

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0K4EC4

4KW, 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	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 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	H
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	05-17-2022

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.	ECS101M0K4EC4											
SPEC.	36-0000-3622					YR						
FRAME	D112C			IP	55	WT.		42				
KW	4	HZ		50	PH		3	DUTY-IPM		S1		
INS CL	F	CLASS RISE				B	AMB-C		40			
EFF. CL	IE5	EFF		91.6		COSØ		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	0											
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

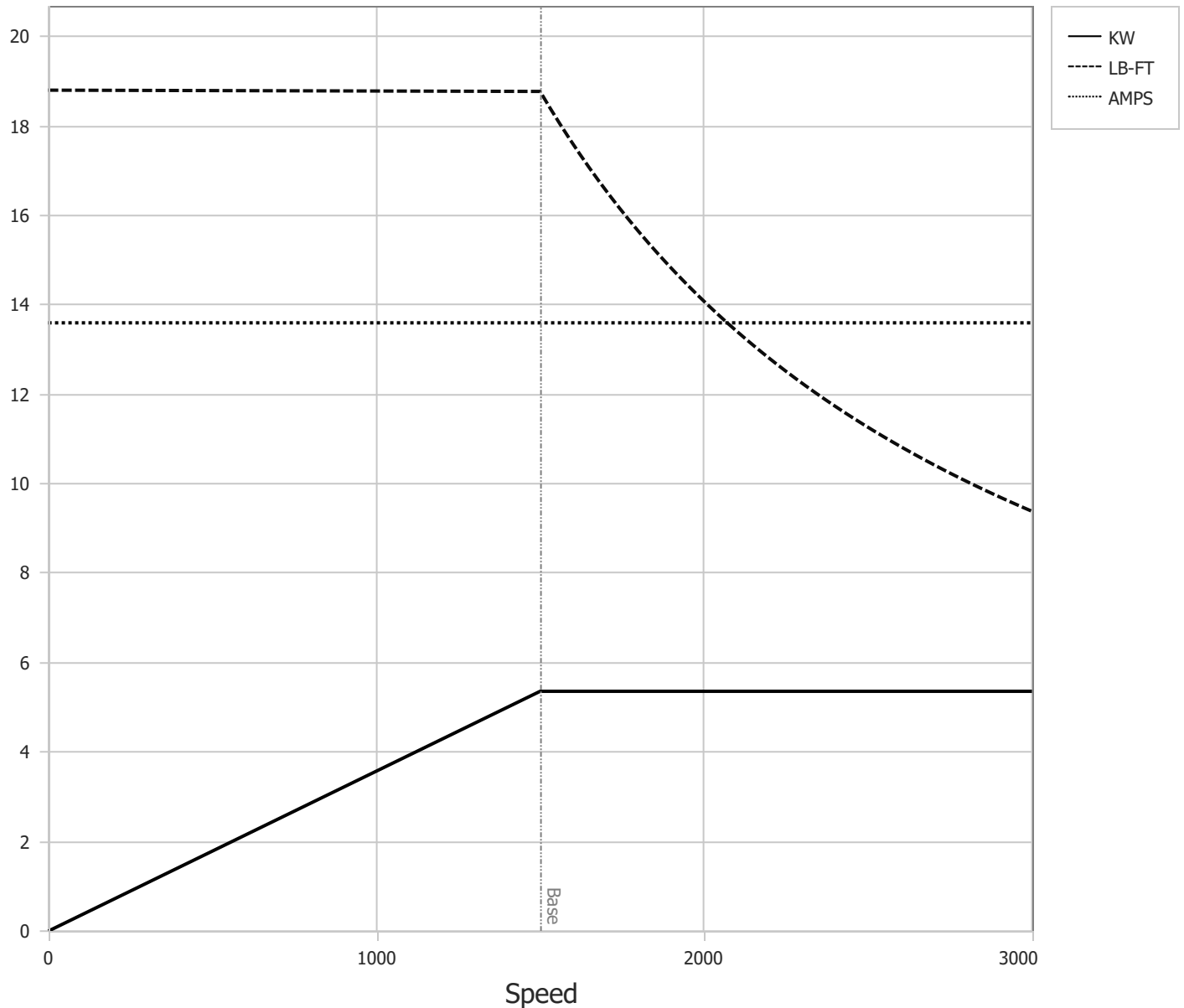
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1500	100%	18.8	100%	5.4	87.9	13.58%	549
P2	750	50%	18.8	100%	2.7	84.1	9.35%	378
P3	255	17%	18.8	100%	0.9	67.7	8.02%	324
P4	1500	100%	9.4	50%	2.7	91.1	4.85%	196
P5	750	50%	9.4	50%	1.3	86.1	3.99%	162
P6	255	17%	9.4	50%	0.5	71.8	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.

	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


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DR By: R & D

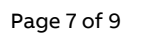
CK By: USGAHIL

APP By:

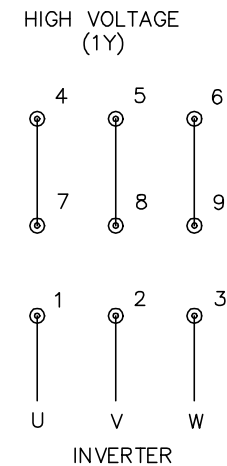
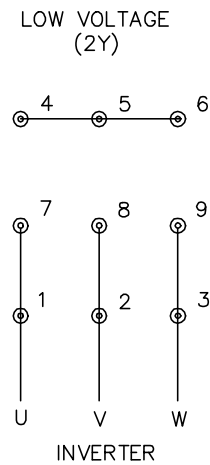
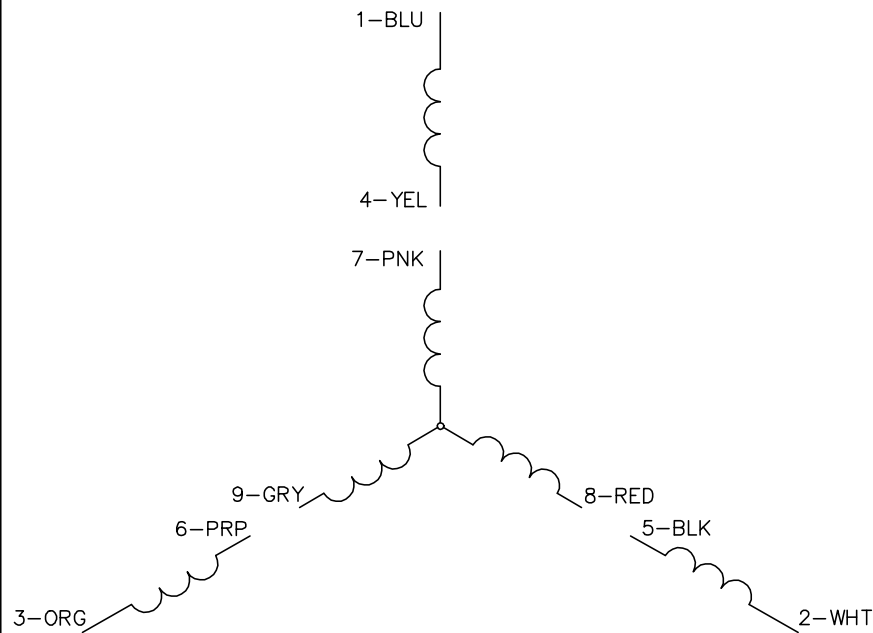
Date: 04/09/2025
**AC MOTOR
PERFORMANCE
CURVES**
36WGA0020

36-0000-3634

Test - 112234



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.

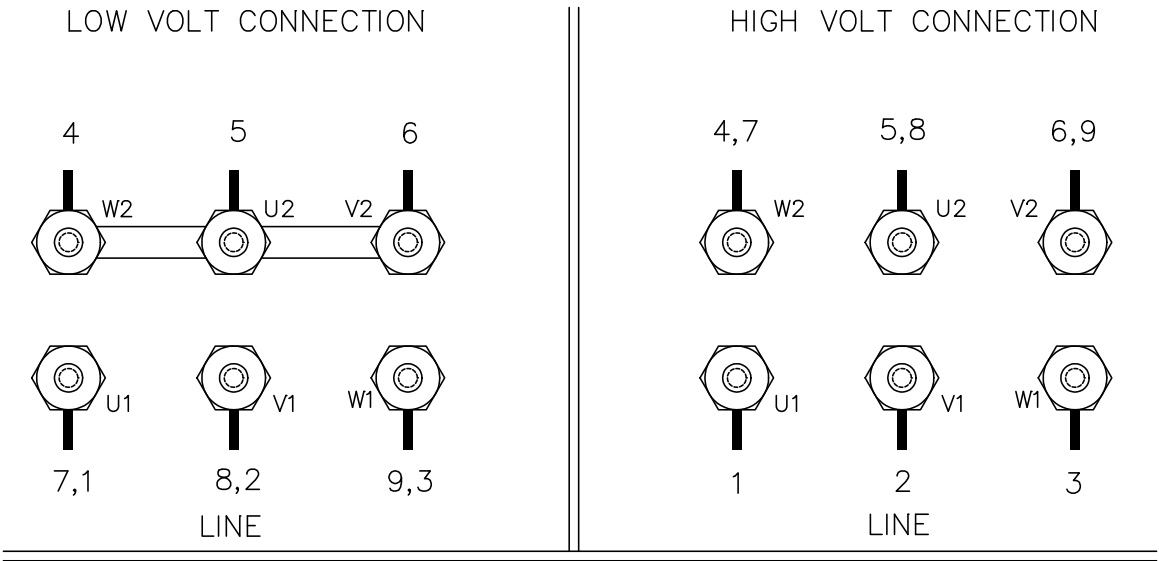
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REV. LTR: -	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
FILE: \AAA\00253\082		
MTL: -		

BALDOR - RELIANCE®

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

CD0005A25

SP0032



TO REVERSE ROTATION
INTERCHANGE ANY TWO
LINE LEADS.

MATL:					BALDOR ELECTRIC Co.	
REV:	A	ADD CONN LABEL REF TO DESC				
2S0032		SCALE: -	BY: JLP	REVISED: 12/17/96	THREE PHASE, DUAL VOLTAGE, TERMINAL BLOCK, CD0005/LC0005C01	
		FILE: AAA00029378		TDR: 0111436		

SP0032