ABB BALDOR RELIANCE

Customer information packet

EM4115T-12

50HP, 1775RPM, 3PH, 60HZ, 326T, 1272M, TEFC, F1
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/1/2026 7:03:18 PM

Specifications

Enclosure	TEFC
Frame	326T
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	50.000 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	NEMA PREMIUM
	CURUSEEV
	NEMA PREMIUM (OLD LOGO)
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	116.000 A @ 230.0 V
	58.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
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	T
Type	AC
Mech. spec.	12C51
Base	
Status	PRD/A
Elec. spec.	12WGY340
Layout	12LYC051
Eff. date	01-14-2025
CD Diagram	CD0104
Poles	04
Leads	12#8
Proprietary	False
Created date	08-03-2010

High Voltage Full Load Amps	58.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	12 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	30.28 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2	None

Nameplate

NP3443L											
CAT.NO.	EM4115T-12			**CUST. P/N**						**ENCL**	TEFC
SPEC.	12C051Y340G1	**CC**	010A	**FRAME**	326T		**SER.NO.**				
HP	50	**CLASS**	F	**HZ**	60						
R.P.M.	1775	**PH**	3	**DES**	A						
VOLTS	230/460	**CODE**	G	**ODE BRG**	6311	**DE BRG**	6312				
AMPS	116/58										
RATING	40C AMB-CONT	**NEMA NOM. EFF.**	94.5	**GREASE**	POLYREX EM						
P.F.	85	**SER.F.**	1.15	**VPWM INVERTER READY**							
HTR-VOLTS		**HTR-AMPS**		**HTR-WATTS**							

Parts List

Part number	Description	Quantity
SA200838	SA 12C051Y340G1	1.000 ea
RA188149	RA 12C051Y340G1	1.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	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
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 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
12EP1106A01	PU ENDPLATE, MACH	1.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	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
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
12FH1002SP	FAN COVER, CAST	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
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
10CB3001A31	KOBX, MACH W/2.50 LD HL,.38-16 GND	1.000 ea
WD1000B19	TERMINAL BURNDY L250HP	1.000 ea
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
12EP1107A05	FR ENDPLATE, MACH	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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
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
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0104A01	CONNECTION DIAGRAM	1.000 ea
NP3443L	SS SUPER-E,INV RED,CURUS EEV,NEMA PREM,C	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A08	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 # 32034
Typical performance - not guaranteed values

Winding: 12WGY340-R001	**Type:** 1272M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			50	**Full Load Torque**	147 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			116/58	**Breakdown Torque**	396 LB-FT
R.P.M.			1775	**Pull-up Torque**	183 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	254 LB-FT
NEMA Design Code	A	**KVA Code**	G	**Starting Current**	397 A
Service Factor (S.F.)			1.15	**No-load Current**	19.8 A
NEMA Nom. Eff.	94.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.10889 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	64°C
S.F. Amps				**Temp. Rise @ S.F. Load**	79°C
				Locked-rotor Power Factor	26
				Rotor inertia	9.59 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	53	74	83	86	87	87	87
Efficiency	91.3	94.3	94.8	94.6	94	93.1	94.2
Speed	1794.5	1789.3	1783.5	1777.5	1770.7	1761.5	1773
Line amperes	24.2	33.5	44.7	57.6	71.5	90	65.9

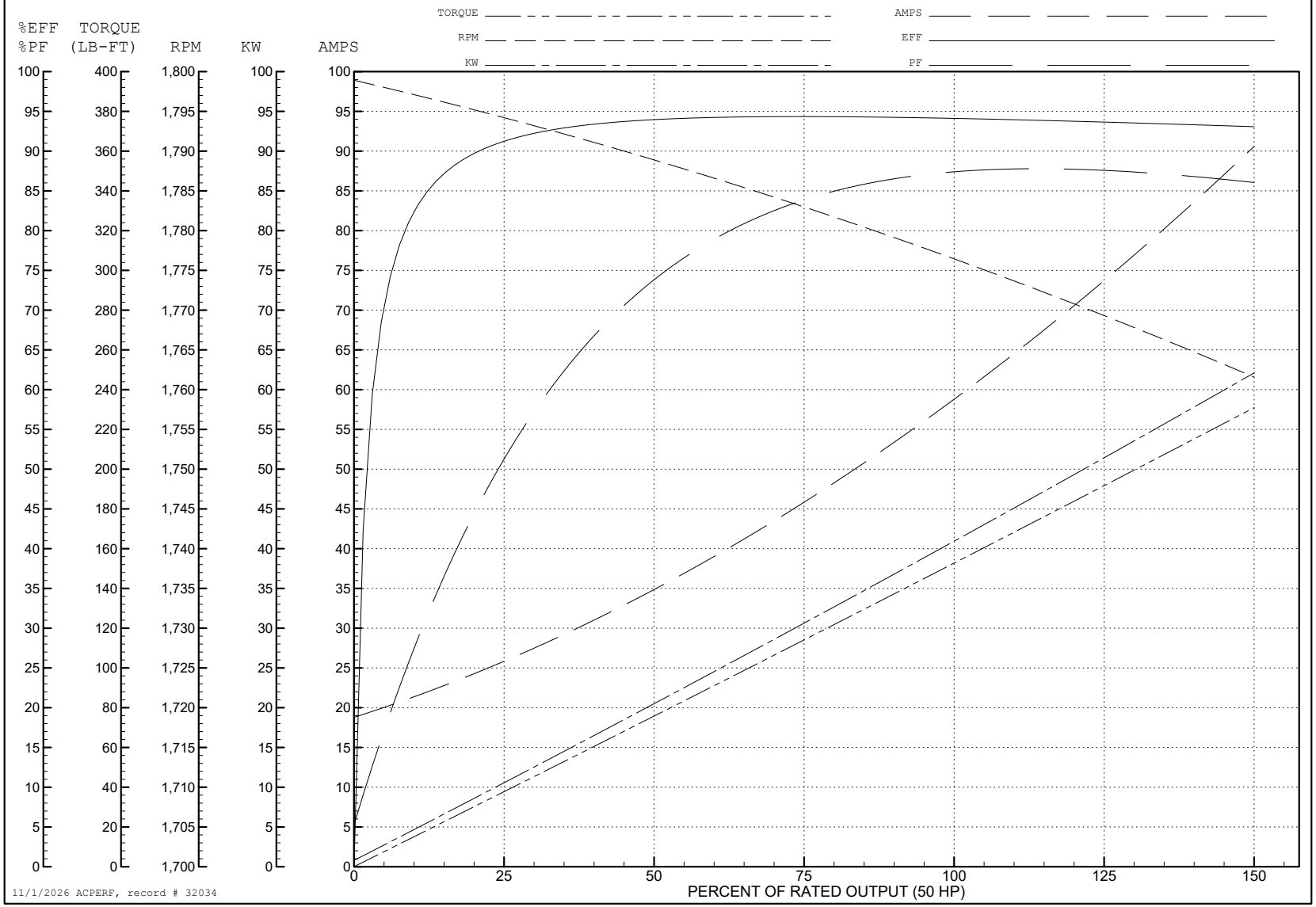
ABB Motors and Mechanical Inc.

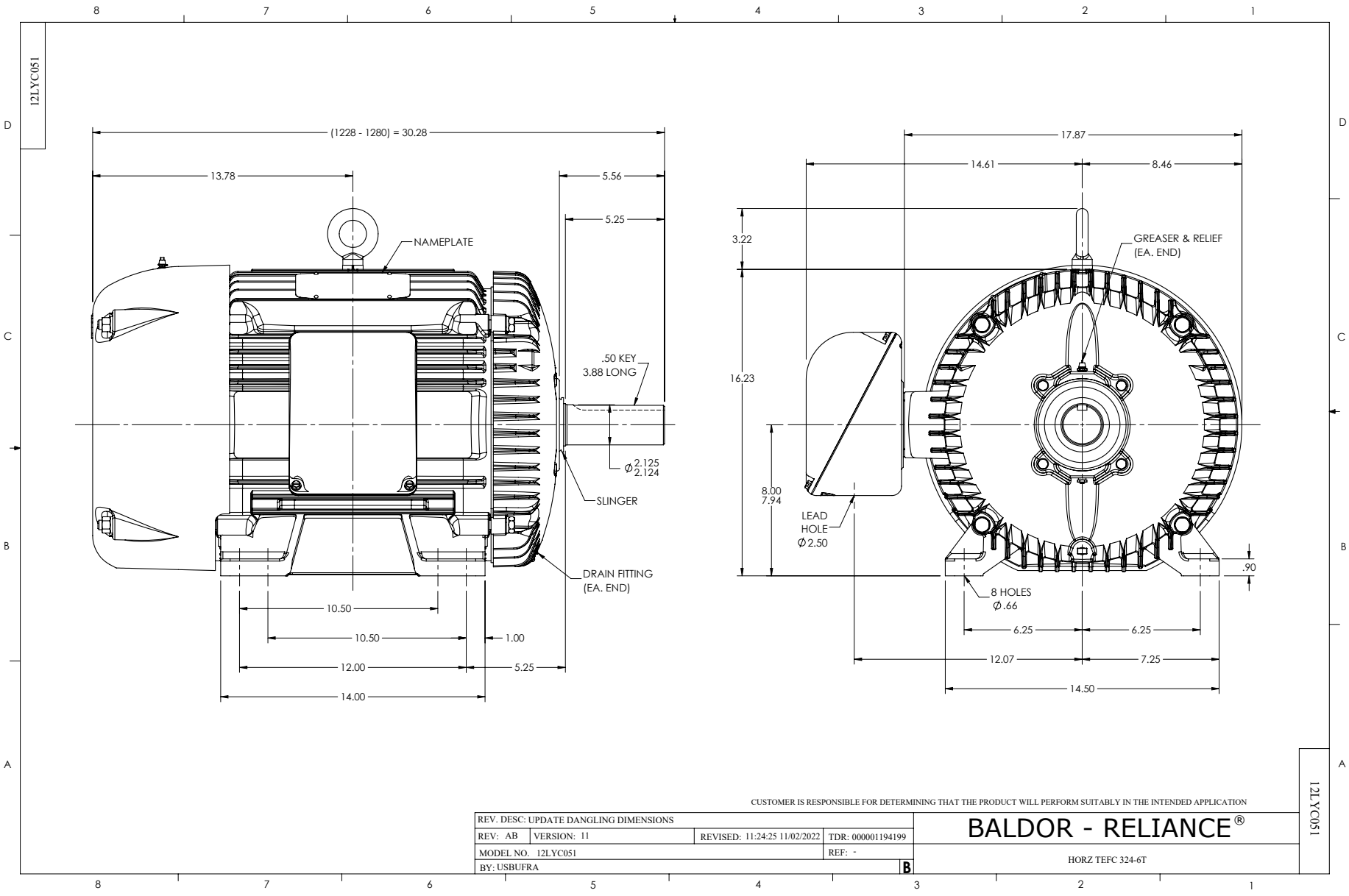
WINDING # 12WGY340

50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

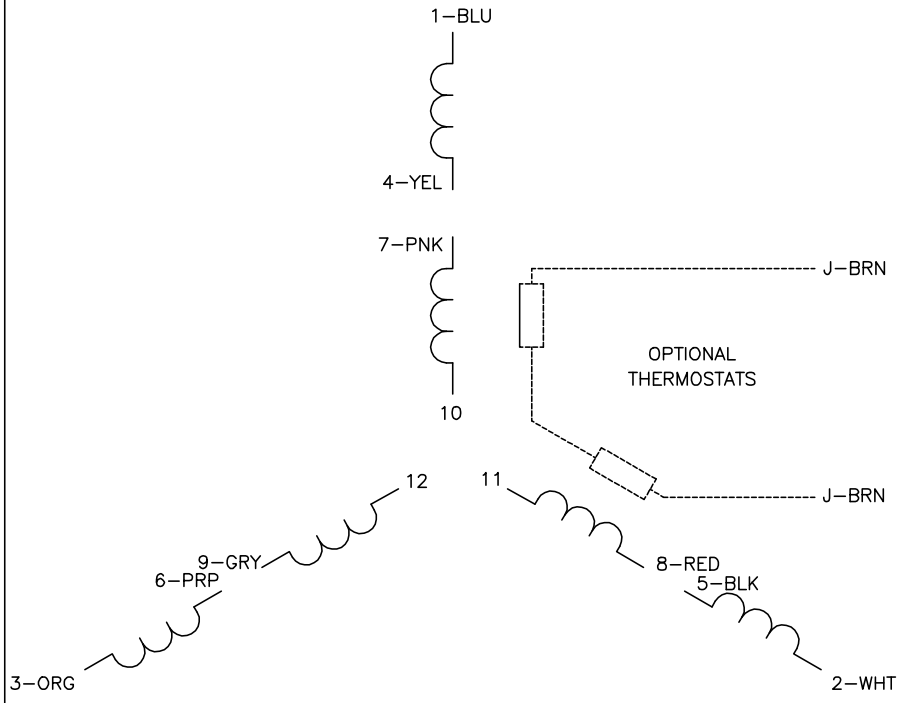
Typical performance - not guaranteed values.

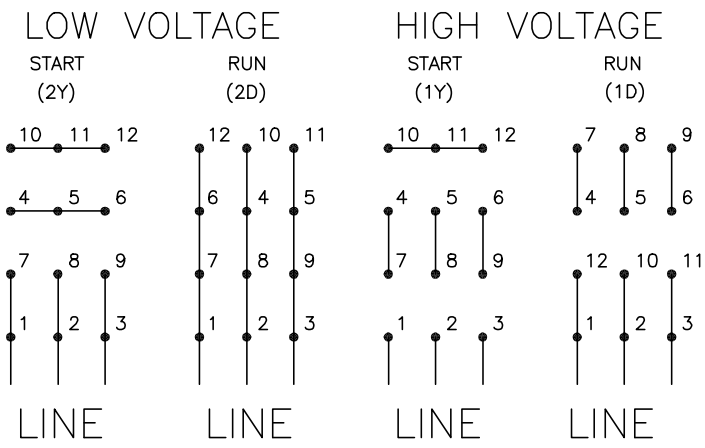
TORQUES(LB-FT): PO=396 PU=183 LR=254 LRA=397




12LYC051
(1228 - 1280) = 30.28
13.78
5.56
5.25
NAMEPLATE
.50 KEY
3.88 LONG
Ø 2.125
2.124
SLINGER
DRAIN FITTING
(EA. END)
10.50
10.50
1.00
12.00
5.25
14.00
17.87
14.61
8.46
3.22
GREASER & RELIEF
(EA. END)
16.23
8.00
7.94
LEAD
HOLE
Ø 2.50
.90
8 HOLES
Ø .66
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: UPDATE DANGLING DIMENSIONS
REV: AB
VERSION: 11
REVISED: 11:24:25 11/02/2022
TDR: 000001194199
MODEL NO. 12LYC051
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ TEFC 324-6T
12LYC051

CD0104





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.

CD0104

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

SH 1 of 1