ABB BALDOR RELIANCE

Customer information packet

VLECP82334T-4

20HP, 1770RPM, 3PH, 60HZ, 256LP, TEFC, V1
Class - CLI GP A,B,C,D
Division - Division II

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/14/2026 12:14:02 PM

Specifications

Enclosure	TEFC
Frame	256LP
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
Agency Approvals	UR
	NEMA PREMIUM
	CSA EEV
	CCSA US
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	1.3
Current @ Voltage	23.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGY977
Layout	10LY-000-527
Eff. date	09-26-2025
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	05-02-2019

High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP56
KVA Code	G
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	V1
Number of Poles	4
Overall Length	34.56 IN
Power Factor	84
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley Face Code	P-Base
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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

NP4332

CAT.NO.	VLECP82334T-4			**P/N**					**ENCLOSURE**	TEFC				
SPEC.	10-0000-0757			**CC**	010A	**FRAME**	256LP		**S/N**					
HP	20			**CLASS**	F	**HZ**	60	**ODE BRG**	7309	**DE BRG**	6213			
RPM	1770	**RPM MAX**	2700	**PH**	3	**DES**	B	**D.E. BRG.**	65BC02X30X					
VOLT	460			**KVA-CODE**	G			**O.D.E. BRG.**	45BT03X30X					
AMP	23			**MOTOR WEIGHT**	420	**GREASE**	POLYREX EM							
RATING	40C AMB-CONT			**MAX. KVAR**	5.1	**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**	84	**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 # 51457
Typical performance - not guaranteed values

Winding: 10WGY977-R017	**Type:** 1046M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			20	**Full Load Torque**	59.3 LB-FT
Volts			460	**Start Configuration**	direct on line
Full Load Amps			23	**Breakdown Torque**	189 LB-FT
R.P.M.			1770	**Pull-up Torque**	76.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	95.9 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	145 A
Service Factor (S.F.)			1.15	**No-load Current**	7.85 A
NEMA Nom. Eff.	93	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.368 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	40°C
S.F. Amps				**Temp. Rise @ S.F. Load**	47°C
				Locked-rotor Power Factor	31.8
				Rotor inertia	3.66 LB-FT2

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	57	78	85	87	88	87	88
Efficiency	88.4	92.3	93.5	93.5	93.3	92.6	93.3
Speed	1793	1785	1779	1771	1763	1755	1766
Line amperes	9.5	13.1	17.7	22.9	28.4	34.6	26.2

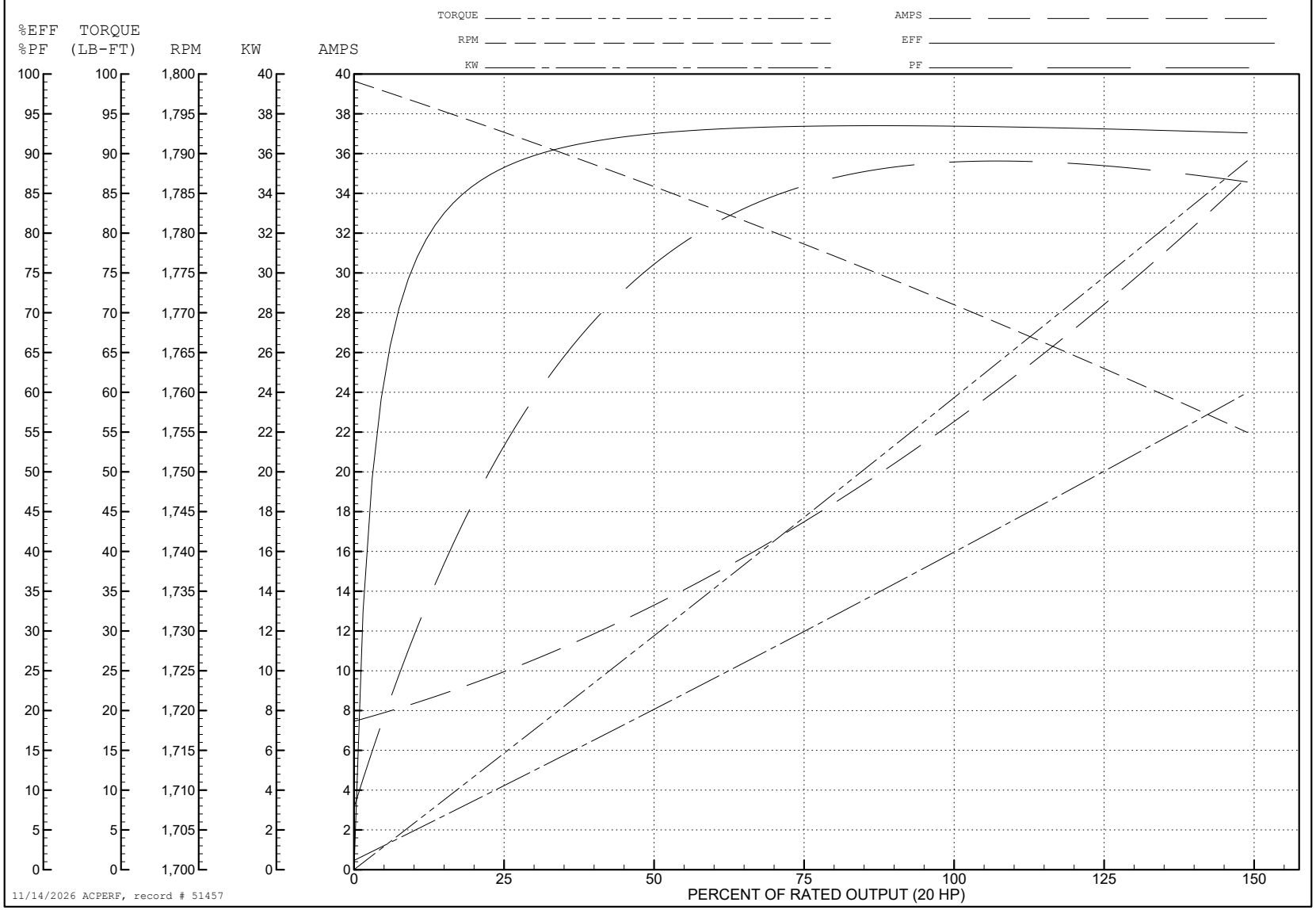
ABB Motors and Mechanical Inc.

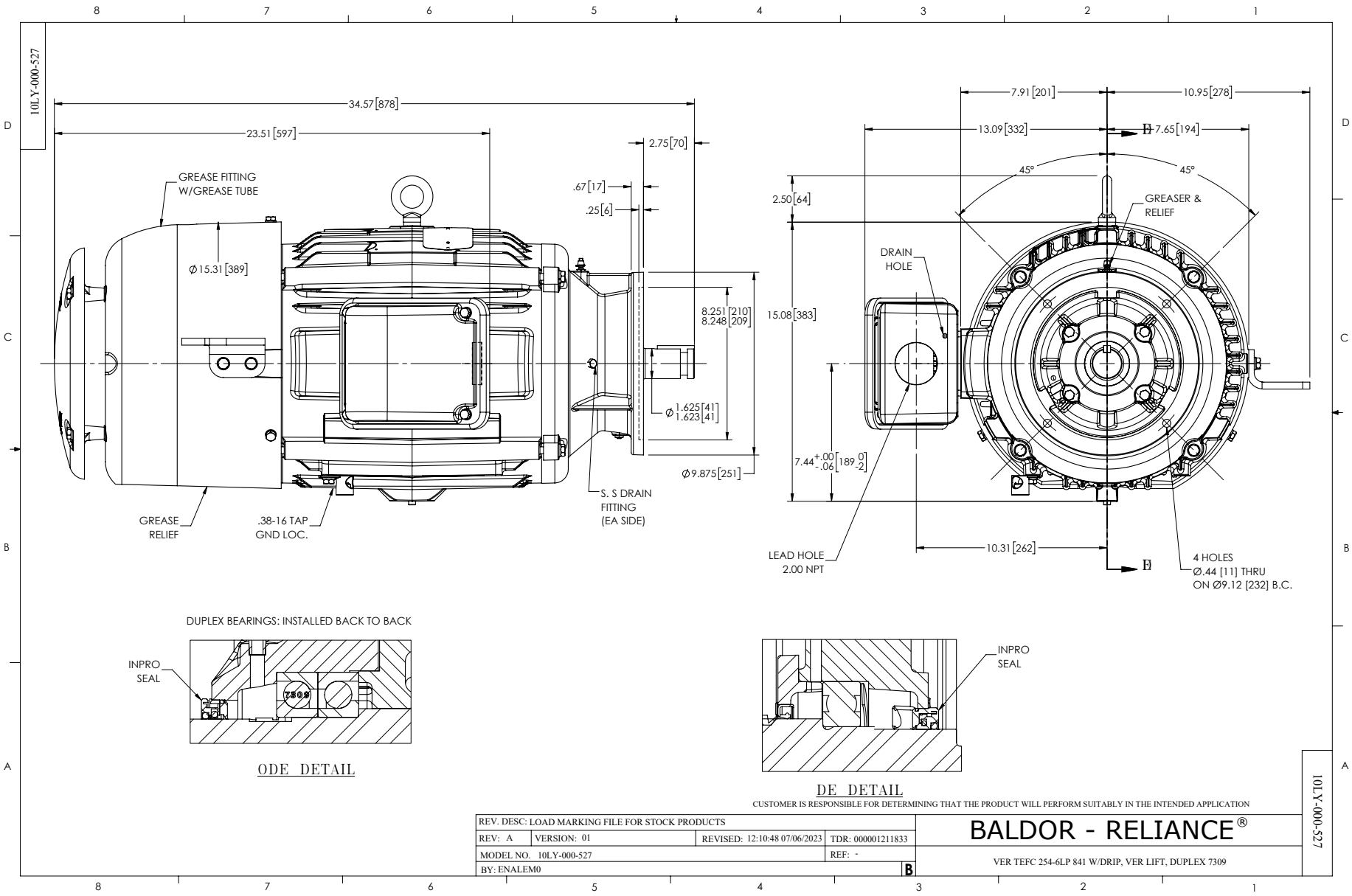
WINDING # 10WGY977

20 HP 3 PH 60 HZ 1770 RPM 460 V 1046M

Typical performance - not guaranteed values.

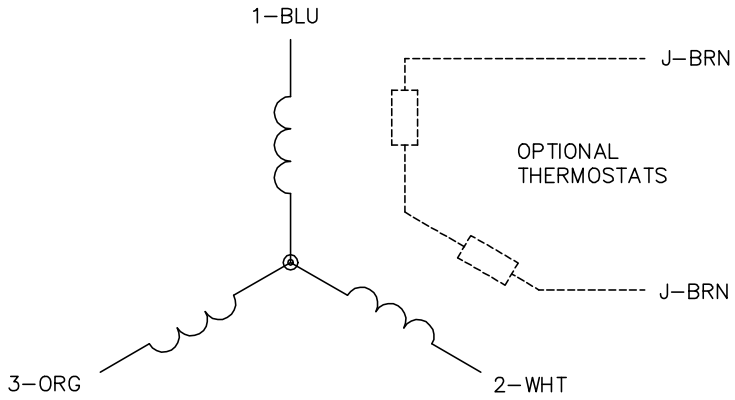
TORQUES(LB-FT): PO=189 PU=76.6 LR=95.9 LRA=145

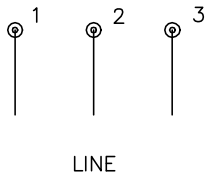



10LY-000-527
34.57[878]
23.51[597]
2.75[70]
.67[17]
.25[6]
GREASE FITTING W/GREASE TUBE
Ø15.31[389]
8.251[210]
8.248[209]
Ø1.625[41]
1.623[41]
Ø9.875[251]
GREASE RELIEF
.38-16 TAP GND LOC.
S. S DRAIN FITTING (EA SIDE)
7.91[201]
10.95[278]
13.09[332]
7.65[194]
45°
45°
2.50[64]
GREASER & RELIEF
DRAIN HOLE
15.08[383]
7.44+.00 -.06 [189.0 -2]
10.31[262]
LEAD HOLE 2.00 NPT
4 HOLES Ø.44 [11] THRU ON Ø9.12 [232] B.C.
DUPLEX BEARINGS: INSTALLED BACK TO BACK
INPRO SEAL
7309
ODE DETAIL
INPRO SEAL
DE DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD MARKING FILE FOR STOCK PRODUCTS
REV: A
VERSION: 01
REVISED: 12:10:48 07/06/2023
TDR: 000001211833
MODEL NO. 10LY-000-527
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VER TEFC 254-6LP 841 W/DRIP, VER LIFT, DUPLEX 7309
10LY-000-527

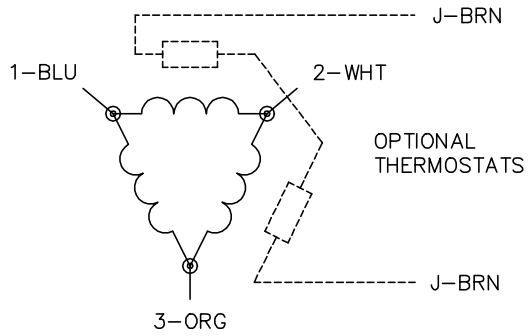
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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.

CD0006

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1