

BALDOR® • RELIANCE 

Product Information Packet

ECP84115T-5

50HP,1770RPM,3PH,60HZ,326T,TEFC,F1

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY613	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:		Layout:	12LYG135	Poles:	04	Created Date:	12-12-2018
Base:		Eff. Date:	12-08-2020	Leads:	3#8		

Specs			
Catalog Number:	ECP84115T-5	Inverter Code:	Inverter Duty
Enclosure:	TEFC	IP Rating:	IP56
Frame:	326T	KVA Code:	F
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	50.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 8 AWG
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	CLI GP A,B,C,D	Motor Lead Termination:	Ring Terminals
XP Division:	Division II	Motor Type:	1272M
Agency Approvals:	CCSA US	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	87
	UR	Product Family:	Chem Process S/P 32-8 IEEE 841
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS NON-COMPLIANT
Constant Torque Speed Range:	1.3	Shaft Extension Location:	Pulley End

Current @ Voltage:	45.000 A @ 575.0 V	Shaft Ground Indicator:	No Shaft Grounding
Design Code:	B	Shaft Rotation:	Reversible
Drip Cover:	No Drip Cover	Shaft Slinger Indicator:	No Slinger
Duty Rating:	CONT	Speed Code:	Single Speed
Electrically Isolated Bearing:	Not Electrically Isolated	Motor Standards:	NEMA
Enclosure Modification:	841	Starting Method:	Direct on line
Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
Front Face Code:	Standard	Thermal Device - Winding:	None
Front Shaft Indicator:	None	Vibration Sensor Indicator:	No Vibration Sensor
Heater Indicator:	No Heater	Winding Thermal 1:	None
Insulation Class:	F	Winding Thermal 2:	None
		XP Temp Code:	T3

Nameplate NP3190										
STK.NO.	ECP84115T-5		P/N			ENCLOSURE	TEFC			
SPEC.	12-0000-0373		CC	010A	FRAME	326T	S/N			
HP	50		CLASS	F	HZ	60	ODE BRG	6312	DE BRG	6312
RPM	1770	RPM MAX	2700	PH	3	DES	B	D.E. BRG.	60BC03X30X	
VOLT	575		KVA-CODE	F		O.D.E. BRG.	60BC03X30X			
AMP	45		MOTOR WEIGHT	700		GREASE	POLYREX EM			
RATING	40C AMB-CONT		MAX. KVAR	9.4		BLANK				
NEMA-NOM-EFF	94.5	# OF ROTOR BARS	40	SER.F.	1.15		IP	56		
G.MIN.EFF	93.6	# OF STATOR SLOTS	48	PF	87		INV.TYPE	PWM		
TEMP CODE	T3		INVERTER-TEMP-CODE	200						
TEMP =	200		C HP FR	60	C HP TO	90				
CT HZ FROM	1.3	CT HZ TO	60							
HTR-VOLTS			HTR-AMPS			HTR-WATTS			MAX. SPACE HEATER TEMP.	
							VT HZ FROM	0	VT HZ TO	60

Parts List		
Part Number	Description	Quantity
SA364004	SA 12-0000-0373	1.000 EA
RA353307	RA 12-0000-0373	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
NP3190	SS IEEE841 INV DIV-2 UL CSA-C US EEV	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
WD1000B48	T&B D73, RING TERMINAL 8 AWG 3/8 STUD	3.000 EA
WD1000B19	TERMINAL BURNDY L250HP	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 EA
80XN3816A12	SET SCREW,HEX SOCKET CUP POINT,3/8-16 X	4.000 EA
12FH1002A15GP6	FAN COVER, MACH, W/PRIMER W/MG1025N19	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
09FN3001C03	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 LB
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 EA
12EP1111A02GP6	FR ENDPLATE, MACH W/EPOXY PRIMER & RELIA	1.000 EA
HA3400A32	STUD, 1/2-13 X 7.38	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 EA
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 EA
HA4002A03	#304 S.S. DRAIN FITTING, .125 NPT (.44 H	1.000 EA
12EP1111A01P	SPL PUEP 312 BRG FOR INPRO SEAL W/EPOXY	1.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 EA
HW4601A55	INPRO/SEAL #1698-A-M0022-0 VBXX 312 BRG/	1.000 EA
HW4500A20	1/8NPT SL PIPE PLUG	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
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
10CB1000A04P	KO BOX, MACH W/2.00 NPT W/EPOXY PRIMER	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA

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WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 EA
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 EA
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.125 GA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.033 EA
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.025 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
MJ5004A59	ADHESIVE LOCTITE #401 SURFACE INSENSITIV	0.010 EA

AC Induction Motor Performance Data

Record # 47188

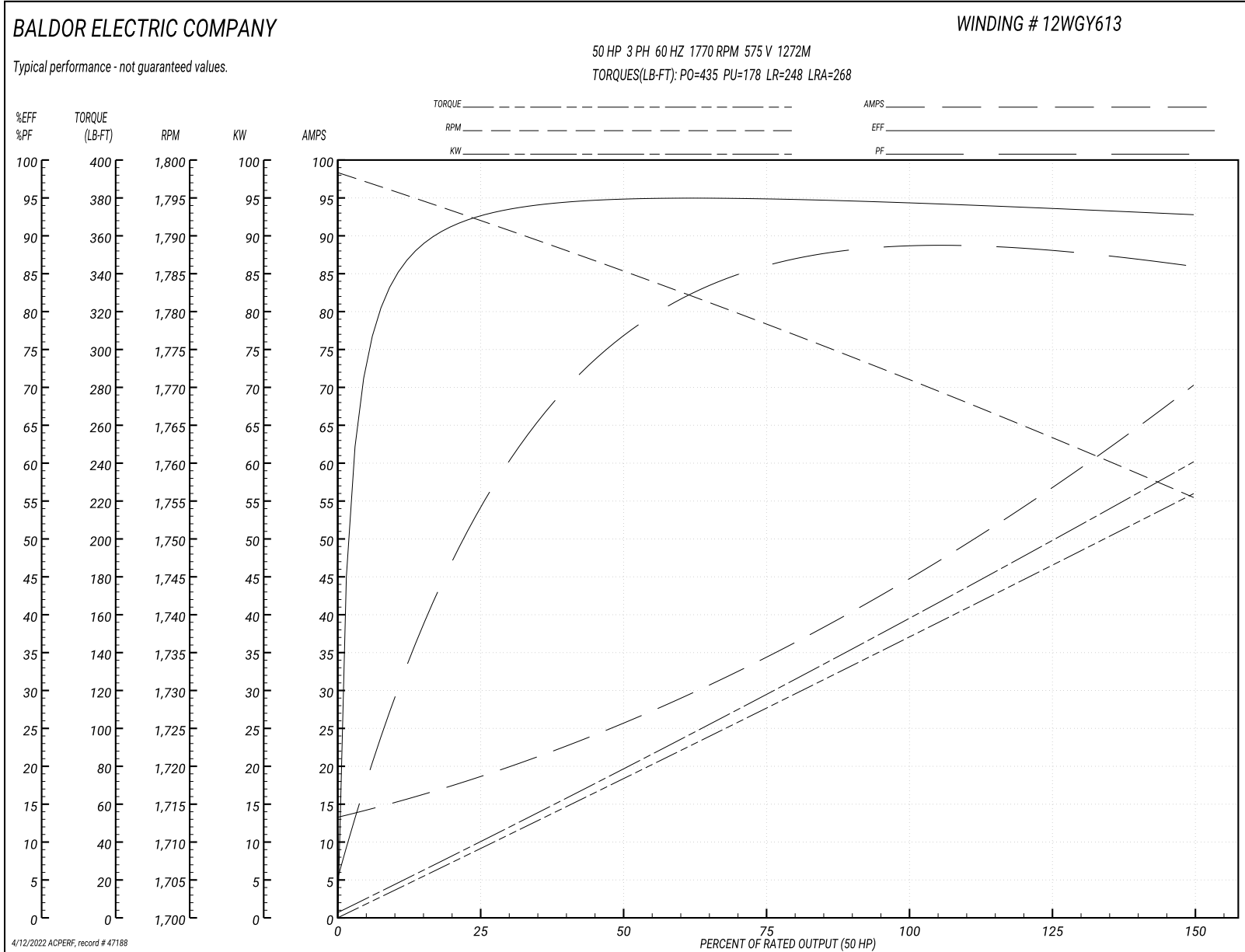
Typical performance - not guaranteed values

Winding: 12WGY613-R006		Type: 1272M	Enclosure: TEFC
Nameplate Data		575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	50	Full Load Torque	148 LB-FT
Volts	575	Start Configuration	direct on line
Full Load Amps	45	Breakdown Torque	435 LB-FT
R.P.M.	1770	Pull-up Torque	178 LB-FT
Hz	60 Phase	Locked-rotor Torque	248 LB-FT
NEMA Design Code	B KVA Code	Starting Current	268 A
Service Factor (S.F.)	1.15	No-load Current	14.2 A
NEMA Nom. Eff.	94.5 Power Factor	Line-line Res. @ 25°C	0.186 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	61°C
S.F. Amps		Temp. Rise @ S.F. Load	75°C
		Rotor inertia	9.59 LB-FT ²

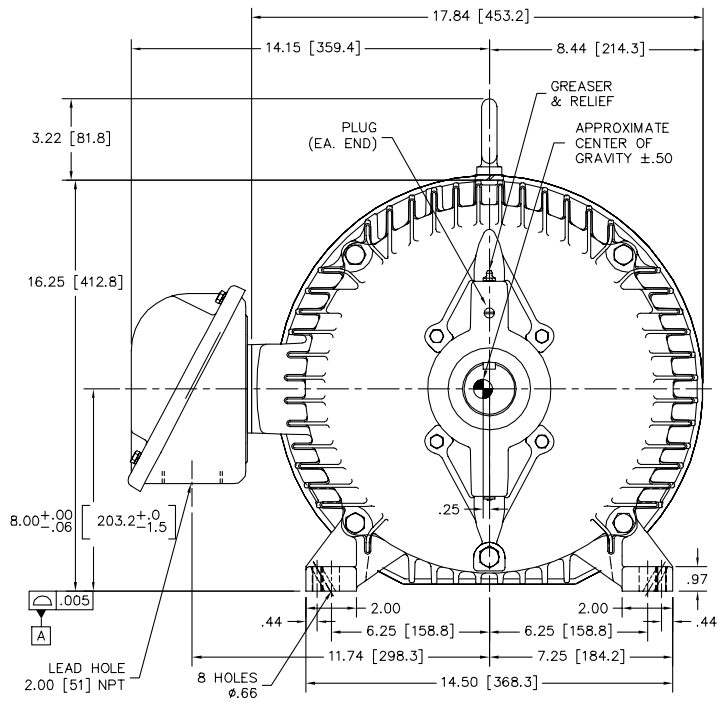
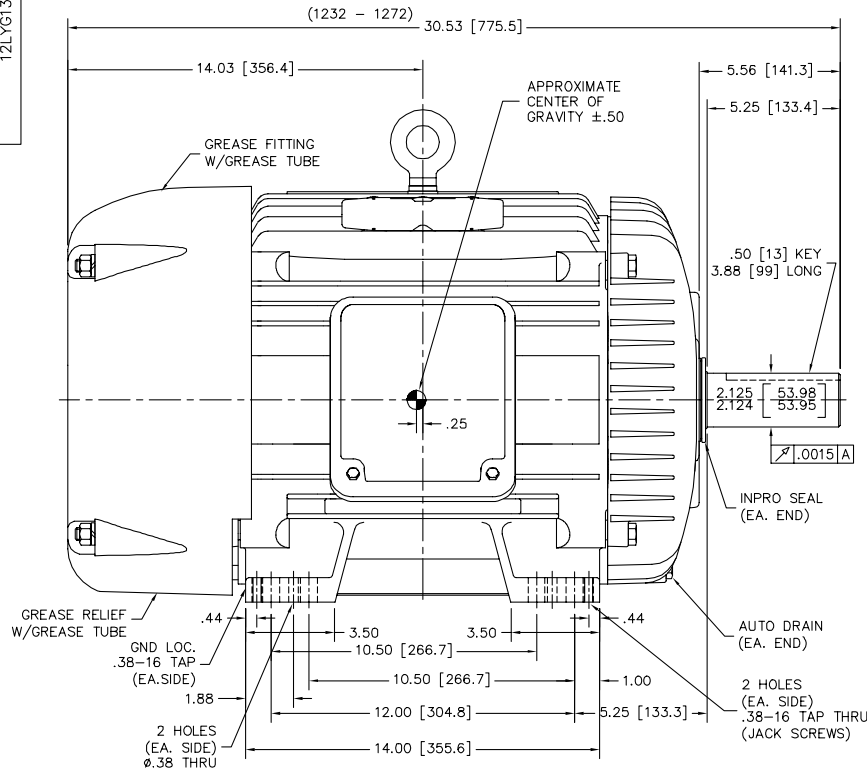
Load Characteristics 575 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	59	79	85	87	88	87	88
Efficiency	92.3	94.8	95	94.5	93.8	92.7	94
Speed	1791	1785	1779	1771	1764	1755	1767
Line amperes	17.4	25.3	34.6	45.4	57	69.8	52.4

Performance Graph at 575V, 60Hz, 50.0HP Typical performance - Not guaranteed values



12LYG135



12LYG135

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: ADDED METRIC UNITS	VERSION: 05	TDR: 000001104601
REV. LTR: E	REVISED: 09:54:03 04/04/2019	BY: ENJOEDO
FILE: \AAA\00179\352		
MTL: -		

BALDOR - RELIANCE®
 HORZ TEFC 324-6T IEEE-841 W/312 BRGS, JACK SCRWS, DOWEL PROV
 SH 1 of 1

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
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FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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