ABB BALDOR RELIANCE

Customer information packet

ZDWNM22938T

10HP, 1765RPM, 3PH, 60HZ, 254TC, 3956M, TENV
Class -
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/16/2026 12:54:50 PM

Specifications

Enclosure	TENV
Frame	254TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 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	12.000 A @ 460.0 V
	24.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	ENCODER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	12.0 a
Insulation Class	H

Part Detail

Revision	AD
Type	AC
Mech. spec.	39S001
Base	
Status	PRD/A
Elec. spec.	39WGW632
Layout	39LYS001
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	01-01-0001

Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3956M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.92 IN
Power Factor	85
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
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	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

Nameplate

NP1167L									
CAT NO	ZDWNM22938T								
SPEC.	39S001W632Z1								
FRAME	254TC		**HP**	10 TE					
VOLTS	230/460								
MAG CUR	8.8/4.4			**FLA**	24/12				
RPM	1765		**RPM MAX**	5000					
HZ	60	**PH**	3	**CLASS**	H				
SER.F.	1.00	**DES**	B	**SL HZ**	1.22				
NEMA-NOM-EFF	91.7	**WK2**	2.44						
BLWR V		**PH**		**HZ**		**A**			
RATING	40C AMB-CONT								
DE BRG	6309		**ODE BRG**	6208					
CC	010A	**SN**							

BALDOR
A MEMBER OF THE ABB GROUP

AC Induction Motor Performance Data

Record # 12831
Typical performance - not guaranteed values

Winding: 39WGW632	**Type:** 3956M	**Enclosure:** TENV

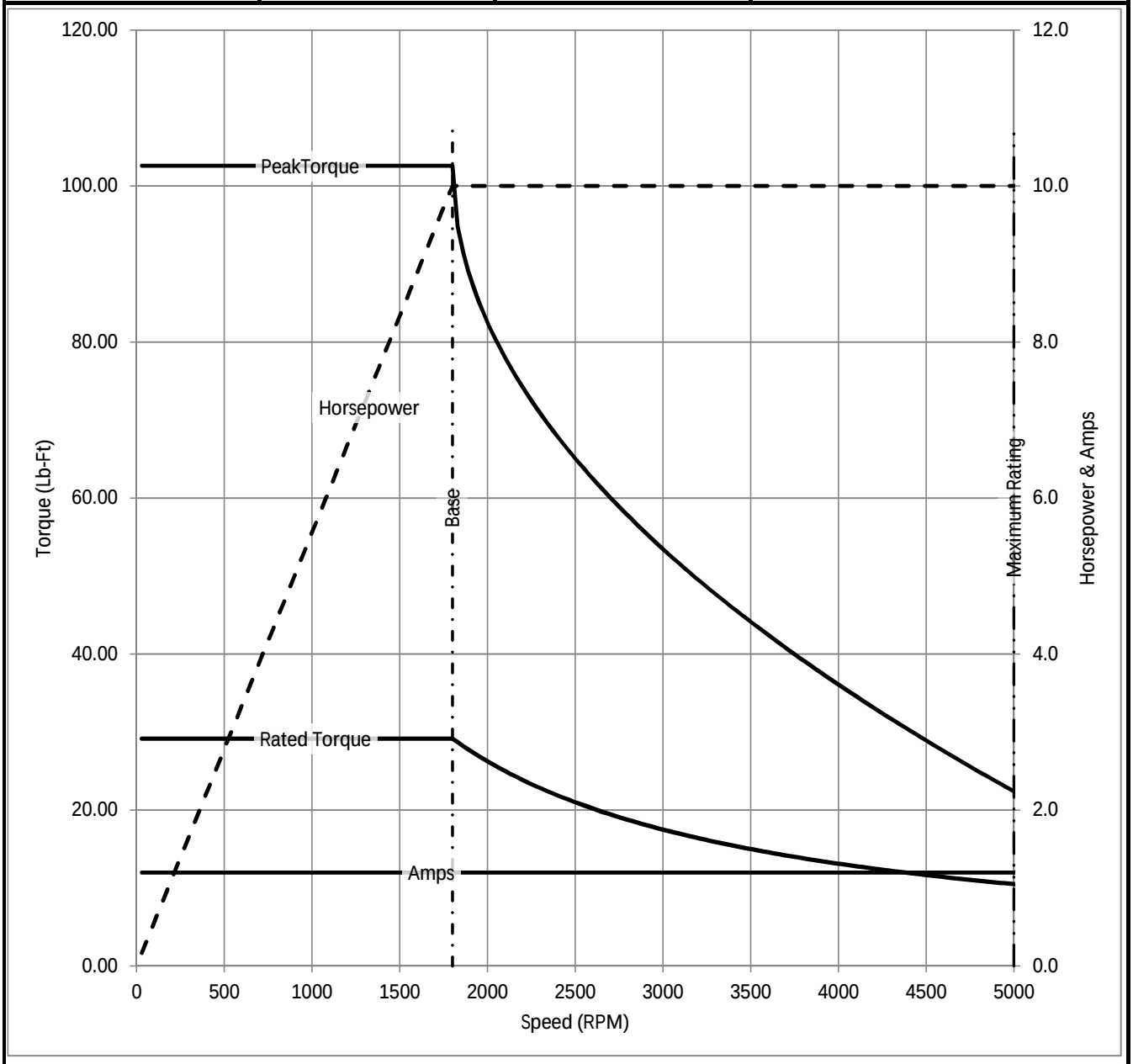
Nameplate Data				General Characteristics at 460 V, 60 Hz: High Volt Connection	
Rated Output (HP)	10			Full Load Torque	30 LB-FT
Volts	230/460			Start Configuration	DOL
Full Load Amps	24/12			Break Down Torque	114 LB-FT
R.P.M.	1765			Pull-Up Torque	41.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	58 LB-FT
NEMA Design Code	B	KVA Code	H	Starting Current	87 Amps
Service Factor	1			No-load Current	4.4 Amps
NEMA Nom. Eff.	91.7	P.F.	85	Line-line Res. @ 25°C.	0.744 Ohms
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	89°C
S.F. Amps				Temp. Rise @ S.F. Load	

Load Characteristics at 460 Volts, 60 Hz, 10 HP

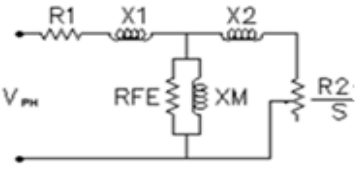
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	72	81	85	86	87	
Efficiency	87.7	91.7	92.4	92	91.2	90.1	
Speed	1791	1783	1774	1764	1753	1741	
Line Amperes	5.3	7.2	9.5	12	14.9	17.9	

Baldor Electric Company Fort Smith, Arkansas BALDOR • RELIANCE

Catalog	ZDWNM22938T	NP VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)	
FRAME	254TC	NP AMPS	24/12	Base Volts	460	R1 0.355	X1 1.628
HP	10 HP	DUTY	Cont	Base AMPS	12	R2 0.319	X2 2.049
BASE SPEED	1800	MAX SAFE RPM	5000	Slip Hz	1.20		XM 56.060
PHASE/HZ	3/60	AMB^{0}C/INSUL	40/H	WK^2 (lb-ft^2)	2.45		



Remarks: Calculated Data



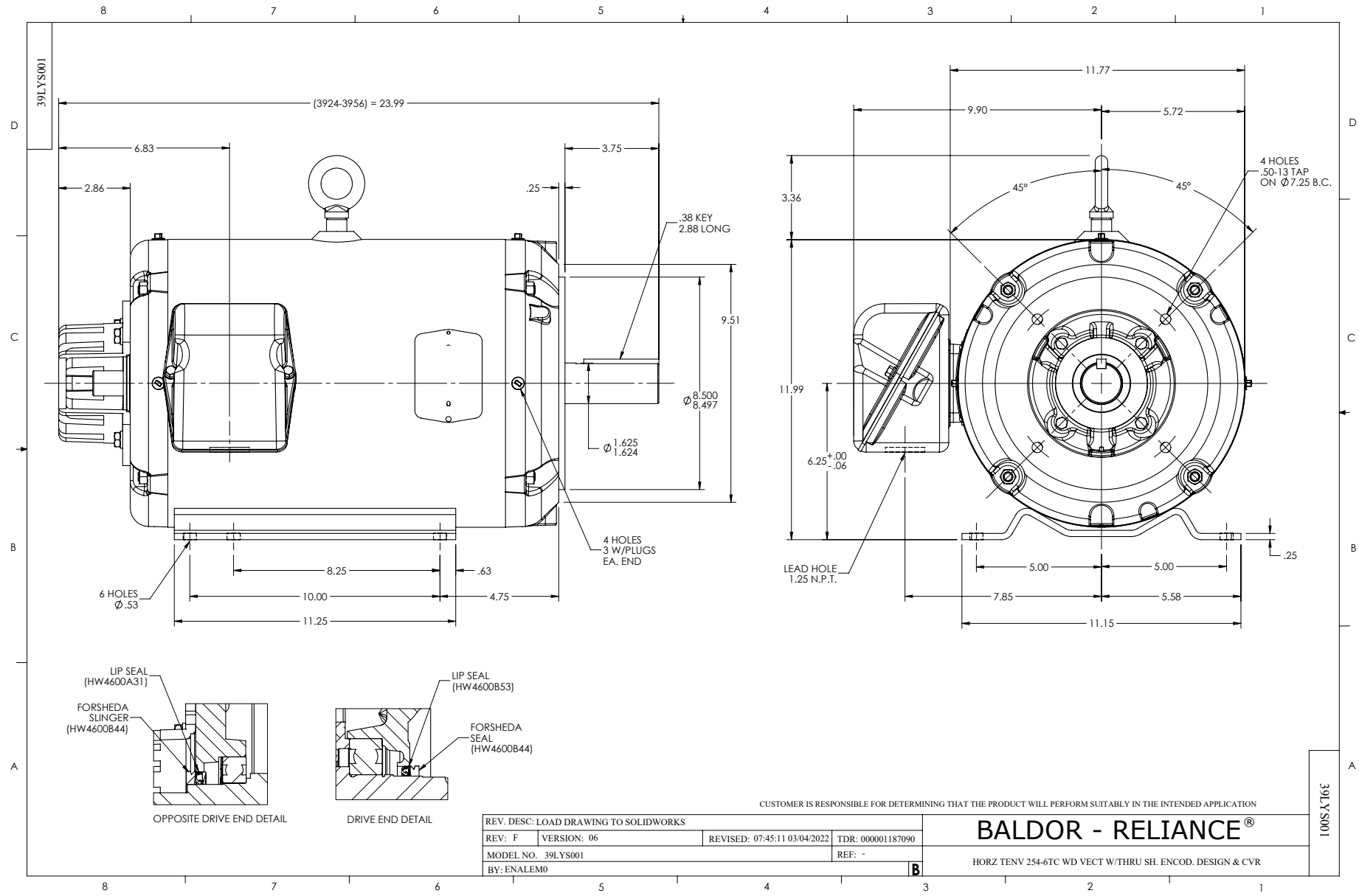
BALDOR
A MEMBER OF THE ABB GROUP

DR BY ENR
CK BY
APP BY ENR
DATE 3/6/2013

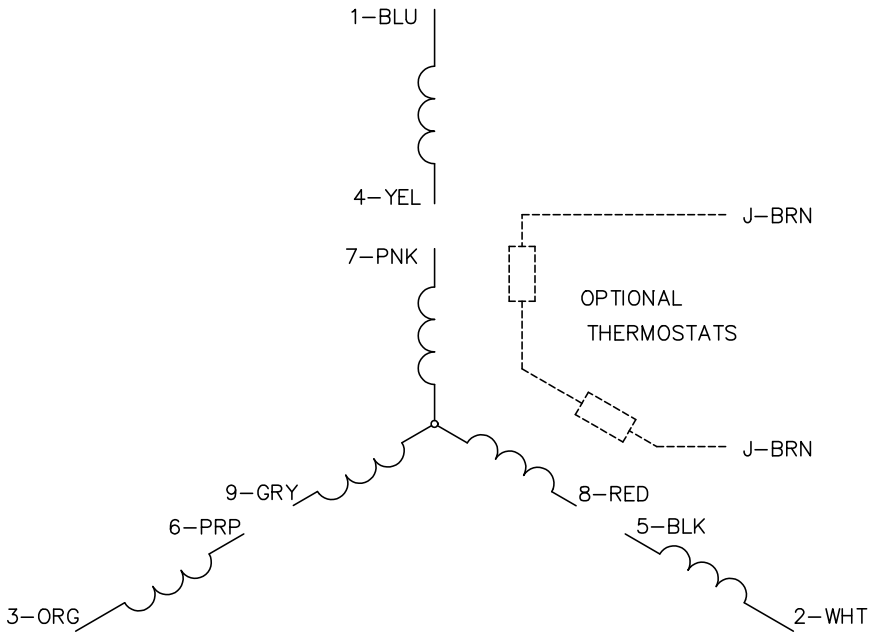
A-C MOTOR
PERFORMANCE CURVES

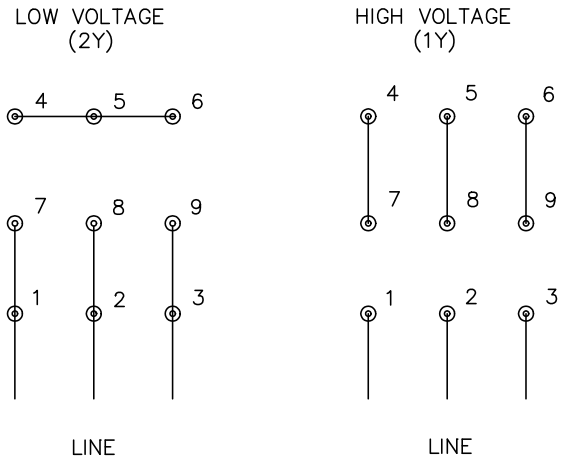
39S001W632Z1

ISSUE DATE 3/6/2013


39LYS001
(3924-3956) = 23.99
6.83
2.86
3.75
.25
.38 KEY
2.88 LONG
9.51
Ø 8.500
8.497
Ø 1.625
1.624
4 HOLES
3 W/PLUGS
EA. END
6 HOLES
Ø .53
8.25
.63
10.00
4.75
11.25
11.77
9.90
5.72
4 HOLES
.50-13 TAP
ON Ø 7.25 B.C.
45°
45°
3.36
11.99
6.25 +.00 -.06
LEAD HOLE
1.25 N.P.T.
.25
5.00
5.00
7.85
5.58
11.15
LIP SEAL
(HW4600A31)
FORSHEDA
SLINGER
(HW4600B44)
OPPOSITE DRIVE END DETAIL
LIP SEAL
(HW4600B53)
FORSHEDA
SEAL
(HW4600B44)
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: F
VERSION: 06
REVISED: 07:45:11 03/04/2022
TDR: 000001187090
MODEL NO. 39LYS001
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ TENV 254-6TC WD VECT W/THRU SH. ENCOD. DESIGN & CVR
39LYS001

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