ABB BALDOR RELIANCE

Customer information packet

ZDVSM4110T

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	324T
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
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
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	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	L
Type	AC
Mech. spec.	12G535
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYG535
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-14-2017

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.14 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2	None

Nameplate

NP3304L					
CAT NO	ZDVSM4110T				
SPEC.	12G535Y276Z1				
FRAME	324T	**HP**	40 TE		
VOLTS	230/460				
MAG CUR	39/19.5	**FLA**	96/48		
RPM	1775	**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F
SER.F.	1.00	**SL HZ**	0.85		
NEMA-NOM-EFF	94.1	**WK2**	7.19		
RATING	40C AMB-CONT				
DE BRG	6312	**ODE BRG**	6311		
CC	010A	**SER.NO**			
	1.5:1 CHP PWM				
	1000:1 CT, 1000:1 VT				

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	96/48	Base Volt	460	R1	0.077	X1	0.428
HP	40HP	NL AMPS	19.5	R2	0.060	X2	0.492
BASE SPEED	1775	Slips (Hz)	0.67			XM	11.900
PHASE/HZ	3/60	WK^2 (lb-ft^2)	7.19				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1780	40.0	118.0	460	60	48.4
Max Speed	2669	40.0	78.7	460	90	45.1
Min Speed	0	0.0	118.0	16.88	0.67	48.4

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	19.5
1/4	1795	10.1	29.5	460	60	22.9
1/2	1790	20.1	59.0	460	60	30.1
3/4	1785	30.1	88.6	460	60	38.9
Full Load	1780	40.0	118.0	460	60	48.4
O/L	1758	80.0	239.0	460	60	94.0

Blower Data	Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty

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DATE 5/29/2018

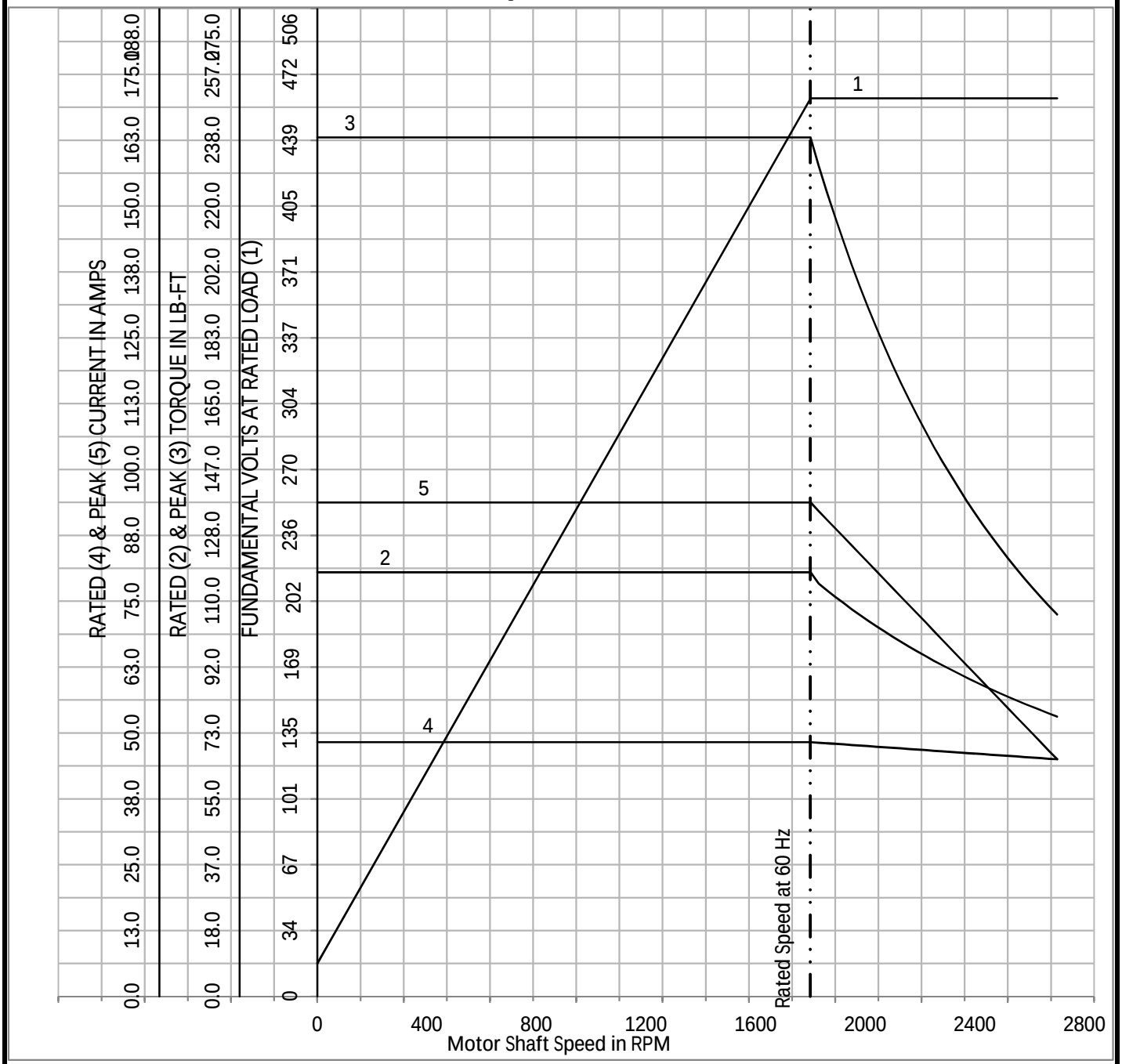
A-C MOTOR PERFORMANCE CURVES

12WGY276

NP VOLTS	230/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
NP AMPS	96/48	Base Volt	460	R1	0.077	X1	0.428
HP	40HP	NL AMPS	19.5	R2	0.060	X2	0.492
BASE SPEED	1775	Slips (Hz)	0.67			XM	11.900
PHASE/HZ	3/60	WK2 (lb-ft2)	7.19				

Vector PWM Inverer Duty

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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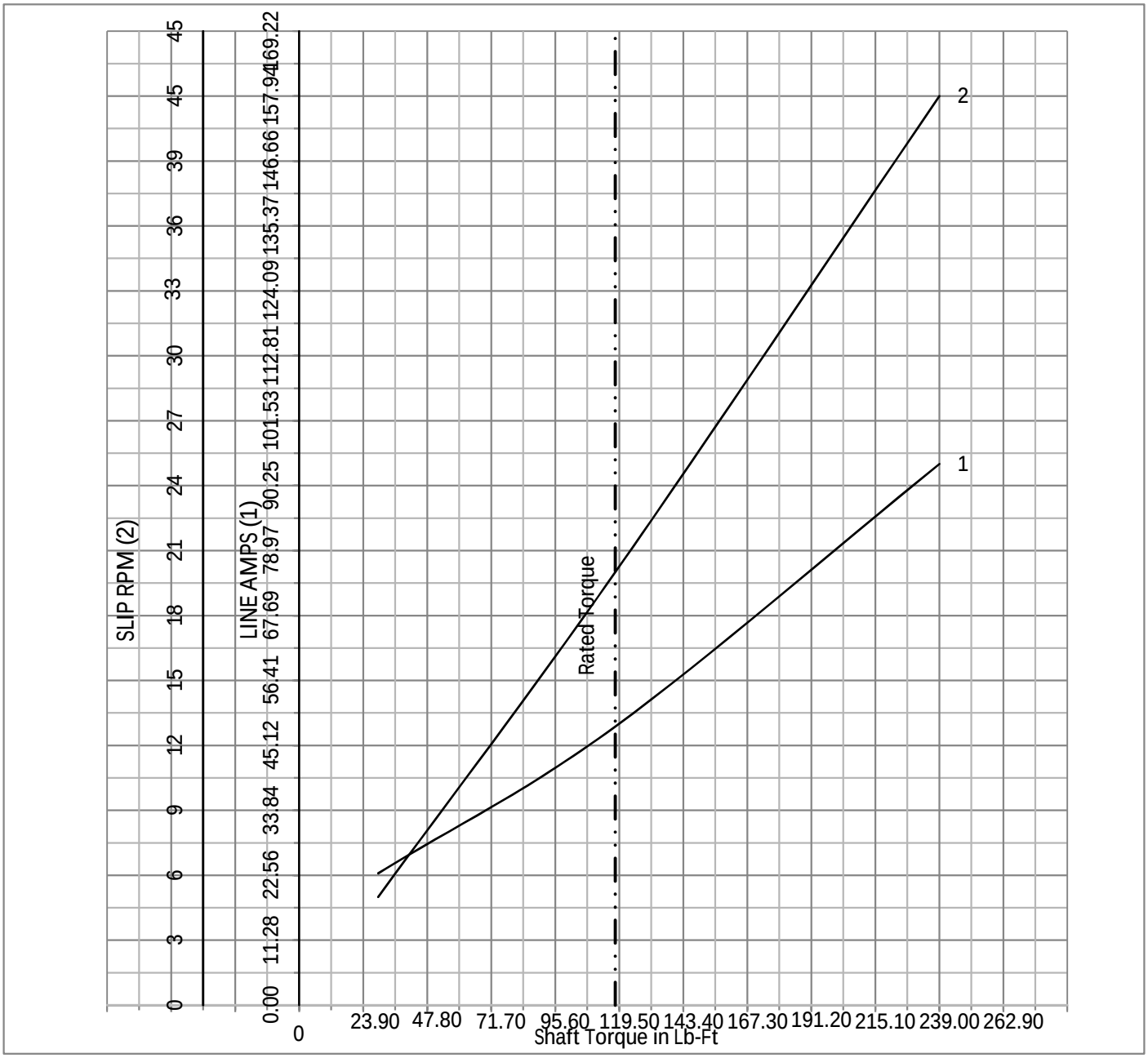
A-C MOTOR PERFORMANCE CURVES

12WGY276

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HP	40HP	NL AMPS	19.5	R2	0.060	X2	0.492
BASE SPEED	1775	Slips (Hz)	0.67			XM	11.900
PHASE/HZ	3/60	WK2 (lb-ft2)	7.19				

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

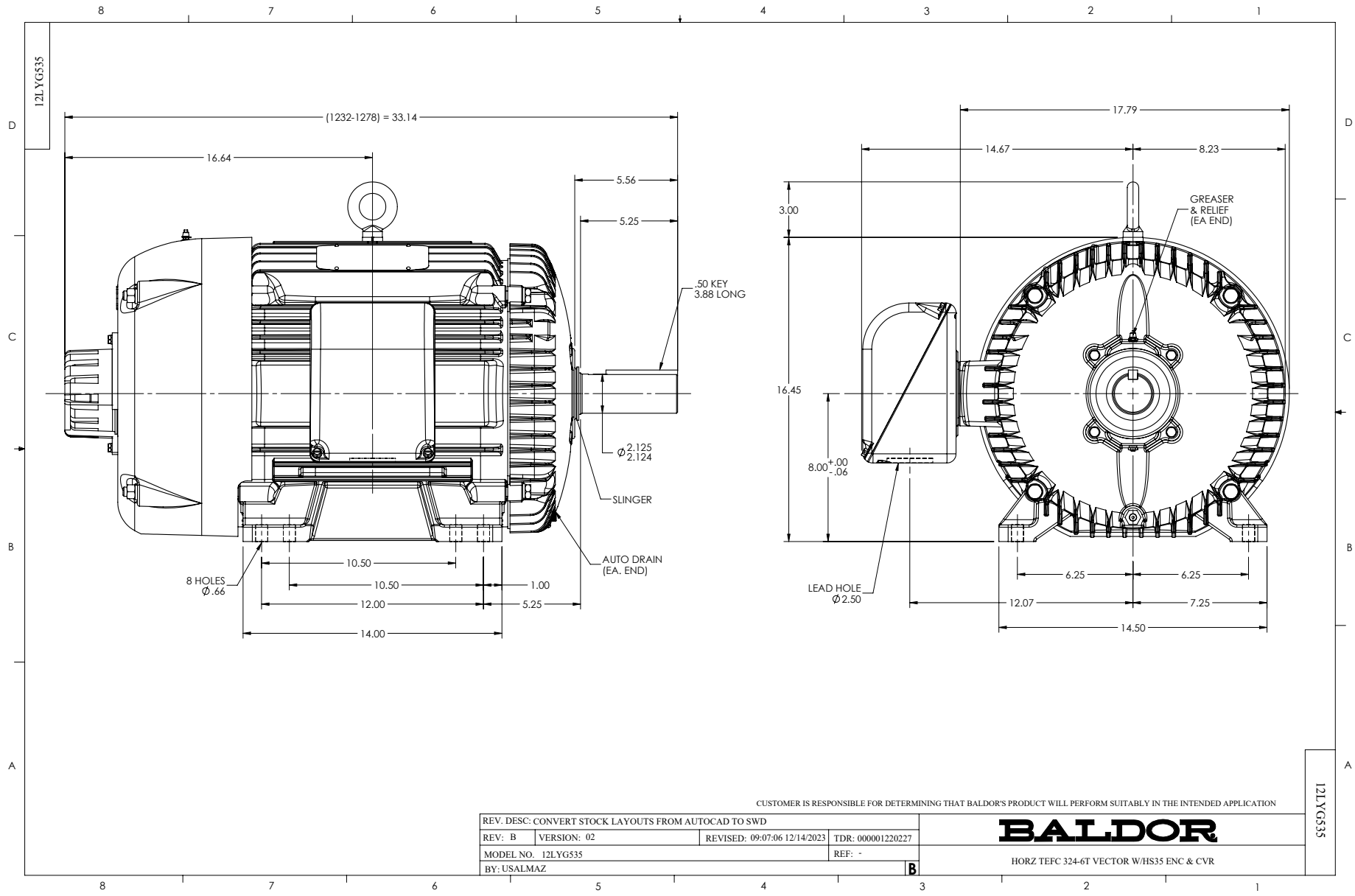
Data Valid For Nameplate Speed Range only

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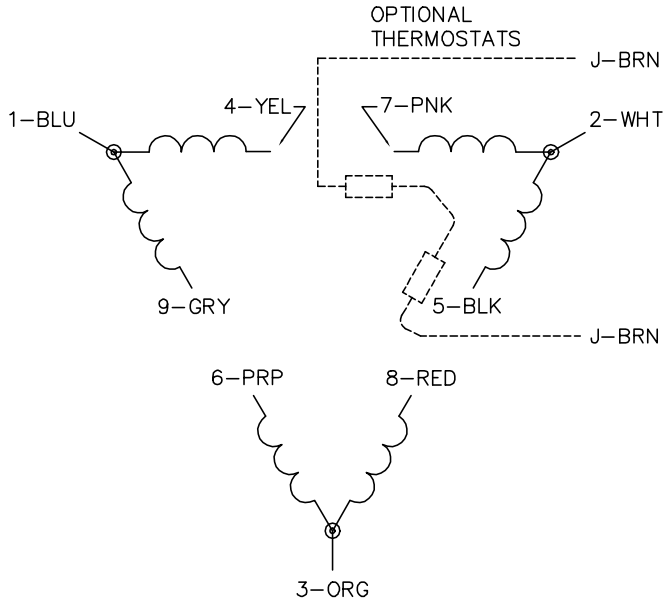
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DATE 5/29/2018

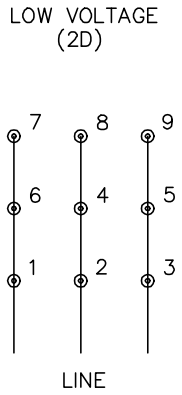
A-C MOTOR PERFORMANCE CURVES

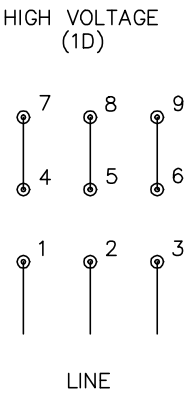
12WGY276


12LYG535
(1232-1278) = 33.14
16.64
5.56
5.25
.50 KEY
3.88 LONG
Ø2.125
2.124
SLINGER
AUTO DRAIN
(EA. END)
8 HOLES
Ø.66
10.50
10.50
1.00
12.00
5.25
14.00
17.79
14.67
8.23
3.00
GREASER
& RELIEF
(EA END)
16.45
8.00 +.00 -.06
LEAD HOLE
Ø2.50
6.25
6.25
12.07
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: B
VERSION: 02
REVISED: 09:07:06 12/14/2023
TDR: 000001220227
MODEL NO. 12LYG535
REF: -
BY: USALMAZ
B
BALDOR
HORZ TEFC 324-6T VECTOR W/HS35 ENC & CVR
12LYG535

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: –		

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3PH, DV, 9 LEADS, DELTA CONNECTION

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