ABB BALDOR RELIANCE

Customer information packet

IDVSM2334T-5

20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TENV, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	256TC
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	20.000 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	19.200 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	19.2 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J

Part Detail

Revision	F
Type	AC
Mech. spec.	09K146
Base	
Status	PRD/A
Elec. spec.	09WGT507
Layout	09LYK146
Eff. date	11-13-2023
CD Diagram	CD0006
Poles	04
Leads	3#10
Proprietary	False
Created date	11-11-2020

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.84 IN
Power Factor	83
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	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP3302L					
CAT NO	IDVSM2334T-5				
SPEC.	09K146T507G1				
FRAME	256TC	**HP**	20 TE		
VOLTS	575				
MAG CUR	8.3	**FLA**	19.2		
RPM	1770	**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F
SER.F.	1.00	**SL HZ**	0.83		
NEMA-NOM-EFF	93	**WK2**	2.62		
RATING	40C AMB-CONT				
DE BRG	6309	**ODE BRG**	6208		
CC	010A	**SN**			
	1.5:1 CHP PWM				

INP AMPS	19.2	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	20 HP	Base Volt	575	R1	0.264	X1	1.370
BASE SPEED	1772	NL AMPS	8.28	R2	0.249	X2	1.820
PHASE/HZ	3/60	Slips(HZ)	0.93			XM	47.200
		WK2 (lb-ft²)	2.650				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1772	20.0	59.3	575	60	19.2
Max Speed	2657	20.0	39.6	575	90	18.5
Min Speed	0	0.0	59.3	22.51	0.93	19.2

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	575	60	8.3
1/4	1793	5.0	14.7	575	60	9.4
1/2	1786	10.0	29.5	575	60	12.0
3/4	1779	15.0	44.3	575	60	15.3
Full Load	1772	20.0	59.3	575	60	19.2
O/L	1741	40.1	121.0	575	60	39.1

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

Remarks: Calculated Data
Vector PWM Inverter Duty

BALDOR • RELIANCE

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CK BY
APP BY USBRRAN1
DATE 11/19/2020

A-C MOTOR PERFORMANCE CURVES

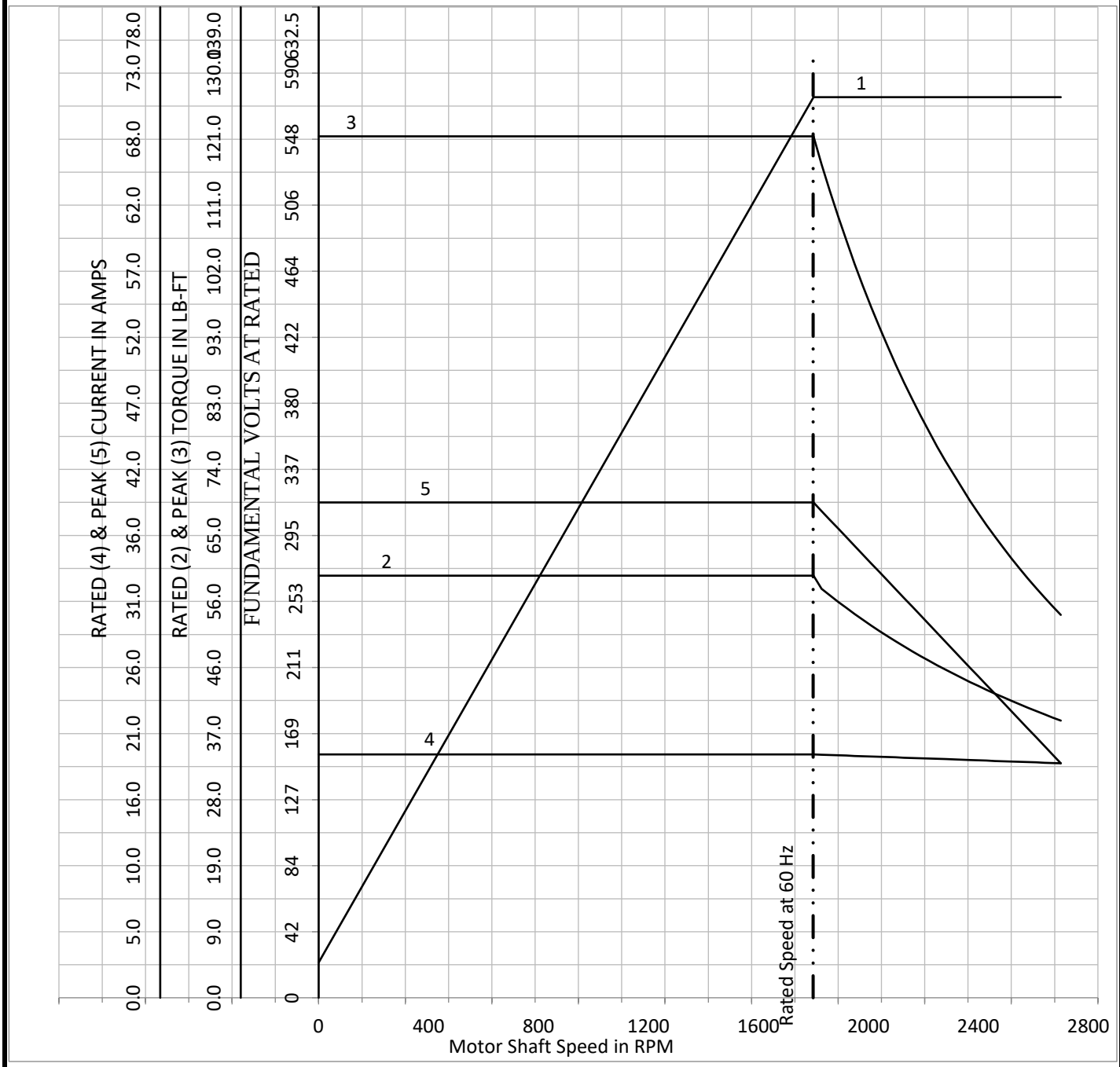
09WGT507

Record: 85523

ABB BALDOR RELIANCE	CUSTOMER INFORMATION PACKET	MAX SAFE RPM 2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)
INT AMPS 19.2		IDVSM2334T-5 - 20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TENV, F	
HP 20 HP		Base Volt 575	R1 0.264 X1 1.370
BASE SPEED 1772		NL AMPS 8.28	R2 0.249 X2 1.820
PHASE/HZ 3/60		Slips(HZ) 0.93	XM 47.200
		WK2 (lb-ft²) 2.650	

Vector PWM Inverter Duty

Variable Speed AC Motor Curves



Calculated Data

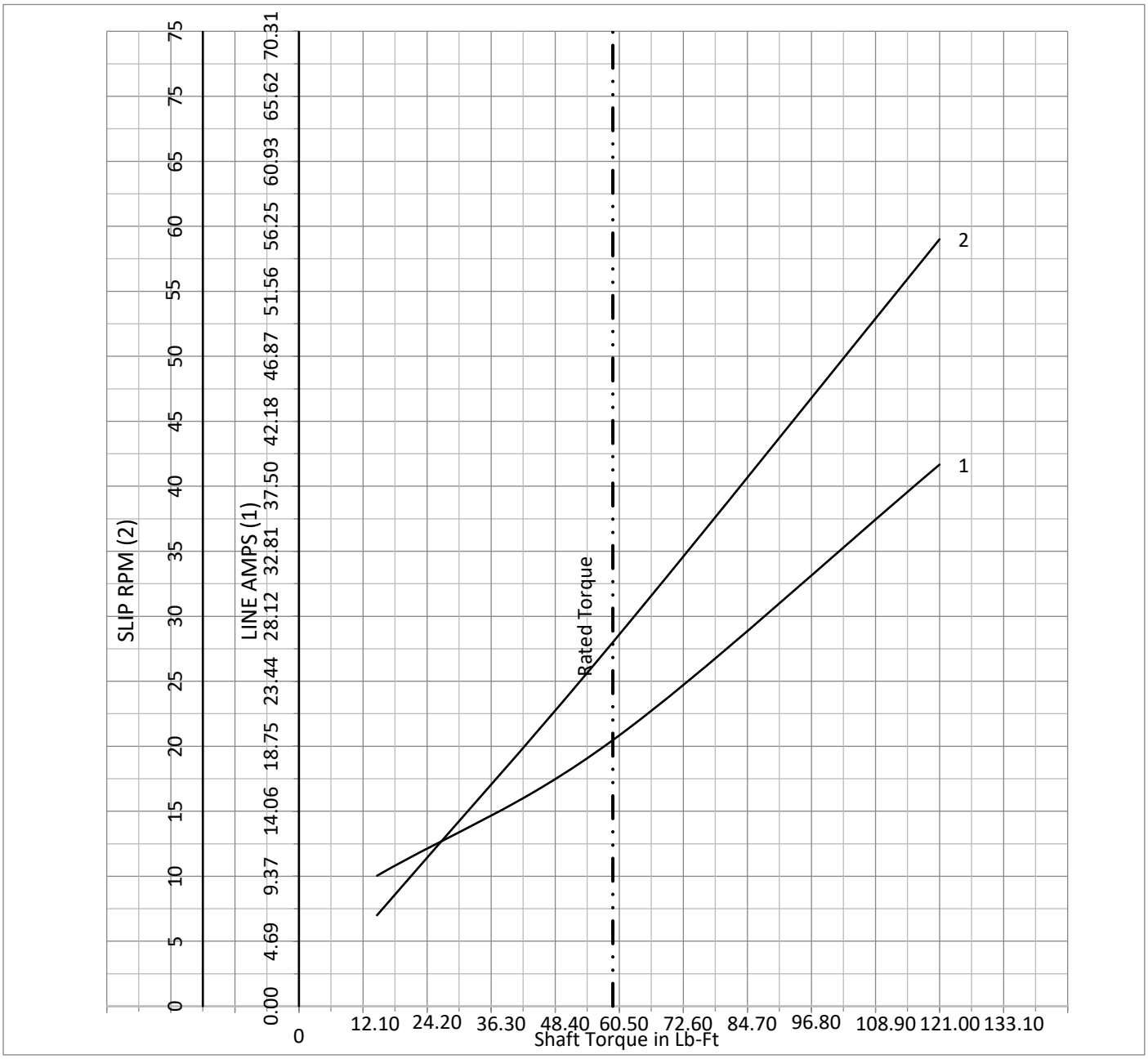
Data Valid For Nameplate Speed Range only

BALDOR • RELIANCE	DR BY USBRRAN1 CK BY APP BY USBRRAN1 DATE 11/19/2020	A-C MOTOR PERFORMANCE CURVES 09WGT507 Record: 85523

ABB BALDOR RELIANCE	CUSTOMER INFORMATION PACKET	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
INT AMPS	19.2	IDVSM2334T-5 - 20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TENV, F					
HP	20 HP	Base Volt	575	R1	0.264	X1	1.370
BASE SPEED	1772	NL AMPS	8.28	R2	0.249	X2	1.820
PHASE/HZ	3/60	Slips(HZ)	0.93			XM	47.200
		WK2 (lb-ft²)	2.650				

Vector PWM Inverer Duty

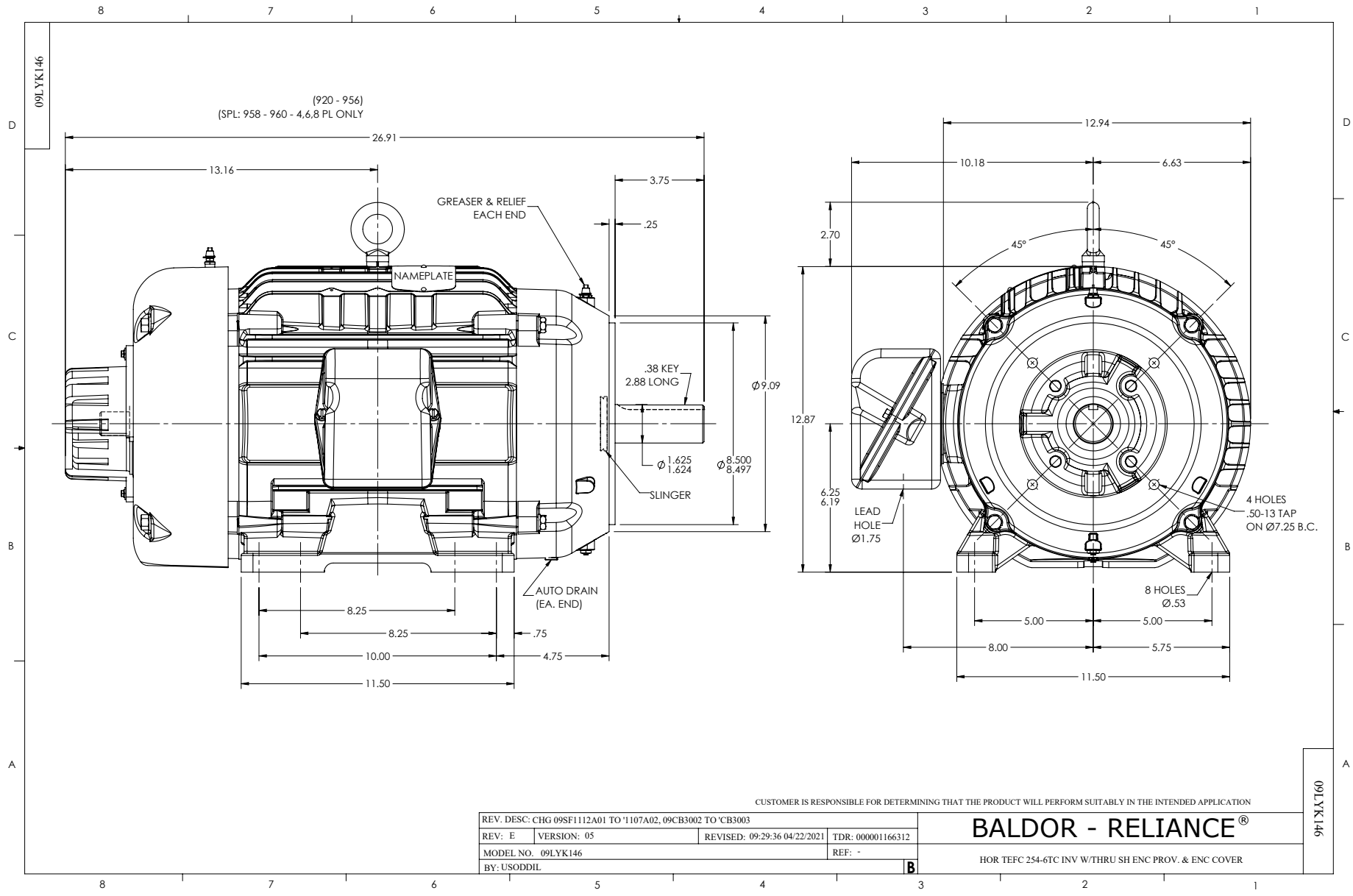
Vaiable Speed AC Motor Curves



Calculated Data

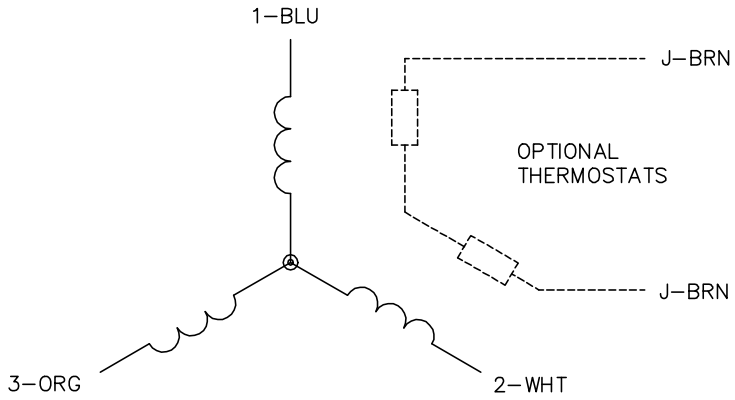
Data Valid For Nameplate Speed Range only

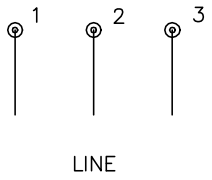
BALDOR • RELIANCE	DR BY USBRRAN1 CK BY APP BY USBRRAN1 DATE 11/19/2020	A-C MOTOR PERFORMANCE CURVES	09WGT507 Record: 85523


09LYK146
(920 - 956)
(SPL: 958 - 960 - 4,6,8 PL ONLY
26.91
13.16
3.75
.25
GREASER & RELIEF
EACH END
NAMEPLATE
.38 KEY
2.88 LONG
Ø9.09
Ø1.625
Ø1.624
Ø8.500
Ø8.497
SLINGER
AUTO DRAIN
(EA. END)
8.25
8.25
.75
10.00
4.75
11.50
12.94
10.18
6.63
2.70
45°
45°
12.87
6.25
6.19
LEAD
HOLE
Ø1.75
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
8 HOLES
Ø.53
5.00
5.00
8.00
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CHG 09SF1112A01 TO '1107A02, 09CB3002 TO 'CB3003
REV: E
VERSION: 05
REVISED: 09:29:36 04/22/2021
TDR: 000001166312
MODEL NO. 09LYK146
REF: -
BY: USODDIL
B
BALDOR - RELIANCE®
HOR TEFC 254-6TC INV W/THRU SH ENC PROV. & ENC COVER
09LYK146

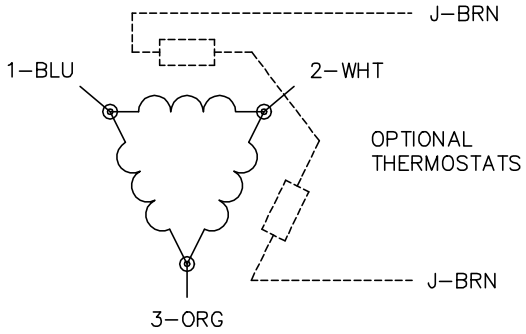
CD0006

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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

SH 1 of 1