

ABB BALDOR RELIANCE III

Customer information packet

VLECP82334T-4

20HP, 1770RPM, 3PH, 60HZ, 256LP, TEFC, V1

Class - CLI GP A,B,C,D

Division - Division II

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. @ 25°C		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

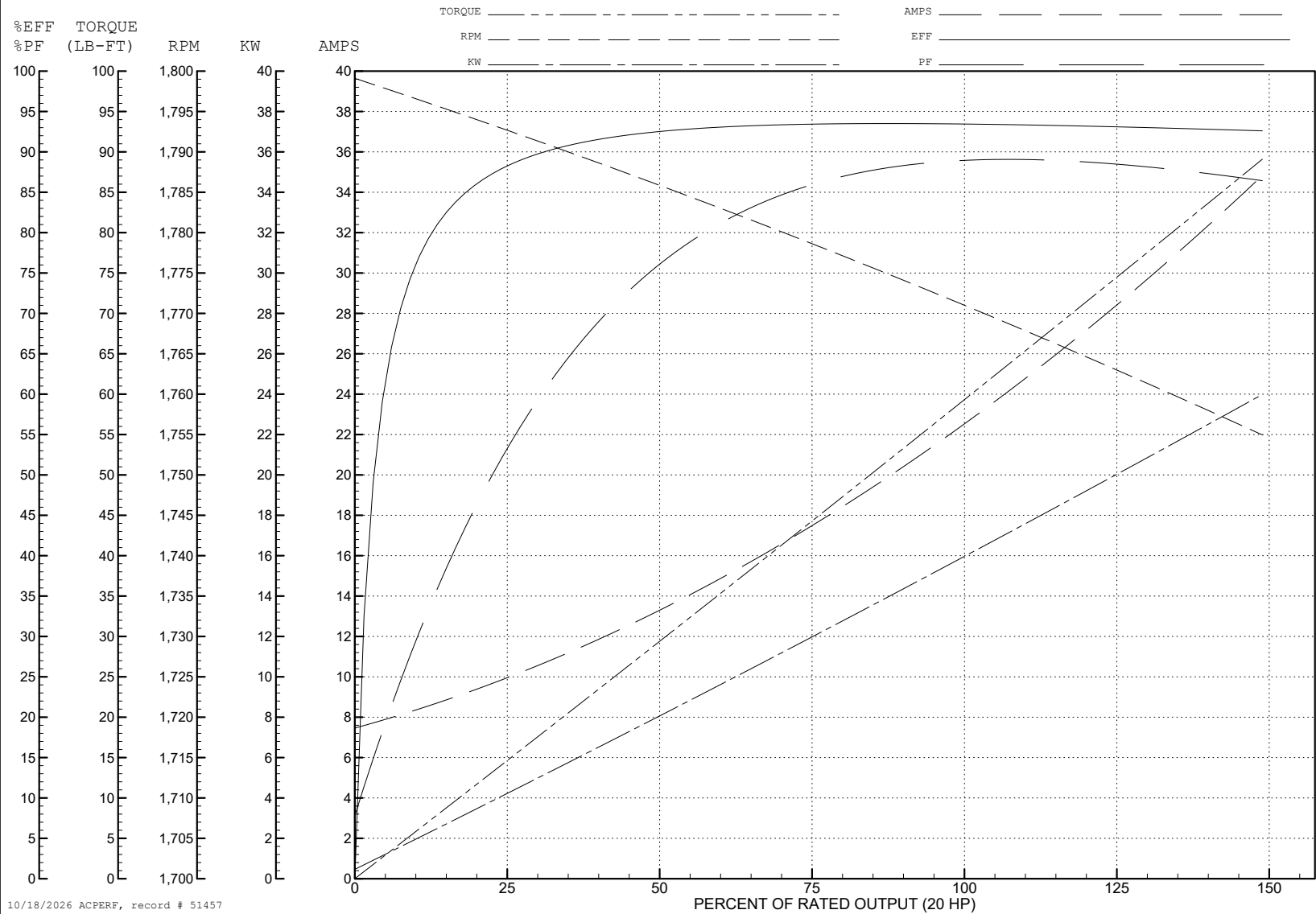
ABB Motors and Mechanical Inc.

WINDING # 10WGY977

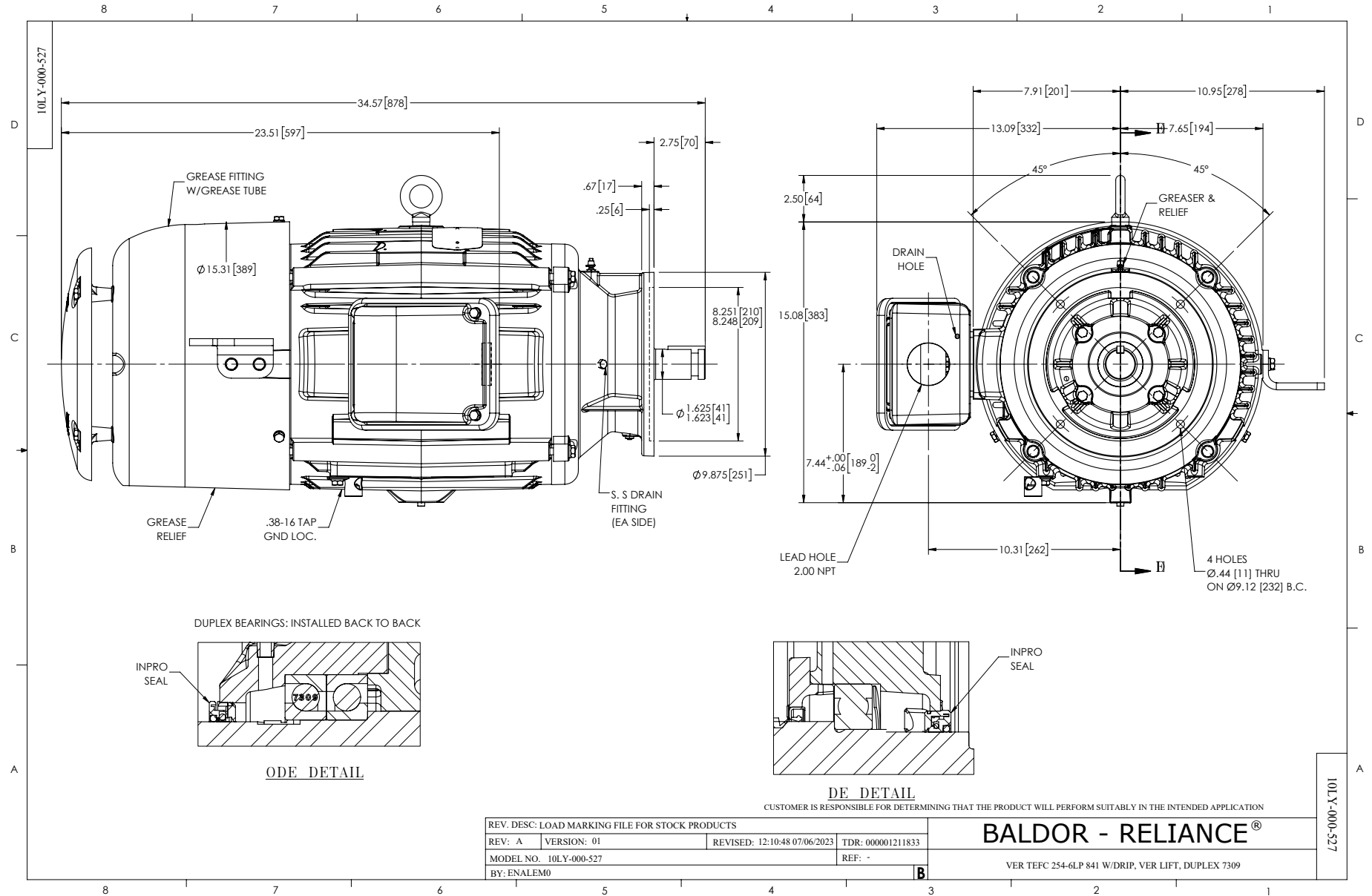
Typical performance - not guaranteed values.

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

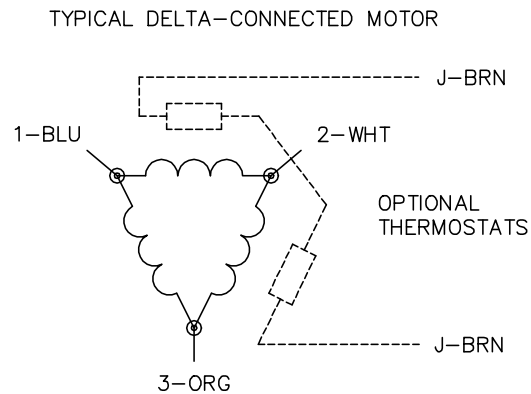
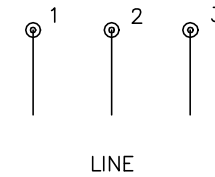
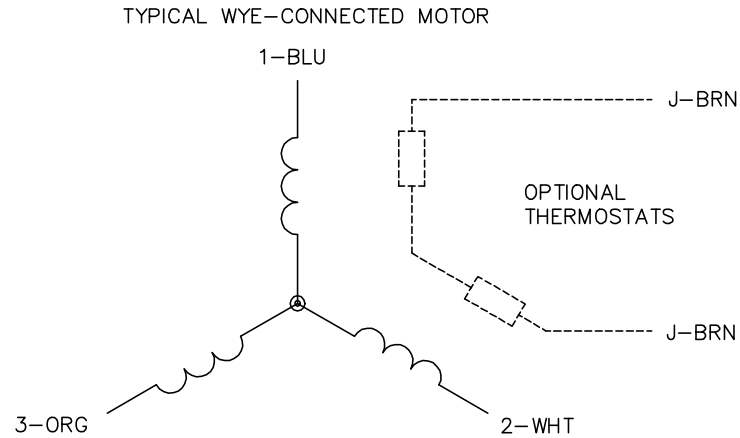
TORQUES (LB-FT): PO=189 PU=76.6 LR=95.9 LRA=145



10/18/2026 ACPERF, record # 51457



CD0006



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

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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