

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0K4ED4

4KW, 1500RPM, 3PH, 50HZ, D112D, 3632B, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D112D
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	4.000 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 CULUS WEEE
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	13.600 A @ 190.0 V 6.800 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	91.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0020
Layout	36LY-000-293
Eff. date	02-12-2026
CD Diagram	CD0005A25
Poles	04
Leads	9#12
Proprietary	False
Created date	10-17-2022

High Voltage Full Load Amps	6.8 a
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	17.91 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	D-Flange
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.	ECS101MOK4ED4								
SPEC.	36-0000-3636			YR					
FRAME	D112D	IP	55	WT.	45				
KW	4	HZ	50	PH	3	DUTY-IPM	S1		
INS CL	F	CLASS RISE		B	AMB-C		40		
EFF. CL	IE5	EFF	91.6	COSφ		97			
VOLTS	190/380		FLA	13.6/6.8					
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	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	13.6/6.8	Max Amps		Cs Diagram	CS0576	BEMF	105/210
KW	4	VFD#	ACS380-040S-09			LD	13.5/54.0
RPM	1500	S.F.	1.00			LQ	47.8/191.0
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.3231 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	1350	90%	18.8	100%	4.8	90.4	9.48%	383
P2	750	50%	18.8	100%	2.7	86.5	7.72%	312
P3	375	25%	18.8	100%	1.3	78.3	6.87%	278
P4	1350	90%	9.4	50%	2.4	92.4	3.67%	149
P5	750	50%	9.4	50%	1.3	89.2	2.98%	121
P6	750	50%	4.7	25%	0.7	89.8	1.40%	57
P7	375	25%	4.7	25%	0.3	84.7	1.12%	45

61800-9-2 PDS Performance at Reference Operating Points

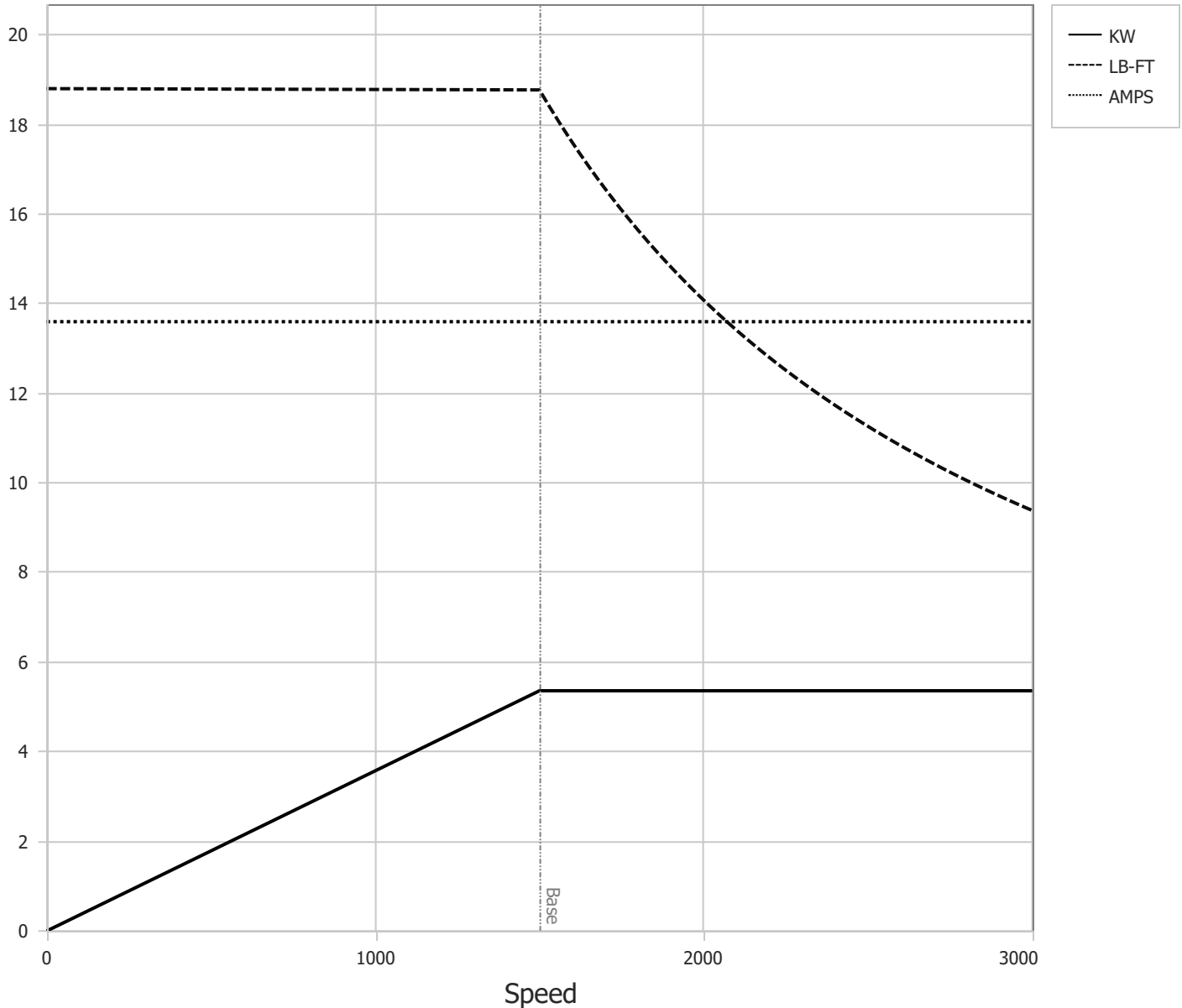
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1500	100%	18.8	100%	5.4	87.9	13.58%	549
P2	750	50%	18.8	100%	2.7	84.1	9.35%	378
P3	255	17%	18.8	100%	0.9	67.7	8.02%	324
P4	1500	100%	9.4	50%	2.7	91.1	4.85%	196
P5	750	50%	9.4	50%	1.3	86.1	3.99%	162
P6	255	17%	9.4	50%	0.5	71.8	3.30%	133
P7	750	50%	4.7	25%	0.7	85.2	2.14%	87
P8	255	17%	4.7	25%	0.2	71.1	1.71%	69

Points not taken in certified order.

BALDOR • RELIANCE	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGA0020 36-0000-3634 Test - 112234
	CK By:	<u>USGAHIL</u>		
	APP By:			
	Date:	<u>04/09/2025</u>		

Volts	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	13.6/6.8	Max Amps		Cs Diagram	CS0576	BEMF	105/210
KW	4	VFD #	ACS380-040S-09			LD	13.5/54.0
RPM	1500	S.F.	1.00			LQ	47.8/191.0
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.3231 Meas L-L

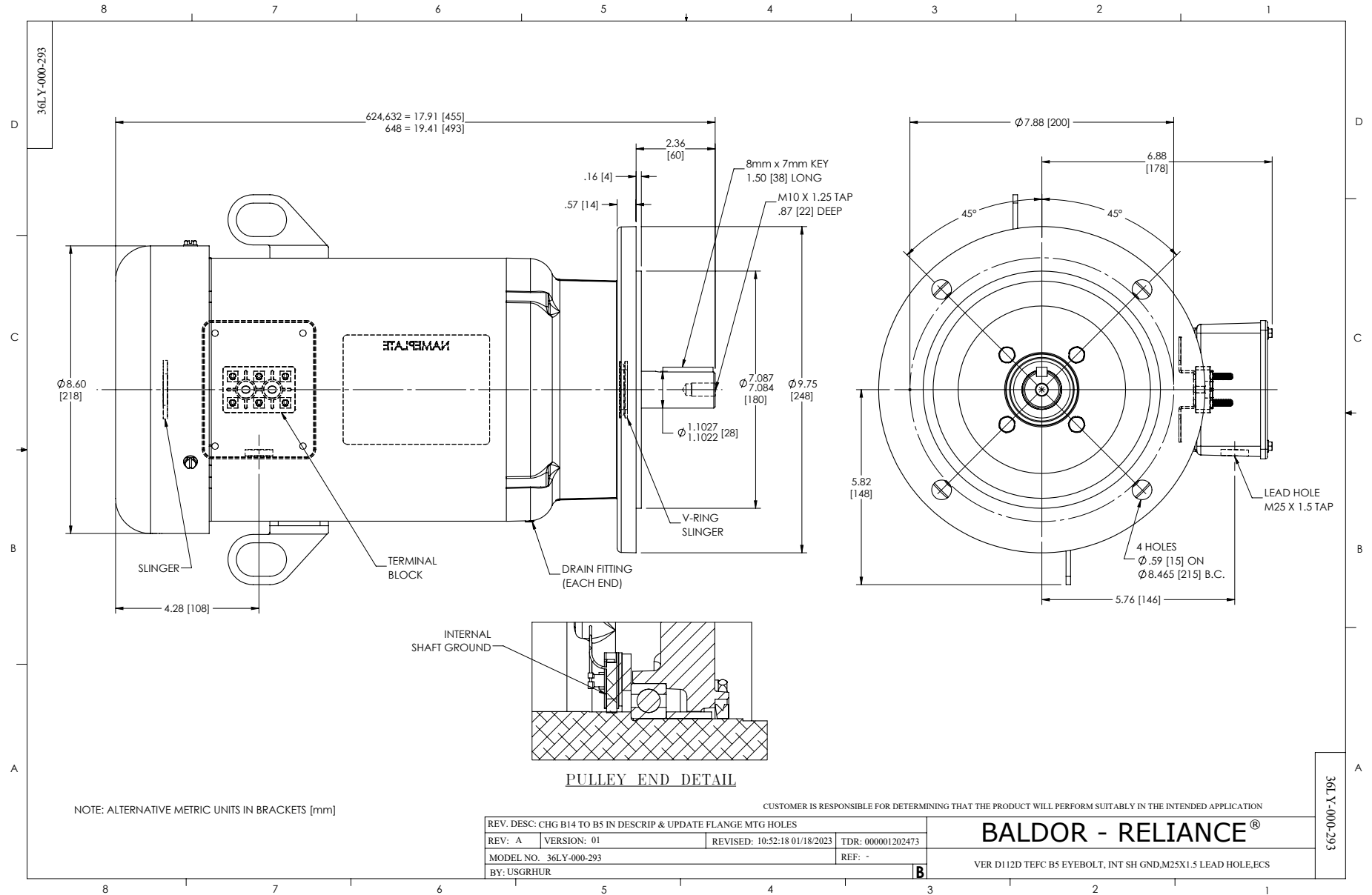
Constant Duty Operating Range



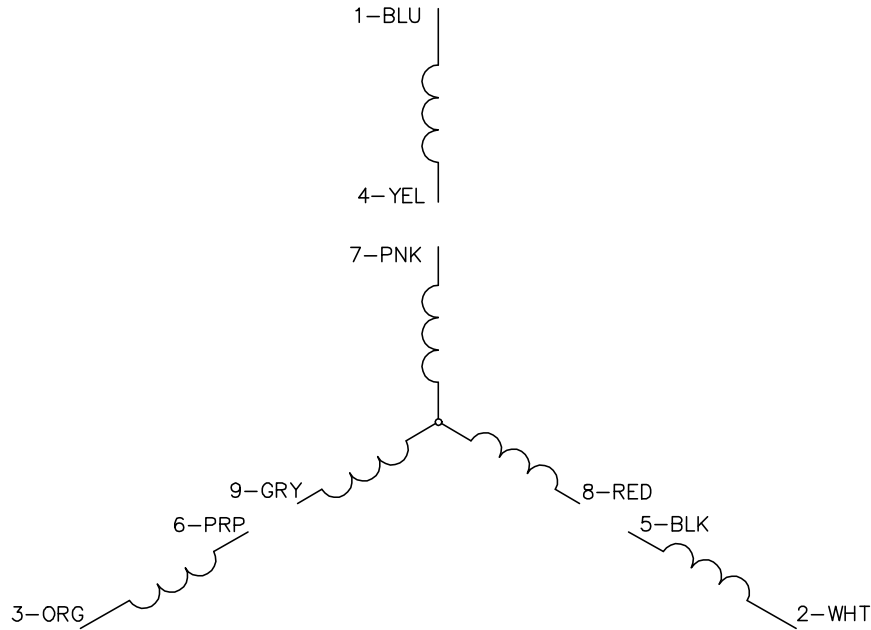
DR By: R & D
 CK By: USGAHIL
 APP By:
 Date: 04/09/2025

**AC MOTOR
PERFORMANCE
CURVES**

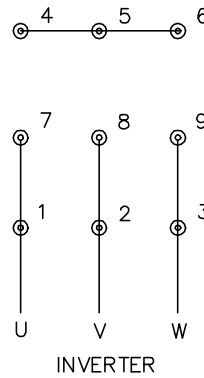
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 36-0000-3634
 Test - 112234



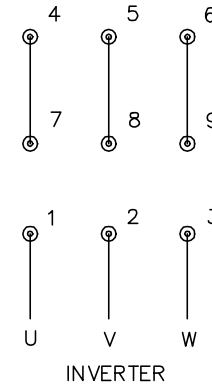
CD0005A25



LOW VOLTAGE
(2Y)



HIGH VOLTAGE
(1Y)



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

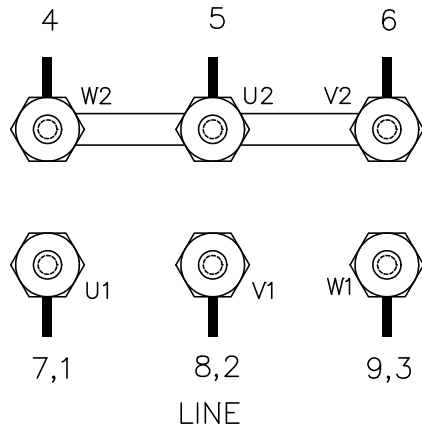
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REV. LTR: -	VERSION: 00	TDR: 000001135746
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MTL: -	© □	

BALDOR - RELIANCE®

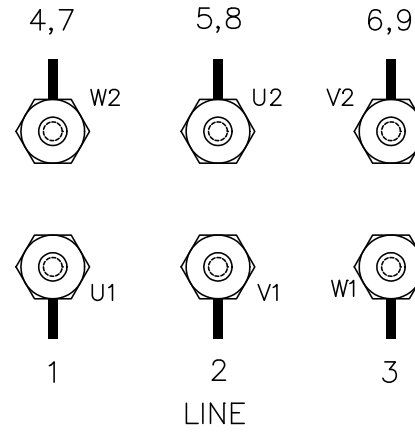
3PH, DV, 9 LEADS, ECS
SH 1 of 1

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