ABB BALDOR RELIANCE

Customer information packet

IDVSM4110T

40HP, 1775RPM, 3PH, 60HZ, 324T, 1254M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	324T
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	40.000 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	96.000 A @ 230.0 V
	48.000 A @ 460.0 V
	102.000 A @ 208.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
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	J
Type	AC
Mech. spec.	12G534
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYG534
Eff. date	05-05-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	03-14-2017

High Voltage Full Load Amps	48.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
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 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	33.14 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Extension Location	Double Shaft
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2	None

Nameplate

NP3302L					
CAT NO	IDVSM4110T				
SPEC.	12G534Y276G1				
FRAME	324T	**HP**	40 TE		
VOLTS	230/460				
MAG CUR	39/19.5	**FLA**	96/48		
RPM	1775	**RPM MAX**	2700		
HZ	60	**PH**	3	**CLASS**	F
SER.F.	1.00	**SL HZ**	0.85		
NEMA-NOM-EFF	94.1	**WK2**	7.19		
RATING	40C AMB-CONT				
DE BRG	6312	**ODE BRG**	6311		
CC	010A	**SN**			
	1.5:1 CHP PWM				
	1000:1 CT, 1000:1 VT				

Parts List

Part number	Description	Quantity
SA335731	SA 12G534Y276G1	1.000 ea
RA323955	RA 12G534Y276G1	1.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
12EP1107A05	FR ENDPLATE, MACH	1.000 ea
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
12EP1106A01	PU ENDPLATE, MACH	1.000 ea
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
12FH1002A27	FAN COVER, MACH	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 ea
HA6881	BEI HS35 THRU SHAFT ENCODER PROTECTIVE C	1.000 ea
10XN2520K12	1/4-20 X.75 GRD 5	3.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 ea
10CB3500	CONDUIT BOX LID, CAST	1.000 ea
10GS1000	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea

HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.080 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3302L	ALUM INV UL CSA CC (W/OUT DESIGN FIELD)	1.000 ea
10PA1010	PACKAGING GROUP, PRINT PK1151A08	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000013	ZRTG PE ASSEMBLY	1.000 ea
FE-0000022	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data
Record # 51423
Typical performance - not guaranteed values

Winding: 12WGY276-R027	**Type:** 1254M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			40	**Full Load Torque**	118 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			96/48	**Breakdown Torque**	386 LB-FT
R.P.M.			1775	**Pull-up Torque**	193 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	216 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	338 A
Service Factor (S.F.)			1	**No-load Current**	19.9 A
NEMA Nom. Eff.	94.1	**Power Factor**	82	**Line-line Res. @ 25ºC**	0.14898 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	54°C
				Locked-rotor Power Factor	27
				Rotor inertia	7.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	47	69	78	83	85	85
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8

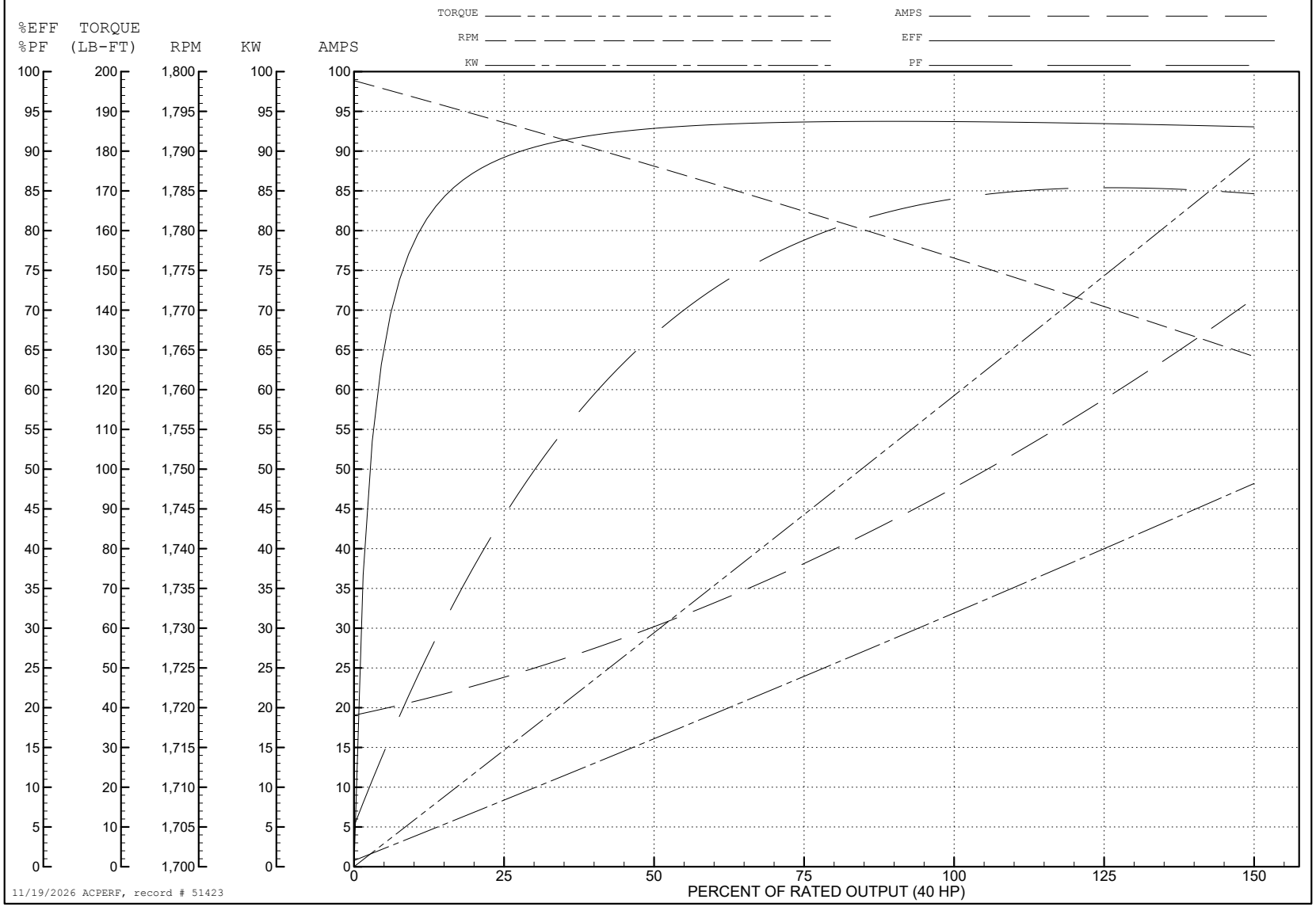
ABB Motors and Mechanical Inc.

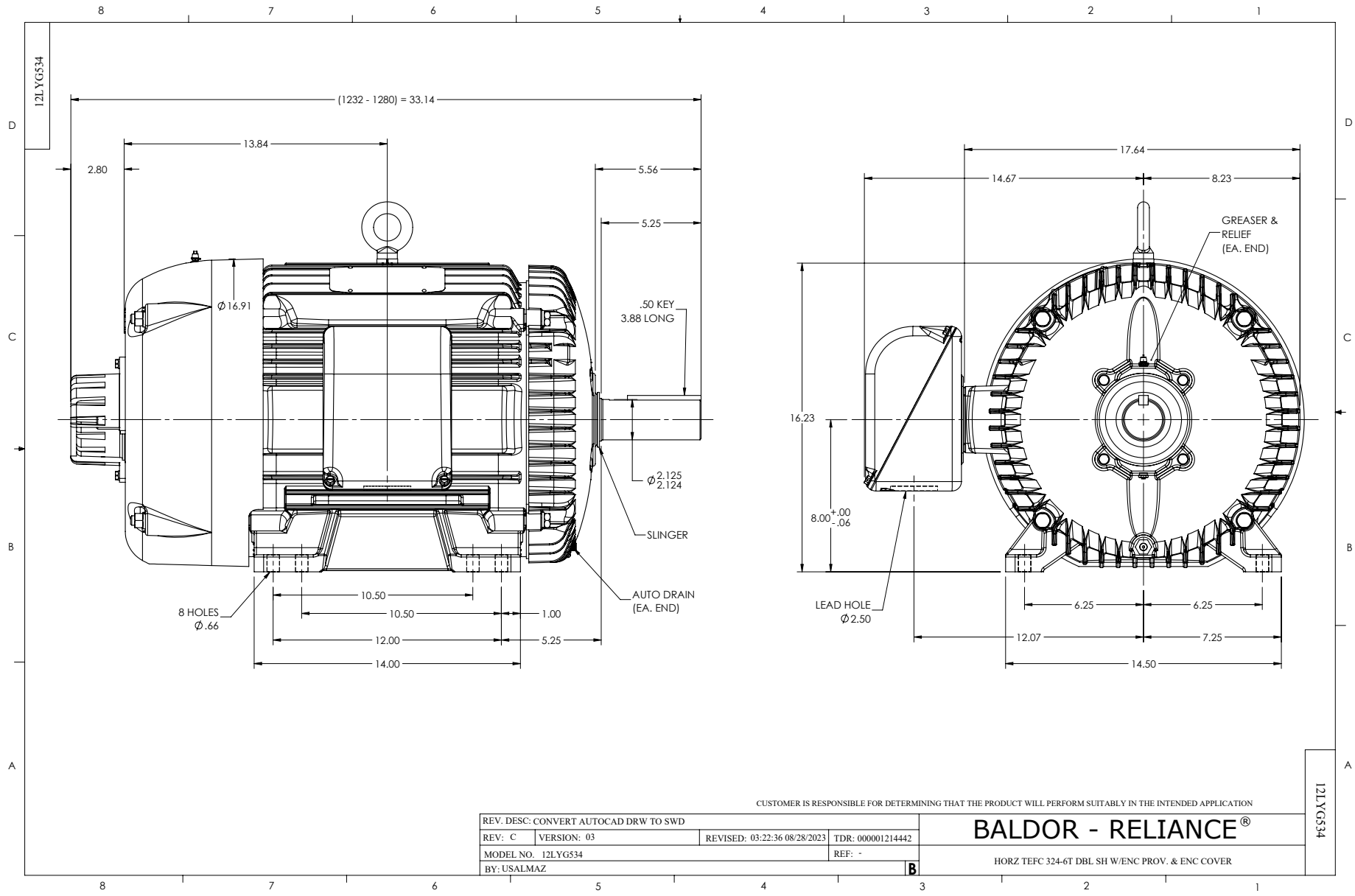
WINDING # 12WGY276

40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

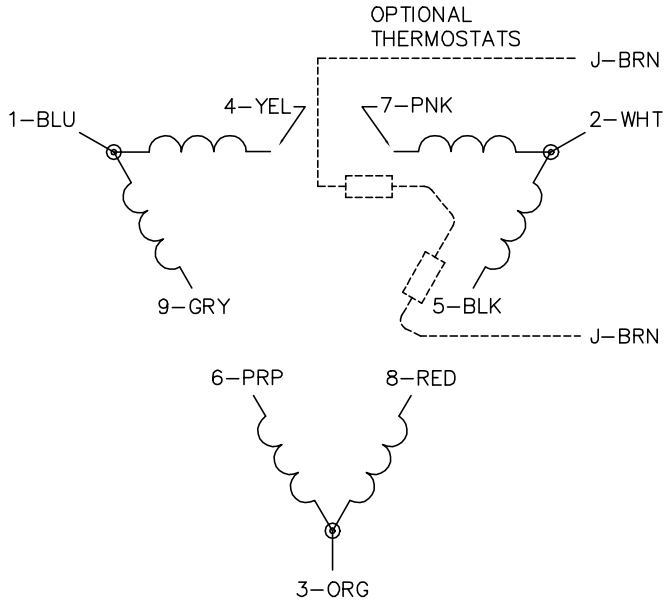
TORQUES(LB-FT): PO=386 PU=193 LR=216 LRA=338

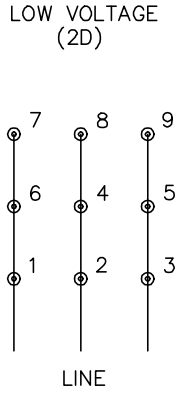
Typical performance - not guaranteed values.

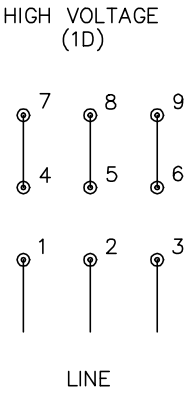



12LYG534
(1232 - 1280) = 33.14
13.84
2.80
5.56
5.25
Ø16.91
.50 KEY
3.88 LONG
Ø2.125
2.124
SLINGER
AUTO DRAIN
(EA. END)
8 HOLES
Ø.66
10.50
10.50
1.00
12.00
5.25
14.00
17.64
14.67
8.23
GREASER &
RELIEF
(EA. END)
16.23
8.00 +.00 -.06
LEAD HOLE
Ø2.50
6.25
6.25
12.07
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD
REV: C
VERSION: 03
REVISED: 03:22:36 08/28/2023
TDR: 000001214442
MODEL NO. 12LYG534
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ TEFC 324-6T DBL SH W/ENC PROV. & ENC COVER
12LYG534

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
MTL: –		

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3PH, DV, 9 LEADS, DELTA CONNECTION

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