

ABB BALDOR RELIANCE III

Customer information packet

FDEM4108T-5

50M 2P TEFC HOR 286TS FARM DUTY SE

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286TS
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	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM 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	28.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	M
Type	AC
Mech. spec.	09L813
Base	
Status	PRD/A
Elec. spec.	09WGT509
Layout	09LYL813
Eff. date	12-16-2025
CD Diagram	CD0006
Poles	02
Leads	3#10
Proprietary	False
Created date	06-14-2018

KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0950M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	24.77 IN
Power Factor	88
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	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 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

NP3126L									
CAT.NO.	FDEM4108T-5								
SPEC.	09L813T509G1								
HP	30								
VOLTS	575								
AMP	28								
RPM	3520								
FRAME	286TS	HZ		60		PH		3	
SER.F.	1.15	CODE		J	DES		A	CL	F
NEMA-NOM-EFF	91.7	PF		88					
RATING	40C AMB-CONT								
CC	010A								
DE	6311		ODE		6208				
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA357355	SA 09L813T509G1	1.000 ea
RA346347	RA 09L813T509G1	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLOCKWASHER	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 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
09EP1100A198	ENDPLATE, MACH	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	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
09EP1116A33	PU ENDPLATE, MACH FOR LIP SEAL,"O" DRAIN	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600A53	SEAL 2.00 X 3.00 X 0.313 SINGLE LIP	1.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB3500SP	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
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb

HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025C02	WILKOFASST SG, 787.105, TAN	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3126L	ALUM FARM DUTY SUPER-E UL CSA-EEV PREM	1.000 ea
40PA1005	PACKAGING GROUP, 09 STD	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020E03	LEAD SET, 10AWG, 3 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 68011

Typical performance - not guaranteed values

Winding: 09WGT509-R001			Type: 0950M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		30	Full Load Torque		44.62 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		28	Breakdown Torque		181 LB-FT	
R.P.M.		3520	Pull-up Torque		92.38 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		110 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current		238 A
Service Factor (S.F.)		1.15		No-load Current		9.64 A
NEMA Nom. Eff.	91.7	Power Factor	88	Line-line Res. @ 25°C		0.367 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		79°C
S.F. Amps				Temp. Rise @ S.F. Load		96°C
				Locked-rotor Power Factor		28.2
				Rotor inertia		1.28 lb-ft²

Load Characteristics 575 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	76	84	88	90	90	89
Efficiency	87.4	91.7	92.4	92.1	91.4	90.4	91.7
Speed	3581	3563	3544	3523	3501	3475	3510
Line amperes	11.76	16.13	21.62	27.74	34.22	41.24	31.6

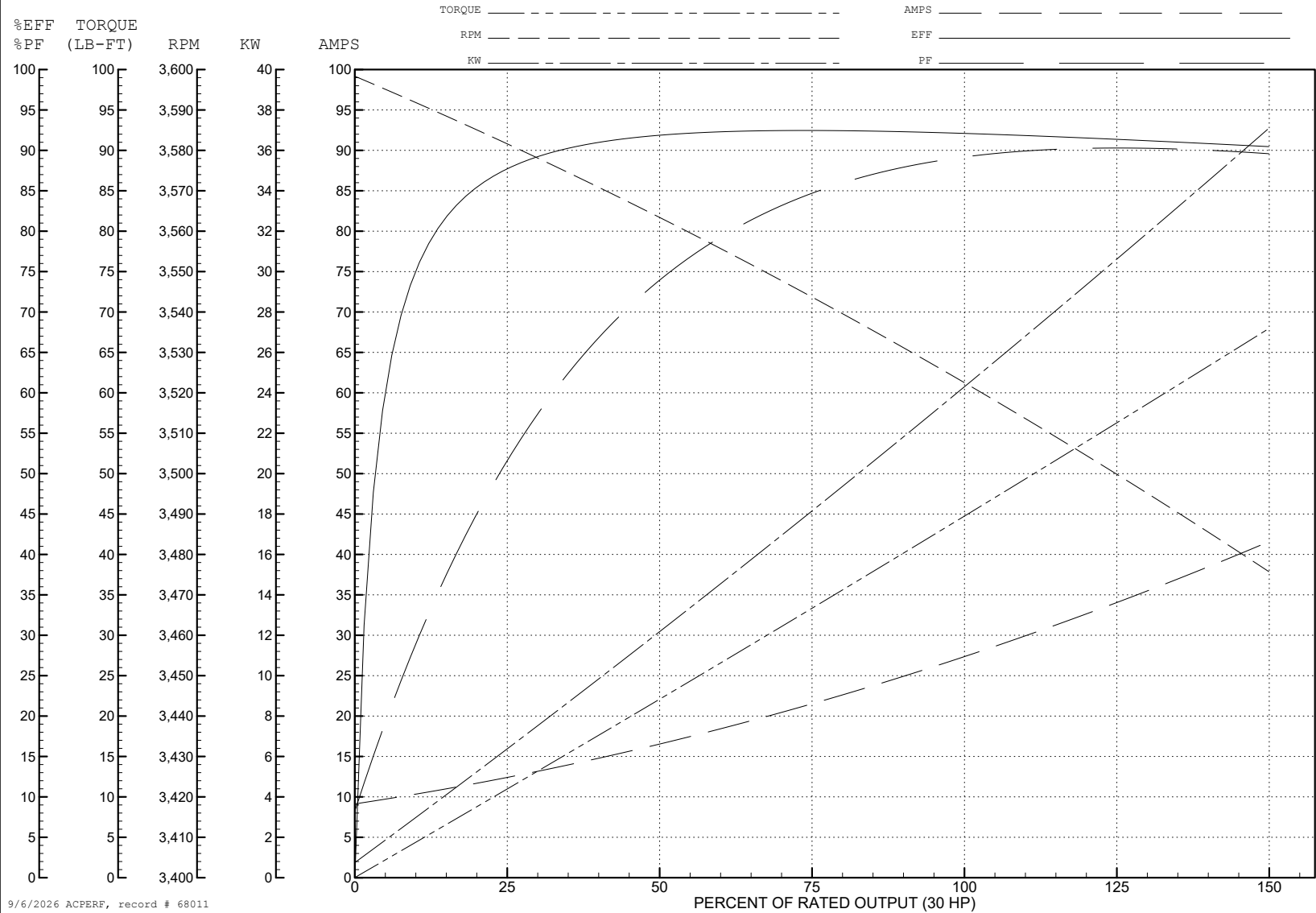
ABB Motors and Mechanical Inc.

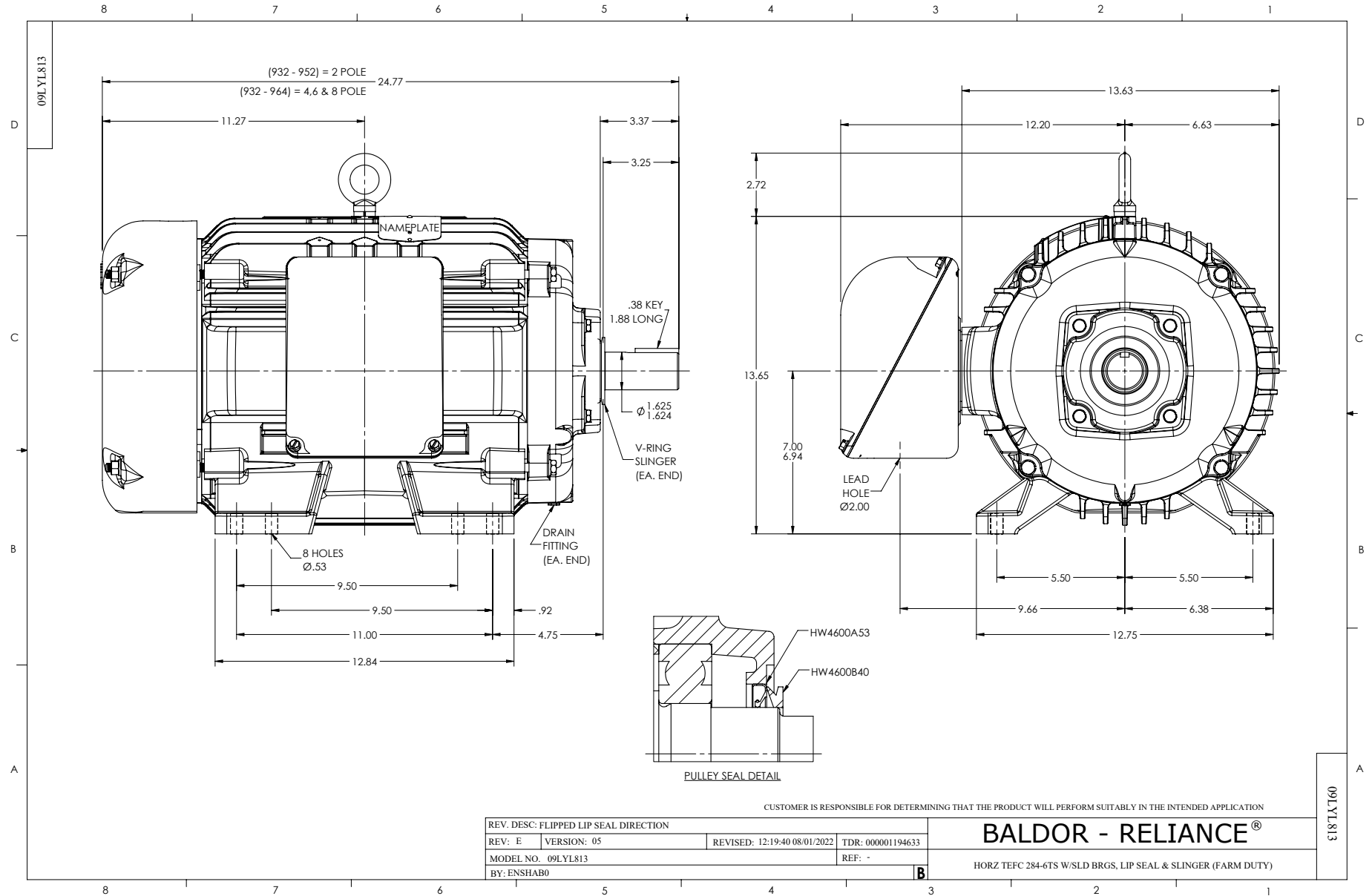
WINDING # 09WGT509

Typical performance - not guaranteed values.

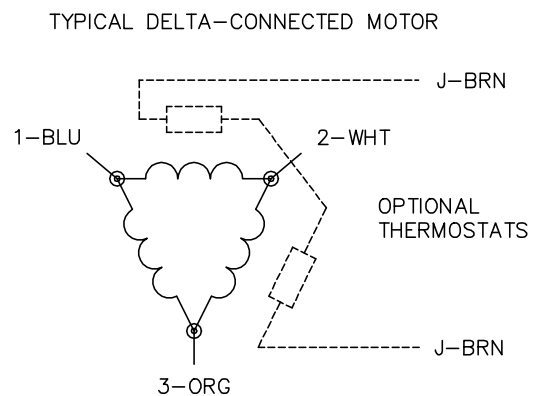
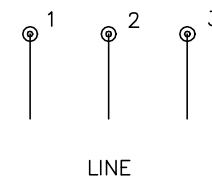
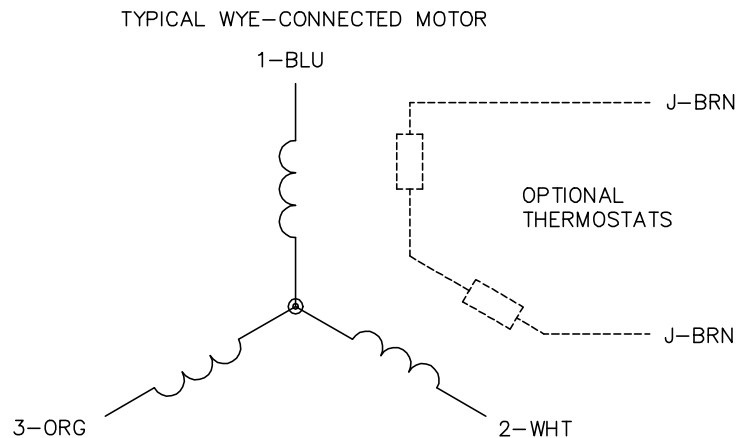
30 HP 3 PH 60 HZ 3520 RPM 575 V 0950M

TORQUES (LB-FT): PO=181 PU=92.38 LR=110 LRA=238





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

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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