

ABB BALDOR RELIANCE III

Customer information packet

VLECP4110T

40HP, 1775RPM, 3PH, 60HZ, 324LP, 1254M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	324LP
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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	0.8
Current @ Voltage	96.000 A @ 230.0 V 48.000 A @ 460.0 V 102.000 A @ 208.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	L
Type	AC
Mech. spec.	12K01
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYK001
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	12-13-2017

Front Shaft Indicator	None
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	34.72 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Thrust
Pulley Face Code	P-Base
Pulley Shaft Indicator	P-Base Groove & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)

Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate
NP3241

CAT.NO.	VLECP4110T			P/N			ENCLOSURE			TEFC				
SPEC.	12K001Y276G1			CC	010A	FRAME	324LP		S/N					
HP	40			CLASS	F	HZ	60	DES	A					
RPM	1775			RPM MAX		2700		PH	3	KVA-CODE	H			
VOLT	230/460			MOTOR WEIGHT			600							
AMP	96/48			SER.F.	1.15	PF	82	ODE BRG	6311	DE BRG	QJ312			
RATING	40C AMB-CONT			NEMA-NOM-EFF			94.1	GREASE	POLYREX EM					
							INV.TYPE	PWM						
TEMP CODE	T3	INVERTER-TEMP-CODE			200									
TEMP =	200	C HP FR	60	C HP TO	90									
CT HZ FROM	0.8	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 # 68449

Typical performance - not guaranteed values

Winding: 12WGY276-R036				Type: 1254M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		40		Full Load Torque		118 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		96/48		Breakdown Torque		386 LB-FT	
R.P.M.		1775		Pull-up Torque		193 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		216 LB-FT	
NEMA Design Code		A	KVA Code	Starting Current		338 A	
Service Factor (S.F.)		1.15		No-load Current		19.9 A	
NEMA Nom. Eff.		94.1	Power Factor	Line-line Res. @ 25°C		0.14898 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C	
S.F. Amps				Temp. Rise @ S.F. Load		64°C	
				Locked-rotor Power Factor		27.3	
				Rotor inertia		7.19 LB-FT2	

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	47	69	78	83	85	85	84
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1	94
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1	1773
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8	54.8

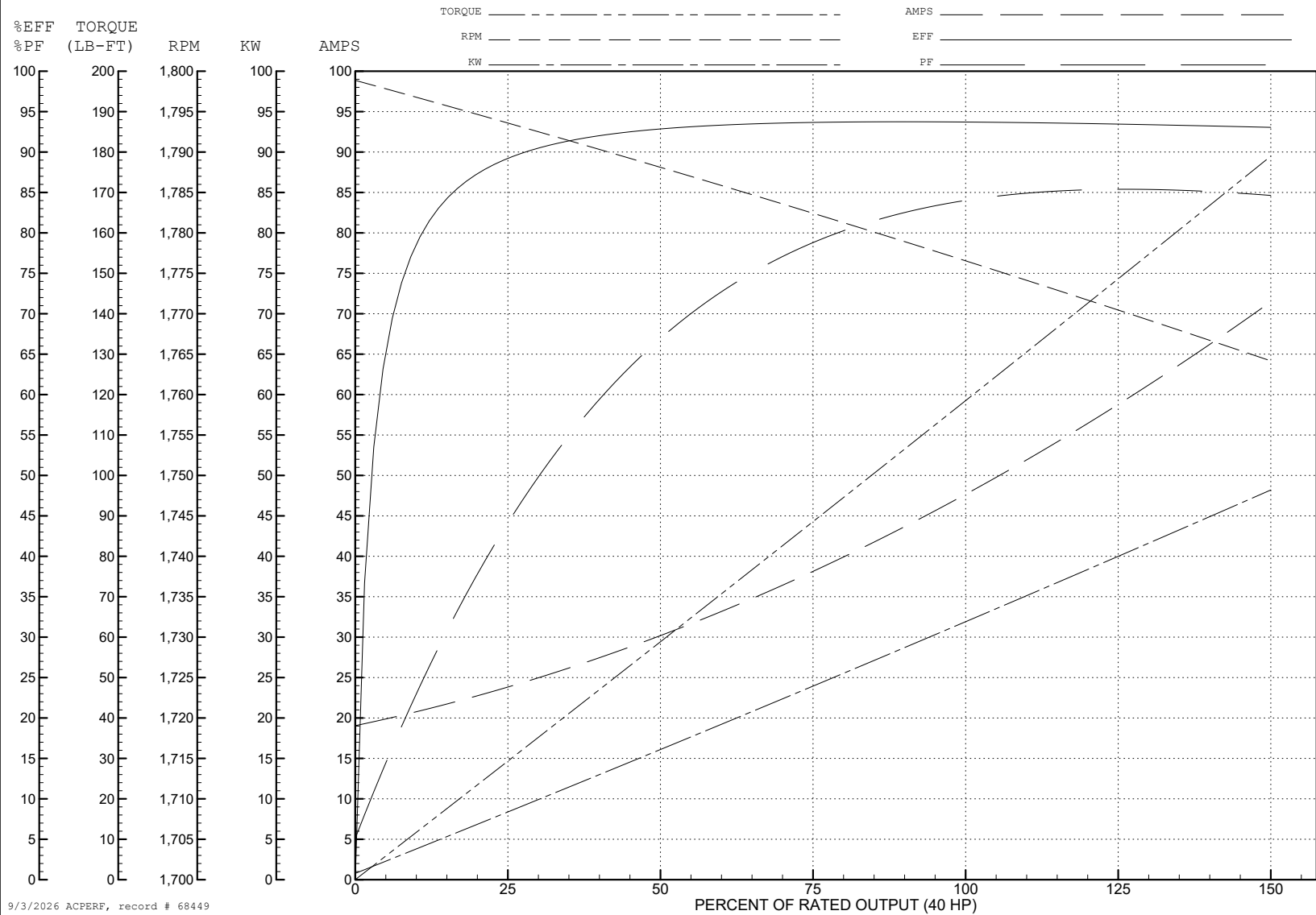
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

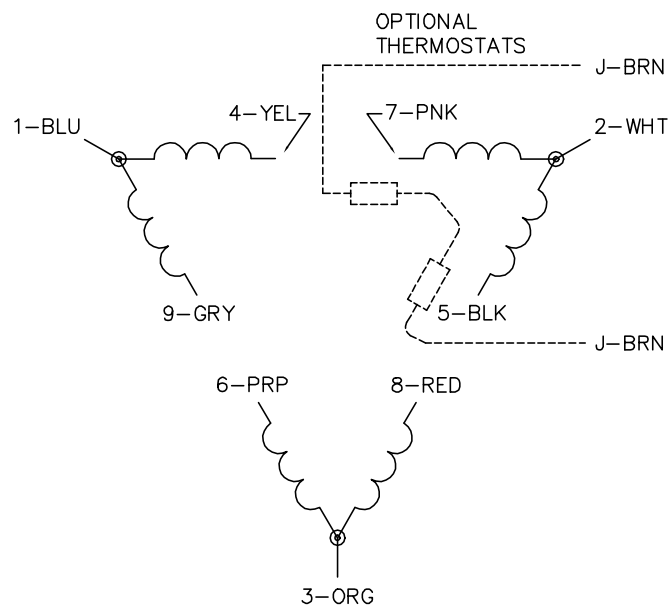
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

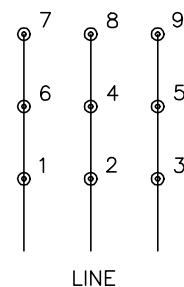
TORQUES (LB-FT): PO=386 PU=193 LR=216 LRA=338



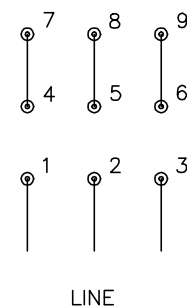
CD0180



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.

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

CD0180