

ABB BALDOR RELIANCE III

Customer information packet

ECS101M0H1DF4

1HP, 1800RPM, 3PH, 60HZ, 145T, 3516B, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Brushless Wound Field PM Rotor
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	WEEE 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	6
Current @ Voltage	1.200 A @ 460.0 V 2.400 A @ 230.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F

Part Detail

Revision	D
Type	AC
Mech. spec.	35E6264
Base	
Status	PRD/A
Elec. spec.	35WGG982
Layout	35LYE6264
Eff. date	10-29-2024
CD Diagram	CD0005A25
Poles	04
Leads	9#16
Proprietary	False
Created date	03-15-2024

Inverter Code	Inverter Duty
KVA Code	-
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.29 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	Y
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1800 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

NP3968A01A01						
CAT.NO.	ECS101M0H1DF4					
SPEC.	35E6264G982					
FRAME	145T	ENCL.	TEFC	IP	54	
HP	1	40	C AMB	CONT		
NOM. EFF.	88.2	PF	97	SF	1.5	
VOLTS	230/460		FLA	2.4/1.2		
RPM	1800	RPM-MAX	4000			
HZ	60	PH.	3	CLASS	F	
BEMF (V)	131/262		RS (OHMS)	5.2/20.8		
LD (MH)	29.3/117		LQ (MH)	136/544		
VPWM	CHP	60	TO	120		
CT	6	TO	60	VT	6	TO 60
MATCHED INV	ACS380-04XX-03A7-1 / 01A8-4					
DE	6205		ODE	6203		
SERIAL #						

Volts	460	Max RPM	3600	Conn Diag.	CD0006B03	Leads	3
Amps	1.05	Max Amps		Cs Diagram	CS1126	BEMF	269
HP	1	VFD#	ECIN4A2P2			LD	117
RPM	1800	S.F.	1.00			LQ	500
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	19.8095 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

	RPM	% Speed	LB-FT	% Torque	HP	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1618	90%	2.9	100%	0.9	88.2	11.94%	90
P2	900	50%	2.9	100%	0.5	86.0	8.08%	61
P3	450	25%	2.9	100%	0.3	79.2	6.50%	49
P4	1621	90%	1.5	50%	0.5	87.1	6.62%	50
P5	900	50%	1.5	50%	0.2	87.4	3.55%	27
P6	900	50%	0.7	25%	0.1	86.0	2.02%	15
P7	450	25%	0.7	25%	0.1	83.8	1.21%	9

61800-9-2 PDS Performance at Reference Operating Points

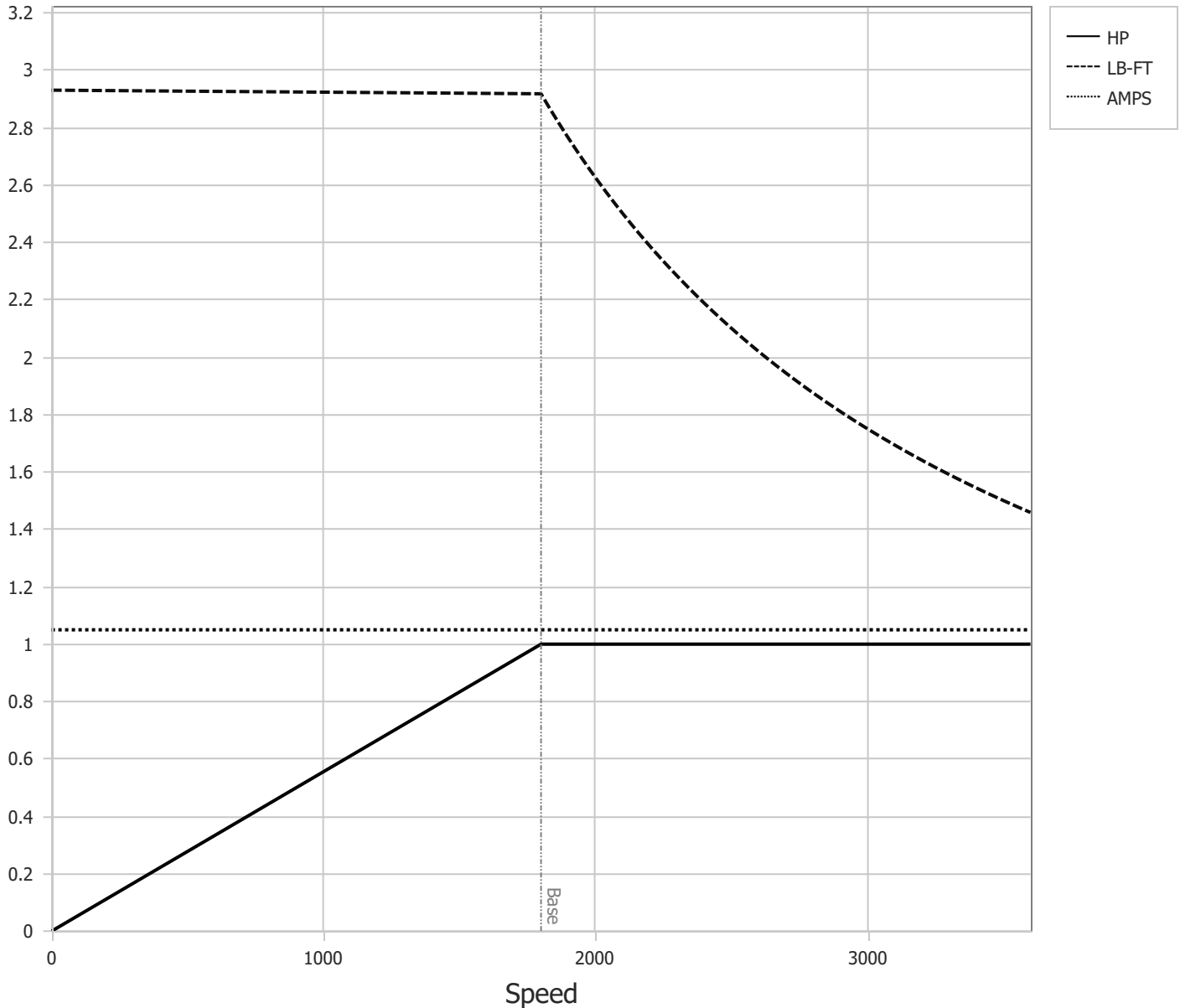
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1799	100%	2.9	100%	1.0	87.0	14.73%	111
P2	900	50%	2.9	100%	0.5	81.0	11.61%	88
P3	300	17%	2.9	100%	0.2	63.2	9.59%	72
P4	1802	100%	1.5	50%	0.5	83.5	9.78%	74
P5	900	50%	1.5	50%	0.2	79.4	6.41%	48
P6	300	17%	1.5	50%	0.1	61.5	5.17%	39
P7	900	50%	0.7	25%	0.1	73.2	4.53%	34
P8	300	17%	0.7	25%	0.0	53.7	3.56%	27

Points not taken in certified order.

BALDOR • RELIANCE	DR By:	<u>R & D</u>	AC MOTOR PERFORMANCE CURVES	35WGG965 35-0000-1623 Test - 111577
	CK By:	<u>USTOSAN</u>		
	APP By:	<u>USWEQUA1</u>		
	Date:	<u>11/14/2024</u>		

Volts	460	Max RPM	3600	Conn Diag.	CD0006B03	Leads	3
Amps	1.05	Max Amps		Cs Diagram	CS1126	BEMF	269
HP	1	VFD #	ECIN4A2P2			LD	117
RPM	1800	S.F.	1.00			LQ	500
Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	19.8095 Meas L-L

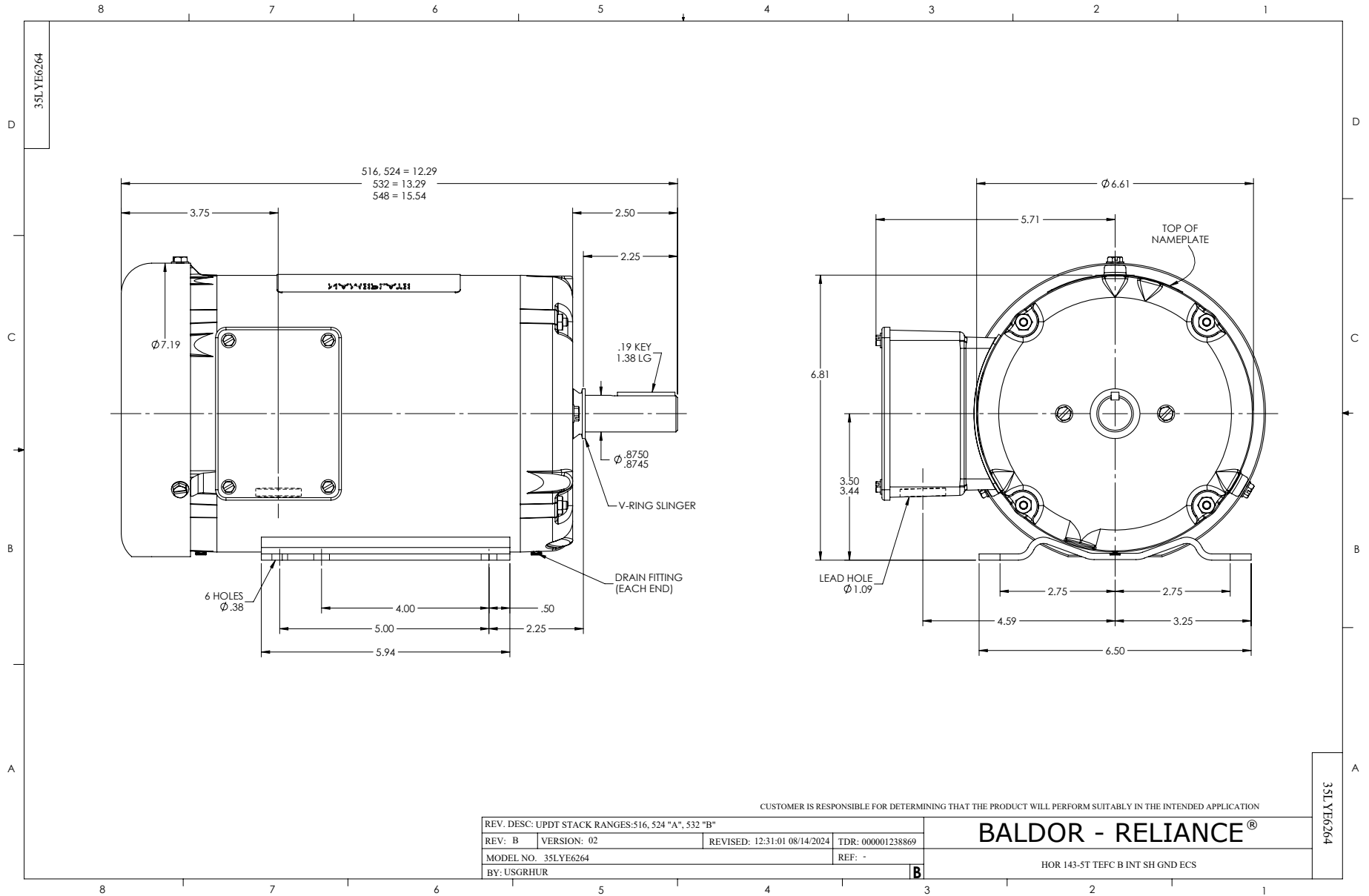
Constant Duty Operating Range



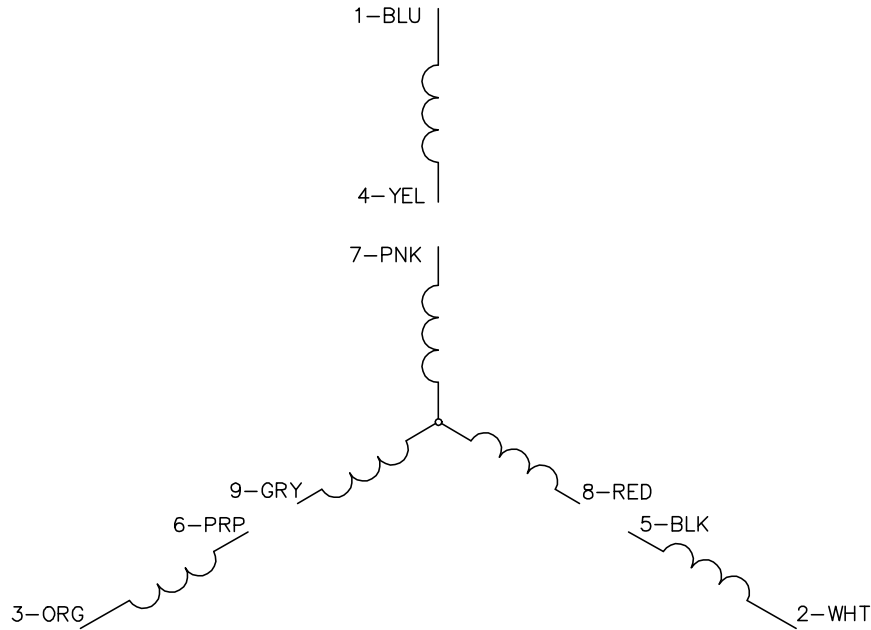
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**AC MOTOR
PERFORMANCE
CURVES**

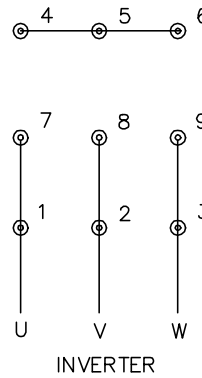
35WGG965
 35-0000-1623
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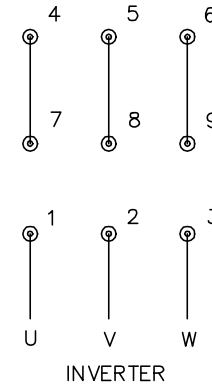
CD0005A25



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.

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

CD0005A25