

ABB BALDOR RELIANCE III

Customer information packet

ECS101T3K2P2EC4

2.2KW, 1500RPM, 3PH, 50HZ, D112C, 3624B, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	D112C
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	2.200 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	380.0 V @ 50 HZ
Agency Approvals	BLUETOOTH CE CULUS 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	5
Current @ Voltage	4.400 A @ 380.0 V
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Frame Prefix	D
Heater Indicator	No Heater
High Voltage Full Load Amps	4.4 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0025
Layout	36LY-000-291
Eff. date	05-08-2024
CD Diagram	CD0006B03
Poles	04
Leads	3#16
Proprietary	False
Created date	05-24-2022

Inverter Code	Inverter Duty
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Motor Type	3624B
Mounting Arrangement	B14
Number of Poles	4
Overall Length	16.05 IN
Power Factor	96
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.103 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

NP3978A01						
PART NO.	ECIN4A5P8					
U1	400	PH	3	HZ	50	
I1	5.2	W/EXT. CHOKE				4.3
SERIAL #						

NP3968B01A01											
CAT.NO.	ECS101T3K2P2EC4										
SPEC.	36-0000-3628					YR					
FRAME	D112C			IP	55	WT.	39				
KW	2.2	HZ	50		PH	3	DUTY-IPM	CONT			
INS CL	F	CLASS RISE				B	AMB-C	40			
EFF. CL	IE5	EFF	91.4	COS0			96				
VOLTS	380			FLA	4.4						
1/MIN	1500				1/MIN MAX			3000			
BEMF (V)	212			RS (OHMS)				3.88			
LD (MH)	57.7			LQ (MH)				217.7			
VPWM	CP =	50		TO	100						
CT	5	TO	50	VT	1		TO	10			
MATCHED INV	ECIN4A5P8										
DE	6206			ODE	6205						
SERIAL #											

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	4.4	Max Amps		Cs Diagram	CS1126	BEMF	172
KW	2.2	VFD#	ECIN4A5P8			LD	51
RPM	1500	S.F.	1.00			LQ	177
Phase/Hz	3/50	Rating	40C AMB CONT			Rs	3.8250 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	1348	90%	10.3	100%	2.7	90.2	9.85%	217
P2	750	50%	10.3	100%	1.5	87.3	7.27%	160
P3	366	25%	10.3	100%	0.7	79.7	6.21%	137
P4	1350	90%	5.2	50%	1.3	92.2	3.83%	84
P5	750	50%	5.2	50%	0.7	89.6	2.91%	64
P6	750	50%	2.6	25%	0.4	89.4	1.48%	33
P7	366	25%	2.6	25%	0.2	84.8	1.09%	24

61800-9-2 PDS Performance at Reference Operating Points

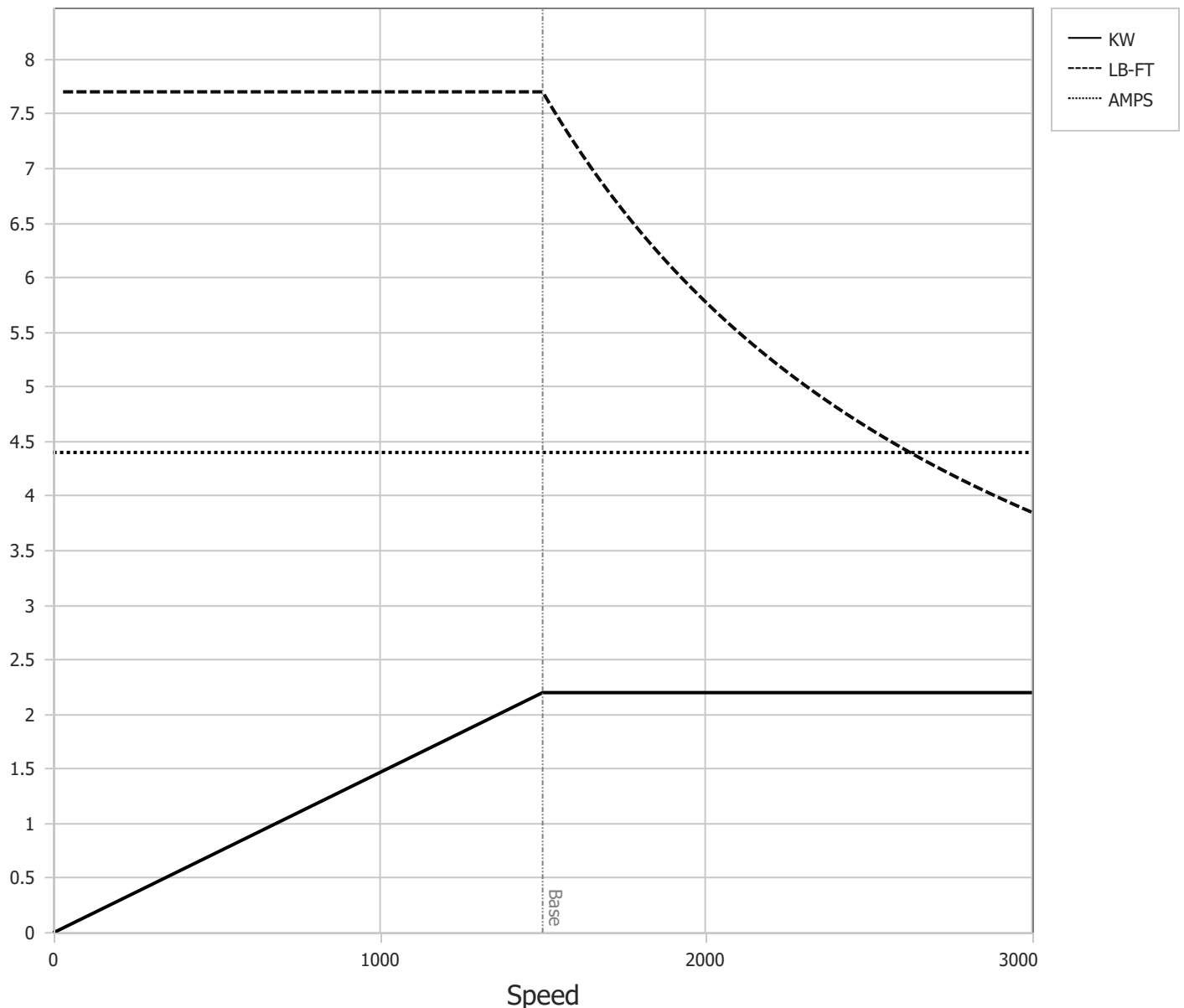
	RPM	% Speed	LB-FT	% Torque	KW	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1498	100%	10.3	100%	2.9	89.8	11.29%	248
P2	750	50%	10.3	100%	1.5	84.1	9.44%	208
P3	246	17%	10.3	100%	0.5	67.2	8.00%	176
P4	1500	100%	5.2	50%	1.5	90.2	5.41%	119
P5	750	50%	5.2	50%	0.7	85.5	4.24%	93
P6	246	17%	5.2	50%	0.2	69.9	3.53%	78
P7	750	50%	2.6	25%	0.4	83.9	2.40%	53
P8	246	17%	2.6	25%	0.1	68.2	1.91%	42

Points not taken in certified order.

	DR By:	R & D	AC MOTOR PERFORMANCE CURVES	36WGA0025 36-0000-3655 Test - 111775
	CK By:	USBIBAK		
	APP By:	USJAROB1		
	Date:	01/07/2025		

Volts	380	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	4.4	Max Amps		Cs Diagram	CS1126	BEMF	172
KW	2.2	VFD #	ECIN4A5P8			LD	51
RPM	1500	S.F.	1.00			LQ	177
Phase/Hz	3/50	Rating	40C AMB CONT			Rs	3.8250 Meas L-L

Constant Duty Operating Range


BALDOR • RELIANCE

 DR By: R & D

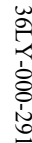
 CK By: USBIBAK

 APP By: USJAROB1

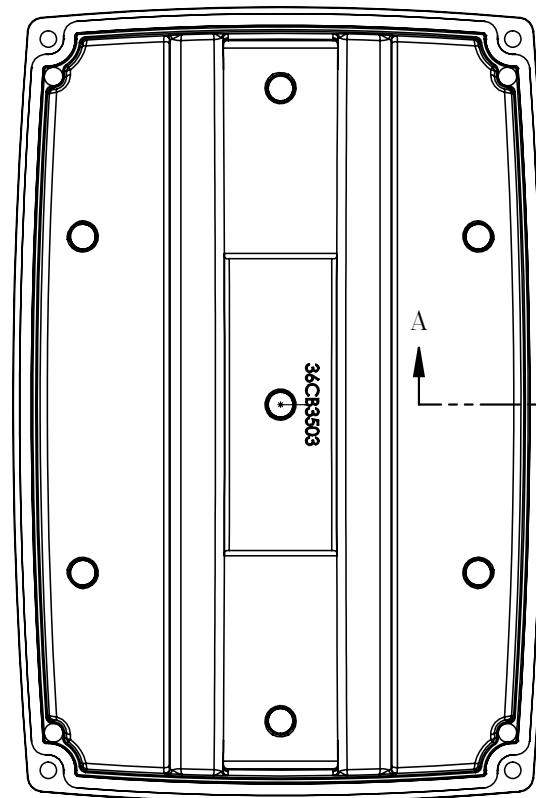
 Date: 01/07/2025
**AC MOTOR
PERFORMANCE
CURVES**
36WGA0025

36-0000-3655

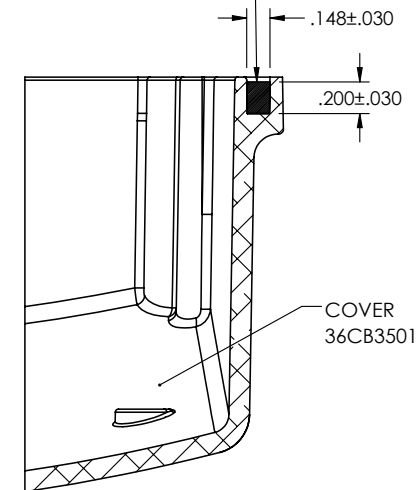
Test - 111775



36CB3503A00



MATERIAL: RAMPF, RAKU-PUR 32-3280-51L



SECTION A-A

REV. DESC: NEW

REV: -	VERSION: 00	REVISED: 09:13:16 01/15/2020	TDR: 000001129989
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MODEL NO. 36CB3503A00

REF: -

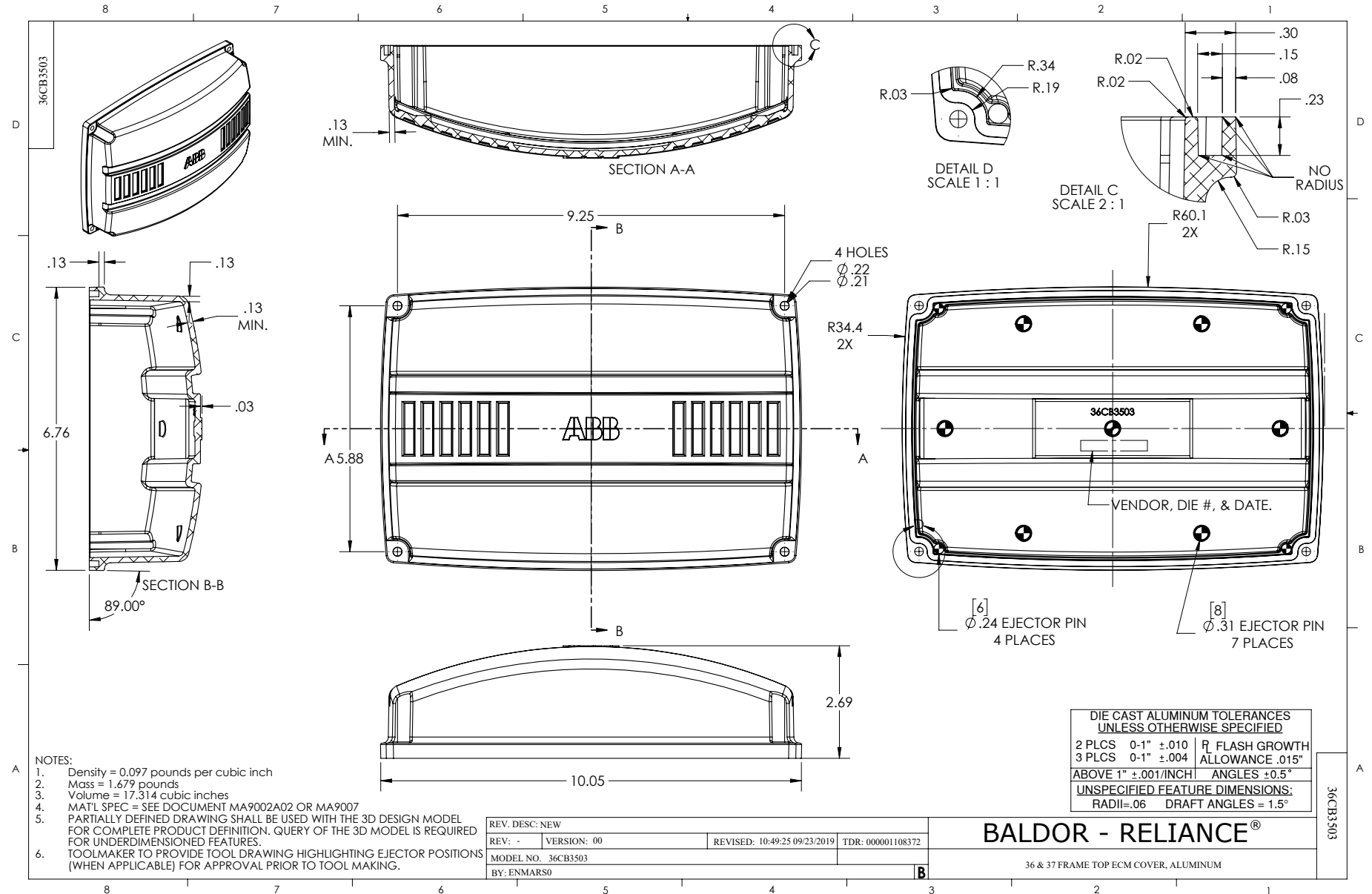
BY: ENMARS0

Material: -

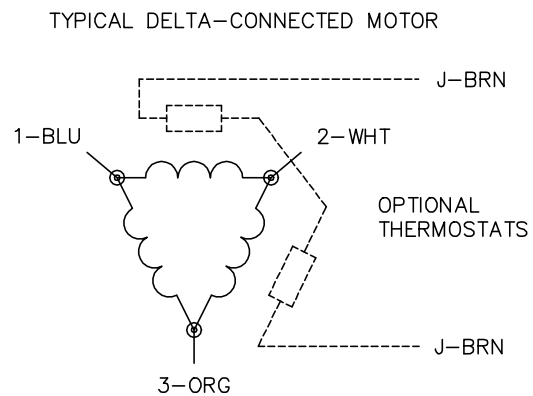
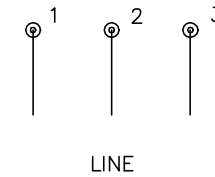
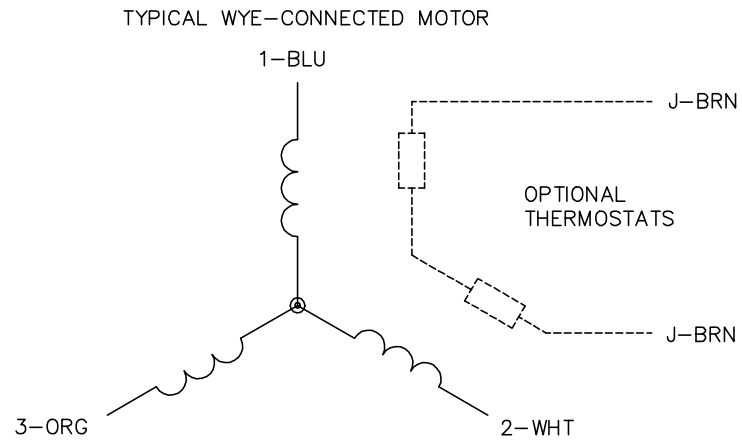
BALDOR - RELIANCE®

36 & 37 FRAME TOP ECM ALUMINUM COVER WITH FOAM SEAL

36CB3503A00



CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

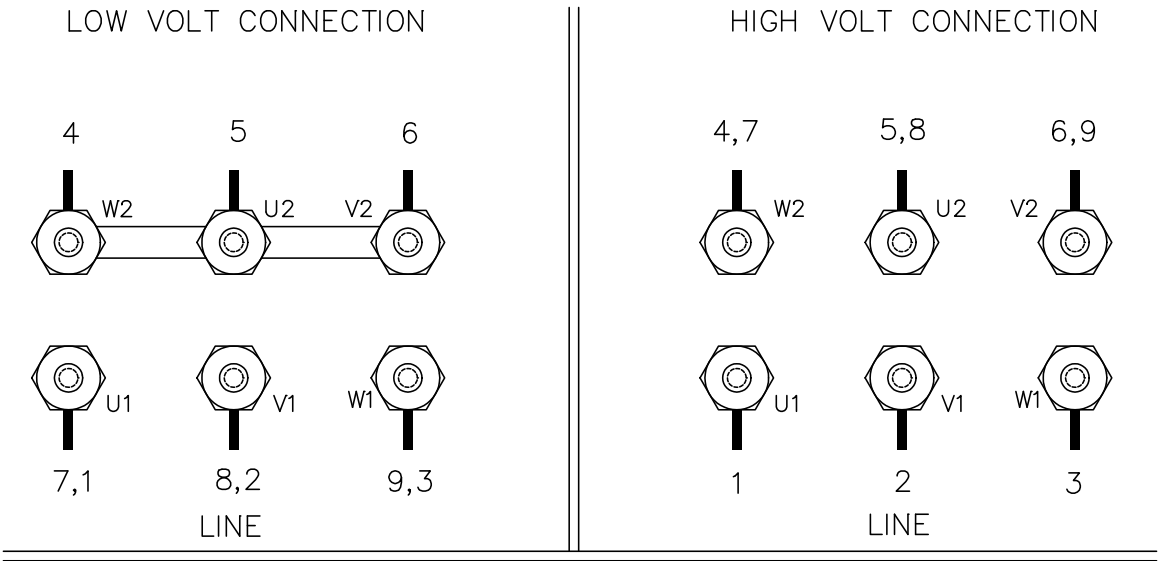
MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1

SP0032



MATL:			
REV:	A	ADD CONN LABEL REF TO DESC	
SP0032		SCALE: -	BY: JLP
		FILE: AAA00029378	TDR: 0111436

BALDOR ELECTRIC Co.

THREE PHASE, DUAL VOLTAGE, TERMINAL BLOCK, CD0005/LC0005C01

SP0032

