ABB BALDOR RELIANCE

Customer information packet

ECS100A1H1DC4

1HP, 1800RPM, 3PH, 60HZ, 143TC, 3514B, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
Agency Approvals	UL
	WEEE
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	2.400 A @ 230.0 V
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.3 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	NLA/A
Elec. spec.	35WGA0021
Layout	35LYE5253
Eff. date	01-19-2023
CD Diagram	CD0006B03
Poles	04
Leads	3#16 13" LONG LEADS
Proprietary	False
Created date	10-07-2020

Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3514B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.71 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
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

NP3978A01								
PART NO.	ECI1A3P2							
U1	120	**PH**	1	**HZ**	60			
I1	10.3	**W/EXT. CHOKE**					8.9	
SERIAL #								

NP3968A01A01								
CAT.NO.	ECS100A1H1DC4							
SPEC.	35-0000-0941							
FRAME	143TC			**ENCL.**	TEFC	**IP**	54	
HP	1		40	**C AMB**		CONT		
NOM. EFF.	89.3	**PF**	97		**SF**	1		
VOLTS	230			**FLA**	2.4			
RPM	1800			**RPM-MAX**	4000			
HZ	60		**PH.**	3	**CLASS**	F		
BEMF (V)	124				**RS (OHMS)**	5.98		
LD (MH)	48.7				**LQ (MH)**	180		
VPWM	**CHP**	60	**TO**	133				
CT	6	**TO**	60	**VT**	1	**TO**	133	
MATCHED INV	ECI1A3P2							
DE	6205			**ODE**	6205			
SERIAL #								

Volts	120	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.4	Max Amps		Cs Diagram	CS1127	BEMF	135
HP	1	VFD#	ECIN1A3P2			LD	29.3
RPM	1800	S.F.	1.00			LQ	136
Phase/Hz	3/60	Rating	40C AMB-CONT			Rs	4.8894 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

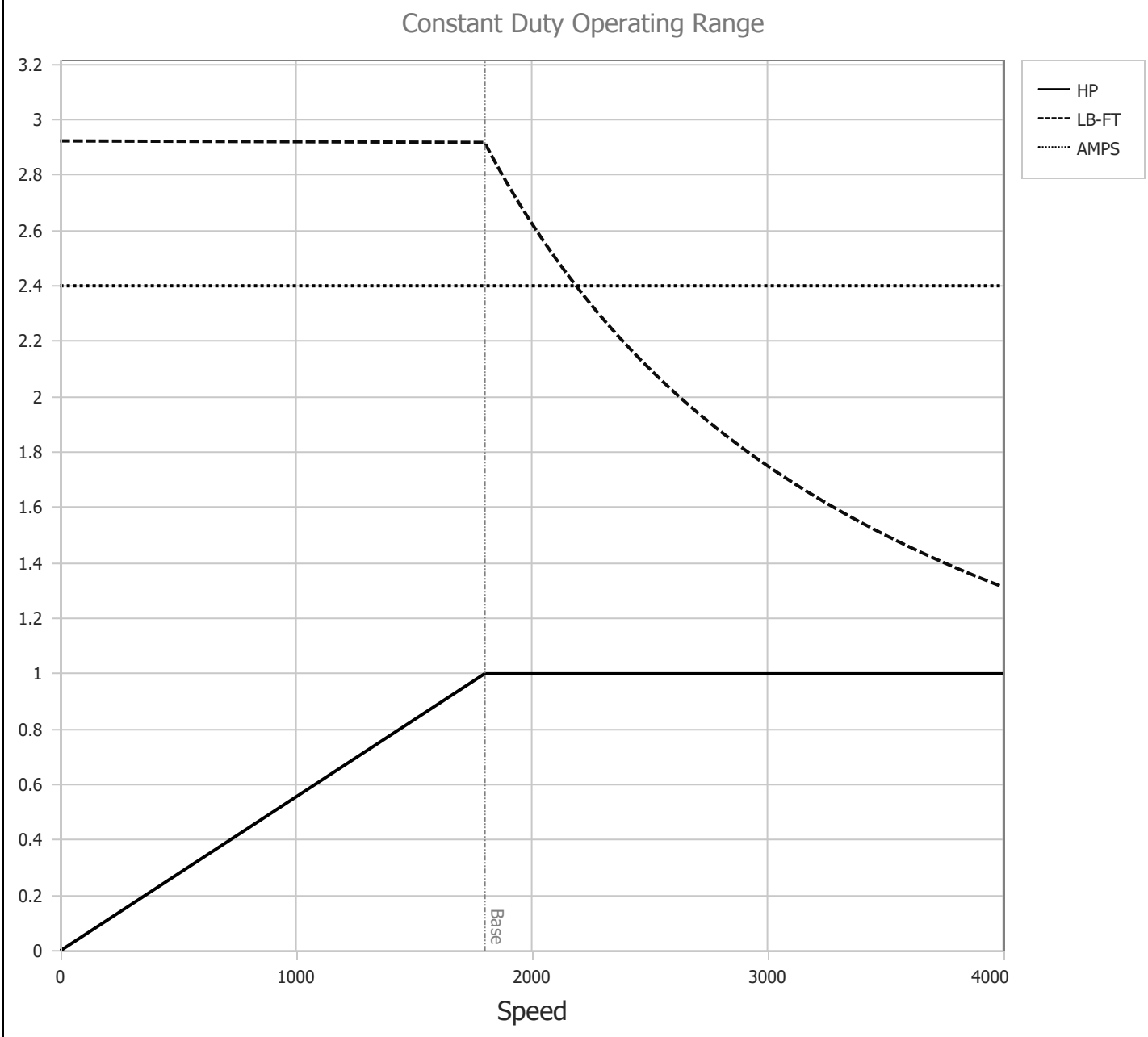
	RPM	% Speed	LB-FT	% Torque	HP	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1618	90%	2.9	100%	0.9	89.8	10.17%	77
P2	900	50%	2.9	100%	0.5	85.4	8.48%	64
P3	450	25%	2.9	100%	0.2	78.7	6.68%	50
P4	1620	90%	1.5	50%	0.5	89.3	5.36%	40
P5	900	50%	1.5	50%	0.2	87.3	3.61%	27
P6	900	50%	0.7	25%	0.1	86.0	2.03%	15
P7	450	25%	0.7	25%	0.1	83.2	1.24%	9

61800-9-2 PDS Performance at Reference Operating Points

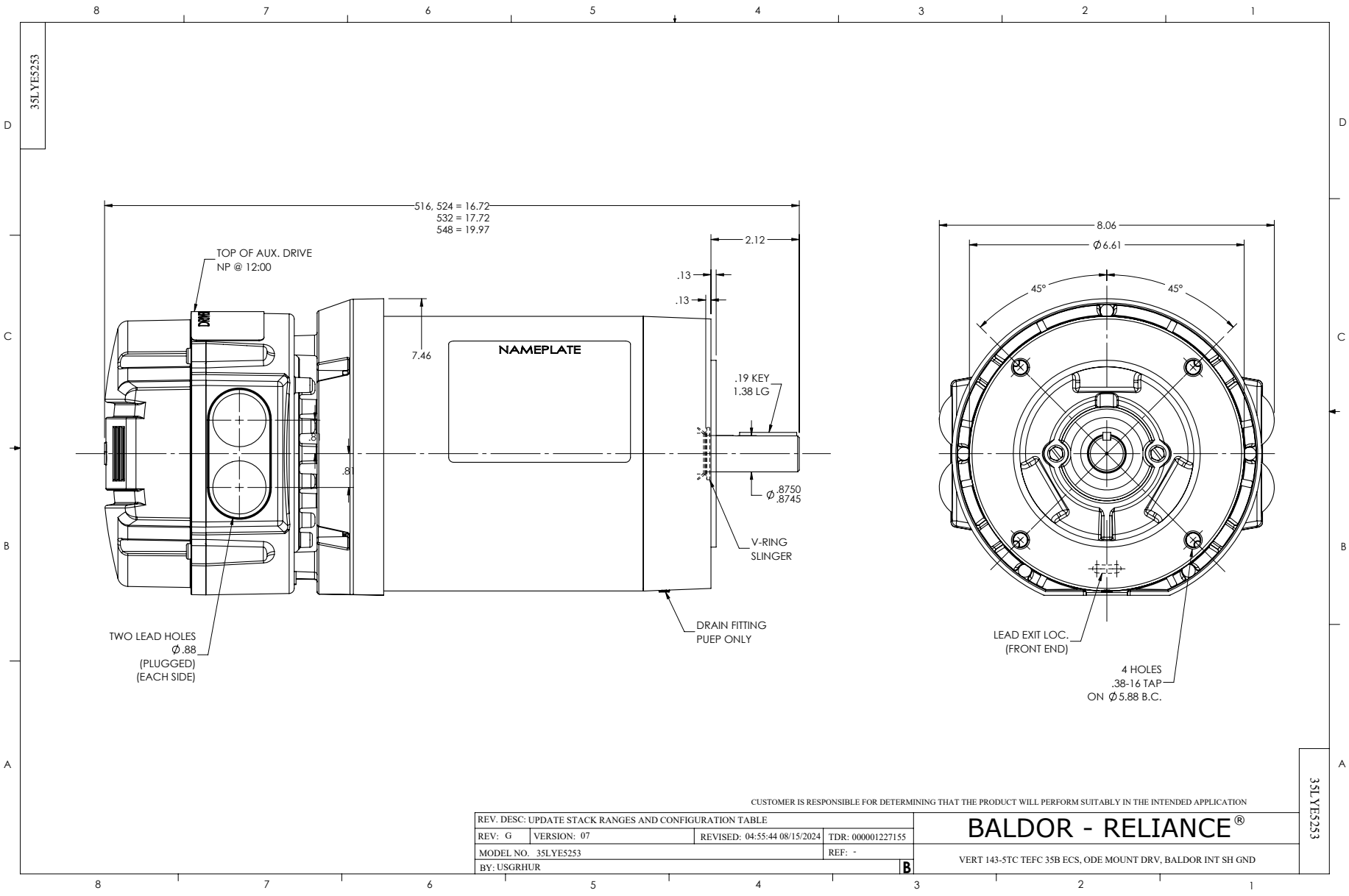
	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1801	100%	2.9	100%	1.0	86.8	15.08%	114
P2	900	50%	2.9	100%	0.5	81.0	11.57%	87
P3	299	17%	2.9	100%	0.2	65.1	8.79%	66
P4	1799	100%	1.5	50%	0.5	85.7	8.23%	62
P5	900	50%	1.5	50%	0.2	82.0	5.43%	41
P6	300	17%	1.5	50%	0.1	67.1	4.03%	30
P7	900	50%	0.7	25%	0.1	78.9	3.32%	25
P8	300	17%	0.7	25%	0.0	64.6	2.25%	17

Points not taken in certified order.

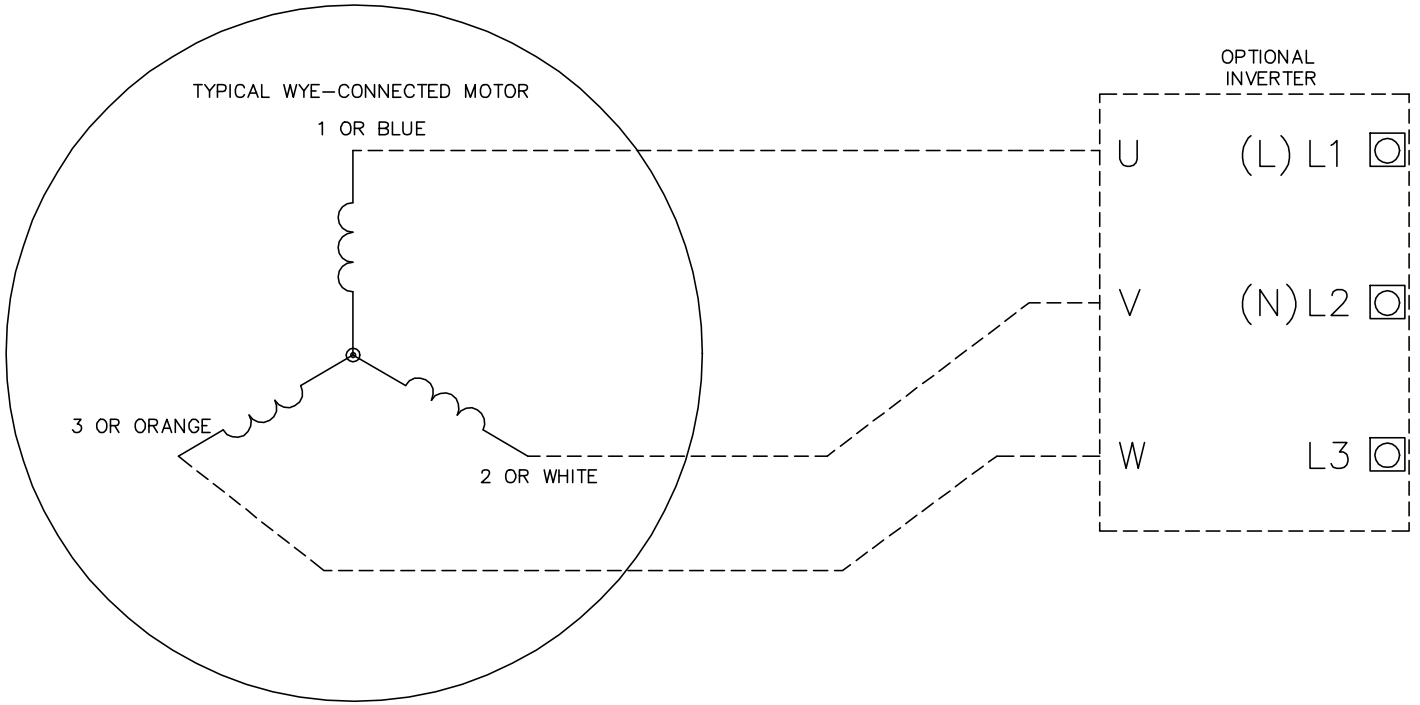
Volts	120	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.4	Max Amps		Cs Diagram	CS1127	BEMF	135
HP	1	VFD #	ECIN1A3P2			LD	29.3
RPM	1800	S.F.	1.00			LQ	136
Phase/Hz	3/60	Rating	40C AMB-CONT			Rs	4.8894 Meas L-L



BALDOR • RELIANCE	DR By: R & D CK By: USBIBAK APP By: USWEQUA1 Date: 12/07/2024	**AC MOTOR PERFORMANCE CURVES**	**35WGG932** 35-0000-1616 *Test - 111671*


35LYE5253
516, 524 = 16.72
532 = 17.72
548 = 19.97
2.12
TOP OF AUX. DRIVE
NP @ 12:00
.13
.13
7.46
NAMEPLATE
.19 KEY
1.38 LG
.81
Ø.8750
.8745
V-RING
SLINGER
DRAIN FITTING
PUEP ONLY
TWO LEAD HOLES
Ø.88
(PLUGGED)
(EACH SIDE)
8.06
Ø6.61
45°
45°
LEAD EXIT LOC.
(FRONT END)
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 STACK RANGES AND CONFIGURATION TABLE
REV: G
VERSION: 07
REVISED: 04:55:44 08/15/2024
TDR: 000001227155
MODEL NO. 35LYE5253
REF: -
BY: USGRHUR
B
BALDOR - RELIANCE®
VERT 143-5TC TEFC 35B ECS, ODE MOUNT DRV, BALDOR INT SH GND
35LYE5253

CD0006B03



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

CD0006B03

REV. DESC: CHANGE LEAD COLORS TO BLUE WHITE ORANGE		
REV. LTR: A	VERSION: 01	TDR: 000001158598
FILE: \AAA\00252\917	REVISED: 11:01:03 01/19/2021	BY: ENMARSO
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE CONNECTED, ECS

SH 1 of 1