ABB BALDOR RELIANCE

Customer information packet

IDVSNM2333T

15HP, 1775RPM, 3PH, 60HZ, 256TC, TENV, FOOT,
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	15.000 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	UR
	CSA
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	18.500 A @ 460.0 V
	37.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	18.5 a

Part Detail

Revision	Z
Type	AC
Mech. spec.	09F278
Base	
Status	PRD/A
Elec. spec.	09WGX946
Layout	09LYF278
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	02-14-2012

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
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 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.11 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
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	1765 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	IDVSNM2333T					
SPEC.	09F278X946G2					
FRAME	256TC		**HP**	15 TE		
VOLTS	230/460					
MAG CUR	17.8/8.9			**FLA**	37/18.5	
RPM	1765		**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F	
SER.F.	1.00		**SL HZ**	0.97		
NEMA-NOM-EFF	92.4		**WK2**	2.1		
RATING	40C AMB-CONT					
DE BRG	6309		**ODE BRG**	6208		
CC	010A	**SN**				
	1.5:1 CHP PWM					

REL S.O.	IDVSNM2333T	VOLTS	460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	254TC	AMPS	18.5	MAX SAFE RPM	5400	(AT BASE RATING, 25^{0}C)			
HP	15	DUTY	CONT	In (AMPS)	8.9	R1	0.2200	X1	0.9040
BASE SPEED	1765	S.F.	1.00	P.F. @NL/FL	5/81	R2	0.1840	X2	1.0940
PHASE/HZ	3/60	AMB^{0}C/INSUL	40/F	WK^2 (lb-ft^2)	2.1			XM	26.4200

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1771	15.2	45.0	460	60	18.4
Max Speed	2669	15.0	29.6	460	90	17.1
Min Speed	0	0.0	44.4	18.03	0.97	18.4

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.0	460	60	8.9
1/4	1793	3.8	11.3	460	60	9.9
1/2	1787	7.7	22.5	460	60	12.0
3/4	1780	11.4	33.8	460	60	15.0
Full Load	1771	15.2	45.0	460	60	18.4
O/L	1719	44.9	137.0	460	60	56.6

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

Remarks: Calculated Data
Vector PWM Inverter Duty

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CK BY E Rowan
APP BY E Rowan
DATE 8/20/2012

A-C MOTOR
PERFORMANCE CURVES

09F278X946G2

ISSUE DATE 8/20/2012

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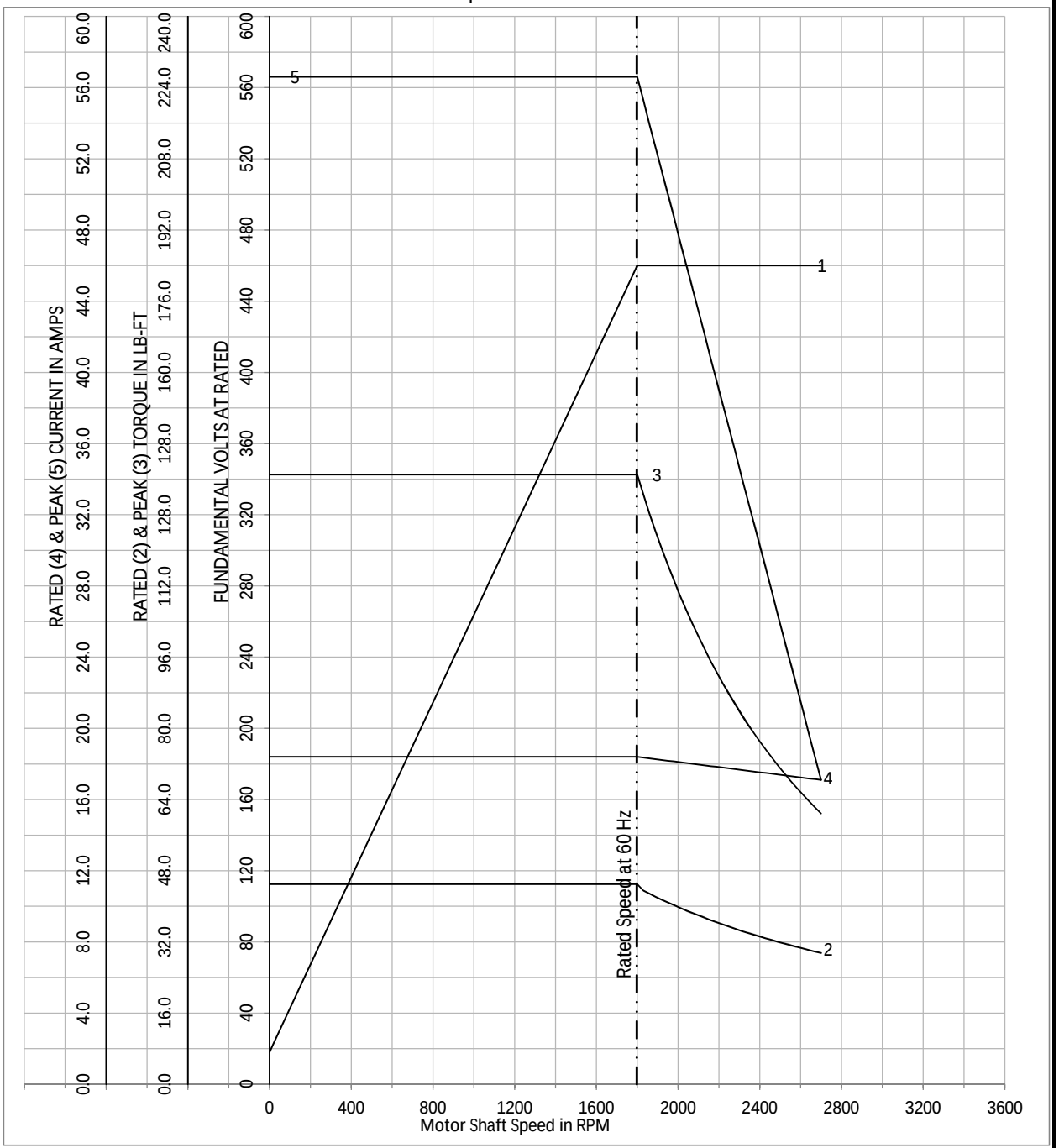
PHASE/HZ	3/60	AMB^{0}C/INSUL	40/F	WK^2 (lb-ft^2)	2.1			XM	26.4200

Vector PWM Inverer Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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09F278X946G2

SH 1 of 2

ISSUE DATE 8/20/2012

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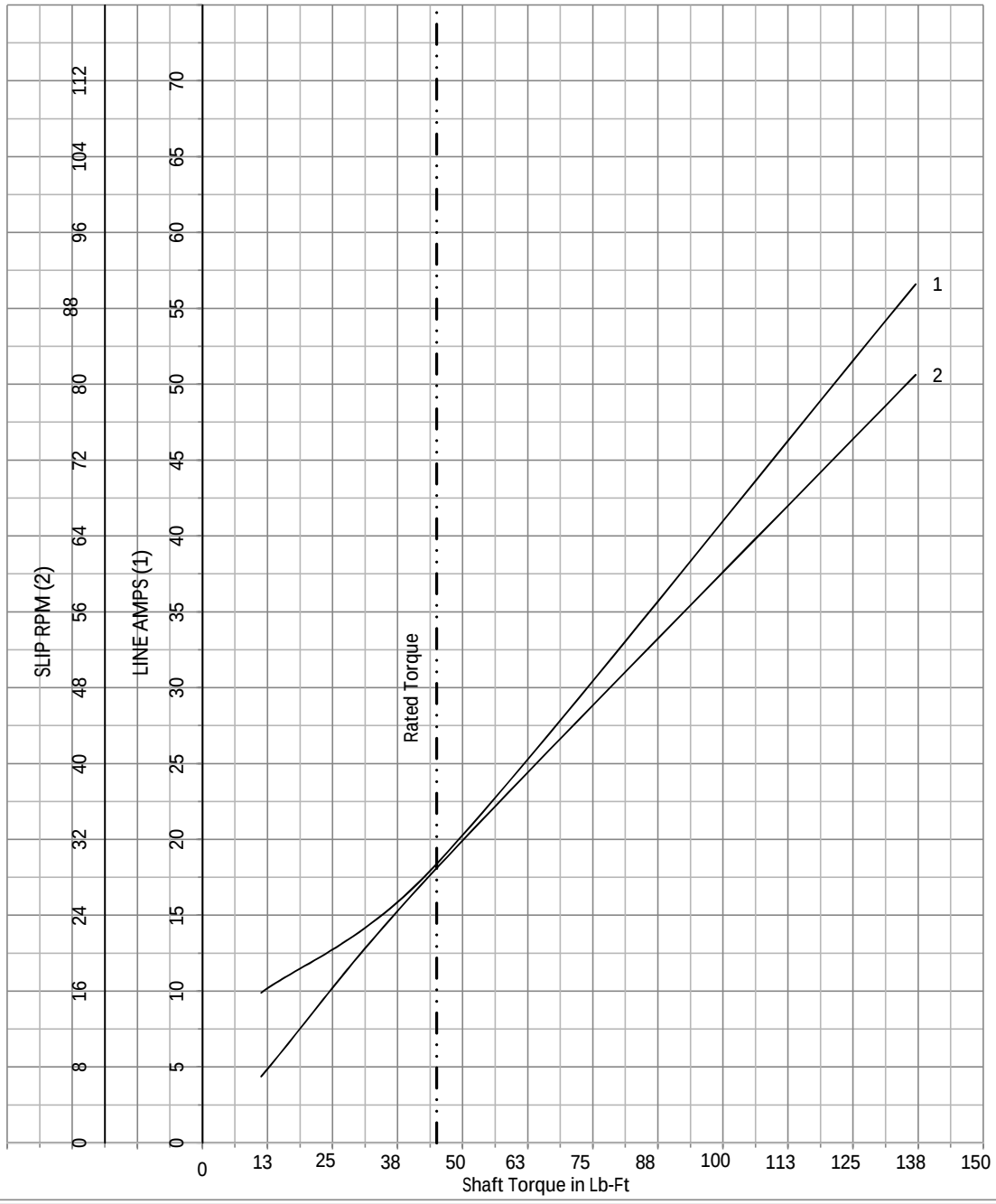
Vector PWM Inverer Duty
Variable Speed AC Motor Curves



Calculated Data

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A-C MOTOR PERFORMANCE CURVES

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SH 1 of 2

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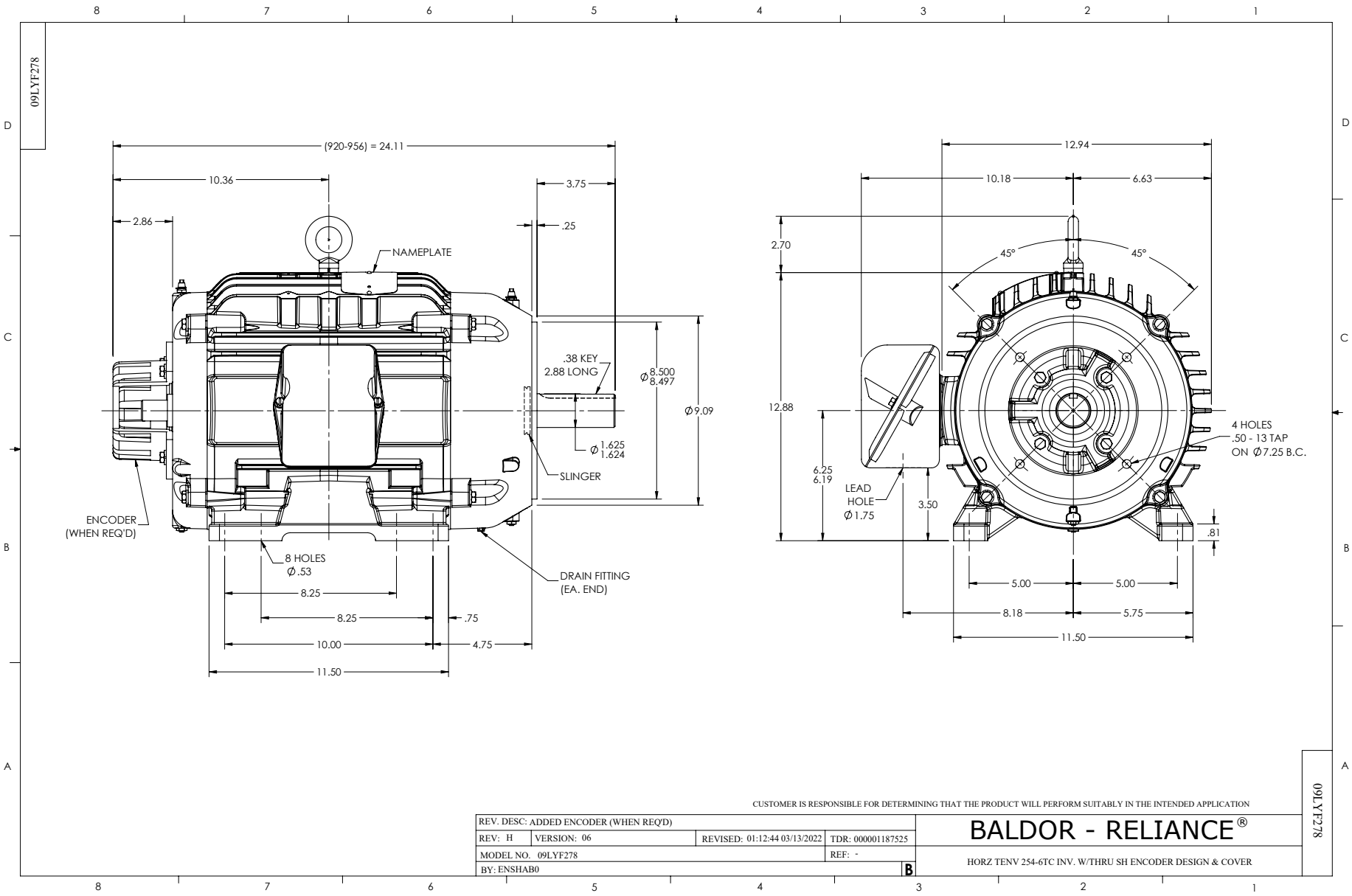
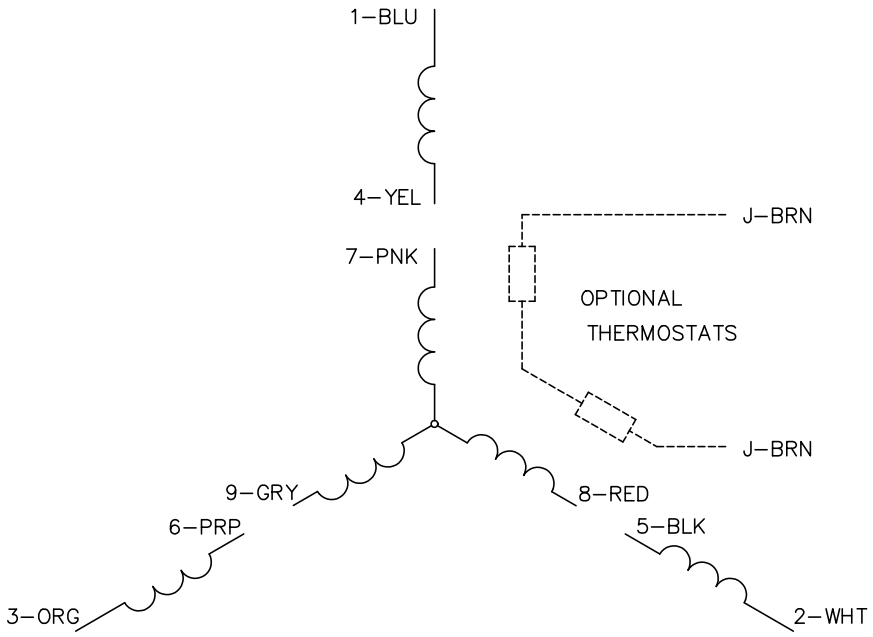
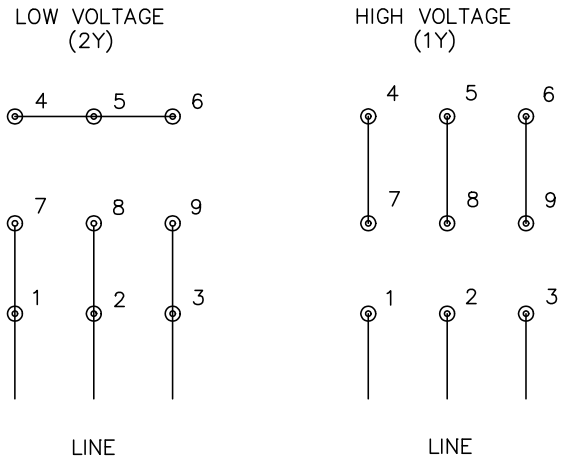

09LYF278
(920-956) = 24.11
10.36
3.75
2.86
.25
NAMEPLATE
.38 KEY
2.88 LONG
Ø8.500
8.497
Ø9.09
Ø1.625
1.624
SLINGER
ENCODER
(WHEN REQ'D)
8 HOLES
Ø.53
DRAIN FITTING
(EA. END)
8.25
8.25
.75
10.00
4.75
11.50
12.94
10.18
6.63
2.70
45°
45°
12.88
4 HOLES
.50 - 13 TAP
ON Ø7.25 B.C.
6.25
6.19
LEAD
HOLE
Ø1.75
3.50
.81
5.00
5.00
8.18
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADDED ENCODER (WHEN REQ'D)
REV: H
VERSION: 06
REVISED: 01:12:44 03/13/2022
TDR: 000001187525
MODEL NO. 09LYF278
REF: -
BY: ENSHAB0
B
BALDOR - RELIANCE®
HORZ TENV 254-6TC INV. W/THRU SH ENCODER DESIGN & COVER
09LYF278

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS