ABB BALDOR RELIANCE

Customer information packet

IDVSNM3538-5

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	.770 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	0.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M

Part Detail

Revision	C
Type	AC
Mech. spec.	35T995
Base	
Status	PRD/A
Elec. spec.	35WGG200
Layout	35LYT995
Eff. date	09-30-2025
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.84 IN
Power Factor	62
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3301L							
CAT NO	IDVSNM3538-5						
SPEC.	35T995G200G1						
FRAME	56C		**HP**	.5 TE			
VOLTS	575						
MAG CUR	0.64			**FLA**	0.77		
RPM	1770		**RPM MAX**	2700			
HZ	60	**PH**	3		**CLASS**	F	
SER.F.	1.00			**SL HZ**	0.97		
NEMA-NOM-EFF	80		**WK2**	0.0866			
RATING	40C AMB-CONT						
DE BRG	6205		**ODE BRG**	6203			
CC		**SN**					
	1.5:1 CHP PWM						
	1000:1 CT/VT						

				WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
INP AMPS	0.77	Base Volt	575	R1	35.900	X1	31.700
HP	0.5	NL AMPS	0.64	R2	9.020	X2	18.400
BASE SPEED	1771	Slip (HZ)	0.97			XM	594.000
PHASE/HZ	3/60	WK^2 (lb-ft^2)	0.087				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771	0.5	1.5	575	60	0.8
Max Speed	2657	0.5	1.0	575	90	0.6
CT Min Speed	1.771	0.001	1.5	0.58	0.06	0.8

Load Performance at Base Speed

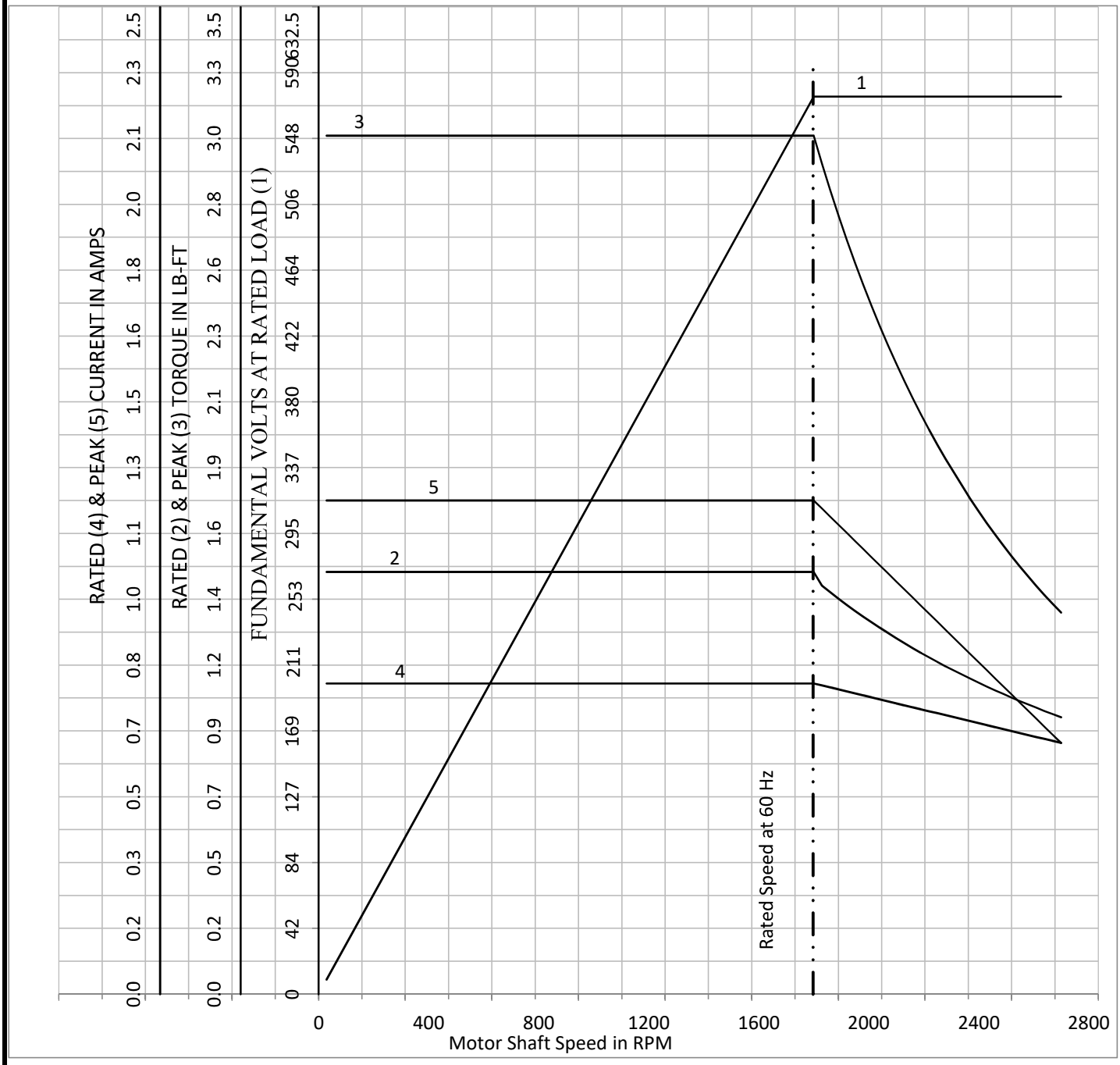
	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798	0.0	0.0	575	60	0.6
1/4	1792	0.1	0.4	575	60	0.6
1/2	1786	0.3	0.7	575	60	0.7
3/4	1779	0.4	1.1	575	60	0.7
Full Load	1771	0.5	1.5	575	60	0.8
O/L	1740	1.0	3.0	575	60	1.2

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

Remarks: Calculated Data

NP AMPS	0.7	Base Volt	575	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	0.5	NL AMPS	0.64	R1	35.900	X1	31.700
BASE SPEED	1771	Slip (HZ)	0.97	R2	9.020	X2	18.400
PHASE/HZ	3/60	WK^2 (lb-ft^2)	0.087			XM	594.000

Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

BALDOR • RELIANCE

DR BY USBRRAN1
CK BY CD
APP BY USBRRAN1
DATE 12/8/2023

A-C MOTOR PERFORMANCE CURVES

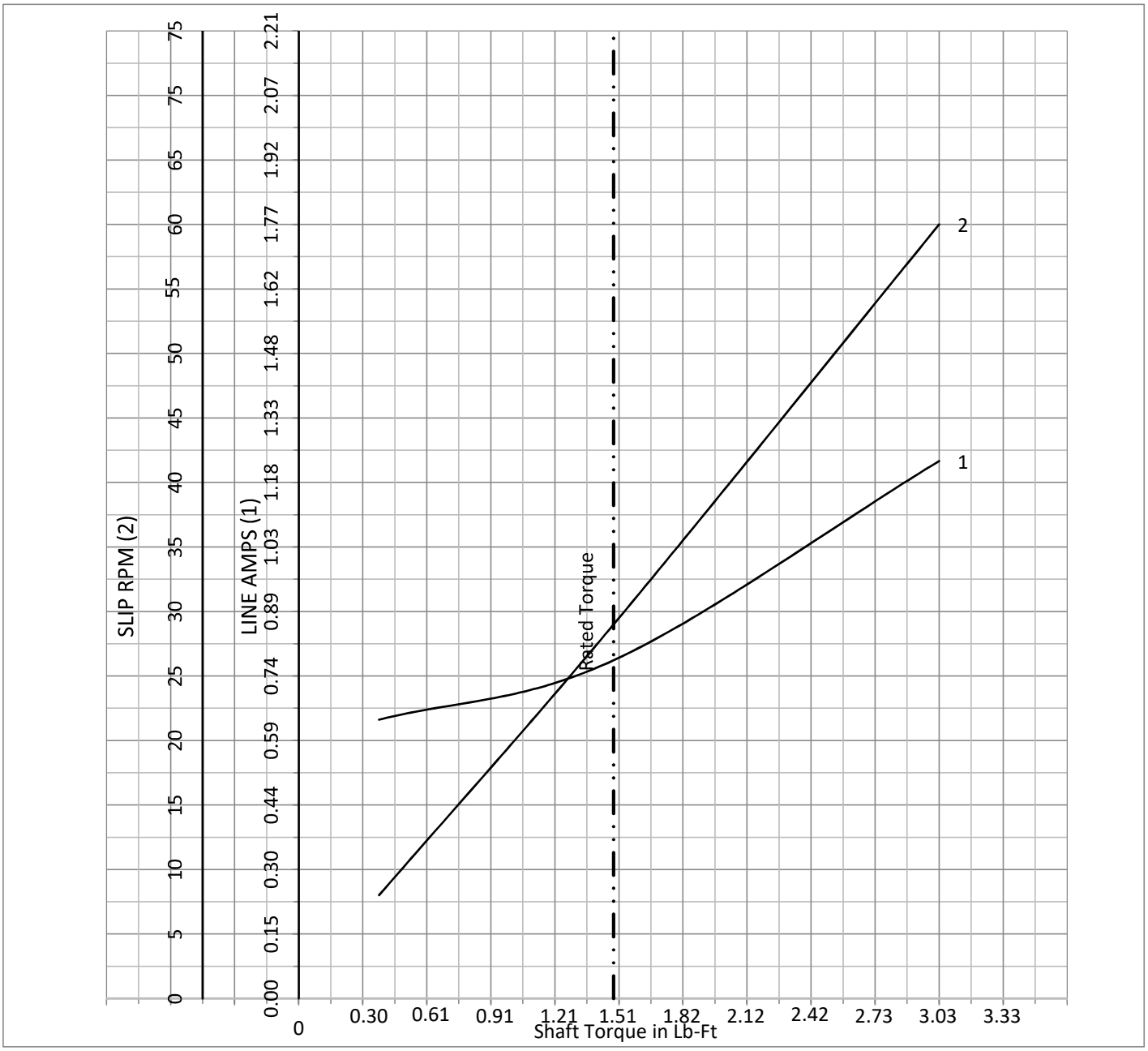
35WGG200

Record: 82258

ABB BALDOR RELIANCE III		CUSTOMER INFORMATION PACKET	0	0	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)		
INP AMPS	0.17	IDV SNM3538-5 - .5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1	Base Volt	575	R1	35.900	X1	31.700
HP	0.5		NL AMPS	0.64	R2	9.020	X2	18.400
BASE SPEED	1771		Slip (HZ)	0.97			XM	594.000
PHASE/HZ	3/60		WK2 (lb-ft2)	0.087				

Vector PWM Inverer Duty

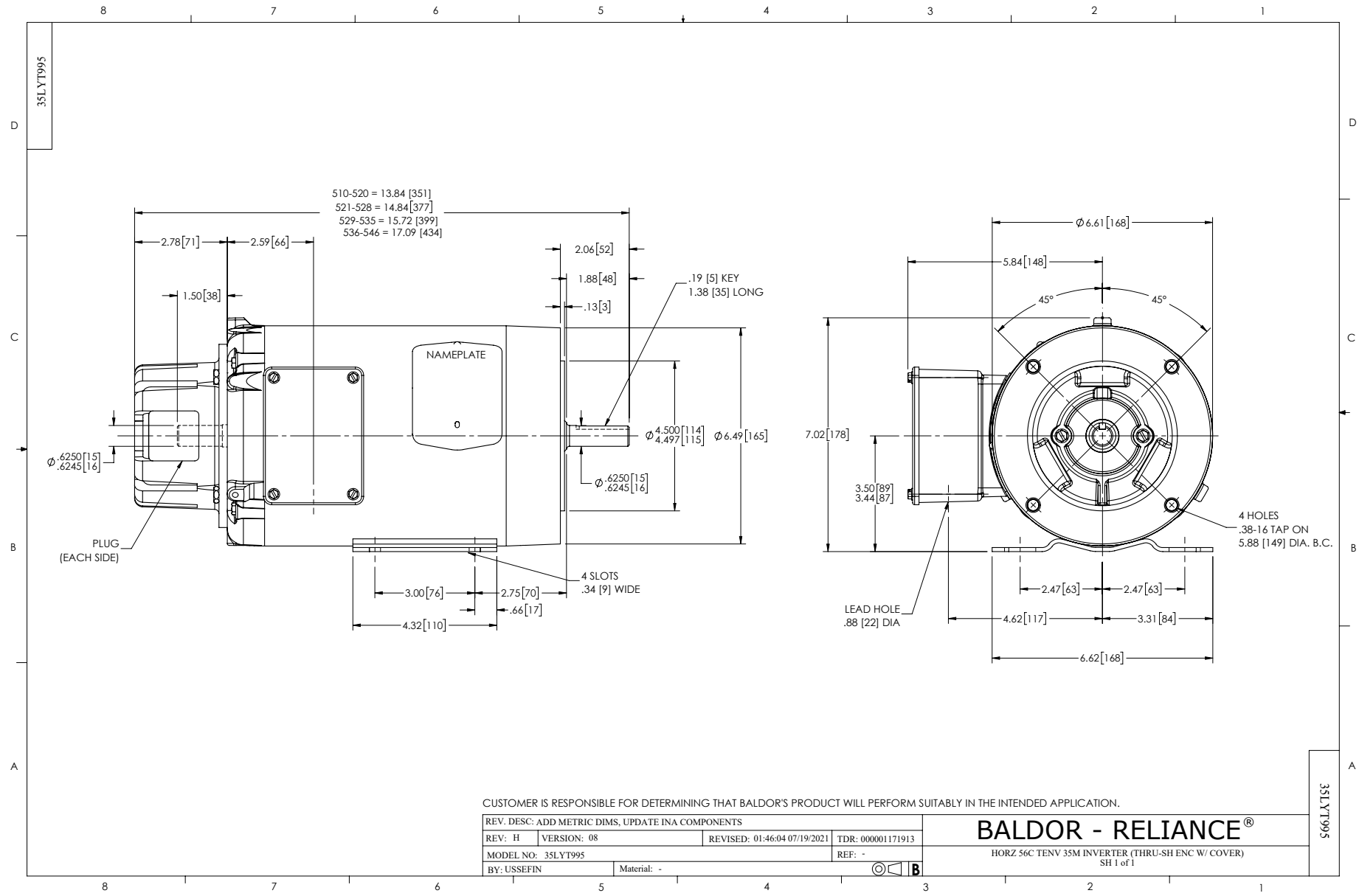
Vaiable Speed AC Motor Curves



Calculated Data

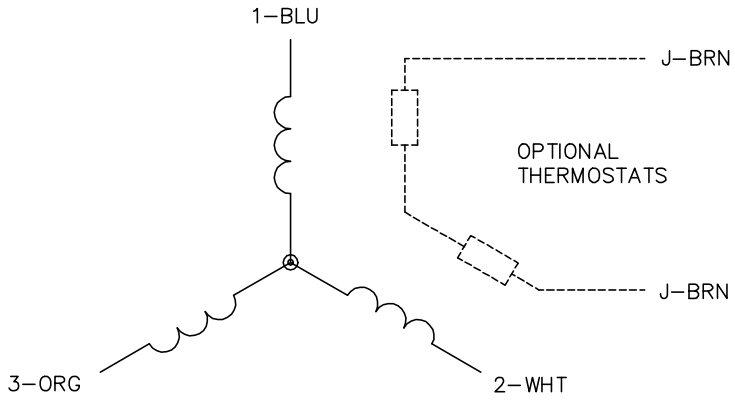
Data Valid For Nameplate Speed Range only

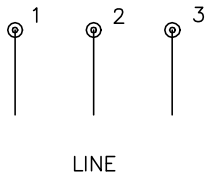
BALDOR • RELIANCE	DR BY USBRRAN1 CK BY CD APP BY USBRRAN1 DATE 12/8/2023	A-C MOTOR PERFORMANCE CURVES	35WGG200 Record: 82258


35LYT995
510-520 = 13.84 [351]
521-528 = 14.84[377]
529-535 = 15.72 [399]
536-546 = 17.09 [434]
2.78[71]
2.59[66]
1.50[38]
2.06[52]
1.88[48]
.13[3]
.19 [5] KEY
1.38 [35] LONG
NAMEPLATE
Ø.6250[15]
.6245[16]
Ø4.500[114]
4.497[115]
Ø6.49[165]
PLUG
(EACH SIDE)
4 SLOTS
.34 [9] WIDE
3.00[76]
2.75[70]
.66[17]
4.32[110]
Ø6.61[168]
5.84[148]
45°
45°
7.02[178]
3.50[89]
3.44[87]
4 HOLES
.38-16 TAP ON
5.88 [149] DIA. B.C.
LEAD HOLE
.88 [22] DIA
2.47[63]
2.47[63]
4.62[117]
3.31[84]
6.62[168]
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: ADD METRIC DIMS, UPDATE INA COMPONENTS
REV: H
VERSION: 08
REVISED: 01:46:04 07/19/2021
TDR: 000001171913
MODEL NO: 35LYT995
REF: -
BY: USSEFIN
Material: -
BALDOR - RELIANCE®
HORZ 56C TENV 35M INVERTER (THRU-SH ENC W/ COVER)
SH 1 of 1
35LYT995

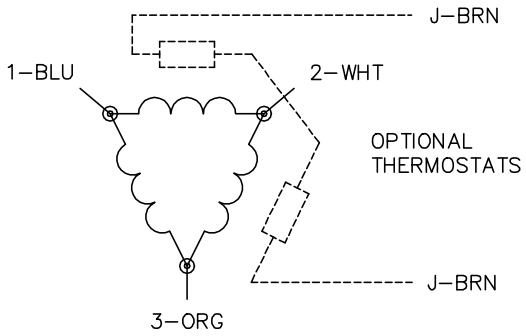
CD0006

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