

BALDOR® • RELIANCE 

Product Information Packet

FDEM4114T

50HP,3540RPM,3PH,60HZ,326TS,1252M,TEFC,F

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGY291	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	12H685	Layout:	12LYH685	Poles:	02	Created Date:	06-25-2015
Base:	RG	Eff. Date:	01-13-2022	Leads:	9#8		

Specs			
Catalog Number:	FDEM4114T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	326TS	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	H
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	50.000 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 8 AWG
Voltage @ Frequency:	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1252M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	90
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Sealed Bearing
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Extension Location:	Pulley End

Blower:	None	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	112.000 A @ 230.0 V	Shaft Rotation:	Reversible
	122.000 A @ 208.0 V	Shaft Slinger Indicator:	Shaft Slinger
	56.000 A @ 460.0 V	Speed Code:	Single Speed
Design Code:	A	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Face Code:	Standard	Winding Thermal 1:	None
Front Shaft Indicator:	None	Winding Thermal 2:	None

Nameplate NP3126L										
CAT.NO.	FDEM4114T									
SPEC.	12H685Y291G1									
HP	50									
VOLTS	230/460									
AMP	112/56									
RPM	3540									
FRAME	326TS				HZ	60			PH	3
SER.F.	1.15		CODE	H	DES	A		CL	F	
NEMA-NOM-EFF	93		PF	90						
RATING	40C AMB-CONT									
CC	010A				USABLE AT 208V			122		
DE	6312				ODE	6311				
ENCL	TEFC		SN							

Parts List		
Part Number	Description	Quantity
SA303860	SA 12H685Y291G1	1.000 EA
RA291012	RA 12H685Y291G1	1.000 EA
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 EA
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 EA
09GS1000SP	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
12EP1107A156	FREP W/"O" DRN & NO GRSR,RLF,DRN,RET HLS	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
HW5100A13	W4627-047 WVY WSHER	1.000 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
12EP1106A85	PUEP, MACH FOR 3.00 LIP SEAL	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
HW4600B37	SEAL 2.250 X 3.000 X .375 SINGLE LIP	1.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 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
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10CB3500SP	CONDUIT BOX LID, CAST	1.000 EA
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 EA
HW2501H18	KEY, 1/2 SQ X 2.000	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 LB
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025C02	WILKOFASST SG, 787.105, TAN	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3126L	ALUM FARM DUTY SUPER-E UL CSA-EEV PREM	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2200bx) 4/22	1.000 EA

AC Induction Motor Performance Data

Record # 35504

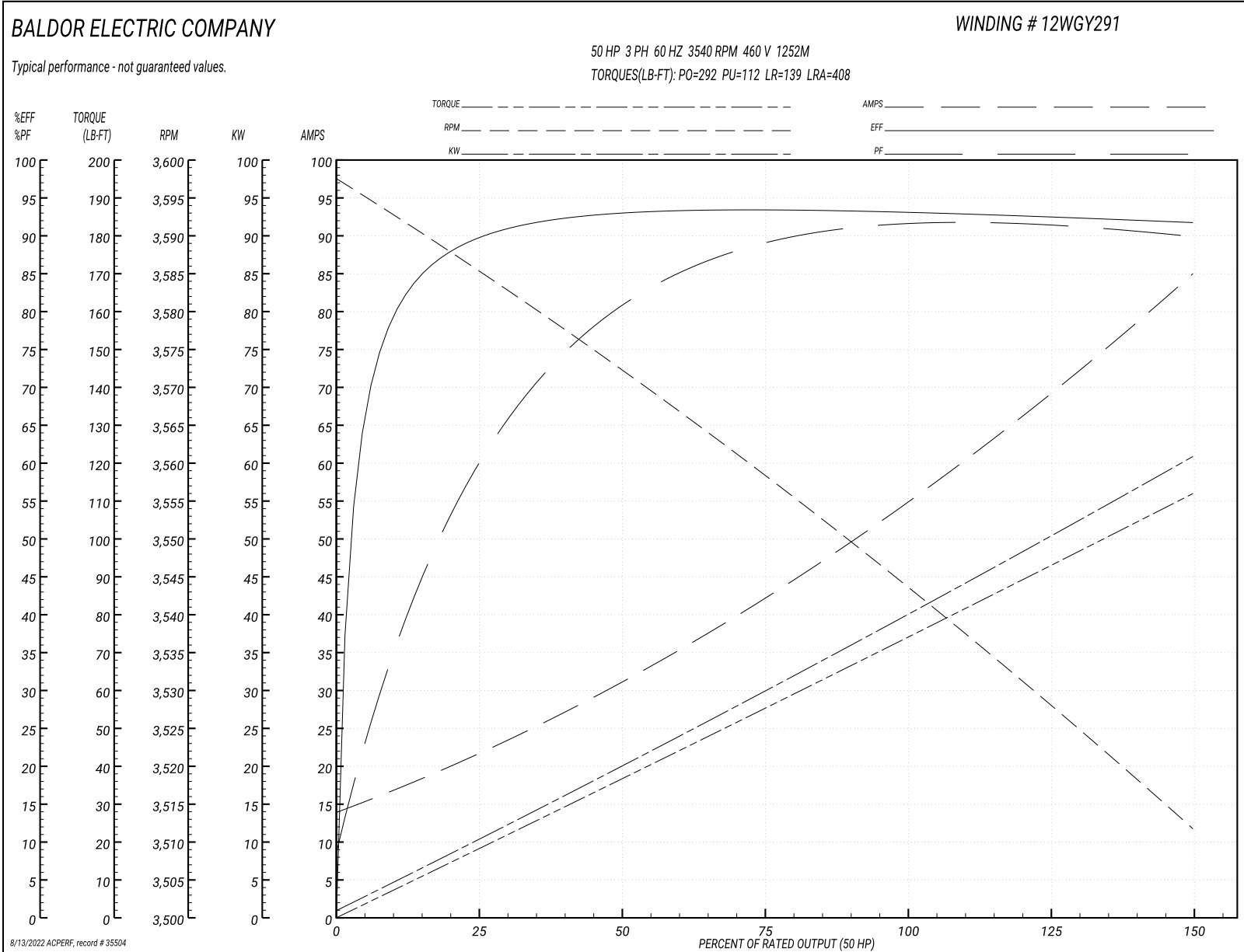
Typical performance - not guaranteed values

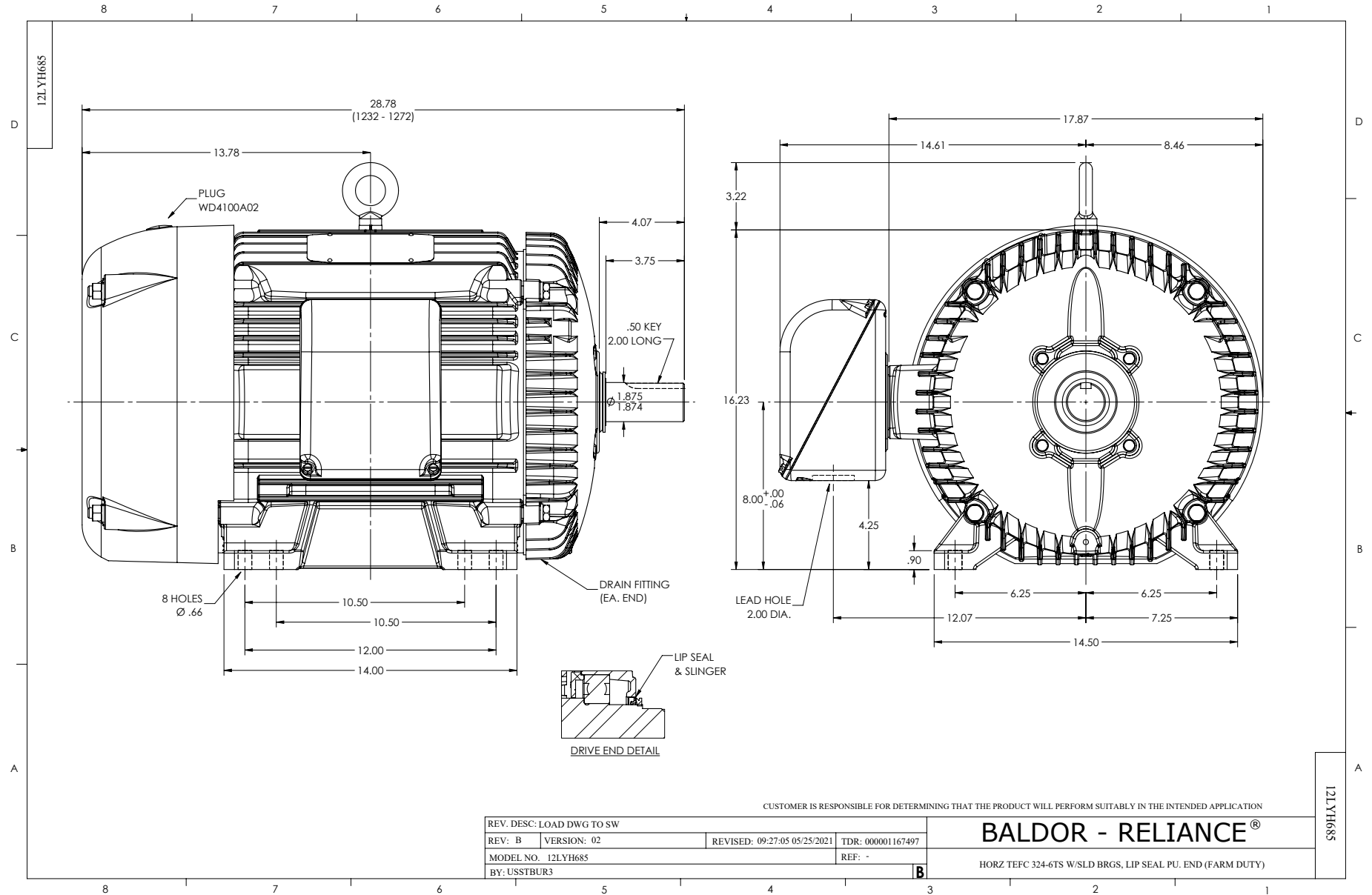
Winding: 12WGY291-R005			Type: 1252M			Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)	50		Full Load Torque	74.4 LB-FT				
Volts	230/460		Start Configuration	direct on line				
Full Load Amps	112/56		Breakdown Torque	292 LB-FT				
R.P.M.	3540		Pull-up Torque	112 LB-FT				
Hz	60 Phase	3	Locked-rotor Torque	139 LB-FT				
NEMA Design Code	A	KVA Code	H	Starting Current	408 A			
Service Factor (S.F.)	1.15		No-load Current	14.9 A				
NEMA Nom. Eff.	93	Power Factor	90	Line-line Res. @ 25°C	0.11257 Ω			
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	77°C				
S.F. Amps			Temp. Rise @ S.F. Load	95°C				
			Locked-rotor Power Factor	20.9				
			Rotor inertia	4.07 LB-FT ²				

Load Characteristics 460 V, 60 Hz, 50 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	66	82	88	90	91	90	91
Efficiency	91.1	93.8	94.2	93.9	93.2	92.3	93.5
Speed	3584.1	3571.8	3558.2	3544.1	3528.2	3511.2	3535
Line amperes	20.4	30.8	42.9	55.8	69.5	84.6	64

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values





CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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
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MTL: -	© □	

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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