

ABB BALDOR RELIANCE III

Customer information packet

EWDM4114T

50HP, 3540RPM, 3PH, 60HZ, 326TS, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	326TS
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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM 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	56.000 A @ 460.0 V 112.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	56.0 a

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY291
Layout	12LYL042
Eff. date	02-21-2024
CD Diagram	CD0180
Poles	02
Leads	9#8
Proprietary	False
Created date	08-19-2019

Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1252M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	28.77 IN
Power Factor	90
Product Family	Washdown Features
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3540 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

NP1669L									
CAT.NO.	EWDM4114T								
SPEC.	12-0000-0910								
HP	50								
VOLTS	230/460 10:1 CT/VT								
AMP	112/56								
RPM	3540								
FRAME	326TS		HZ	60			PH	3	
SER.F.	1.00	CODE	H	DES	A	CLASS		F	
NEMA-NOM-EFF	93	PF	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6312		ODE	6311					
ENCL	TEFC	SN							
BLANK	1.15SF ON SINEWAVE								

Parts List

Part number	Description	Quantity
SA373182	SA 12-0000-0910	1.000 ea
RA362966	RA 12-0000-0910	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP1669L	SS WD SUPER-E UL PREM REV MTG	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
12FH1002WP	FAN COVER, W/WHITE EPOXY, PRIMED CASTING	1.000 ea
HW1001S50	WASHER, 1/2 SPLT LK, STAINLESS STEEL	4.000 ea
XY5013S12	1/2-13 HEX R.H. NUT ST.S	4.000 ea
37FN3002C04	EXFN, PLASTIC, 6.00 OD, 2.003 ID	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
51XB1214S20	12-14X1.25 HXWSSLD SERTYB, SS	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
12EP1107A12WP	FREP TENV 324-6T NO GREASERS W/WHITE EPO	1.000 ea
HA3400S13	303 S.S. STUD, 1/2-13 X 7" WELKER	4.000 ea
HW1001S50	WASHER, 1/2 SPLT LK, STAINLESS STEEL	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
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
12EP1106A12P	PU ENDPLATE, MACH W/EPOXY PRIMER (NO GRE	1.000 ea
10XN5013S28	1/2-13X1 3/4 HEX SS CAP	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW4600B34	SINGLE LIP SEAL 2.250 X 2.997 X .438,DBL	1.000 ea
10XN3118S40	5/16-18X2 1/2 HEX HD SS	4.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
10CB1000A377P	KOBX W/2.00 NPT, .38-16 TAP GND	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

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
10CB1500P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 ea
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 ea
10XN2520S16	1/4-20 X 1 HEX HEAD SS	4.000 ea
HW1001S25	WASHER, 1/4 SPLT LK, STAINLESS STEEL	4.000 ea
MG1025W01	WILKOFAS, 781.01, SIGNAL WHITE #9003	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
HW2502H18	#303 SS,SQ KEY 1/2 X 2.000	1.000 ea

AC Induction Motor Performance Data

Record # 78204

Typical performance - not guaranteed values

Winding: 12WGY291-R008				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		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
						Locked-rotor Power Factor		20.9
						Rotor inertia		4.07 LB-FT2

Load Characteristics 460 V, 60 Hz, 50 HP

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

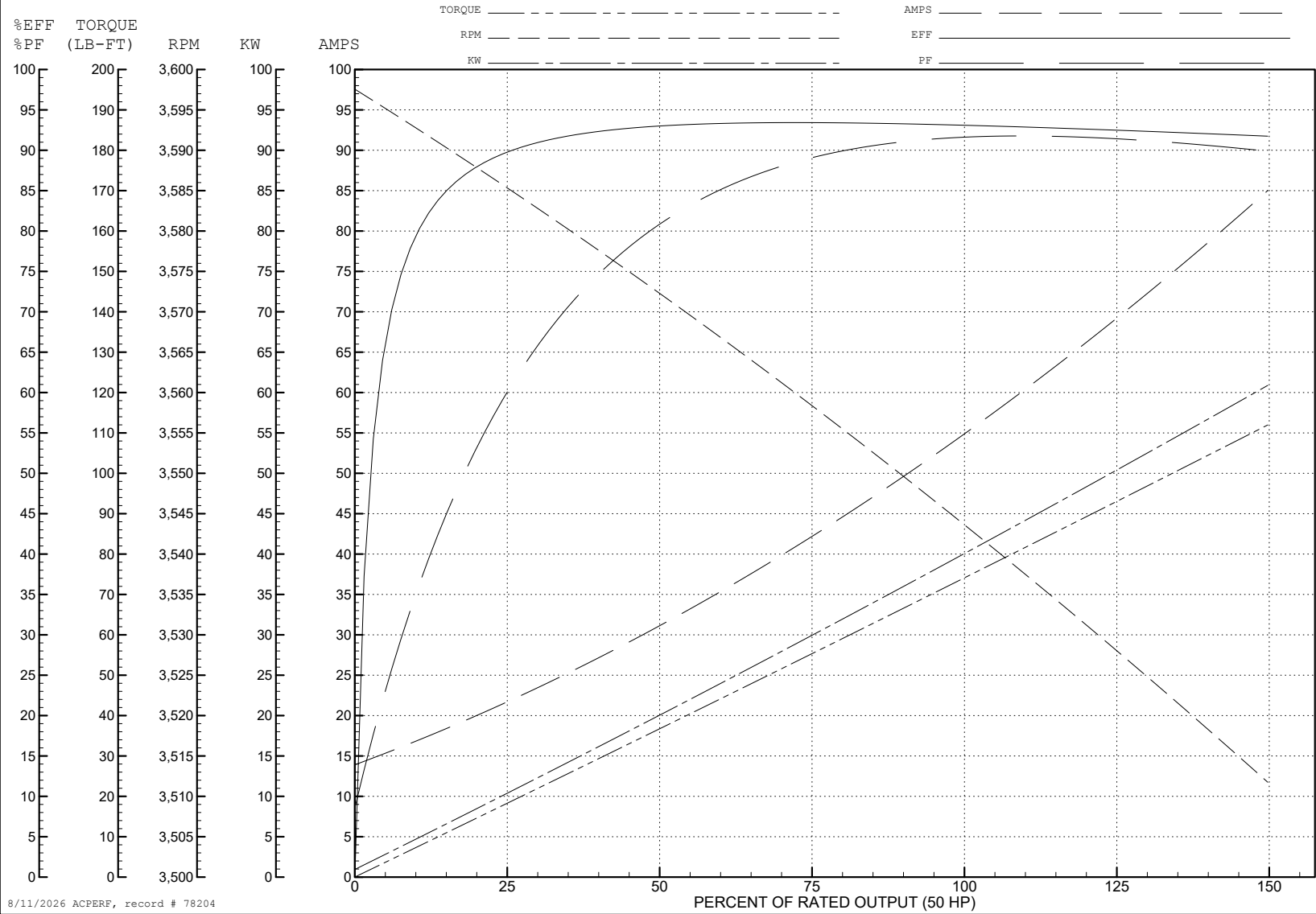
ABB Motors and Mechanical Inc.

WINDING # 12WGY291

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3540 RPM 460 V 1252M

TORQUES (LB-FT): PO=292 PU=112 LR=139 LRA=408



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.

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180