ABB BALDOR RELIANCE

Customer information packet

IDWNM22937T

7.5HP, 1770RPM, 3PH, 60HZ, 254TC, 3948M, TENV
Class -
Division - Not Applicable

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Specifications

Enclosure	TENV
Frame	254TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 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	17.800 A @ 230.0 V
	8.900 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
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	8.9 a
Insulation Class	H

Part Detail

Revision	K
Type	AC
Mech. spec.	39R099
Base	
Status	PRD/A
Elec. spec.	39WGX950
Layout	39LYR099
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	02-23-2016

Inverter Code	Inverter Duty
KVA Code	J
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	3948M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.92 IN
Power Factor	84
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	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

Nameplate

NP1162L							
CAT NO	IDWNM22937T						
SPEC.	39R099X950G1						
FRAME	254TC		**HP**	7.5 TE			
VOLTS	230/460						
MAG CUR	7.4/3.7			**FLA**	17.8/8.9		
RPM	1770		**RPM MAX**	5000			
HZ	60	**PH**	3	**CLASS**	H		
SER.F.	1.00	**DES**	A	**SL HZ**	1		
NEMA-NOM-EFF	91.7	**WK2**	2.1				
BLWR V		**PH**		**HZ**		**A**	
RATING	40C AMB-CONT						
DE BRG	6309		**ODE BRG**	6208			
CC	010A	**SN**					

Parts List

Part number	Description	Quantity
SA315712	SA 39R099X950G1	1.000 ea
RA303248	RA 39R099X950G1	1.000 ea
HA6016P	ADAPTER, CAST CONDUT BOX EPOXY PRIMER	1.000 ea
09GS1006	GASKET, CONDUIT BOX, NEOP-1/16 THICK-BLA	1.000 ea
09CB3002A01P	CB MACH - 1.25 N.P.T. LEAD HOLE W/EPOXY	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
39EP1100A25P	FREP, MACH W/LIP SEAL, ENC & COVER MTG	1.000 ea
10XN2520S12	BOLT 1/4 - 20X 3/4 HEX HEAD SS (F/S)	1.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	1.000 ea
HW4600A31	SEAL,NATIONAL #453065 SINGLE LIP DOUBLE	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
10XN2520S28	1/4-20X 1 3/4 HEX HD SS X	4.000 ea
39EP1500A04P	PU ENDPLATE, MACH W/EPOXY PRIMER	1.000 ea
HW4600B53	SEAL 1.688 X 2.275 X 0.312 SINGLE LIP DB	1.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
HA3154S02	THRUBOLT STUD 3/8-16 X 15.875 SS	4.000 ea
XY3816S12	3/8-16 HEX FINISHED NUT SS	8.000 ea
HA6881	BEI HS35 THRU SHAFT ENCODER PROTECTIVE C	1.000 ea
10XN3816S12	3/8-16 X 3/4 HEX HD CAP SCREW, STAINLE	3.000 ea
HW1001S38	WASHER, 3/8 SPLT LK, STAINLESS STEEL	3.000 ea
09CB3501P	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 ea
19XT2520S12	1/4-20X3/4 HWH NO SLOT TY.23 18-8 S.S.	2.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	2.000 ea
HW2502G25	#303 SS,SQ KEY 3/8 X 2.880	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 ea
HA5027A01	HA4066A01 T-DRAIN X2 BAGGED	1.000 ea

09GS1017	GASKET, CONDUIT BOX, .125 THICK BLACK NE	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
HW4032A01	BLACK DRAIN PLUG FOR WASH DOWN MOTORS	3.000 ea
MG1025W01	WILKOFAST, 781.01, SIGNAL WHITE #9003	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1164	LABEL,WARNING AND DRAIN	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP1162L	SS INV UL CSA CC	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data
Record # 57991
Typical performance - not guaranteed values

Winding: 39WGX950-R001	**Type:** 3948M	**Enclosure:** TENV

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	22.1 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			17.8/8.9	**Breakdown Torque**	86.6 LB-FT
R.P.M.			1770	**Pull-up Torque**	32.9 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	44.4 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	68.7 A
Service Factor (S.F.)			1	**No-load Current**	3.67 A
NEMA Nom. Eff.	91.7	**Power Factor**	84	**Line-line Res. @ 25ºC**	1.05 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
				Locked-rotor Power Factor	32.9

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	46	69	79	84	86	87
Efficiency	88.3	92.4	93.1	93	92.4	91.5
Speed	1792.6	1786.1	1779.3	1772.7	1765.1	1756.1
Line amperes	4.27	5.55	7.17	8.94	11	13.2

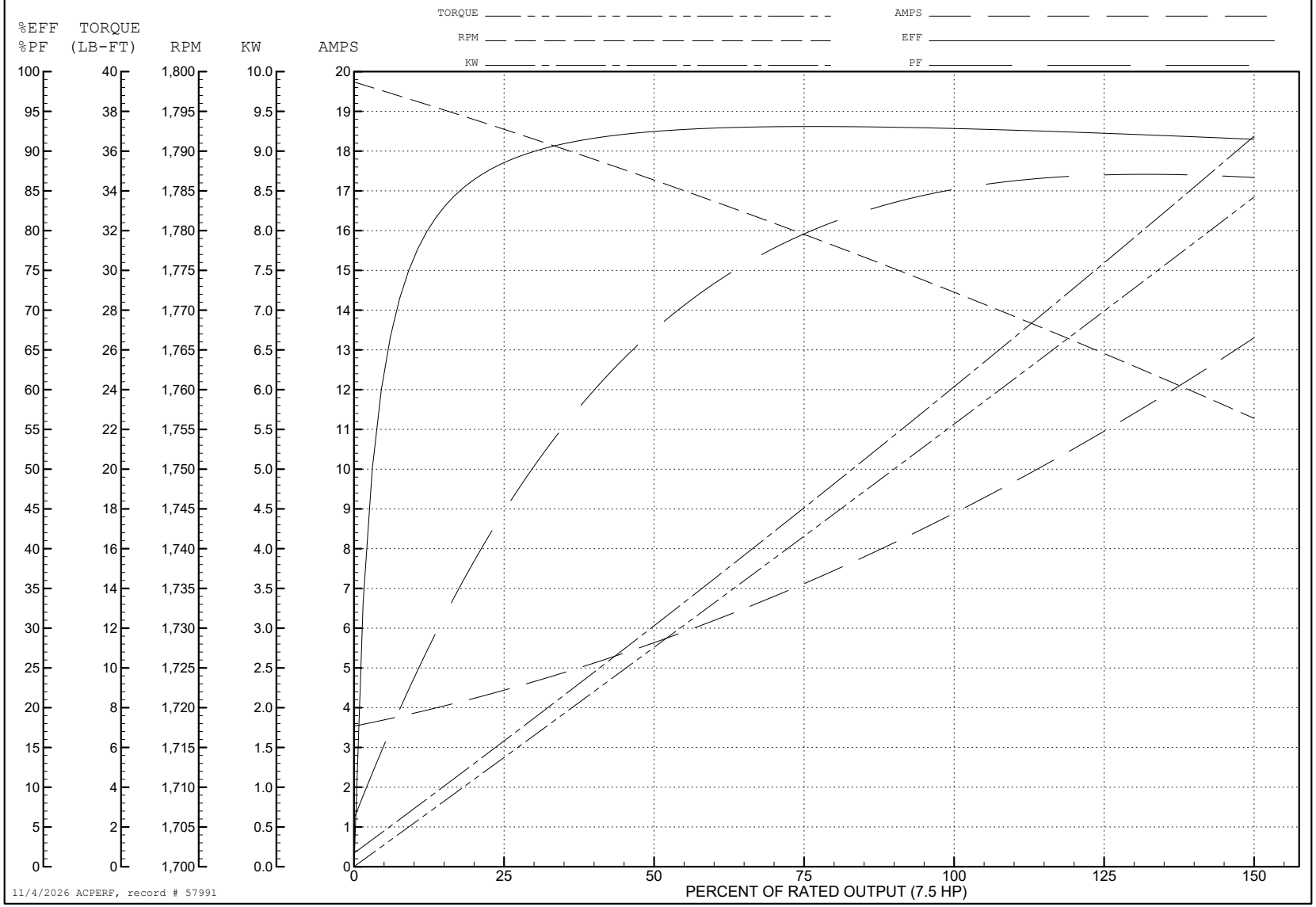
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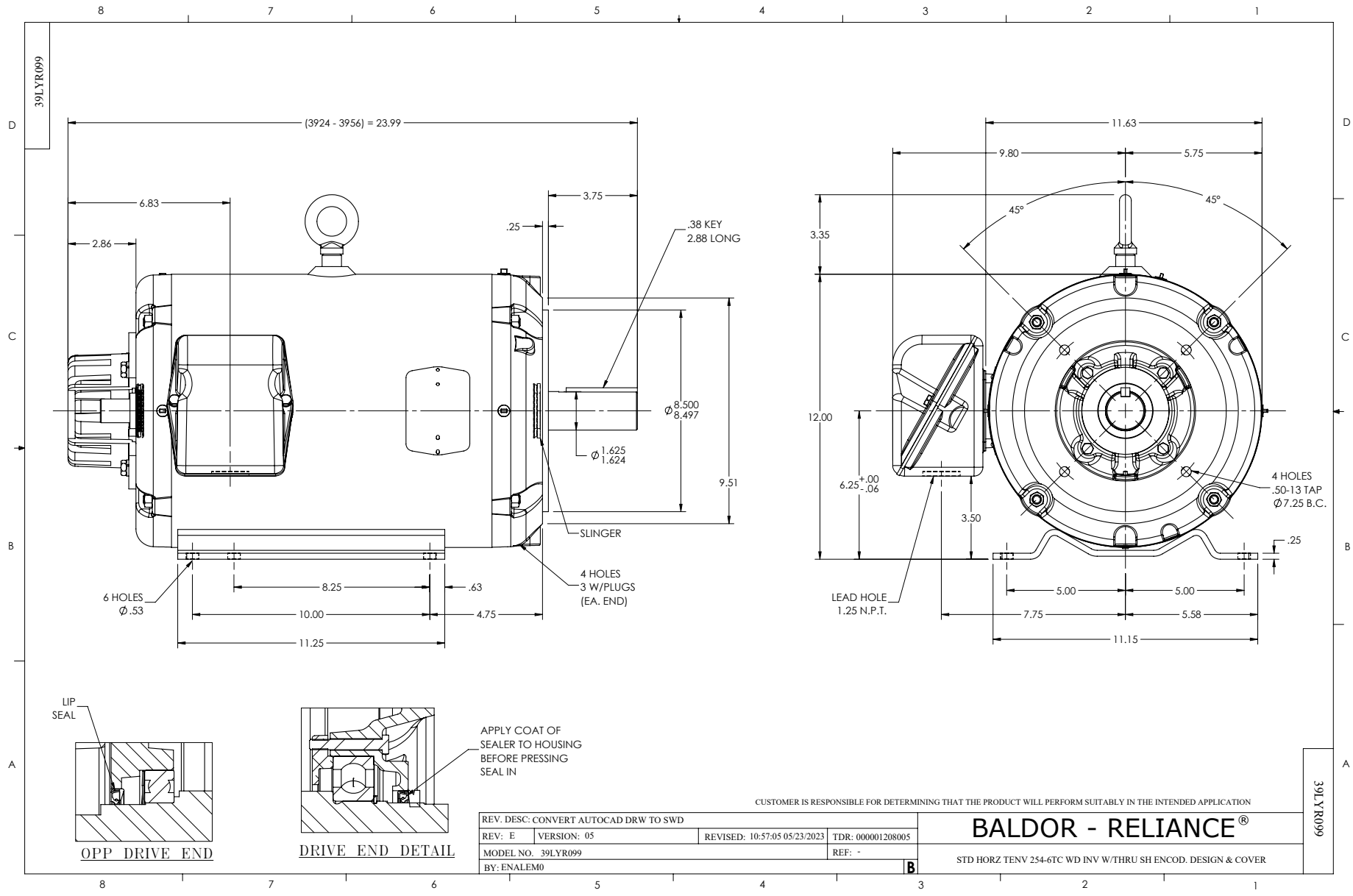
WINDING # 39WGX950

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3948M

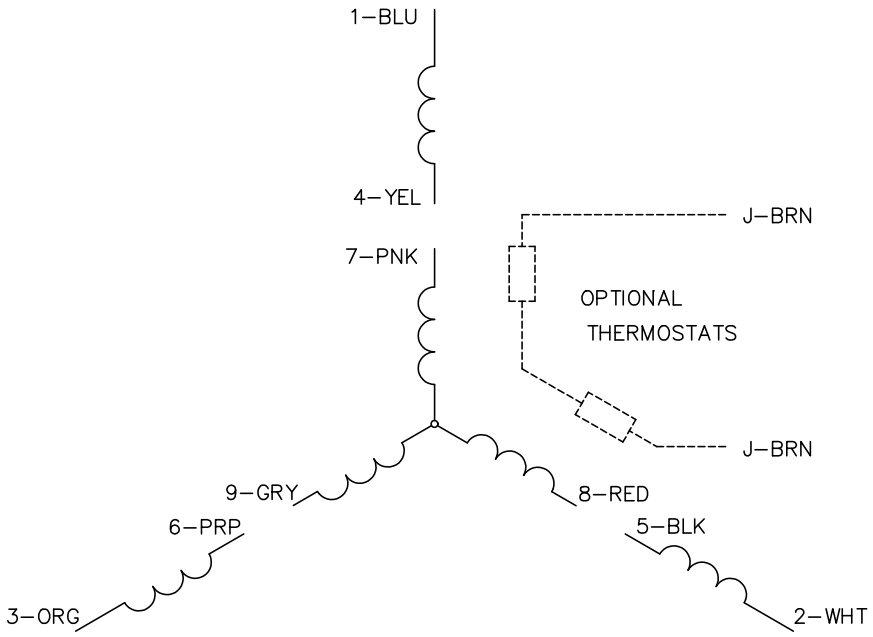
TORQUES(LB-FT): PO=86.6 PU=32.9 LR=44.4 LRA=68.7

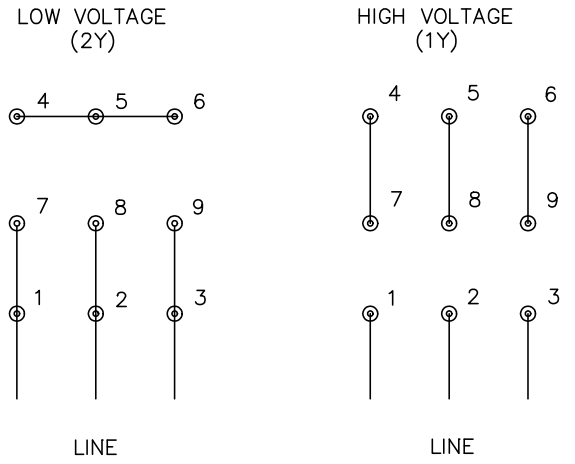
Typical performance - not guaranteed values.




39LYR099
(3924 - 3956) = 23.99
6.83
2.86
3.75
.25
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø 1.625
1.624
9.51
SLINGER
4 HOLES
3 W/PLUGS
(EA. END)
6 HOLES
Ø .53
8.25
.63
10.00
4.75
11.25
11.63
9.80
5.75
45°
45°
3.35
12.00
6.25 +.00 -.06
3.50
4 HOLES
.50-13 TAP
Ø 7.25 B.C.
.25
LEAD HOLE
1.25 N.P.T.
5.00
5.00
7.75
5.58
11.15
LIP
SEAL
OPP DRIVE END
APPLY COAT OF
SEALER TO HOUSING
BEFORE PRESSING
SEAL IN
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: E
VERSION: 05
REVISED: 10:57:05 05/23/2023
TDR: 000001208005
MODEL NO. 39LYR099
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ TENV 254-6TC WD INV W/THRU SH ENCOD. DESIGN & COVER
39LYR099

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