



Customer information packet

ECS101M0H1DB4

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

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
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	F
Type	AC
Mech. spec.	35E5263
Base	
Status	PRD/A
Elec. spec.	35WGG982
Layout	35LYE5263
Eff. date	09-24-2025
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	C-Face
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

BALDOR • RELIANCE

EC-Titanium™

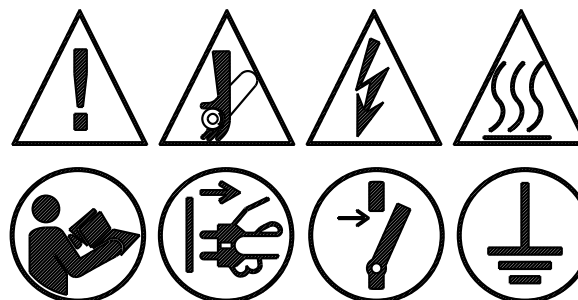
CAT. NO.	ECS101M0H1DB4													
SPEC.	35E5263G982								YR	***				
FRAME	145TC				ENCL.		TEFC		IP	54				
HP	1		RATING		40C AMB-CONT									
NOM. EFF.	88.2			PF		97		SF		1.50				
VOLTS	230/460				FLA		2.4/1.2							
RPM	1800			RPM MAX			4000							
HZ	60			PH.		3		CLASS		F				
BEMF (V)	131/262				Rs (Ω)		5.2/20.8							
Ld (mH)	29.3/117				Lq (mH)		136/544							
INV TYP	VPWM		CHP		60		TO 120		HZ					
	CT	6			TO 60		HZ		VT	6	TO 60		HZ	
MATCHED INV				ACS380-04XX-03A7-1 / 01A8-4										
BEARING	DE	6205				ODE		6203						
SERIAL#	***													

ELECTRIC MOTOR FOR INDUSTRIAL USE



ABB MOTORS AND MECHANICAL INC.
5711 R.S. BOREHAM JR. ST., FORT SMITH, AR. MFG IN U.S.A.

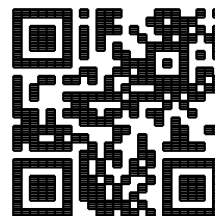
FERRITE ASSISTED
SYNCHRONOUS RELUCTANCE MOTOR
FOR INVERTER USE ONLY



PERMANENT MAGNET MOTOR. WHEN SHAFT IS
ROTATED, VOLTAGE WILL BE GENERATED AT
THE MOTOR TERMINALS.

MOTEUR À AIMANT PERMANENT. LORSQUE
L'ARBRE TOURNE, UNE TENSION SERA
GÉNÉRÉE AUX BORNES DU MOTEUR.

BALDOR-RELIANCE
SHAFT GROUNDING BRUSH INSTALLED



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

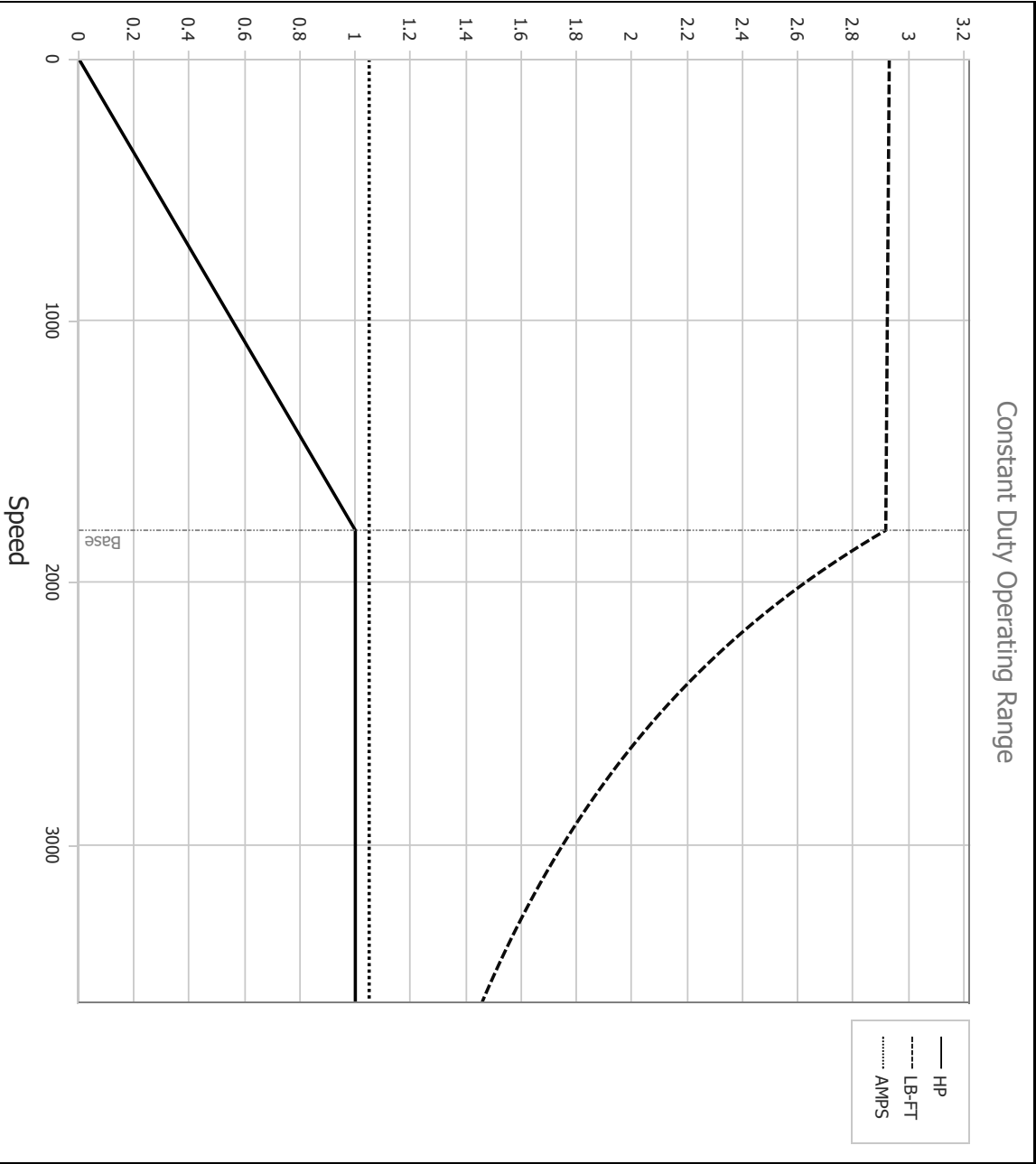
61800-9-2 PDS Performance at Reference Operating Points

	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

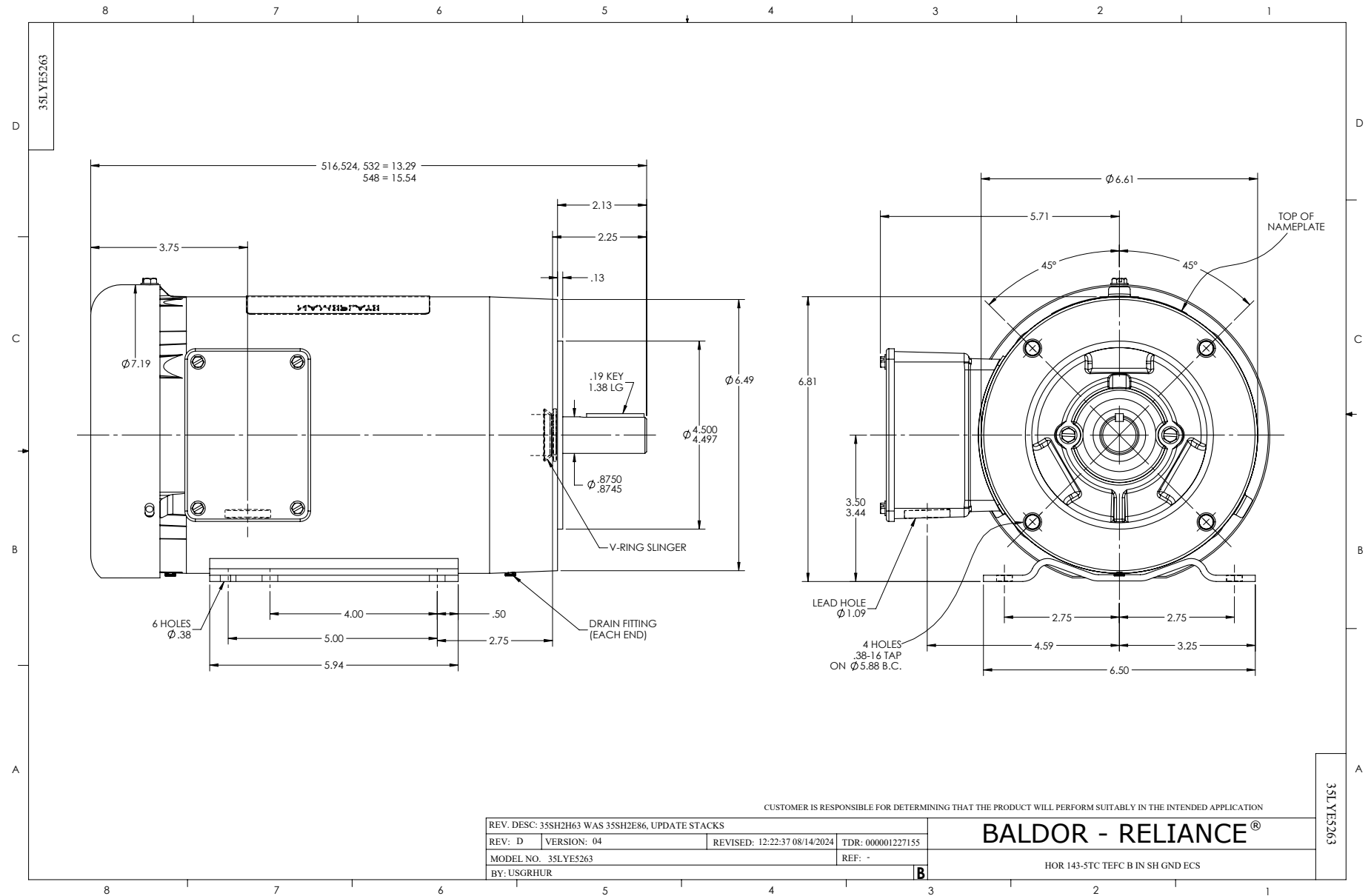
Points not taken in certified order.

BALDOR • RELIANCE	DR By: <u>R & D</u> CK By: <u>USTOSAN</u> APP By: <u>USWEQUA1</u> Date: <u>11/14/2024</u>	AC MOTOR PERFORMANCE CURVES	35WGG965 35-0000-1623 Test - 111577
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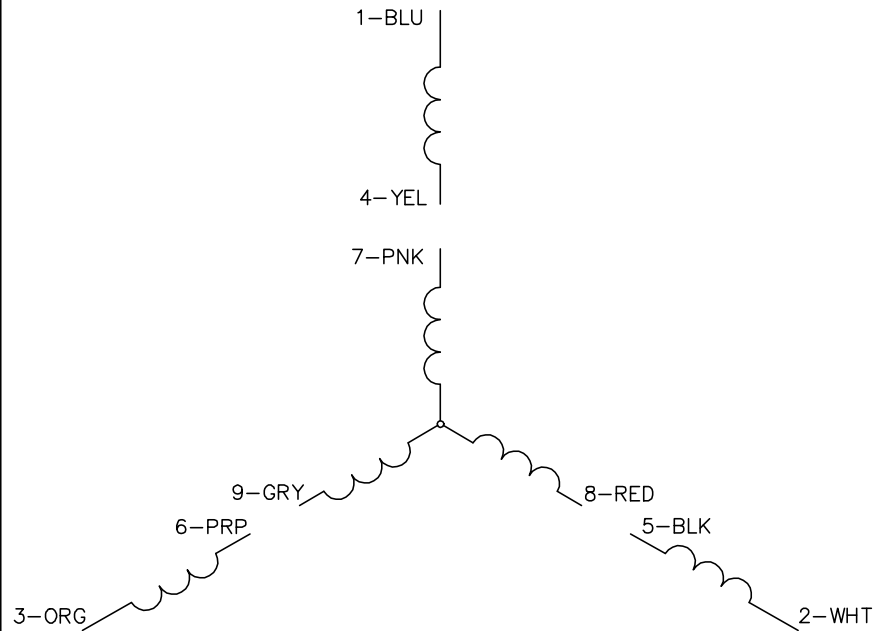
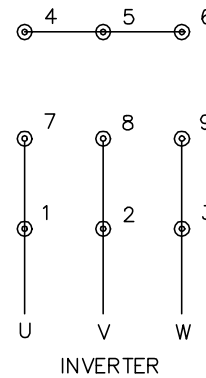
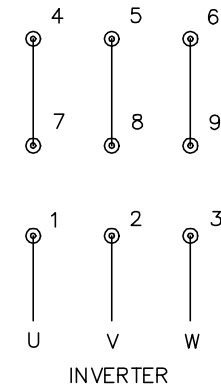
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CD0005A25

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