ABB BALDOR RELIANCE

Customer information packet

IDVSM2334T

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

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Specifications

Enclosure	TEFC
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	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	52.000 A @ 208.0 V
	48.000 A @ 230.0 V
	24.000 A @ 460.0 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	P
Type	AC
Mech. spec.	09K146
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYK146
Eff. date	08-28-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	11-27-2017

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
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 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	26.71 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 Extension Location	Pulley End
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				
SPEC.	09K146T459G1				
FRAME	256TC	**HP**	20 TE		
VOLTS	230/460				
MAG CUR	20.8/10.4		**FLA**	48/24	
RPM	1770	**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F
SER.F.	1.00	**SL HZ**	1		
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				
	1000:1 CT, 1000:1 VT				

INP AMPS	48/24	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	20 HP	Base Volt	460	R1	0.167	X1	0.876
BASE SPEED	1772	NL AMPS	10.40	R2	0.159	X2	1.160
PHASE/HZ	3/60	Slips(HZ)	0.94			XM	30.000
		WK2 ()	0.000				

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771.9	20.0	59.3	460	60	24.0
Max Speed	2657	20.0	39.5	460	90	23.1
Min Speed	0	0.0	59.3	17.91	0.94	24.0

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1798.9	0.0	0.0	460	60	10.4
1/4	1793.2	5.0	14.7	460	60	11.8
1/2	1786.4	10.0	29.4	460	60	15.0
3/4	1779.1	15.0	44.3	460	60	19.2
Full Load	1771.9	20.0	59.3	460	60	24.0
O/L	1741	40.1	121.0	460	60	48.7

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

Remarks: Calculated Data
Vector PWM Inverter Duty

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A-C MOTOR PERFORMANCE CURVES

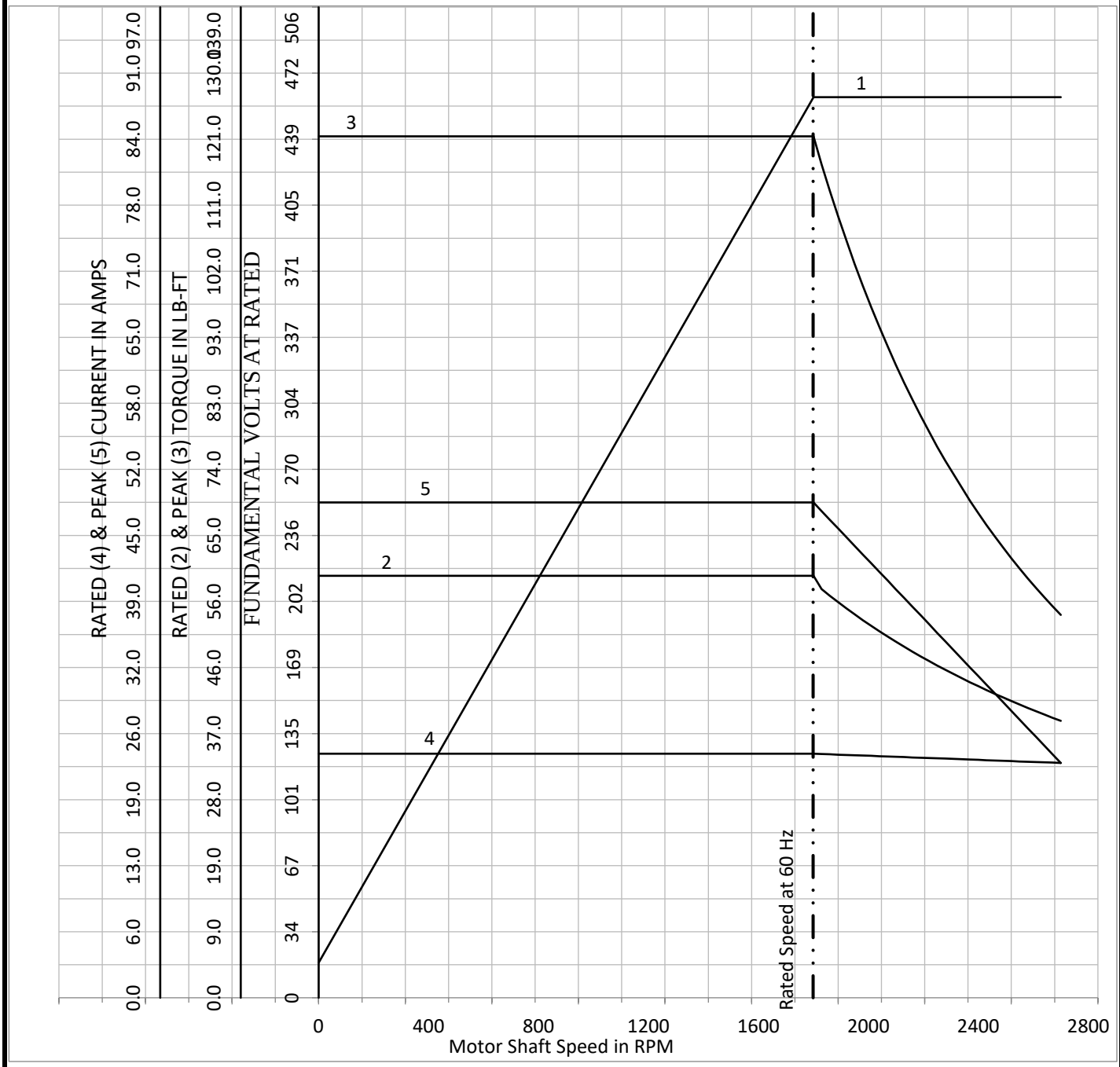
09WGT459

Record: 67965

INT AMPS	43/24	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
HP	20 HP	Base Volt	460	IDVSM2334T - 20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F			
BASE SPEED	1771.90002	NL AMPS	10.40	R1	0.167	X1	0.876
PHASE/HZ	3/60	Slips(HZ)	0.94	R2	0.159	X2	1.160
		WK2 ()	0.000			XM	30.000

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

09WGT459

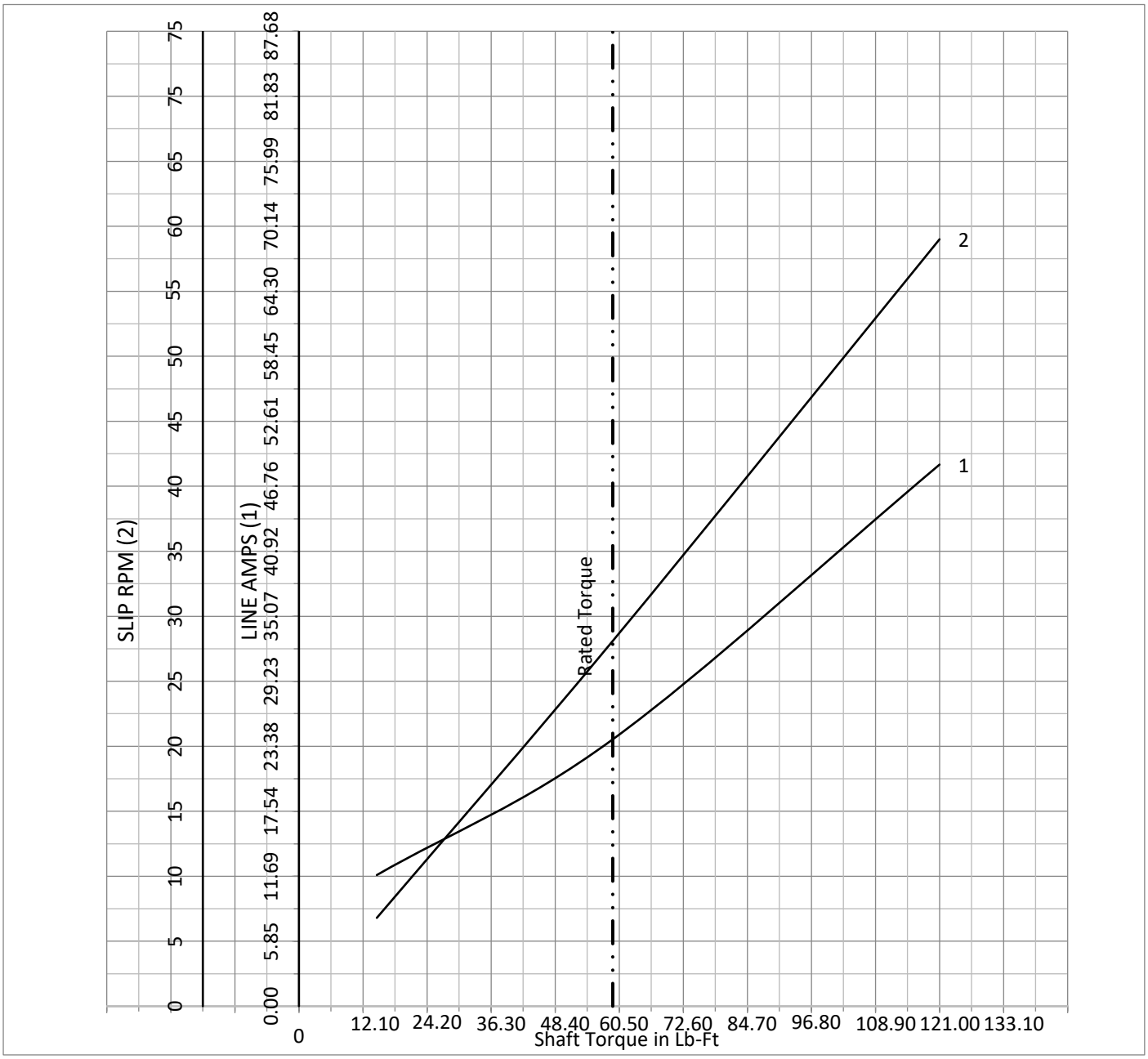
Record: 67965

VOLTS	208/460	MAX SAFE RPM	2700	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FL AMPS	43/24	Base Volt	460	R1	0.167	X1	0.876
HP	20 HP	NL AMPS	10.40	R2	0.159	X2	1.160
BASE SPEED	1771.900024	Slips(HZ)	0.94			XM	30.000
PHASE/HZ	3/60	WK2 ()	0.000				

IDVSM2334T - 20HP, 1770RPM, 3PH, 60HZ, 256TC, 0960M, TEFC, F

Vector PWM Inverer Duty

Vaiable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

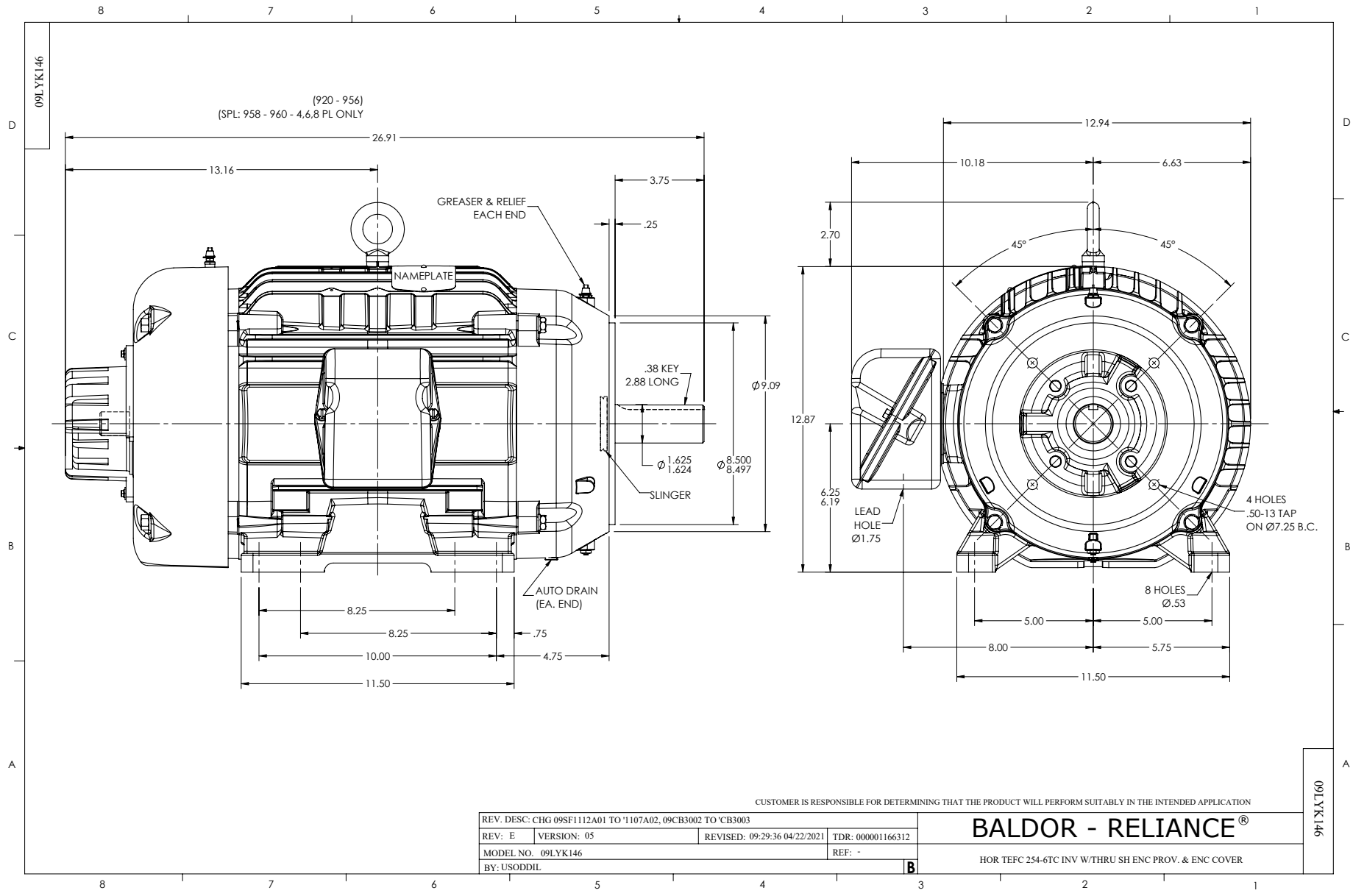
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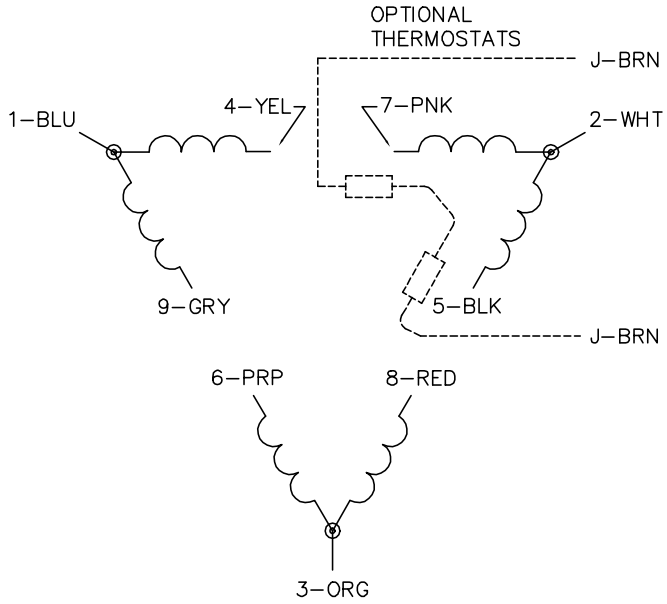
A-C MOTOR PERFORMANCE CURVES

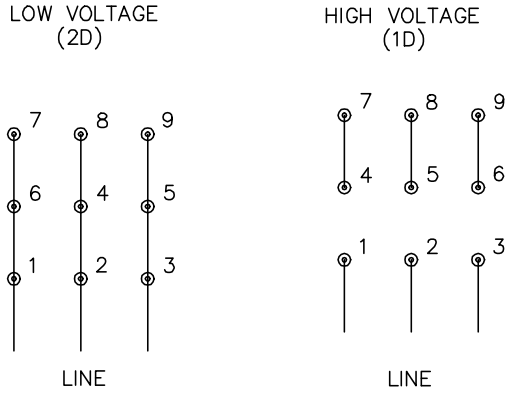
09WGT459

Record: 67965


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

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
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BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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