ABB BALDOR RELIANCE

Customer information packet

ECS101A3K1P5DF4

1.5KW, 1500RPM, 3PH, 50HZ, D90S, 3524B, TEFC, B
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
9/7/2026 10:50:28 AM

Specifications

Enclosure	TEFC
Frame	D90S
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	1.500 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 V @ 50 HZ
Agency Approvals	CE
	CULUS
	UKCA
	WEEE
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	2.360 A @ 380.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a

Part Detail

Revision	C
Type	AC
Mech. spec.	35E5479
Base	
Status	PRD/A
Elec. spec.	35WGG963
Layout	35LYE5479
Eff. date	11-22-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#16 13" LONG LEADS Y
Proprietary	False
Created date	04-30-2024

Insulation Class	F
Inverter Code	03
KVA Code	-
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524B
Mounting Arrangement	B3
Number of Poles	4
Overall Length	15.38 IN
Power Factor	95
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.945 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1500 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

NP3968B01A01											
CAT.NO.	ECS101A3K1P5DF4										
SPEC.	35E5479G963				**YR**						
FRAME	D90S		**IP**	55	**WT.**	44					
KW	1.5	**HZ**	50		**PH**	3	**DUTY-IPM**	CONT			
INS CL	F		**CLASS RISE**				**AMB-C**	40			
EFF. CL	IE4	**EFF**	87.7		**COS0**	95					
VOLTS	380		**FLA**	2.36							
1/MIN	1500				**1/MIN MAX**	3000					
BEMF (V)	247				**RS (OHMS)**	11.7					
LD (MH)	78.9				**LQ (MH)**	406					
VPWM	**CP =**	50		**TO**	133						
CT	5	**TO**	50	**VT**	5	**TO**	50				
MATCHED INV	ECIN4A4P1										
DE	6205		**ODE**	6203							
SERIAL #											

NP3978A00						
PART NO.	ECIN4A4P1					
U1	400	**PH**	3	**HZ**	50	
I1	2.9	**W/EXT. CHOKE**				2.7
SERIAL #						

Volts	380	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.2	Max Amps		Cs Diagram	CS1126	BEMF	296
KW	1.5	VFD#	ECIN4A44P1			LD	78.9
RPM	1500	S.F.	1.00			LQ	406
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	11.7387 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

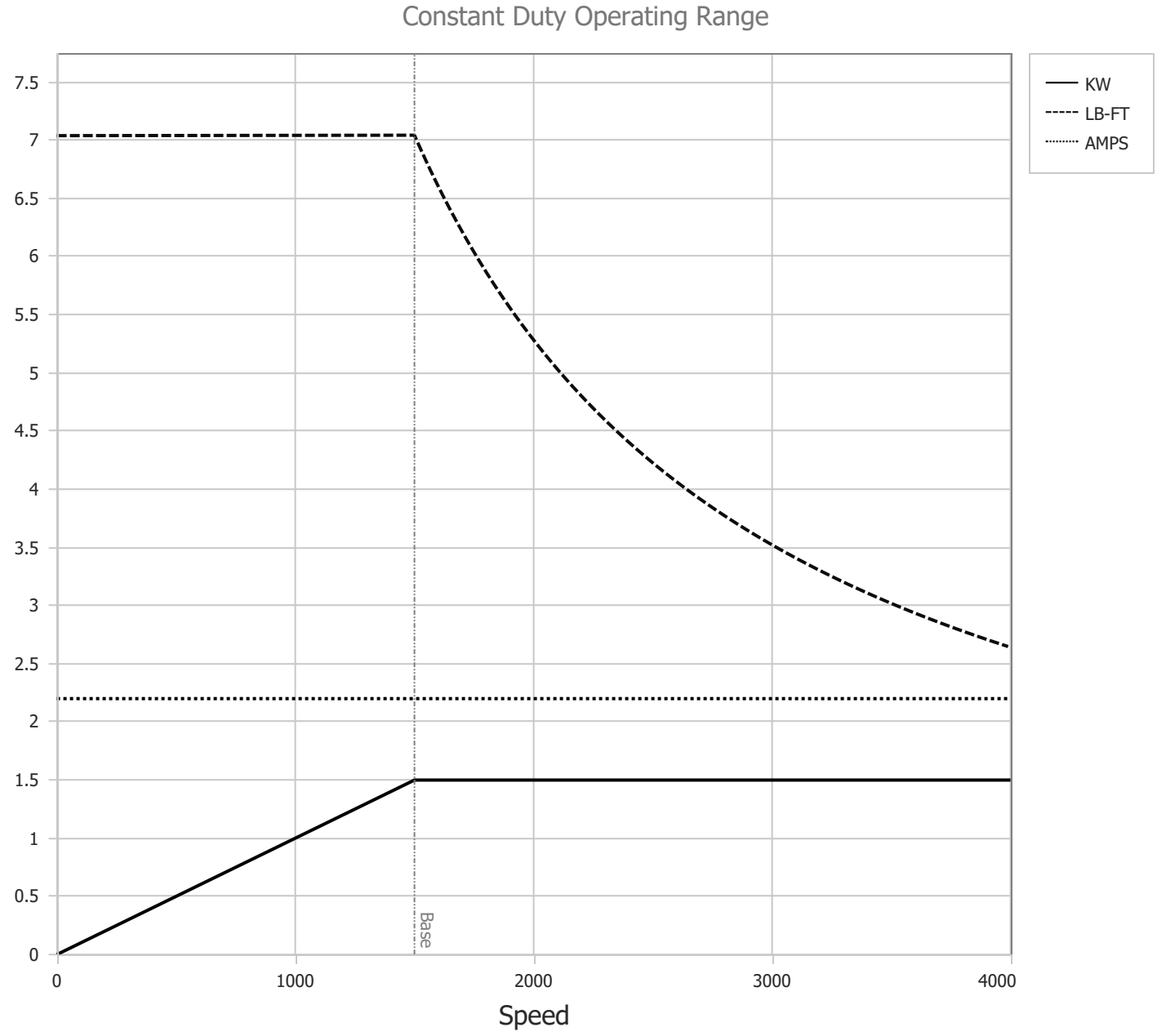
	RPM	% Speed	LB-FT	% Torque	KW	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1361	90%	7.0	100%	1.4	88.8	11.51%	173
P2	755	50%	7.0	100%	0.8	84.6	9.15%	137
P3	363	25%	7.0	100%	0.4	74.2	8.40%	126
P4	1358	90%	3.5	50%	0.7	91.2	4.40%	66
P5	755	50%	3.5	50%	0.4	87.8	3.50%	53
P6	755	50%	1.8	25%	0.2	89.4	1.51%	23
P7	363	25%	1.8	25%	0.1	84.3	1.13%	17

61800-9-2 PDS Performance at Reference Operating Points

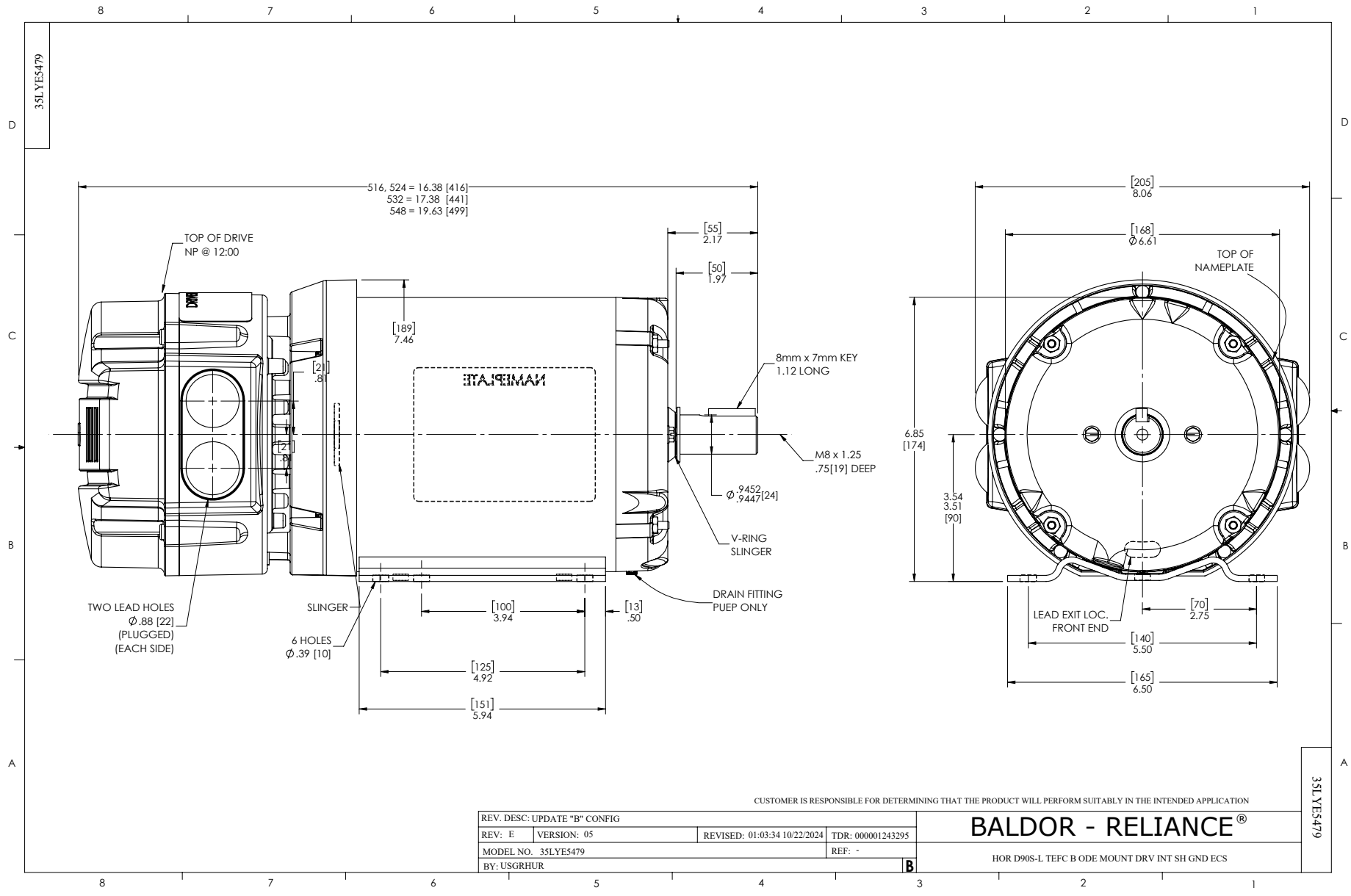
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1511	100%	7.0	100%	1.5	85.4	17.18%	258
P2	755	50%	7.0	100%	0.8	81.3	11.59%	174
P3	245	17%	7.0	100%	0.2	61.1	10.37%	155
P4	1509	100%	3.5	50%	0.8	88.4	6.59%	99
P5	755	50%	3.5	50%	0.4	82.9	5.18%	78
P6	245	17%	3.5	50%	0.1	65.2	4.36%	65
P7	755	50%	1.8	25%	0.2	81.9	2.80%	42
P8	245	17%	1.8	25%	0.1	64.1	2.29%	34

Points not taken in certified order.

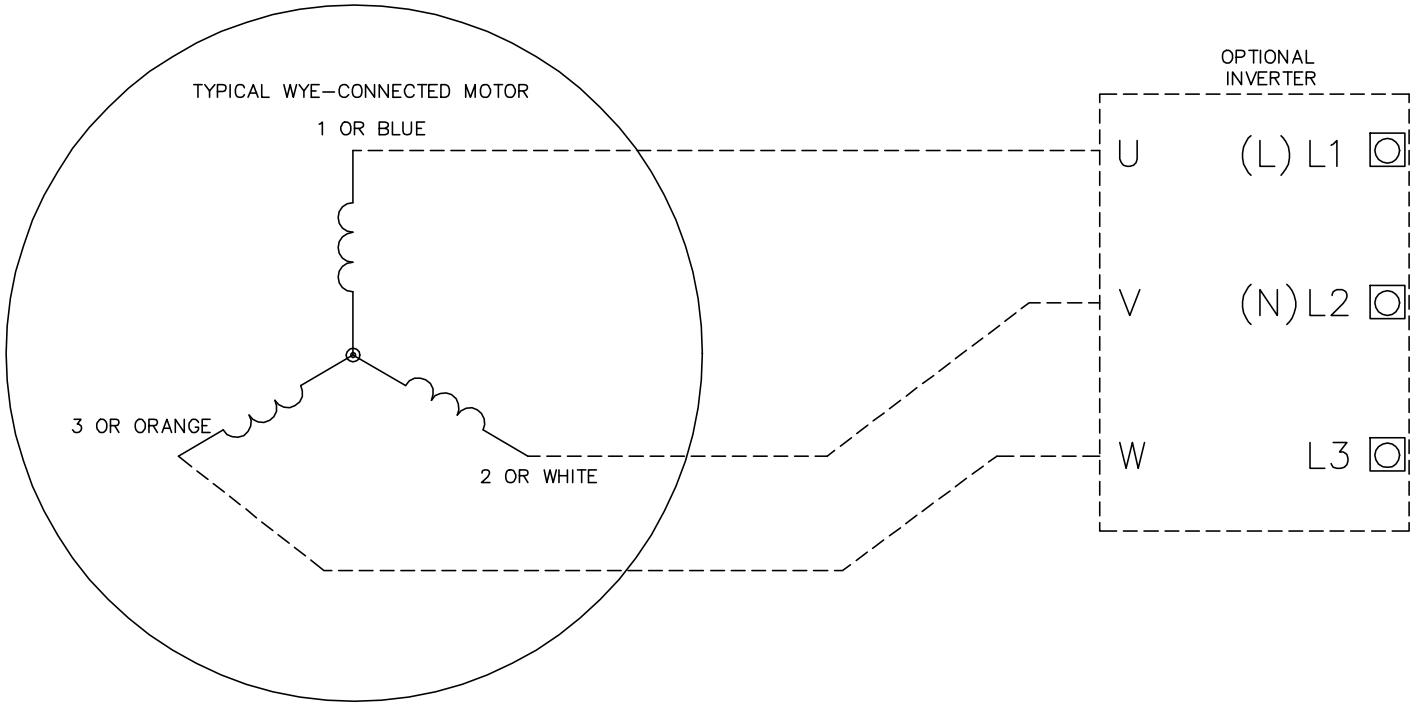
Volts	380	Max RPM	4000	Conn Diag.	CD0006B03	Leads	3
Amps	2.2	Max Amps		Cs Diagram	CS1126	BEMF	296
KW	1.5	VFD #	ECIN4A44P1			LD	78.9
RPM	1500	S.F.	1.00			LQ	406
Phase/Hz	3/50	Rating	40C AMB-CONT			Rs	11.7387 Meas L-L



BALDOR • RELIANCE	DR By: R & D CK By: USTOSAN APP By: USJAROB1 Date: 08/08/2024	**AC MOTOR PERFORMANCE CURVES**	**35WGG963** 35E5209G963 *Test - 111107*


35LYE5479
516, 524 = 16.38 [416]
532 = 17.38 [441]
548 = 19.63 [499]
TOP OF DRIVE
NP @ 12:00
[55]
2.17
[50]
1.97
[189]
7.46
[2]
.8
8mm x 7mm KEY
1.12 LONG
M8 x 1.25
.75[19] DEEP
Ø .9452
.9447[24]
V-RING
SLINGER
DRAIN FITTING
PUEP ONLY
TWO LEAD HOLES
Ø .88 [22]
(PLUGGED)
(EACH SIDE)
SLINGER
6 HOLES
Ø .39 [10]
[100]
3.94
[13]
.50
[125]
4.92
[151]
5.94
[205]
8.06
[168]
Ø 6.61
TOP OF
NAMEPLATE
6.85
[174]
3.54
3.51
[90]
LEAD EXIT LOC.
FRONT END
[70]
2.75
[140]
5.50
[165]
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE "B" CONFIG
REV: E
VERSION: 05
REVISED: 01:03:34 10/22/2024
TDR: 000001243295
MODEL NO. 35LYE5479
REF: -
BY: USGRHUR
B
BALDOR - RELIANCE®
HOR D90S-L TEFC B ODE MOUNT DRV INT SH GND ECS
35LYE5479

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