

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0K3EC4

3KW, 1500RPM, 3PH, 50HZ, D112C, 3632B, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D112C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Brushless Wound Field PM Rotor
Output @ Frequency	3.000 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 380.0 V @ 50 HZ
Agency Approvals	CE WEEE CULUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	5
Current @ Voltage	5.300 A @ 380.0 V 10.600 A @ 190.0 V
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	5.3 a

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0020
Layout	36LY-000-292
Eff. date	05-08-2024
CD Diagram	CD0005A25
Poles	04
Leads	9#12
Proprietary	False
Created date	05-18-2022

Insulation Class	F
Inverter Code	Inverter Duty
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3632B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.88 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.103 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1500 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

NP3968B01A01									
CAT.NO.	ECS101MOK3EC4								
SPEC.	36-0000-3627			YR					
FRAME	D112C	IP	55	WT.	42				
KW	3	HZ	50	PH	3	DUTY-IPM	S1		
INS CL	F	CLASS RISE		B	AMB-C		40		
EFF. CL	IE5	EFF	92.4	COSφ		97			
VOLTS	190/380		FLA	10.6/5.3					
1/MIN	1500			1/MIN MAX	3000				
BEMF (V)	105/210			RS (OHMS)	0.82/3.30				
LD (MH)	13.5/54.0			LQ (MH)	47.8/191.0				
VPWM	CP =	50	TO	100					
CT	5	TO	50	VT	1	TO	50		
MATCHED INV									
DE	6206		ODE	6205					
SERIAL #									

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	5.3	Max Amps		Cs Diagram	CS1126	BEMF	210
KW	3	VFD#	ECIN4A5P8			LD	54
RPM	1500	S.F.	1.00			LQ	191
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.0984 Meas. L-L


60034-2-3 Motor Performance at Standardized Operating Points

	RPM	% Speed	LB-FT	% Torque	KW	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1336	90%	14.1	100%	3.6	92.9	6.79%	204
P2	750	50%	14.1	100%	2.0	90.1	5.49%	165
P3	380	25%	14.1	100%	1.0	83.9	4.85%	146
P4	1350	90%	7.0	50%	1.8	93.3	3.26%	98
P5	750	50%	7.0	50%	1.0	91.3	2.40%	72
P6	750	50%	3.5	25%	0.5	91.2	1.22%	36
P7	378	25%	3.5	25%	0.3	87.7	0.88%	27

61800-9-2 PDS Performance at Reference Operating Points

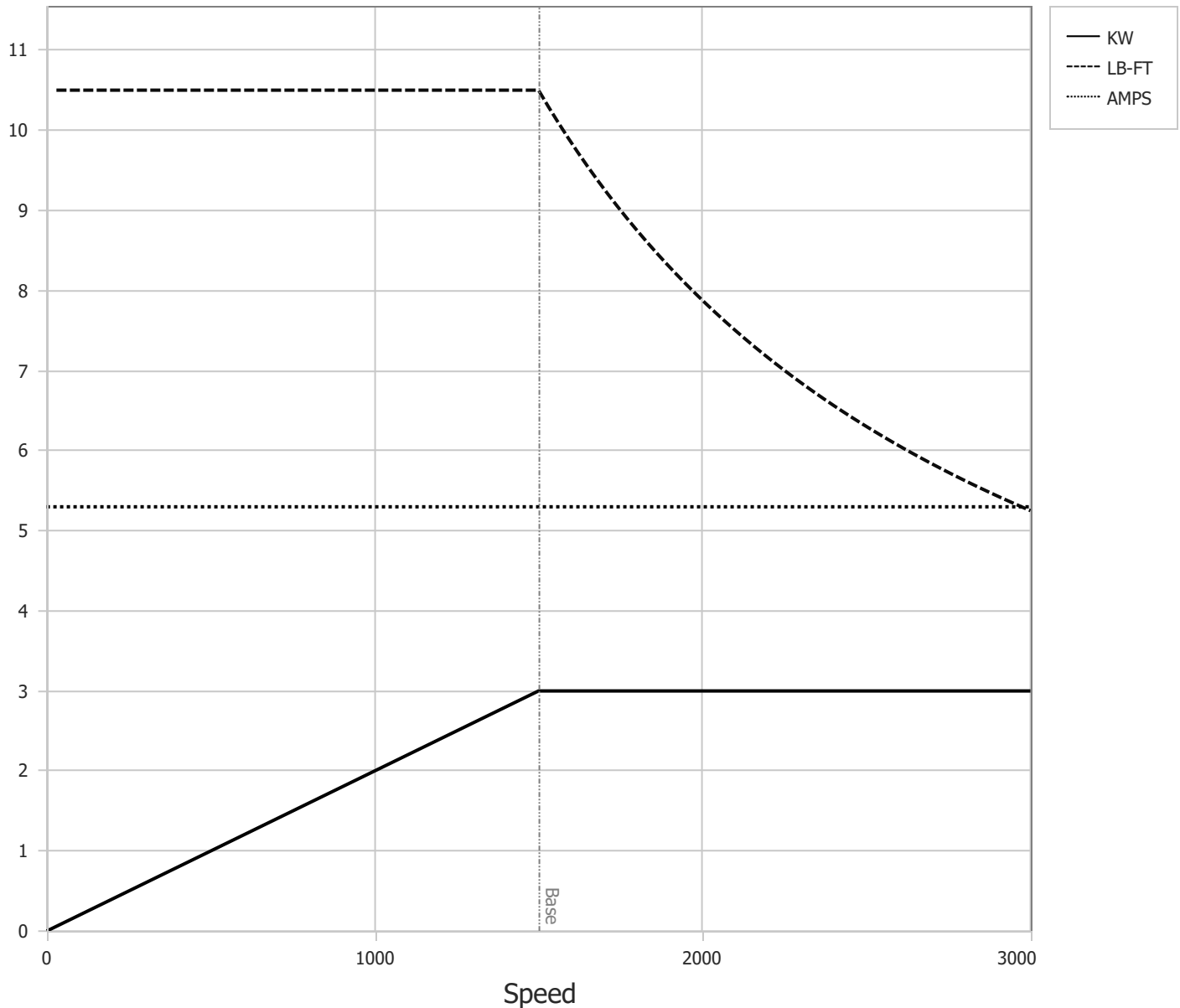
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1508	100%	14.1	100%	4.0	90.2	10.89%	327
P2	750	50%	14.1	100%	2.0	86.8	7.63%	229
P3	255	17%	14.1	100%	0.7	72.0	6.59%	198
P4	1494	100%	7.0	50%	2.0	91.2	4.79%	144
P5	750	50%	7.0	50%	1.0	86.8	3.79%	114
P6	255	17%	7.0	50%	0.3	73.2	3.11%	93
P7	750	50%	3.5	25%	0.5	84.8	2.24%	67
P8	255	17%	3.5	25%	0.2	70.6	1.77%	53

Points not taken in certified order.

	DR By: <u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGA0022 36-0000-3639 Test - 111783
	CK By: <u>USTOSAN</u>		
	APP By: <u>USJAROB1</u>		
	Date: <u>01/09/2025</u>		

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	5.3	Max Amps		Cs Diagram	CS1126	BEMF	210
KW	3	VFD #	ECIN4A5P8			LD	54
RPM	1500	S.F.	1.00			LQ	191
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.0984 Meas L-L

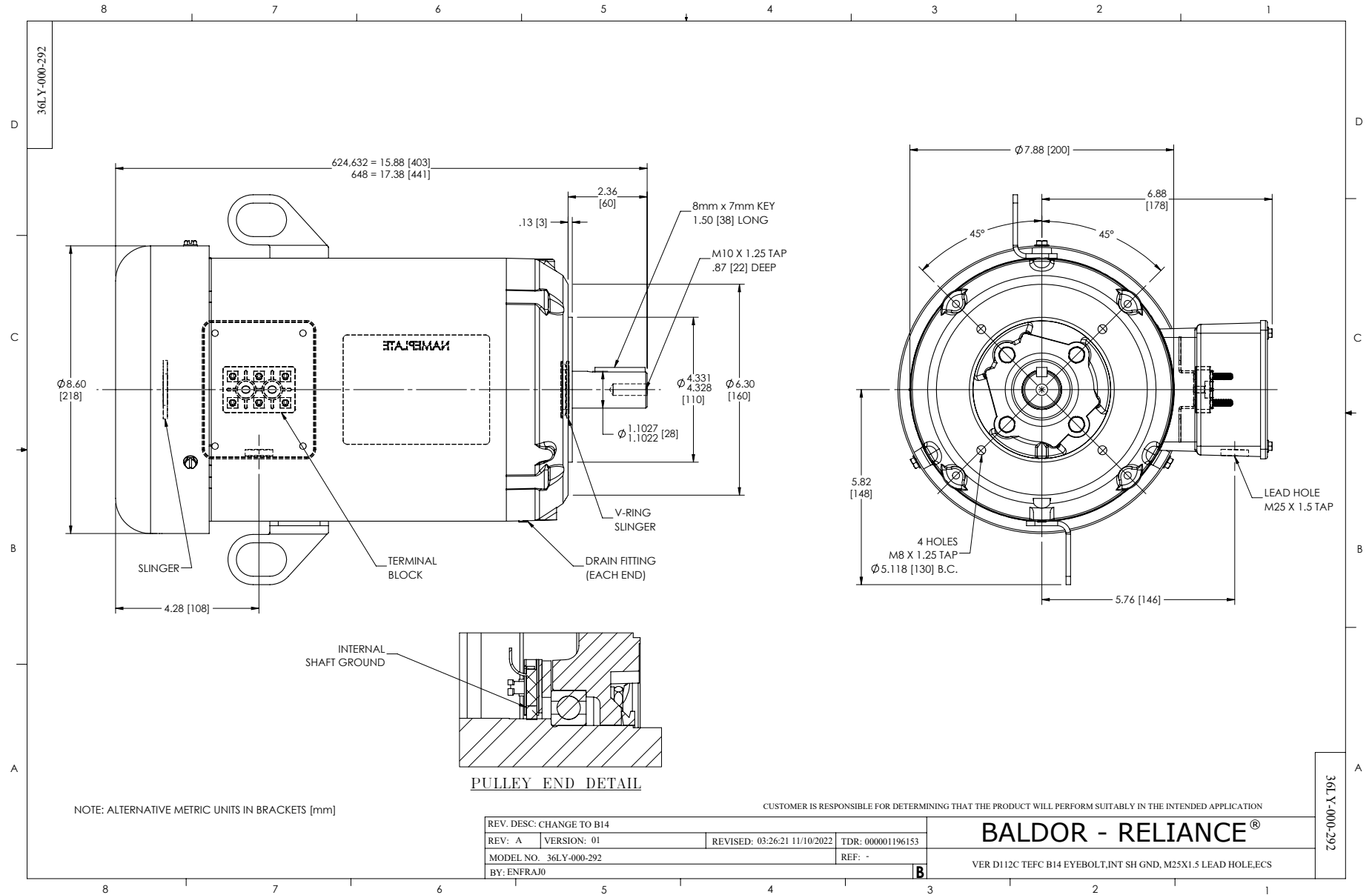
Constant Duty Operating Range



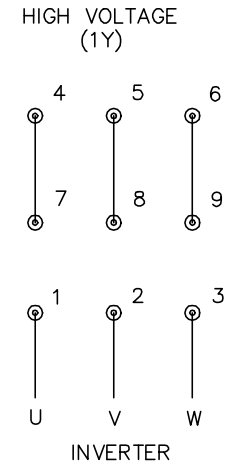
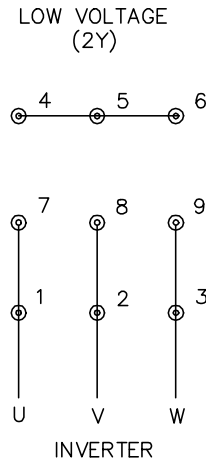
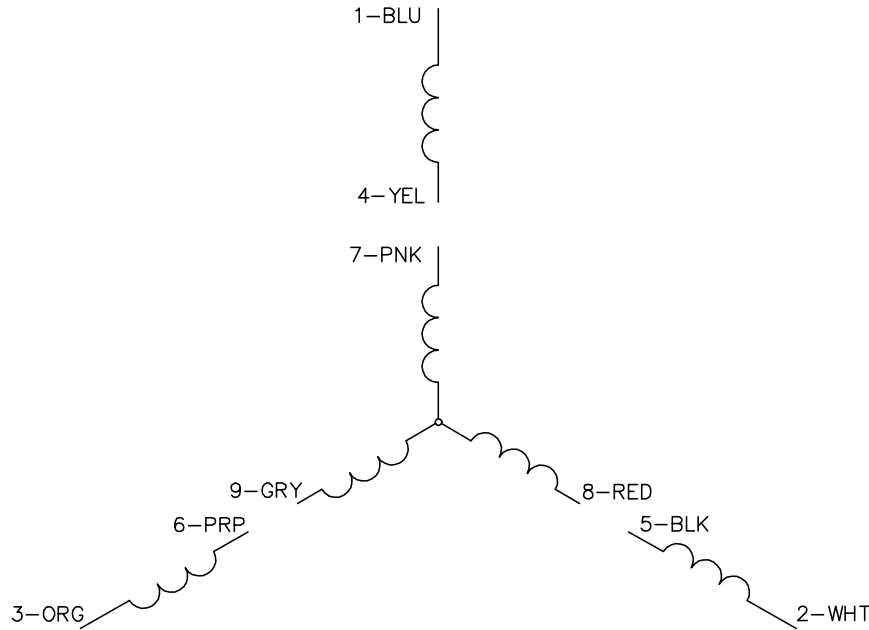
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**AC MOTOR
PERFORMANCE
CURVES**

36WGA0022
 36-0000-3639
 Test - 111783



CD0005A25



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005A25

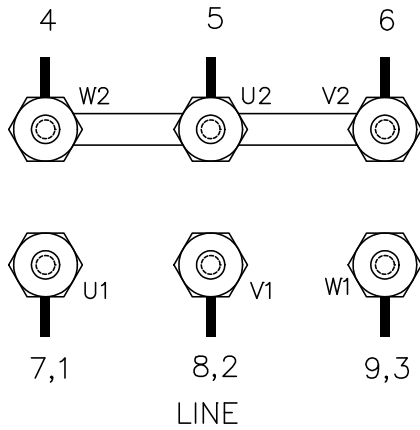
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REV. LTR: -	VERSION: 00	TDR: 000001135746
FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARS0
MTL: -	© □	

BALDOR - RELIANCE®

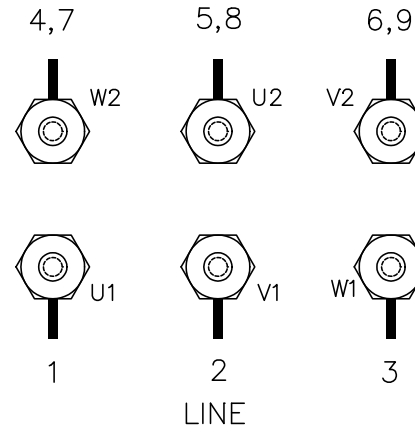
3PH, DV, 9 LEADS, ECS
SH 1 of 1

SP0032

LOW VOLT CONNECTION



HIGH VOLT CONNECTION



TO REVERSE ROTATION
INTERCHANGE ANY TWO
LINE LEADS.

MATL:

REV: A ADD CONN LABEL REF TO DESC

SP0032

SCALE: -

BY: JLP

REVISED: 12/17/96

FILE: AAA00029378

TDR: 0111436

BALDOR ELECTRIC Co.

THREE PHASE, DUAL VOLTAGE, TERMINAL BLOCK, CD0005/LC0005C01

SP0032