

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0K7P5FB4

7.5KW, 1500RPM, 3PH, 50HZ, D132C, 3740B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D132C
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	7.500 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	13.800 A @ 380.0 V 27.600 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	S1
Efficiency @ 100% Load	93.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGA0017
Layout	37LYT620
Eff. date	02-12-2026
CD Diagram	CD0005A25
Poles	04
Leads	9#12
Proprietary	False
Created date	01-11-2023

Heater Indicator	No Heater
High Voltage Full Load Amps	13.8 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	3740B
Mounting Arrangement	B14
Number of Poles	4
Overall Length	18.75 IN
Power Factor	94
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.497 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

Nameplate

NP3968B01A01									
CAT.NO.	ECS101MOK7P5FB4								
SPEC.	37-0000-0490			YR					
FRAME	D132C		IP	55	WT.	131			
KW	7.5	HZ	50	PH	3	DUTY-IPM	S1		
INS CL	F	CLASS RISE				AMB-C	40		
EFF. CL	IE5	EFF	93.7	COSφ	94				
VOLTS	190/380	FLA	28.15/14.08						
1/MIN	1500	1/MIN MAX	3000						
BEMF (V)	200	RS (OHMS)	0.93						
LD (MH)	23.21	LQ (MH)	75.933						
VPWM	CP =	50	TO	100					
CT	5	TO	50	VT	1	TO	50		
MATCHED INV									
DE	6208	ODE	6206						
SERIAL #									

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

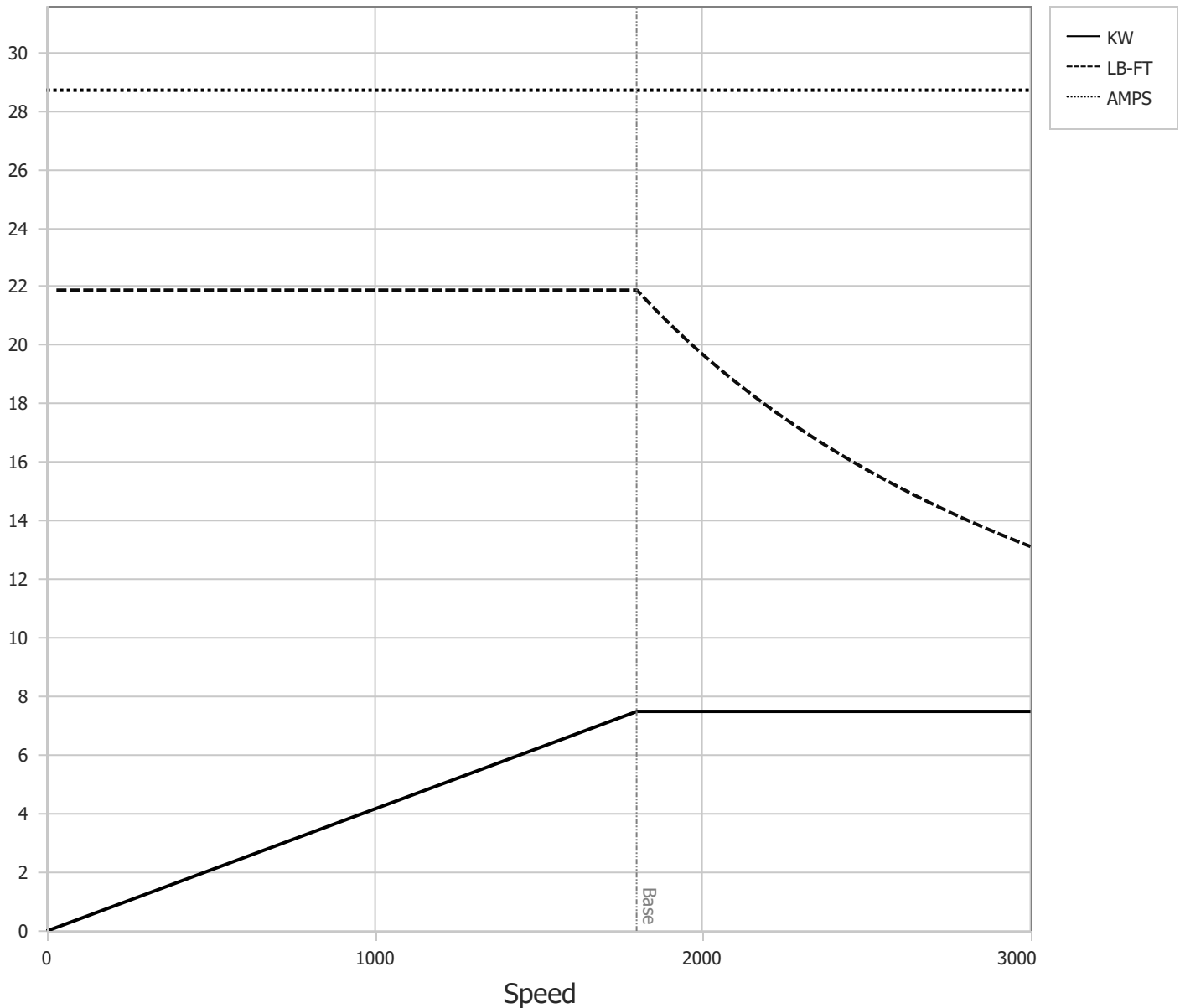
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1500	100%	35.2	100%	10.1	92.0	8.71%	653
P2	750	50%	35.2	100%	5.0	87.9	6.89%	517
P3	255	17%	35.2	100%	1.7	74.2	5.91%	443
P4	1500	100%	17.6	50%	5.0	92.7	3.95%	296
P5	750	50%	17.6	50%	2.5	89.2	3.02%	226
P6	255	17%	17.6	50%	0.9	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.

BALDOR • RELIANCE	DR By: <u>R & D</u>	AC MOTOR PERFORMANCE CURVES	37WGA0017 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

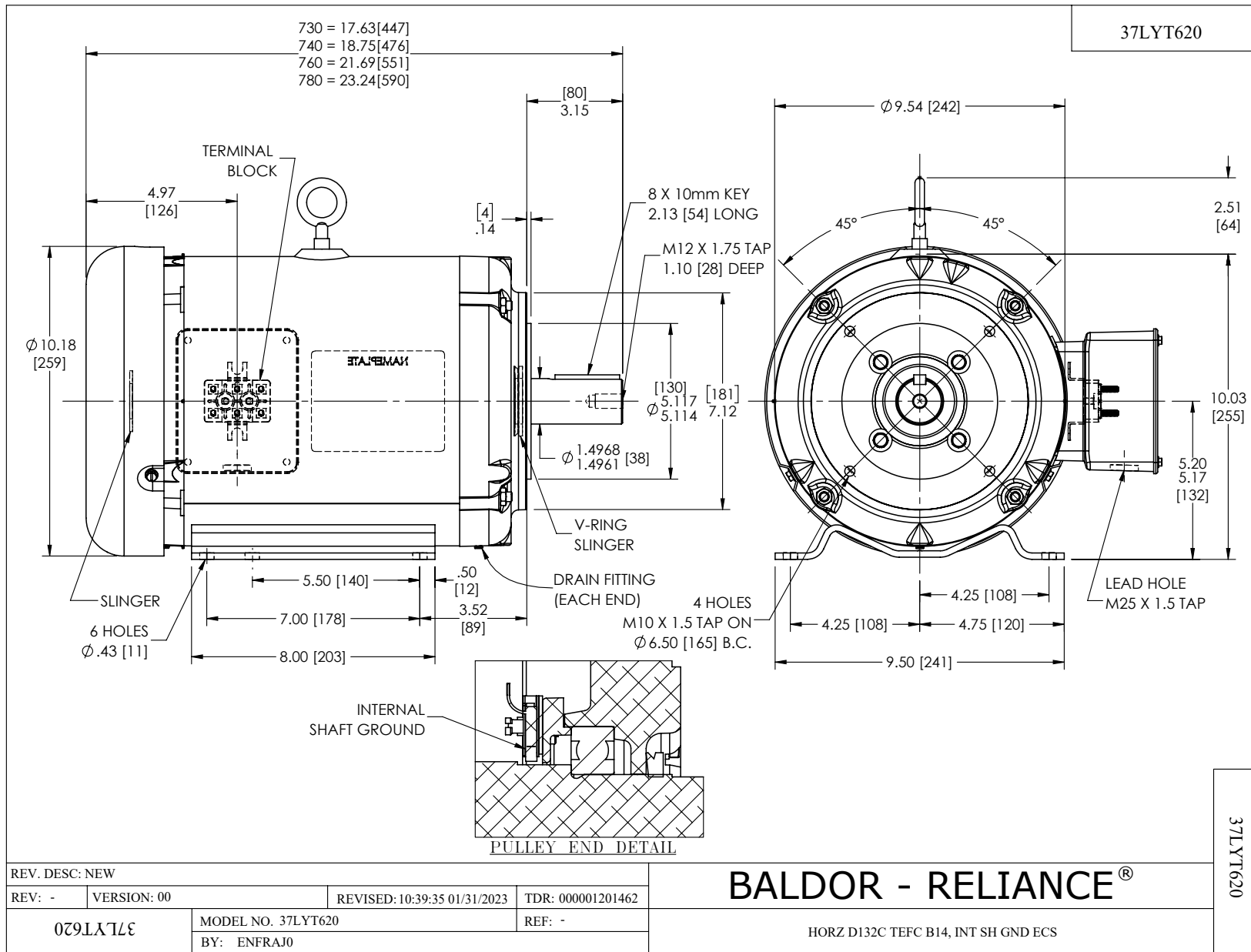
Constant Duty Operating Range



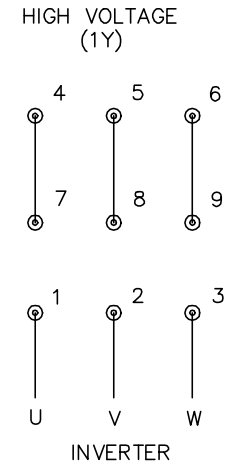
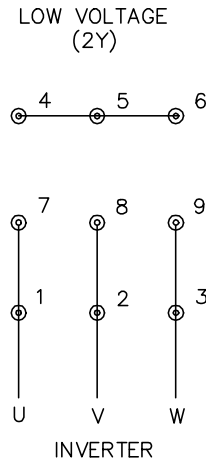
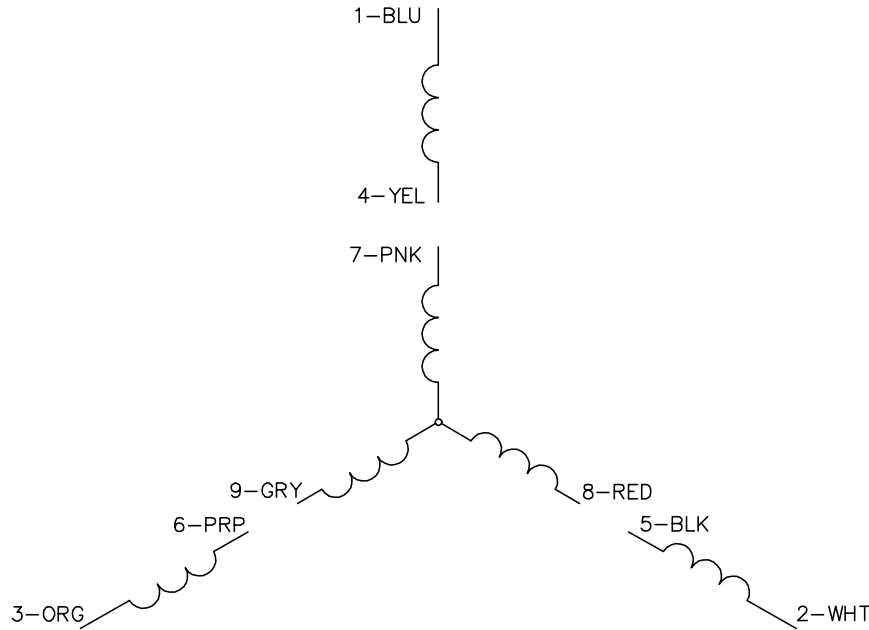
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**AC MOTOR
PERFORMANCE
CURVES**

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