

ABB BALDOR RELIANCE III

Customer information packet

CECP4115T

50HP, 1775RPM, 3PH, 60HZ, 324TC, 1272M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	324TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM 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
Constant Torque Speed Range	0.8
Current @ Voltage	58.000 A @ 460.0 V 116.000 A @ 230.0 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

Part Detail

Revision	F
Type	AC
Mech. spec.	12G214
Base	
Status	PRD/A
Elec. spec.	12WGZ279
Layout	12LYG214
Eff. date	11-03-2025
CD Diagram	CD0180
Poles	04
Leads	9#8 Y
Proprietary	False
Created date	02-03-2021

Front Shaft Indicator	None
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	58.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 6 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	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1775 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

NP3241																	
CAT.NO.	CECP4115T				P/N				ENCLOSURE				TEFC				
SPEC.	12G214Z279G1			CC	010A	FRAME		326TC		S/N							
HP	50				CLASS		F	HZ		60	DES	A					
RPM	1775				RPM MAX		2700		PH		3	KVA-CODE		H			
VOLT	230/460				MOTOR WEIGHT				656								
AMP	116/58				SER.F.		1.15		PF		85	ODE BRG		6312	DE BRG 6312		
RATING	40C AMB-CONT				NEMA-NOM-EFF				94.5		GREASE		POLYREX EM				
									INV.TYPE		PWM						
TEMP CODE	T3	INVERTER-TEMP-CODE				200											
TEMP =	200	C HP FR	60		C HP TO		90										
CT HZ FROM	0.8		CT HZ TO		60												
HTR-VOLTS		HTR-AMPS			HTR-WATTS			MAX. SPACE HEATER TEMP.					VT HZ FROM		O	VT HZ TO	60

Parts List

Part number	Description	Quantity
SA390460	SA 12G214Z279G1	1.000 ea
RA380909	RA 12G214Z279G1	1.000 ea
09FN3001C03	XTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB1000A203P	KOBX W/2.00 NPT & .31 GND MTG, EPOXY PRI	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
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
HA4017A02	.125X2.50 GREASER EXTENS.F/S	1.000 ea
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 ea
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	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
10CB1503P	CONDUIT BOX LIPPED, CAST W/EPOXY PRIMER	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	4.000 ea
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	2.000 ea
12EP1105A97P	PU EP, MACH, PLS W/EPOXY PRIMER	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
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 ea
12FH1002A59P	FAN COVER, MACH W/EPOXY PRIMER	1.000 ea
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 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

HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 qt
MJ5002A01	SILICON RUBBER SEALANT, 732CL 10.3 OZ TU	0.030 ea
12EP1111A57LP5	ENDPLATE, MACH W/EPOXY PRIMER & PAINT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1025N19	WILKOFASST, 778.50, RELIANCE BLUE-GREEN 8	0.125 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 ea
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7026F09	LEAD SET, 8 AWG, 9 LEAD, 26" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 86839

Preliminary Data Sheet

Winding: 12WGZ279-R006				Type: 1272M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		50		Full Load Torque		147.8 LB-FT		
Volts		230/460		Start Configuration		direct on line		
Full Load Amps		116/58		Breakdown Torque		475 LB-FT		
R.P.M.		1775		Pull-up Torque		210 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		240 LB-FT		
NEMA Design Code		A	KVA Code	H		Starting Current		413 A
Service Factor (S.F.)		1.15		No-load Current		20.8 A		
NEMA Nom. Eff.		94.5	Power Factor	85		Line-line Res. @ 25°C		0.114 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		68°C		
S.F. Amps		132/68		Temp. Rise @ S.F. Load		88°C		
				Locked-rotor Power Factor		29.7		
				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	52	73	82	86	87	87	87
Efficiency	91.5	94.4	94.8	94.6	94	93.2	94.1
Speed	1794	1788	1782	1776	1769	1761	1770
Line amperes	24.8	33.9	45.3	57.9	71.6	87.5	66.1

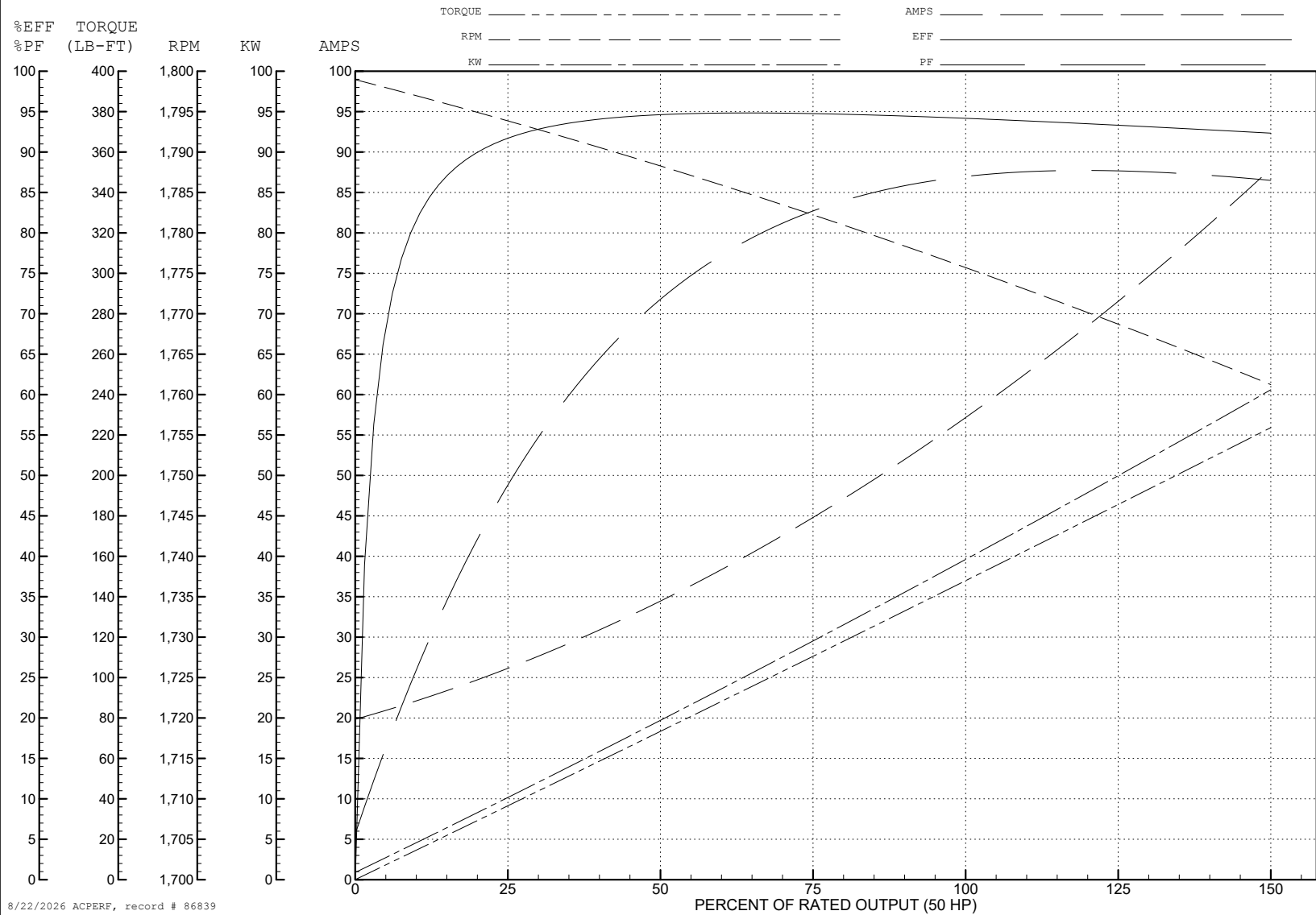
ABB Motors and Mechanical Inc.

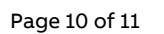
WINDING # 12WGZ279

Typical performance - not guaranteed values.

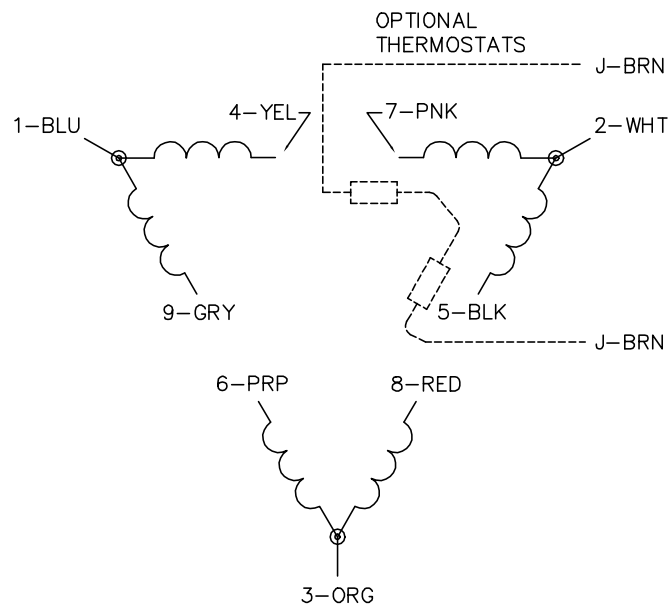
50 HP 3 PH 60 HZ 1775 RPM 460 V 1272M

TORQUES (LB-FT): PO=475 PU=210 LR=240 LRA=413

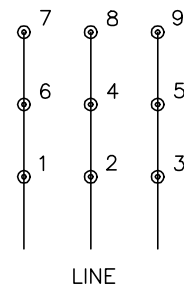




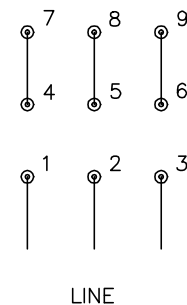
CD0180



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

FILE: \AAA\00005\148

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

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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