

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0K2P2EF4

2.2KW, 1500RPM, 3PH, 50HZ, D112S, 3624B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D112S
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	2.200 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 UKCA CULUS
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	5
Current @ Voltage	4.300 A @ 380.0 V 8.600 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	91.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0019
Layout	36LYT499
Eff. date	02-12-2026
CD Diagram	CD0005A25
Poles	04
Leads	9#14
Proprietary	False
Created date	01-10-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	4.3 a
Insulation Class	F
Inverter Code	Inverter Duty
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Terminal Block
Motor Standards	IEC
Motor Type	3624B
Mounting Arrangement	B3
Number of Poles	4
Overall Length	16.16 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	Standard
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	INVERTER SPECIAL
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Volts	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	8.6/4.3	Max Amps		Cs Diagram	CS0576	BEMF	0
KW	2.2	VFD#	ACS380-040S-05			LD	0
RPM	1500	S.F.	1.00			LQ	0
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.7855 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%	10.3	100%	2.7	91.4	8.56%	188
P2	750	50%	10.3	100%	1.5	87.5	7.16%	157
P3	375	25%	10.3	100%	0.7	80.1	6.23%	137
P4	1350	90%	5.2	50%	1.3	91.8	4.06%	89
P5	750	50%	5.2	50%	0.7	89.1	3.07%	68
P6	750	50%	2.6	25%	0.4	88.8	1.58%	35
P7	375	25%	2.6	25%	0.2	85.0	1.11%	24

61800-9-2 PDS Performance at Reference Operating Points

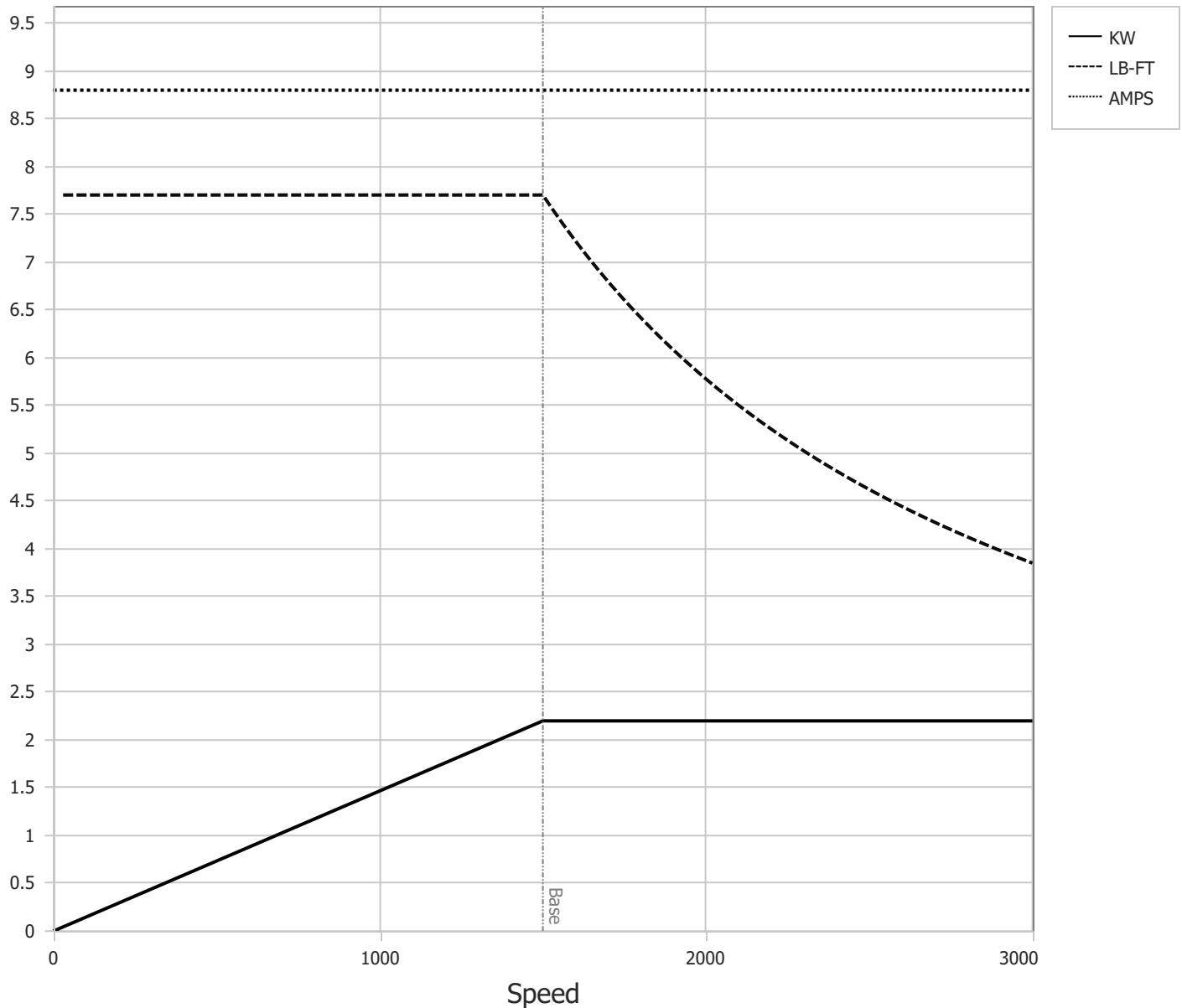
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1500	100%	10.3	100%	2.9	89.7	11.52%	253
P2	750	50%	10.3	100%	1.5	83.9	9.55%	210
P3	255	17%	10.3	100%	0.5	67.5	8.17%	180
P4	1500	100%	5.2	50%	1.5	89.4	5.92%	130
P5	750	50%	5.2	50%	0.7	84.2	4.68%	103
P6	255	17%	5.2	50%	0.3	69.1	3.79%	83
P7	750	50%	2.6	25%	0.4	81.5	2.83%	62
P8	255	17%	2.6	25%	0.1	66.0	2.19%	48

Points not taken in certified order.

BALDOR • RELIANCE	DR By: <u>R & D</u>	AC MOTOR PERFORMANCE CURVES	36WGA0019 36-0000-3637 Test - 111800
	CK By: <u>USJORAD2</u>		
	APP By: <u>USJAROB1</u>		
	Date: <u>01/15/2025</u>		

Volts	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	8.6/4.3	Max Amps		Cs Diagram	CS0576	BEMF	0
KW	2.2	VFD #	ACS380-040S-05			LD	0
RPM	1500	S.F.	1.00			LQ	0
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	3.7855 Meas L-L

Constant Duty Operating Range

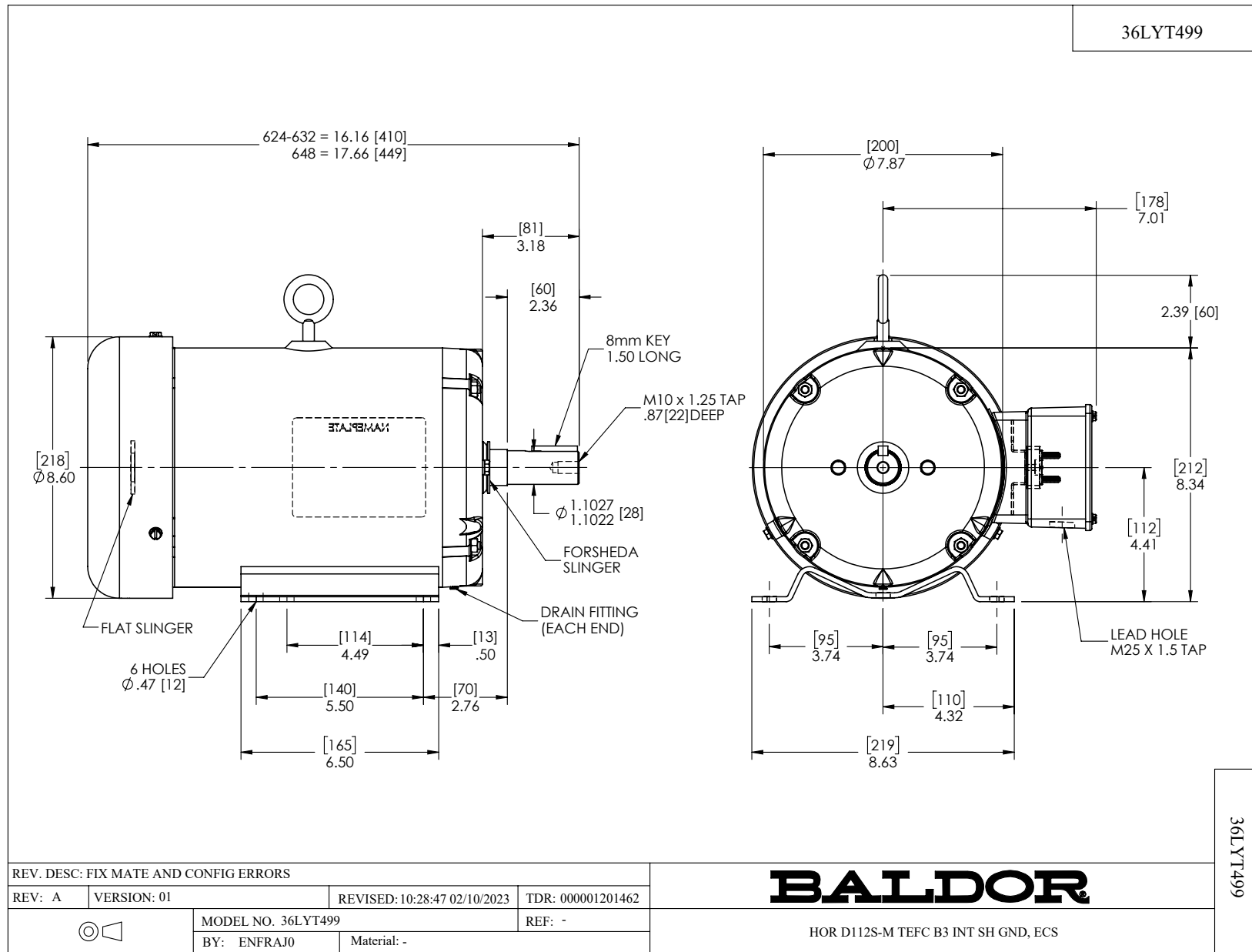


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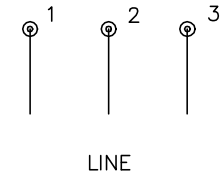
DR By: R & D
 CK By: USJORAD2
 APP By: USJAROB1
 Date: 01/15/2025

**AC MOTOR
PERFORMANCE
CURVES**

36WGA0019
 36-0000-3637
 Test - 111800



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

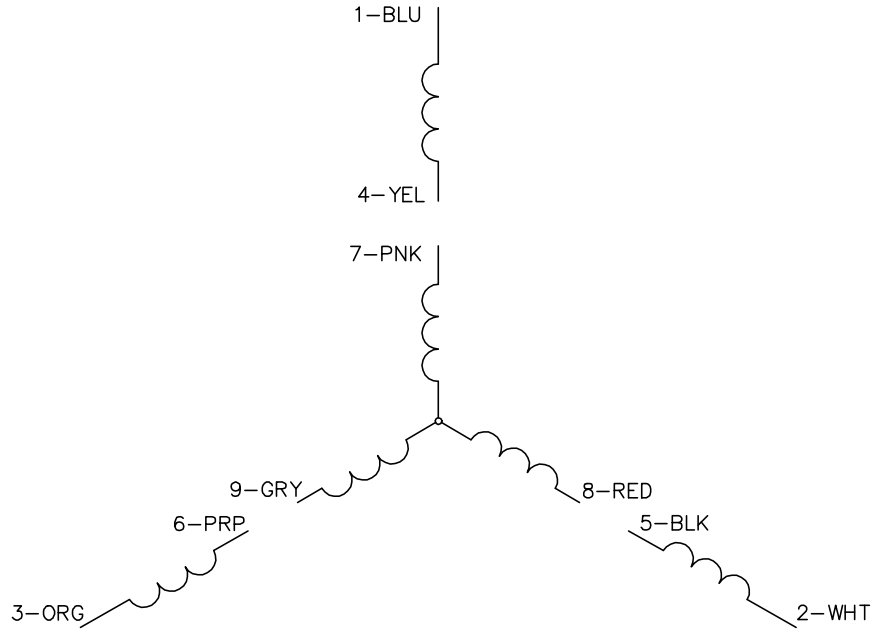
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MTL: -	© □	

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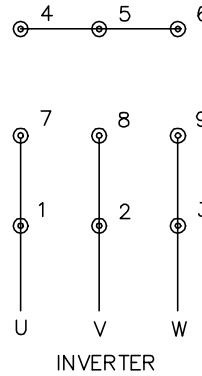
3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

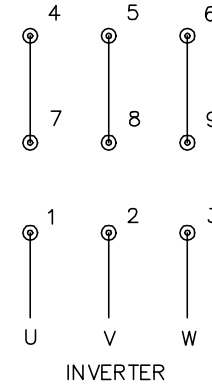
CD0005A25



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

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

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