ABB BALDOR RELIANCE

Customer information packet

ECS101M0H1DC4

1HP, 1800RPM, 3PH, 60HZ, 145TC, 3516B, TEFC, F1
Class - None
Division - Not Applicable

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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	No Mounting
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	G
Type	AC
Mech. spec.	35E5350
Base	
Status	PRD/A
Elec. spec.	35WGG982
Layout	35LYE5350
Eff. date	10-08-2026
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	12.29 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

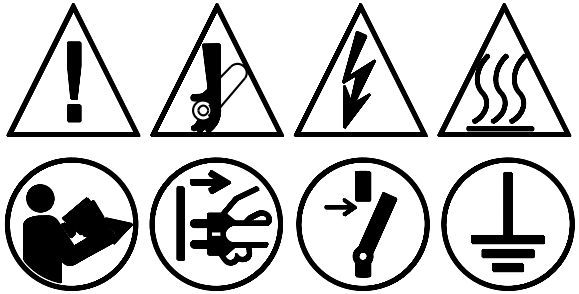
BALDOR•RELIANCE

EC-Titanium™

CAT. NO.	ECS101M0H1DC4						
SPEC.	35E5350G982				YR	***	
FRAME	145TC		ENCL.	TEFC	IP54		
HP	1	RATING	40C AMB-CONT				
NOM. EFF.	89.5	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

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

BALDOR-RELIANCE
SHAFT GROUNDING BRUSH INSTALLED

c UL us LISTED
E46145

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

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

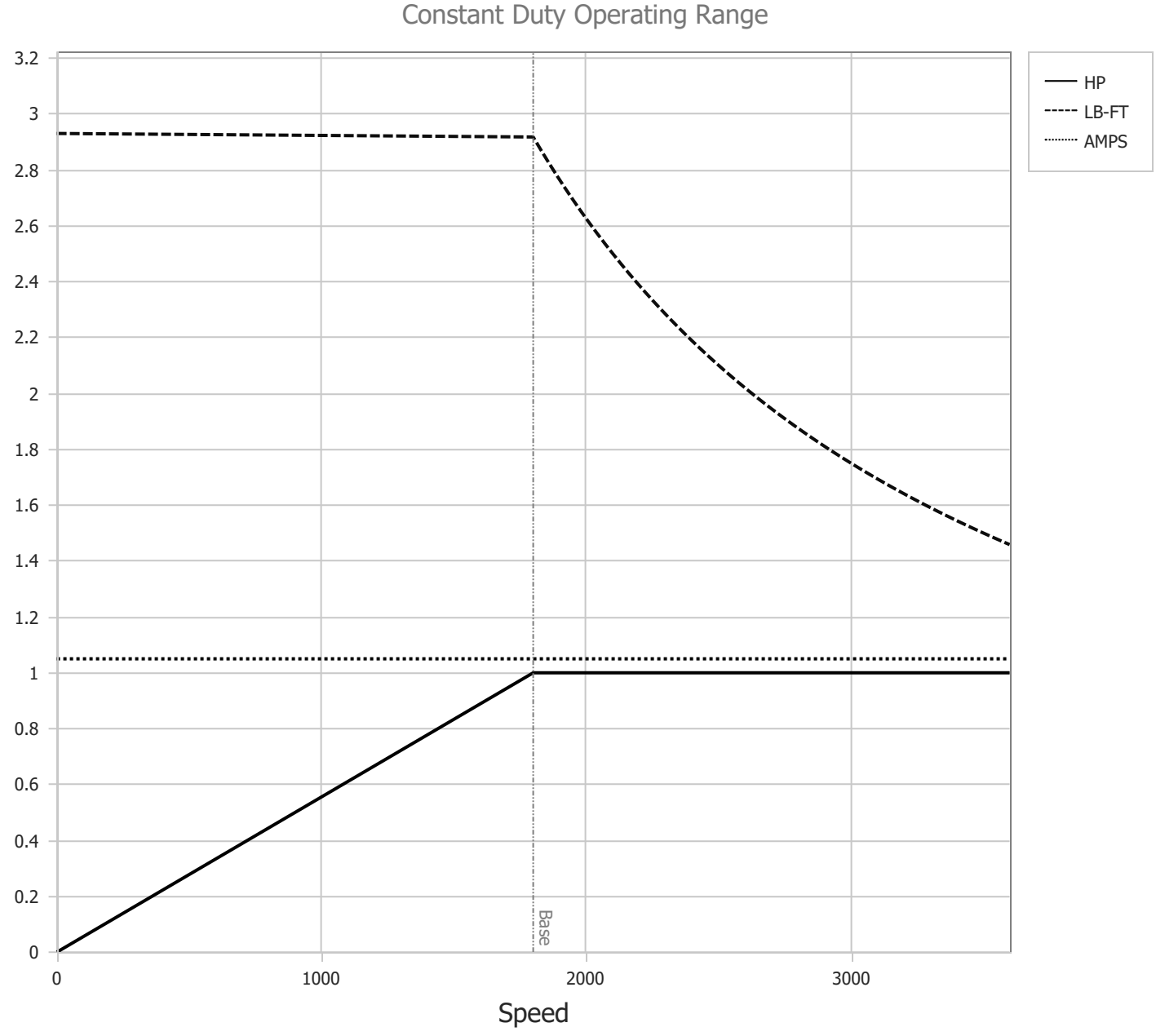
	RPM	% Speed	LB-FT	% Torque	HP	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1618	90%	2.9	100%	0.9	88.2	11.94%	90
P2	900	50%	2.9	100%	0.5	86.0	8.08%	61
P3	450	25%	2.9	100%	0.3	79.2	6.50%	49
P4	1621	90%	1.5	50%	0.5	87.1	6.62%	50
P5	900	50%	1.5	50%	0.2	87.4	3.55%	27
P6	900	50%	0.7	25%	0.1	86.0	2.02%	15
P7	450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

61800-9-2 PDS Performance at Reference Operating Points

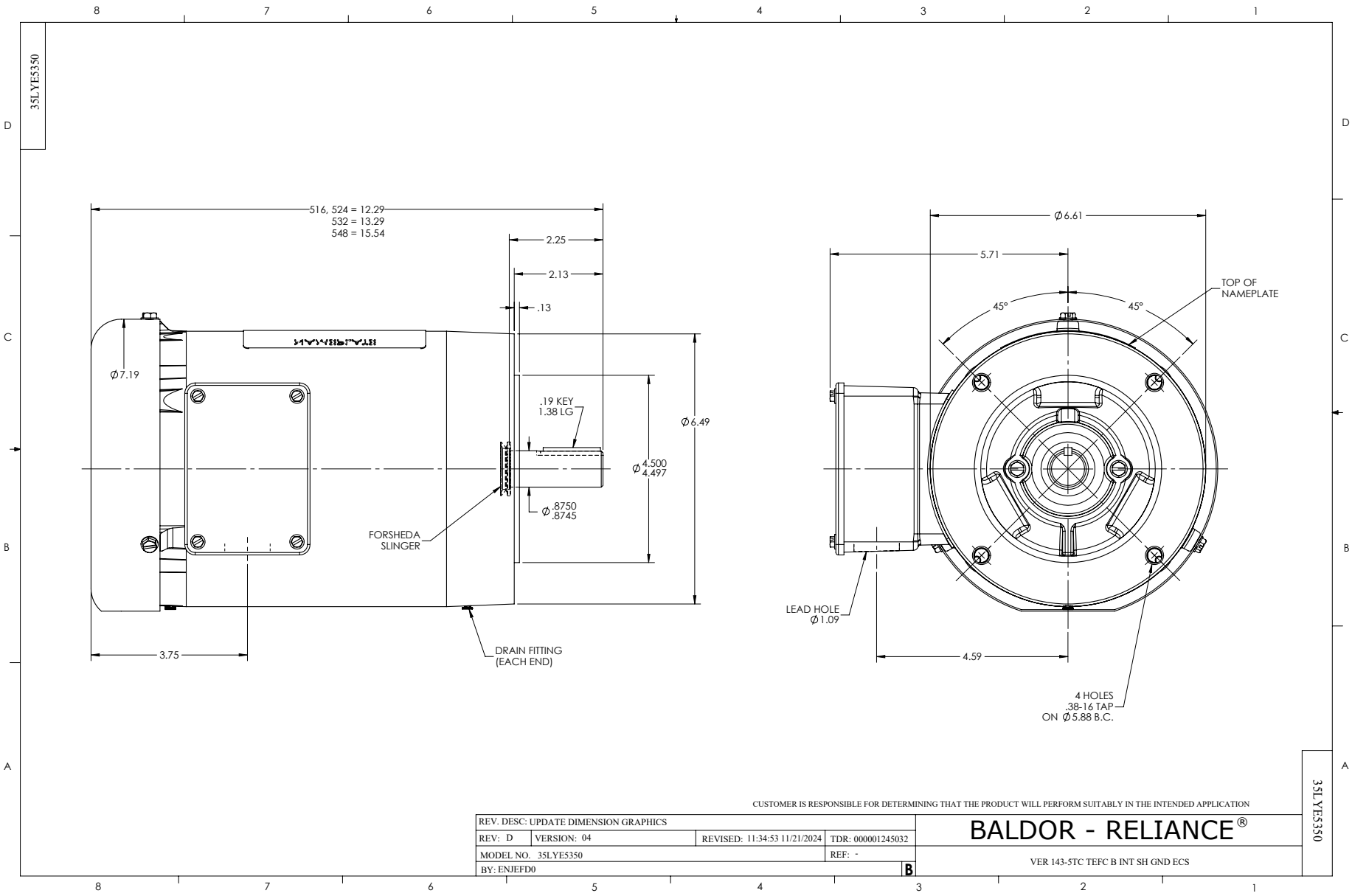
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1799	100%	2.9	100%	1.0	87.0	14.73%	111
P2	900	50%	2.9	100%	0.5	81.0	11.61%	88
P3	300	17%	2.9	100%	0.2	63.2	9.59%	72
P4	1802	100%	1.5	50%	0.5	83.5	9.78%	74
P5	900	50%	1.5	50%	0.2	79.4	6.41%	48
P6	300	17%	1.5	50%	0.1	61.5	5.17%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

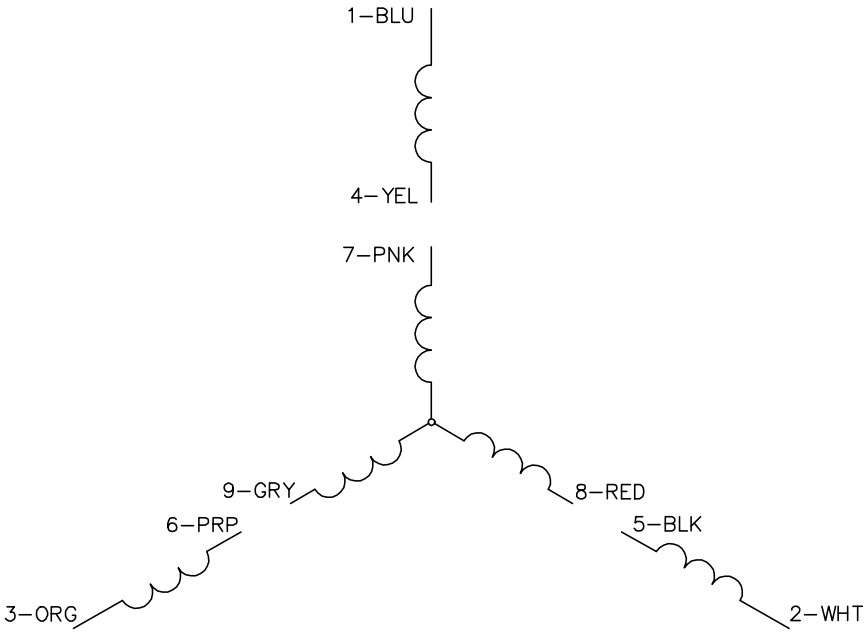
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Amps	1.05	Max Amps		Cs Diagram	CS1126	BEMF	269
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Phase/Hz	3/60	Rating	50C AMB-CONT			Rs	19.8095 Meas L-L

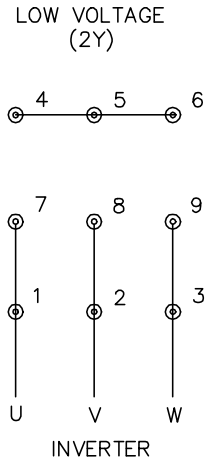


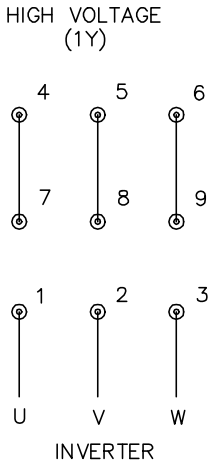
BALDOR • RELIANCE	DR By: R & D CK By: USTOSAN APP By: USWEQUA1 Date: 11/14/2024	**AC MOTOR PERFORMANCE CURVES**	**35WGG965** 35-0000-1623 *Test - 111577*


35LYE5350
516, 524 = 12.29
532 = 13.29
548 = 15.54
2.25
2.13
.13
Ø7.19
.19 KEY
1.38 LG
Ø6.49
Ø4.500
4.497
Ø.8750
.8745
FORSHEDA
SLINGER
3.75
DRAIN FITTING
(EACH END)
Ø6.61
5.71
45°
45°
TOP OF
NAMEPLATE
LEAD HOLE
Ø1.09
4.59
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE DIMENSION GRAPHICS
REV: D
VERSION: 04
REVISED: 11:34:53 11/21/2024
TDR: 000001245032
MODEL NO. 35LYE5350
REF: -
BY: ENJEFD0
B
BALDOR - RELIANCE®
VER 143-5TC TEFC B INT SH GND ECS
35LYE5350

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