

BLC-015 V2.0 Lock Controller

Specification Sheet

Model: BLC-015 V2.0

Revision: 2013.04.16

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1. Development Summary

-To install entrance ceiling to pull information from connected device for door open/close and settings for related usage to control door. For controlling door RS-485/Wiegand communication is used. Also Backup Battery feature is added for in case of power failure.

1.1. Product Summary

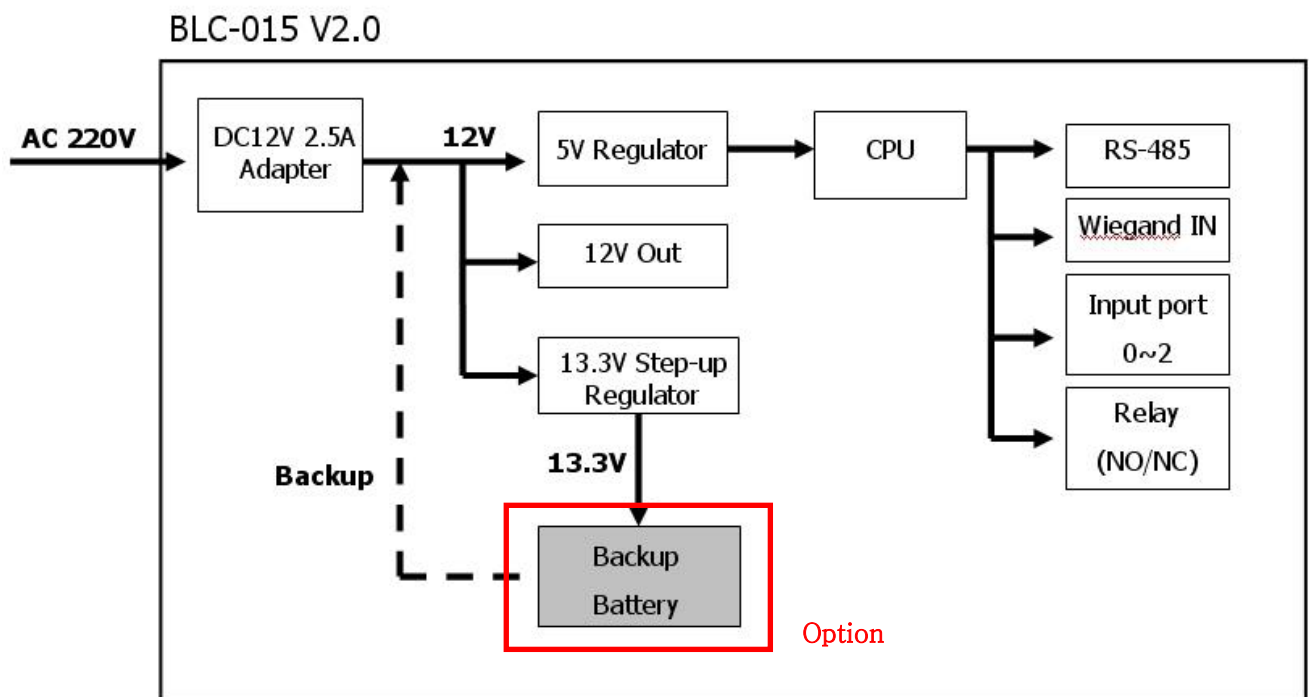
- Product is designed to integrated with access control with supply power.
- Available for integrate with single lock. Support various communications such as RS-485 and Wiegand.
- Able to choose between NC, NO for 2 contact relay.
- When Adapter power failure back-up battery mode starts automatically. (OPTION)
- Battery Charge circuit is equipped.
- Over Voltage/current protection circuit is equipped.

1.2. Product Specifications

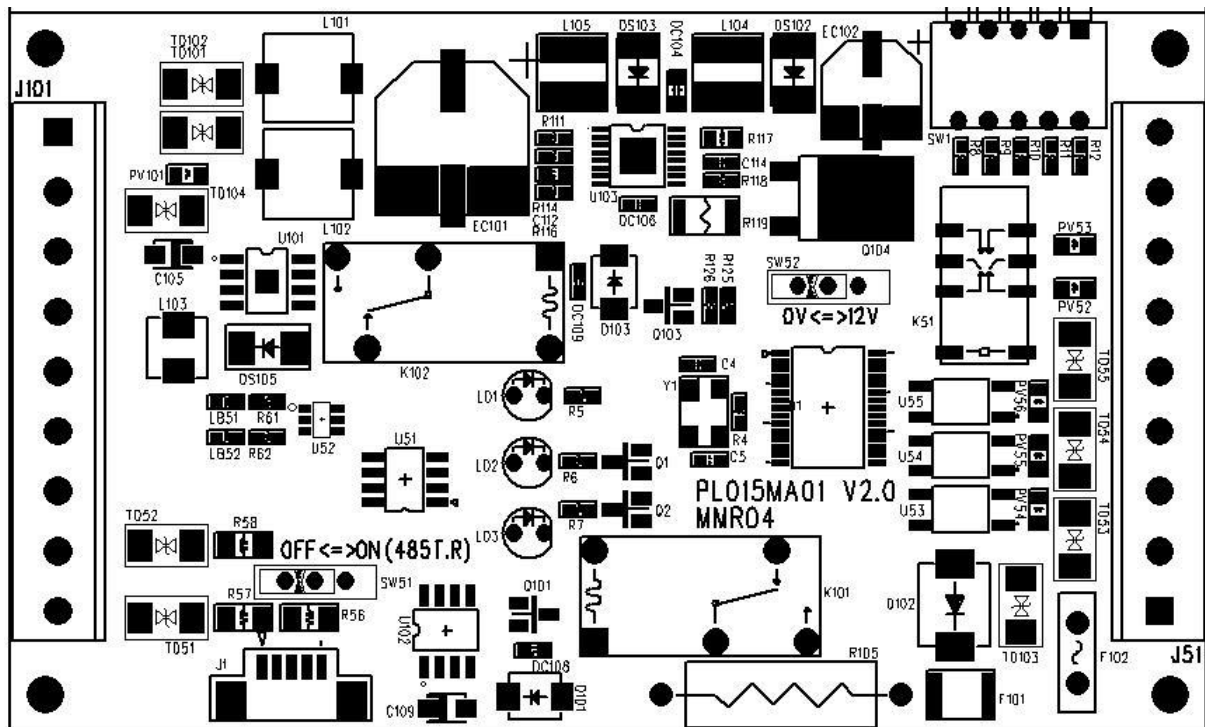
Description	Specification	Remark
Adapter	12V 2.5A	
Main input	DC12±2V	
Main current	Normally: 80±15mA	
Relay	2A at 30VDC	G6S-2G 5VDC(OMRON)
Relay Output	1 Relay NC, NO dry contact	
Lock availability	DC 12V Max Current 1A	
Status LED	Red/Green/Blue	Power : Red, RS485 : Green Lock : Blue
Sensor input	3Port	Inside Open 0, Lock/Door Status 0
External Terminal	Terminal Block 9P/9P	

2. System Configuration

2.1. Block Diagram



2.2. Board Layout



J101 : External Connector

SW1 : Dip Switch
ID & Time Setting

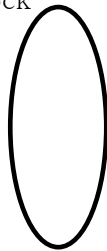
J51 : External Connector



J1 : F/W Insert

SW52 : Lock Power

LD1 : Power
LD2 : RS-485
LD3 : Lock



2.3. Pin Assignment

Connector	No	PIN NAME	Signal	Specification	
J101	1	12V IN	Power	12V 2.5A Adapter	
	2	GND			
	3	12V OUT			
	4	GND			
	5	Wiegand IN0	Communication		
	6	Wiegand IN1			
	7	GND			
	8	RS-485A			
	9	RS-485B			
J51	1	Bat(+)	Battery		Option
	2	GND			
	3	IN 0	Inside Open 0		Sensor input
	4	IN 1	Door Status 0		
	5	IN 2	Lock Status 0		
	6	GND	GND	DC 12V, Max Current 1A (Refer to Installation Guide)	
	7	NC	Nomal Close		
	8	NO	Nomal Open		
	9	COM	Common		
SW1	1	ID Setting			
	2				
	3	Lock Timer Setting			
	4				
	5				

3. 제공 기능

3.1. Door control by using communication

Door open by using RS485, and Wiegand communication.

When device get authentication signal, door open event is sent to VIRDI BLC-015 for unlock door.

3.2. Terminal ID change

Dip Switch 1~2

No.	ID	Dip SW1	Dip SW2
1	0	OFF	OFF
2	1	OFF	ON
3	2	ON	OFF
4	3	ON	ON

Using SW1 and SW2 for set device number (01 ~ 04)

3.3 Door open setting.

Dip Switch 3~5

No.	Door open time (Sec)	Dip SW3	Dip SW4	Dip SW5
1	0.2	OFF	OFF	OFF
2	0.5	OFF	OFF	ON
3	1	OFF	ON	OFF
4	1.5	OFF	ON	ON
5	2	ON	OFF	OFF
6	3	ON	OFF	ON
7	4	ON	ON	OFF

8	5	ON	ON	ON
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Using SW3,SW4,SW5 switch for door open time setting.

4. LED Status

4.1 Power LED(LD1)

- 1) Red LED on, when power input has made to BLC-015.

4.2 Communication LED(LD2)

- 2) When RS-485 communication is made correctly. Green LED on. If RS-485 communication is abnormal, Green LED flashes.

4.3 Relay Status LED(LD3)

- 3) If Relay output is on, blue LED on.