ABB BALDOR RELIANCE

Customer information packet

FSWDM23934T-E

20HP, 1765RPM, 3PH, 60HZ, 256T, 3960M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256T
Frame Material	Stainless Steel
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	UR
	CSA
	NEMA PREMIUM
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	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.	39E739
Base	
Status	PRD/A
Elec. spec.	39WGY400
Layout	39LYE739
Eff. date	11-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#12
Proprietary	False
Created date	01-29-2018

High Voltage Full Load Amps	24.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.18 IN
Power Factor	84
Product Family	WD All SS Encapsulated
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	No Slinger
Speed	1765 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4427AAA05												
CAT #	FSWDM23934T-E			**WGT**		**LBS**						
SPEC	39E739Y400G1			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	69					
HP	20		**MAG CUR**	19.4/9.7								
VOLTS	230/460					**NEMA NOM. EFF**	93					
AMPS	48/24				**PF**	84						
RATING	40C AMB-CONT											
RPM	1765			**MAX RPM**	2700							
FRAME	256T	**HZ**	60	**CODE**	J	**CLASS**	H					
SER.F.	1.00	**SF AMP**		**PH**	3	**DES**	A					
DE	6309		**ODE**	6309								
LUBRICATION	POLYREX EM											
ID LOGO	**INV TYPE:**		**VPWM**	**CHP**	60	**TO**	90		1.5:1			
ID LOGO	**WK2**	2.52	**CT**	30	**TO**	60		2:1				
ID LOGO	**SL HZ**	1.2	**VT**	6	**TO**	60		10:1				
										QR		
YR												

Parts List

Part number	Description	Quantity
SA351096	SA 39E739Y400G1	1.000 ea
RA339767	RA 39E739Y400G1	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
39CB1001A01	39 MID-SECTION, - 3PC. BOX W/5.75-12 THD	1.000 ea
RM1070A79	O-RING, -051 VITON/FKM .070CS X 5.489ID	1.000 ea
10XN2520S10	1/4-20X 5/8 HEX HD CAP SS	4.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
10XN2520G08	25-20 X.50 - PAINTED GREEN	1.000 ea
39EP1904A02	FREP ENCL 309 BRG (STAINLESS) POLISHED	1.000 ea
RM1070A80	O-RING, VITON/FKM .070CS X 10.800ID	1.000 ea
HW4600F81	45 X 68 X 10 LIP SEAL, GRAPHITE INFUSED	1.000 ea
HW4600F80	45 X 62 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW4500S33	1/8 NPT STAINLESS #304 SS PLUG	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
39EP1904A01	PUEP ENCL 309 BRG (STAINLESS) POLISHED	1.000 ea
RM1070A80	O-RING, VITON/FKM .070CS X 10.800ID	1.000 ea
HW4600F81	45 X 68 X 10 LIP SEAL, GRAPHITE INFUSED	1.000 ea
HW4600F80	45 X 62 X 4.5 AFS SEAL, GRAPHITE INFUSED	1.000 ea
RM1070A78	O-RING, -012 VITON/FKM .070CS X .364ID	4.000 ea
39FH4004A01	304 SS FANCOVER SPUN W/SLOTS & MTG(POLIS	1.000 ea
10XN2520FS08	HEX HD CAP SCREW 1/4-20 X 1/2 SS FOOD SA	3.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	3.000 ea
39CB1500A01	39 LID, 3 PC. BOX STAINLESS (POLISHED)	1.000 ea
RM1070A79	O-RING, -051 VITON/FKM .070CS X 5.489ID	1.000 ea
HW2502G25	#303 SS,SQ KEY 3/8 X 2.880	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.005 qt
MJ5004A37	#76732 LOCTITE ANTISEIZE THRD COMPOUND	0.005 ea
HA5027A09	DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HA3105FS14	THRUBOLT, 3/8-16 X 17.250 SS FOOD SAFE	4.000 ea

HW2502F08	KEY, 5/16 SQ X .875 303 SS	1.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea
WD5603A01	KIT, CLOSED-END LEAD SPLICE (18-14GA)	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000013	ZRTG FE ASSEMBLY	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea
HA1025A03	FELT WSH 2.1875 OD X 1.170 ID X .25 #321	8.000 ea
PE-0000003	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 69070
Typical performance - not guaranteed values

Winding: 39WGY400-R001	**Type:** 3960M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	59.38 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	226 LB-FT
R.P.M.			1765	**Pull-up Torque**	109 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	139 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	188 A
Service Factor (S.F.)			1	**No-load Current**	9.7 A
NEMA Nom. Eff.	93	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.371 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	92°C
				Locked-rotor Power Factor	30.4

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	47	69	79	84	86	87
Efficiency	89.8	93.1	93.5	93.1	92.4	91.3
Speed	1792	1784.5	1776.1	1767.4	1758.1	1747.4
Line amperes	11.2	14.5	18.9	23.9	29.3	35.2

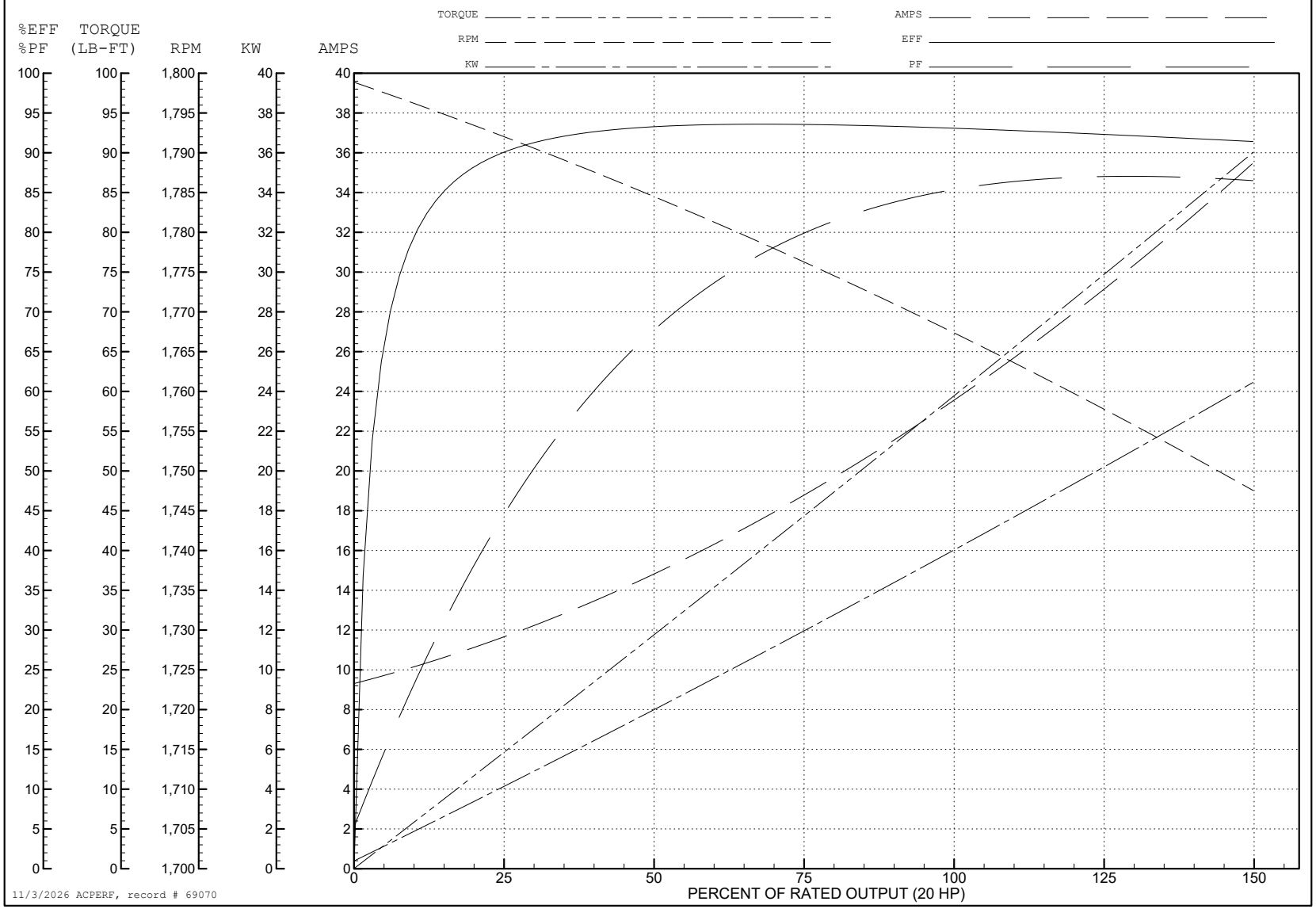
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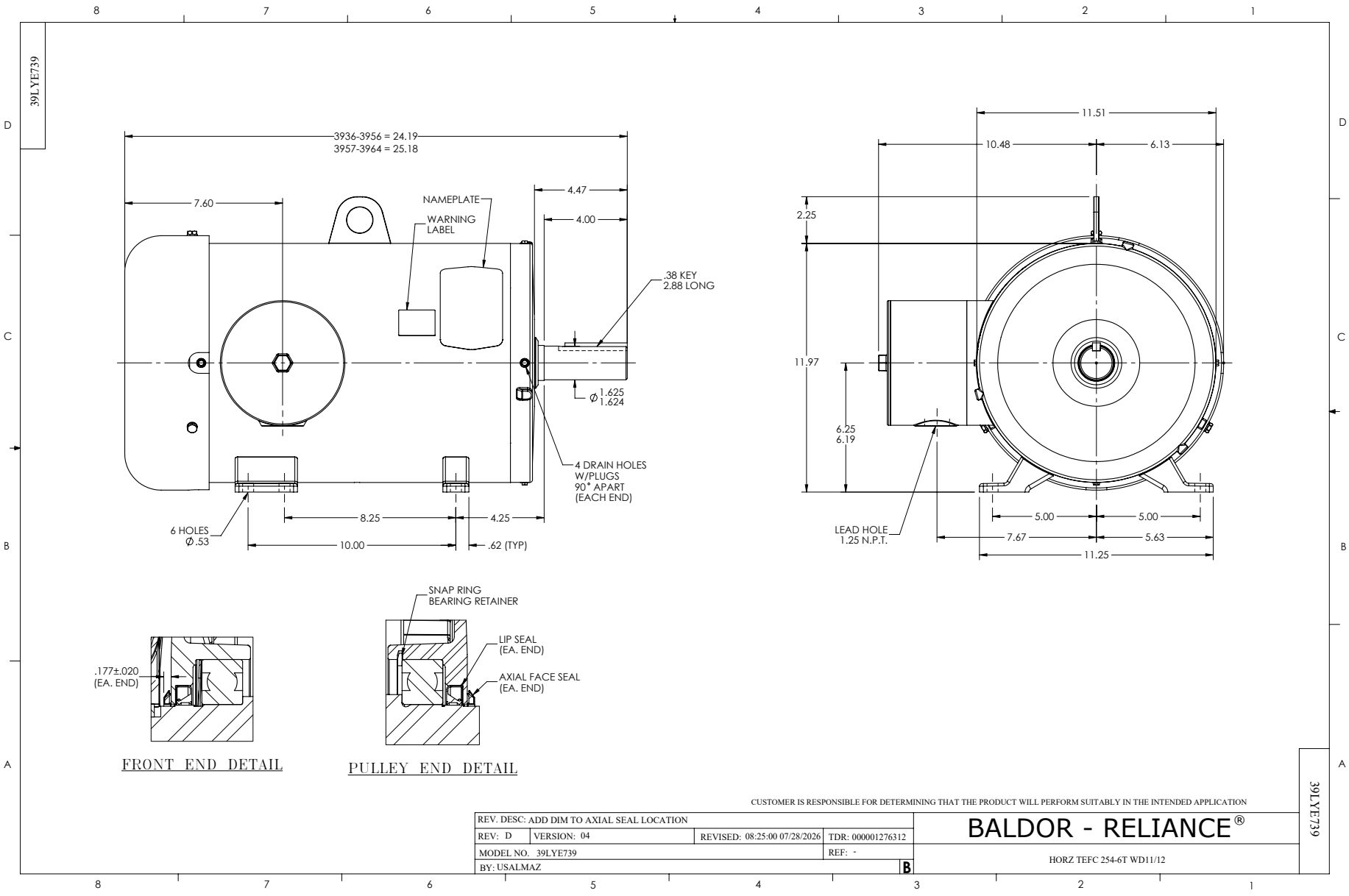
WINDING # 39WGY400

20 HP 3 PH 60 HZ 1765 RPM 460 V 3960M

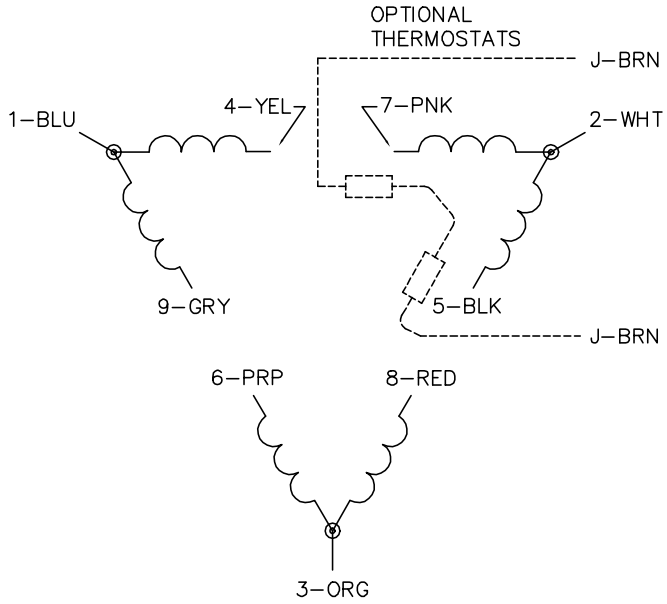
Typical performance - not guaranteed values.

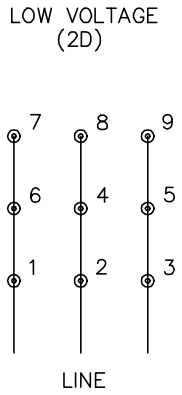
TORQUES(LB-FT): PO=226 PU=109 LR=139 LRA=188

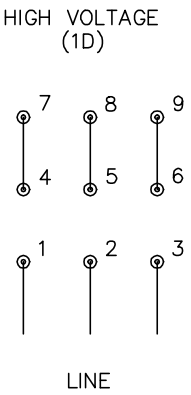



39LYE739
3936-3956 = 24.19
3957-3964 = 25.18
7.60
NAMEPLATE
WARNING LABEL
4.47
4.00
.38 KEY
2.88 LONG
Ø 1.625
1.624
4 DRAIN HOLES
W/PLUGS
90° APART
(EACH END)
6 HOLES
Ø .53
8.25
4.25
10.00
.62 (TYP)
11.51
10.48
6.13
2.25
11.97
6.25
6.19
LEAD HOLE
1.25 N.P.T.
5.00
5.00
7.67
5.63
11.25
SNAP RING
BEARING RETAINER
LIP SEAL
(EA. END)
AXIAL FACE SEAL
(EA. END)
.177±.020
(EA. END)
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: D
VERSION: 04
REVISED: 08:25:00 07/28/2026
TDR: 000001276312
MODEL NO. 39LYE739
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T WD11/12
39LYE739

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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3PH, DV, 9 LEADS, DELTA CONNECTION

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