

# ABB BALDOR RELIANCE III

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## Customer information packet

ECS101M0K7P5FE4

7.5KW, 1500RPM, 3PH, 50HZ, D132D, 3740B, TEFC

Class - None

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	D132D
<b>Frame Material</b>	Steel
<b>Frequency</b>	50.00 Hz
<b>Haz Area Class and Group</b>	None
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Brushless Wound Field PM Rotor
<b>Output @ Frequency</b>	7.500 KW @ 50 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1500 RPM @ 50 HZ
<b>Voltage @ Frequency</b>	190.0 V @ 50 HZ 380.0 V @ 50 HZ
<b>Agency Approvals</b>	CE WEEE UKCA CULUS
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Auxiliary Box Lead Termination</b>	None
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Blower</b>	None
<b>Constant Torque Speed Range</b>	5
<b>Current @ Voltage</b>	13.800 A @ 380.0 V 27.600 A @ 190.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	S1
<b>Efficiency @ 100% Load</b>	93.7 %
<b>Electrically Isolated Bearing</b>	Not Electrically Isolated
<b>Feedback Device</b>	NO FEEDBACK
<b>Frame Prefix</b>	D

**Part Detail**

<b>Revision</b>	G
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	37WGA0017
<b>Layout</b>	37LYT621
<b>Eff. date</b>	02-12-2026
<b>CD Diagram</b>	CD0005A25
<b>Poles</b>	04
<b>Leads</b>	9#12
<b>Proprietary</b>	False
<b>Created date</b>	01-11-2023

<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	13.8 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Duty
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Termination</b>	Terminal Block
<b>Motor Standards</b>	IEC
<b>Motor Type</b>	3740B
<b>Mounting Arrangement</b>	B5
<b>Number of Poles</b>	4
<b>Overall Length</b>	18.75 IN
<b>Power Factor</b>	94
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	D-Flange
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	1.497 IN
<b>Shaft Ground Indicator</b>	Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Speed</b>	1500 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	INVERTER SPECIAL
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

<b>NP3968B01A01</b>									
<b>CAT.NO.</b>	ECS101MOK7P5FE4								
<b>SPEC.</b>	37-0000-0492			<b>YR</b>					
<b>FRAME</b>	D132D		<b>IP</b>	55		<b>WT.</b>	131		
<b>KW</b>	7.5	<b>HZ</b>	50		<b>PH</b>	3	<b>DUTY-IPM</b>	S1	
<b>INS CL</b>	F	<b>CLASS RISE</b>				<b>AMB-C</b>		40	
<b>EFF. CL</b>	IE5	<b>EFF</b>	93.7		<b>COSφ</b>	94			
<b>VOLTS</b>	190/380		<b>FLA</b>	28.15/14.08					
<b>1/MIN</b>	1500			<b>1/MIN MAX</b>	3000				
<b>BEMF (V)</b>	200			<b>RS (OHMS)</b>	0.93				
<b>LD (MH)</b>	23.21			<b>LQ (MH)</b>	75.933				
<b>VPWM</b>	<b>CP =</b>	50		<b>TO</b>	100				
<b>CT</b>	5	<b>TO</b>	50	<b>VT</b>	1	<b>TO</b>	50		
<b>MATCHED INV</b>									
<b>DE</b>	6208		<b>ODE</b>	6206					
<b>SERIAL #</b>									

Volts	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	28.71/14.36	Max Amps		Cs Diagram	CS0576	BEMF	184
KW	7.5	VFD#	ACS380-040S-17			LD	23.21
RPM	1500	S.F.	1.00			LQ	75.933
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	0.9585 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%	35.2	100%	9.0	93.9	5.88%	441
P2	750	50%	35.2	100%	5.0	91.1	4.93%	370
P3	375	25%	35.2	100%	2.5	85.2	4.33%	325
P4	1350	90%	17.6	50%	4.5	94.8	2.47%	185
P5	750	50%	17.6	50%	2.5	92.9	1.93%	144
P6	750	50%	8.8	25%	1.3	93.4	0.89%	67
P7	375	25%	8.8	25%	0.6	90.5	0.66%	49

**61800-9-2 PDS Performance at Reference Operating Points**

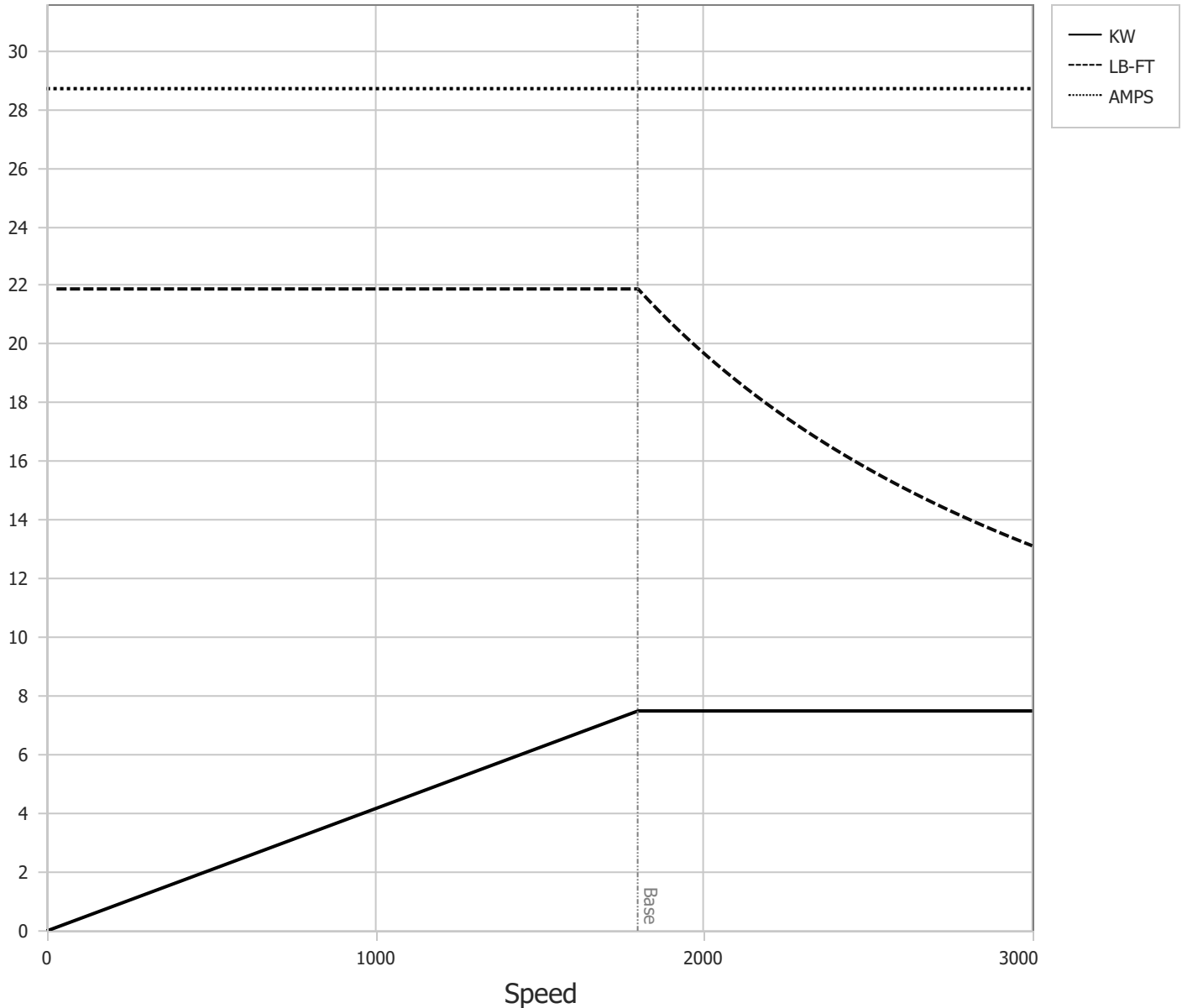
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1500	100%	35.2	100%	10.1	92.0	8.71%	653
P2	750	50%	35.2	100%	5.0	87.9	6.89%	517
P3	255	17%	35.2	100%	1.7	74.2	5.91%	443
P4	1500	100%	17.6	50%	5.0	92.7	3.95%	296
P5	750	50%	17.6	50%	2.5	89.2	3.02%	226
P6	255	17%	17.6	50%	0.9	77.5	2.47%	185
P7	750	50%	8.8	25%	1.3	88.5	1.62%	121
P8	255	17%	8.8	25%	0.4	76.9	1.28%	96

Points not taken in certified order.

<b>BALDOR • RELIANCE</b>	DR By:	<u>R &amp; D</u>	<b>AC MOTOR PERFORMANCE CURVES</b>	<b>37WGA0017</b> 37-0000-0488 Test - 111844
	CK By:	<u>USTOSAN</u>		
	APP By:	<u>USJAROB1</u>		
	Date:	<u>01/28/2025</u>		

Volts	190/380	Max RPM	3000	Conn Diag.	CD0005A25	Leads	9
Amps	28.71/14.36	Max Amps		Cs Diagram	CS0576	BEMF	184
KW	7.5	VFD #	ACS380-040S-17			LD	23.21
RPM	1500	S.F.	1.00			LQ	75.933
Phase/Hz	3/50	Rating	40C AMB-S1			Rs	0.9585 Meas L-L

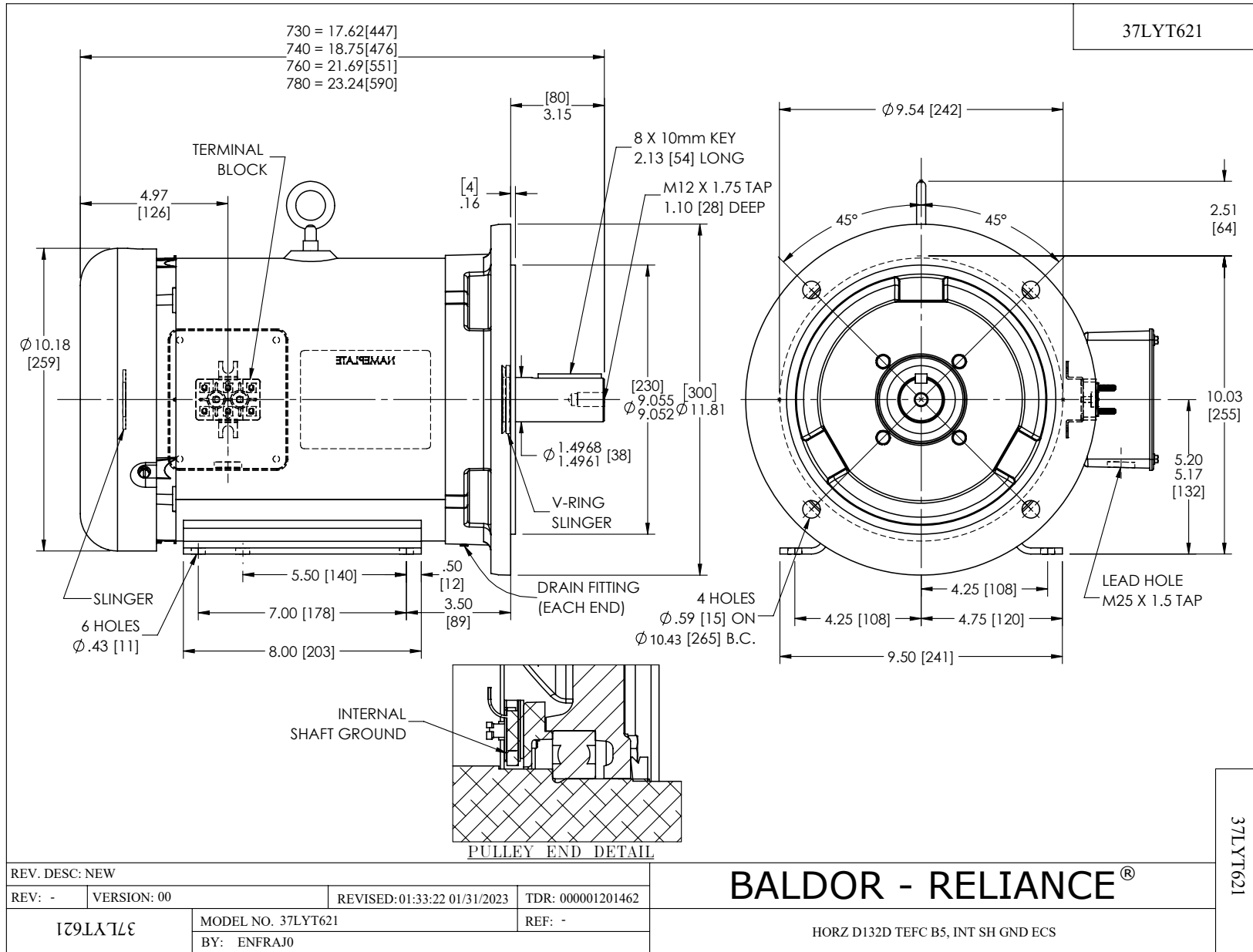
Constant Duty Operating Range



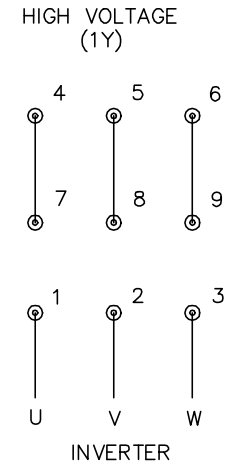
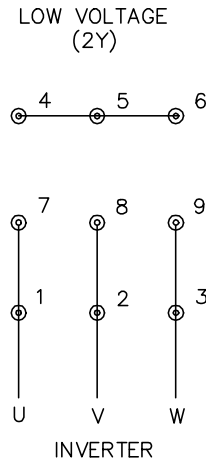
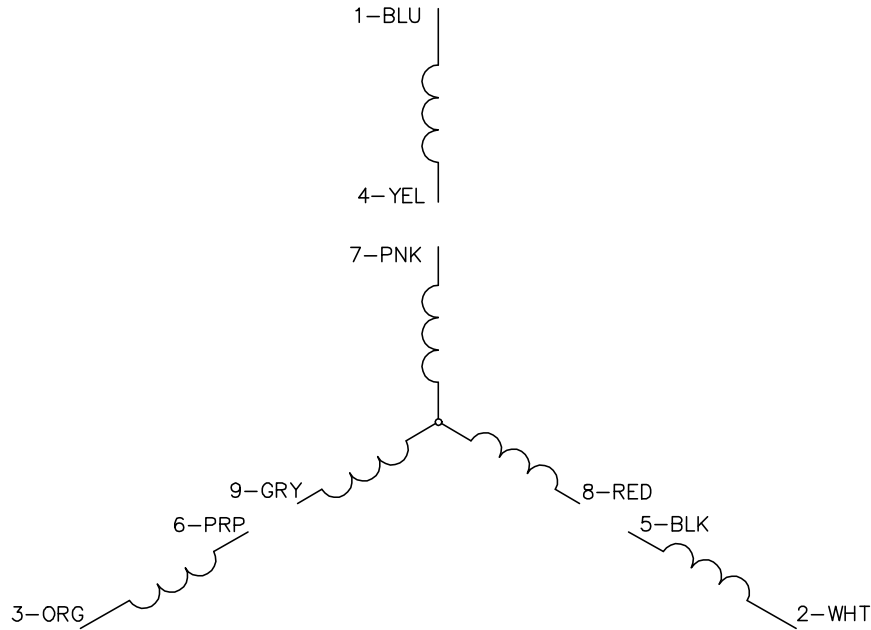
DR By: R & D  
 CK By: USTOSAN  
 APP By: USJAROB1  
 Date: 01/28/2025

**AC MOTOR  
PERFORMANCE  
CURVES**

**37WGA0017**  
 37-0000-0488  
 Test - 111844



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

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

**BALDOR - RELIANCE®**

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