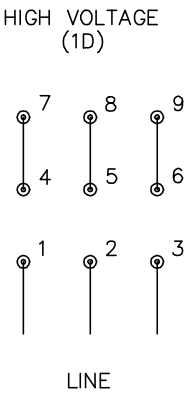
ABB Motors and Mechanical Inc.
WINDING # 09WGT459
15 HP 3 PH 60 HZ 1770 RPM 400 V 0960M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=172 PU=91 LR=102 LRA=168
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (15 HP)
12/22/2025 ACPERF, record # 114686


09LYH181
(920 - 960) = 27.41
13.66
3.75
.25
.38 KEY
2.88 LONG
Ø9.09
Ø8.500
8.497
Ø1.625
1.624
SLINGER
AUTO DRAIN
(EA. END)
.31-18 TAP
GND LOC.
12.98
10.35
6.63
45°
45°
2.70
LEAD HOLE
1.25 NPT
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: G
VERSION: 07
REVISED: 08:48:36 02/12/2020
TDR: 000001132140
MODEL NO. 09LYH181
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VERT TEFC 254-6TC ECP W/309 BRGS & DRIP CVR
09LYH181

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: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1