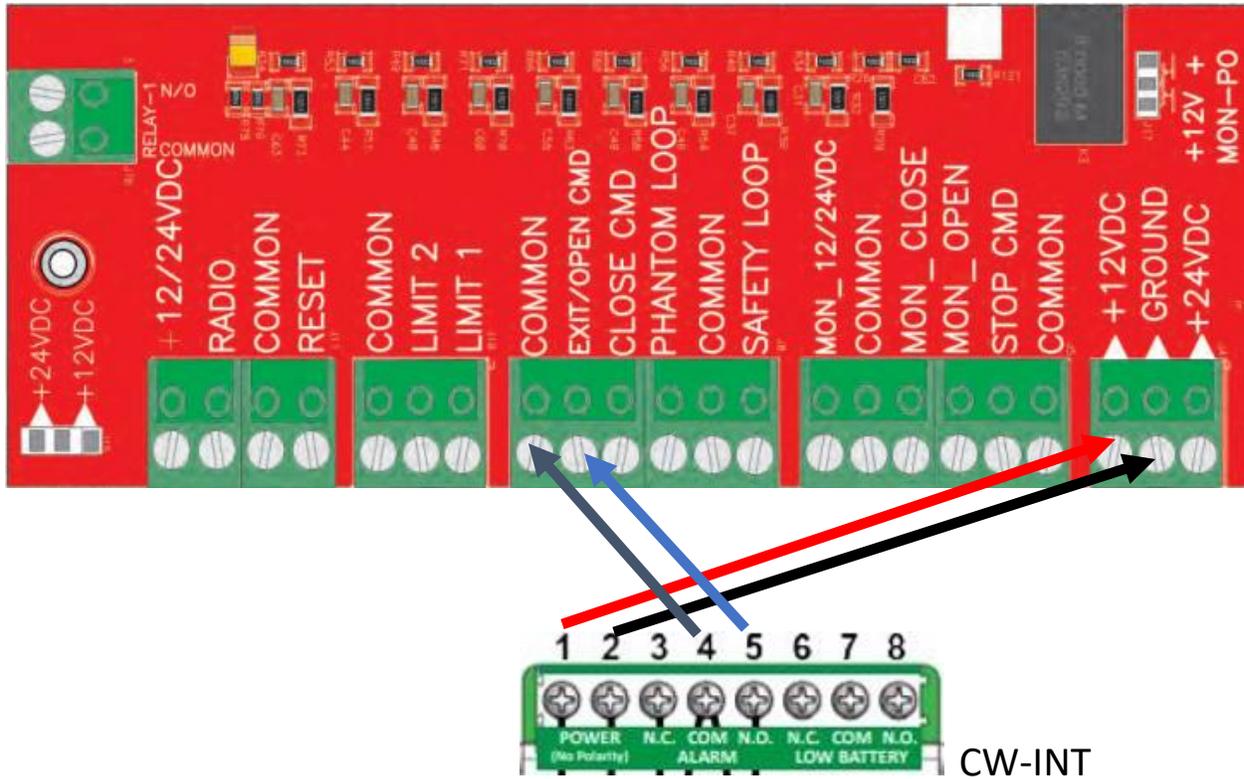# CW-SYS to All-O-Matic SW-300DC, SW-325DC, & SW-350DC

Note If powering operator via solar panels, be sure to compensate for the 25mA standby current draw of the CW-INT
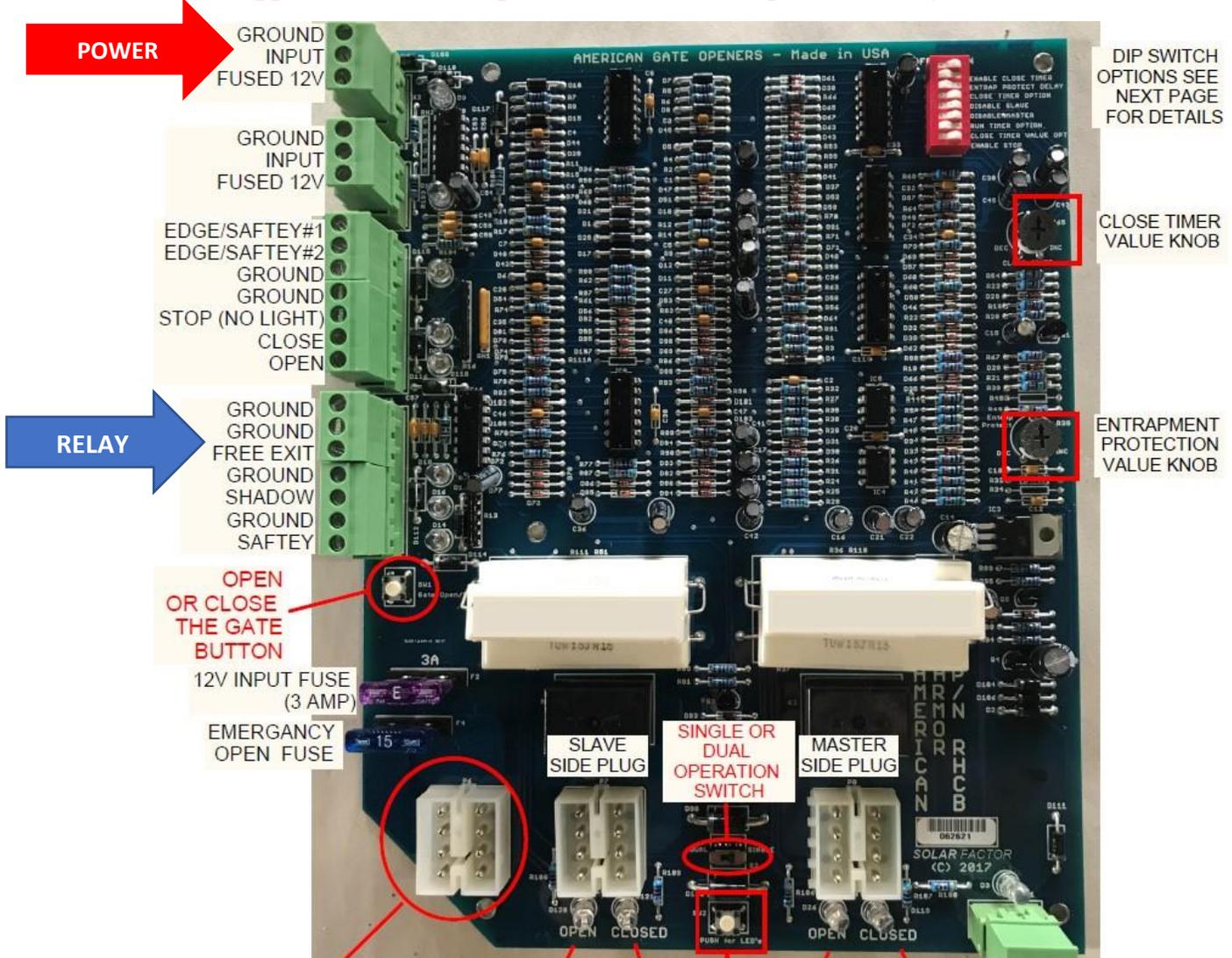

CW-INT

CW-INT

Terminals 1 & 2 are power 8-24 VAC or 8-28 VDC.

Terminal 4 is relay common.

Terminal 5 is normally open.

CW-SYS to American Armor (AAP Board)

**(Solar application must compensate for 25 Milliamp mA stand-by current draw)**

POWER

GROUND
INPUT
FUSED 12V

GROUND
INPUT
FUSED 12V

EDGE/SAFTEY#1
EDGE/SAFTEY#2
GROUND
GROUND
STOP (NO LIGHT)
CLOSE
OPEN

RELAY

GROUND
GROUND
FREE EXIT
GROUND
SHADOW
GROUND
SAFTEY

OPEN
OR CLOSE
THE GATE
BUTTON

12V INPUT FUSE
(3 AMP)

EMERGANCY
OPEN FUSE

AMERICAN GATE OPENERS - Made in USA

DIP SWITCH
OPTIONS SEE
NEXT PAGE
FOR DETAILS

CLOSE TIMER
VALUE KNOB

ENTRAPMENT
PROTECTION
VALUE KNOB

SLAVE
SIDE PLUG

SINGLE OR
DUAL
OPERATION
SWITCH

MASTER
SIDE PLUG

SOLAR FACTOR
(C) 2017

OPEN   CLOSED

PUSH for LED's

OPEN   CLOSED

1	2	3	4	5	6	7	8
POWER (No Polarity)		N.C.	COM	N.O.	N.C.	COM	N.O.
			ALARM			LOW BATTERY	

CW-INT

Terminal 1 to 12V

Terminal 2 to Ground (GND)

Terminal 4 Relay Common to GND

Terminal 5 Relay Open to Free Exit

How to connect a Cartell CW-SYS to an Apollo 636 Board

Connect the Cartell Integrator (CW-INT) which is part of the CW-SYS, as outlined below:

CW-INT terminal block

Apollo 636 Board

Terminal GND

Terminal 12V

Terminal 8 or 9 GND

Terminal 10 Free Exit
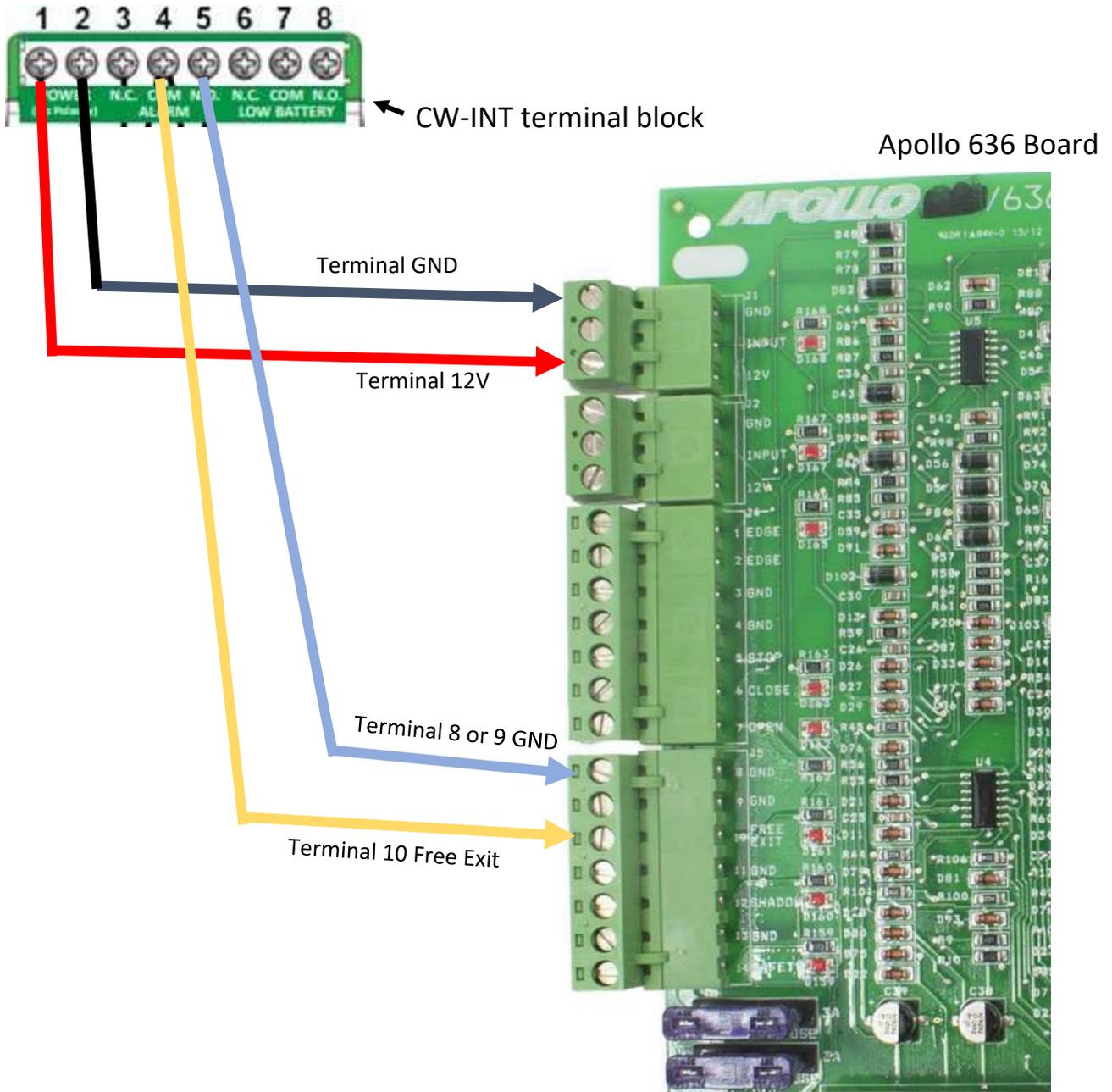
Note: You can also get power from block J2 if J1 is full.

CWSYS to Apollo 636 Wiring Diagram

CF-2C and CW-SYS Wiring Diagram

The CW-SYS unit can be used to replace the CT-6 probe on a CF-2C system. Follow the instructions below to complete the installation.

Connect the wires to the following terminals:

CF Board   **Integrator**
Terminal 6 (VDC OUT)   to   Terminal 1 (Power Input)
Terminal 15 or 16 (GRD)   to   Terminal 2 (Power Input)
Terminal 17   to   Terminal 4 (COM)
Terminal 19   to   Terminal 5 (NO)

You may also choose to power the Integrator with a separate power supply.

CW-SYS = Dual Purpose Wireless System
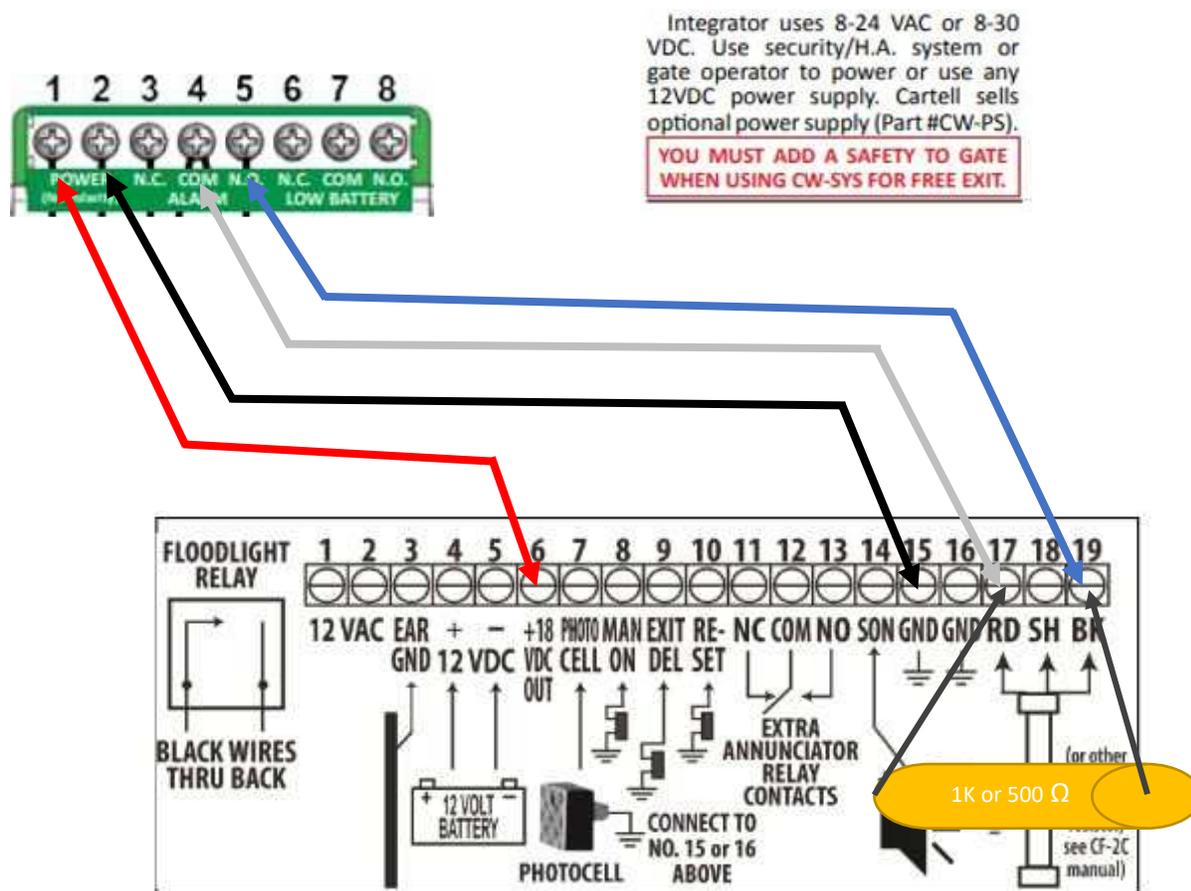CW-REP = Wireless Repeater
CW-PSU = Power Supply

Integrator uses 8-24 VAC or 8-30 VDC. Use security/H.A. system or gate operator to power or use any 12VDC power supply. Cartell sells optional power supply (Part #CW-PS).

YOU MUST ADD A SAFETY TO GATE WHEN USING CW-SYS FOR FREE EXIT.

Figure 2

Connect a resistor between terminals 17 and 19. 500 or 1K ohms would be fine. That will assist in eliminating a probe fault alarm.

CT-2B and CW-SYS Wiring Diagram

The CW-SYS unit can be used to replace the CT-6 probe on a CT-2B system. Follow the instructions below to complete the installation.

Connect the wires to the following terminals:

CT Board   **Integrator**
Terminal 3 (VDC OUT)   to   Terminal 1 (Power Input)
Terminal 8 (GRD)   to   Terminal 2 (Power Input)
Terminal 10   to   Terminal 4 (COM)
Terminal 12   to   Terminal 5 (NO)

You may also choose to power the Integrator with a separate power supply within range: 8-24 VAC or 8-28 VDC.
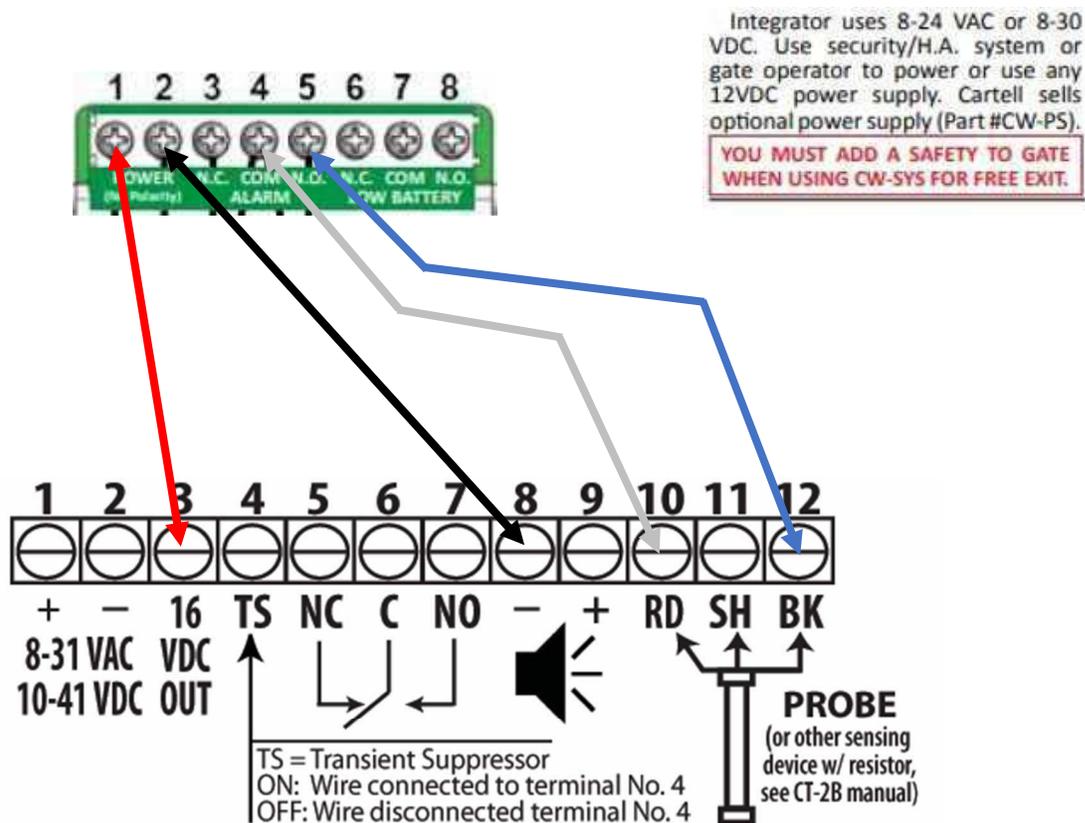
CW-SYS = Dual Purpose Wireless System
CW-SEN = Wireless Sensor only
CW-INT = Wireless Integrator only
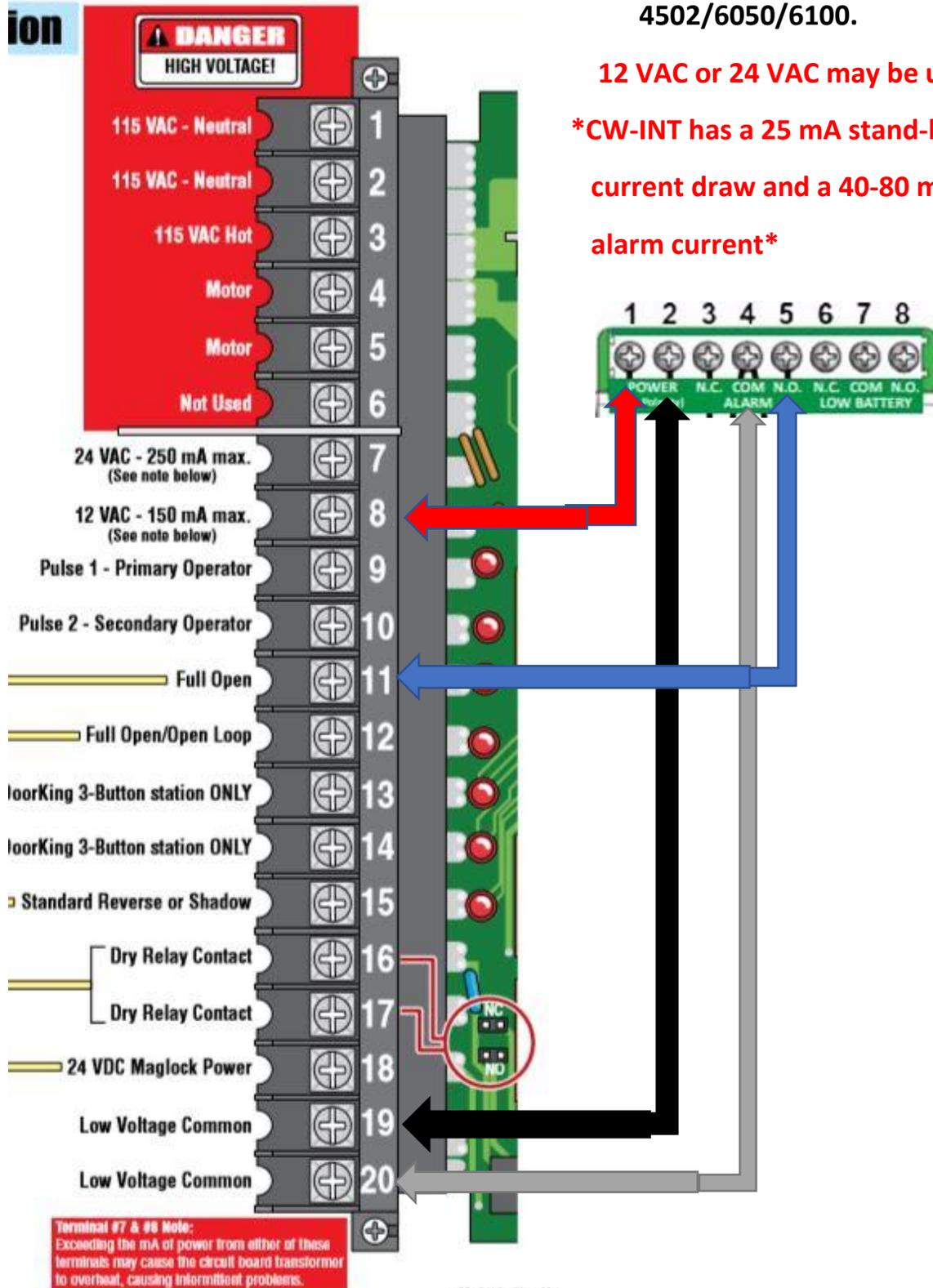CW-REP = Wireless Repeater
CW-PSU = Power Supply

Integrator uses 8-24 VAC or 8-30 VDC. Use security/H.A. system or gate operator to power or use any 12VDC power supply. Cartell sells optional power supply (Part #CW-PS).

YOU MUST ADD A SAFETY TO GATE WHEN USING CW-SYS FOR FREE EXIT.

1 2 3 4 5 6 7 8
POWER N.C. COM N.O. N.C. COM N.O.
(± Polarity) ALARM LOW BATTERY

1 2 3 4 5 6 7 8 9 10 11 12
+ − 16 TS NC C NO − + RD SH BK
8-31 VAC VDC
10-41 VDC OUT

PROBE
(or other sensing device w/ resistor, see CT-2B manual)

TS = Transient Suppressor
ON: Wire connected to terminal No. 4
OFF: Wire disconnected terminal No. 4

A   **FIELD ADJUSTMENTS**   B
"A" = RELAY TIME: ½ - 15 sec. (CW to increase)
"B" = PROBE SENSITIVITY (CW to increase)

4 - WIRING

⚠ **DANGER** HIGH VOLTAGE!

Terminal	Label
1	115 VAC - Neutral
2	115 VAC - Neutral
3	115 VAC Hot
4	Motor
5	Motor
6	Not Used
7	24 VAC - 250 mA max. (See note below)
8	12 VAC - 150 mA max. (See note below)
9	Pulse 1 - Primary Operator
10	Pulse 2 - Secondary Operator
11	Full Open
12	Full Open/Open Loop
13	DoorKing 3-Button station ONLY
14	DoorKing 3-Button station ONLY
15	Standard Reverse or Shadow
16	Dry Relay Contact
17	Dry Relay Contact
18	24 VDC Maglock Power
19	Low Voltage Common
20	Low Voltage Common

Terminal #7 & #8 Note:
Exceeding the mA of power from either of these terminals may cause the circuit board transformer to overheat, causing intermittent problems.

6050-065-N-5-18

CW-SYS to Door King 4502/6050/6100.

12 VAC or 24 VAC may be used.

CW-INT has a 25 mA stand-by current draw and a 40-80 mA alarm current

1 2 3 4 5 6 7 8
POWER | N.C. COM N.O. | N.C. COM N.O.
ALARM | LOW BATTERY

CW-SYS to FAAC 400

CW-INT Terminal 1 to Terminal 17 or 18 (+24)

CW-INT Terminal 2 to Terminal 16 (-). Note 14 or 15 will work as well.

CW-INT Terminal 5 to Terminal 9 Open A.

CW-INT Terminal 4 to Terminal 14 (-). Note 15 or 16 will work as well.

NOTE CW-INT Terminals 2 & 4 need to be on separate Terminals 14-16. Do not connect to the same terminal on FAAC.
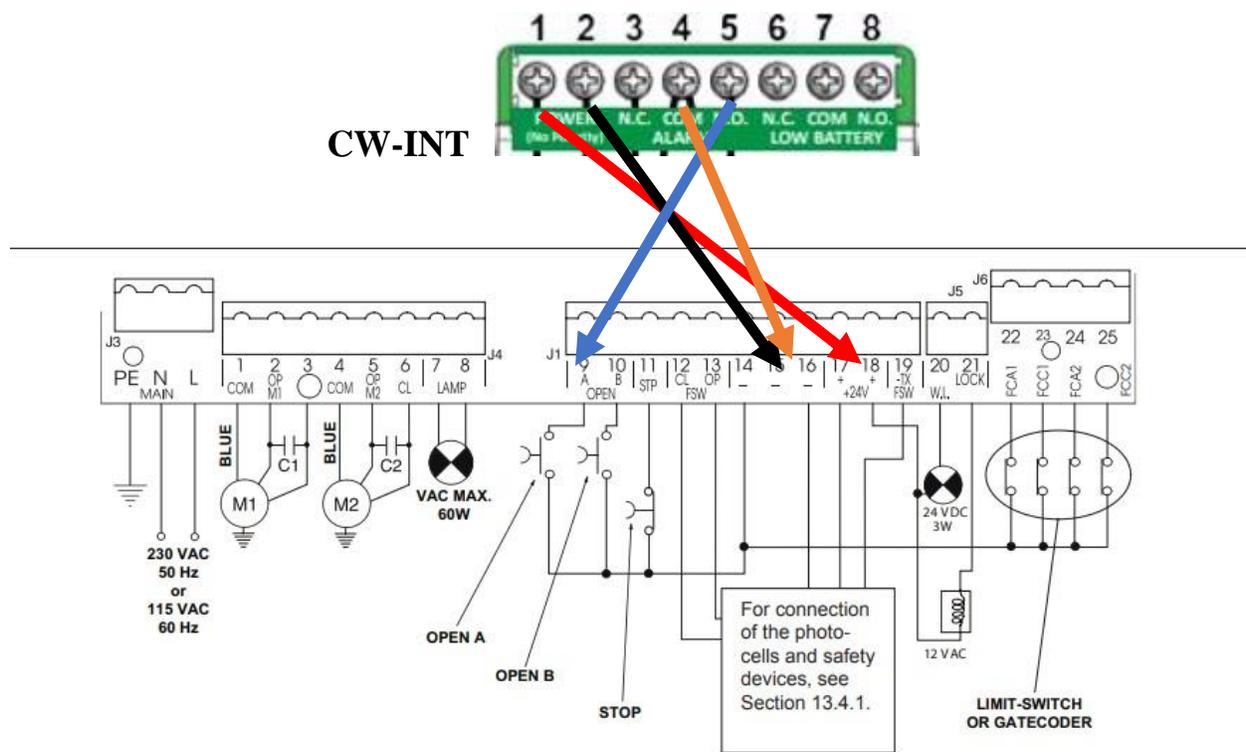
CW-INT power input is 8-24 VAC or 8-28 VDC.

Wiring diagram for CW-SYS to GT Master Intelligent Control Board

Integrator (CW-INT) is connected to the control bord via low voltage wires.

4.3.5.1 Intelligent control board
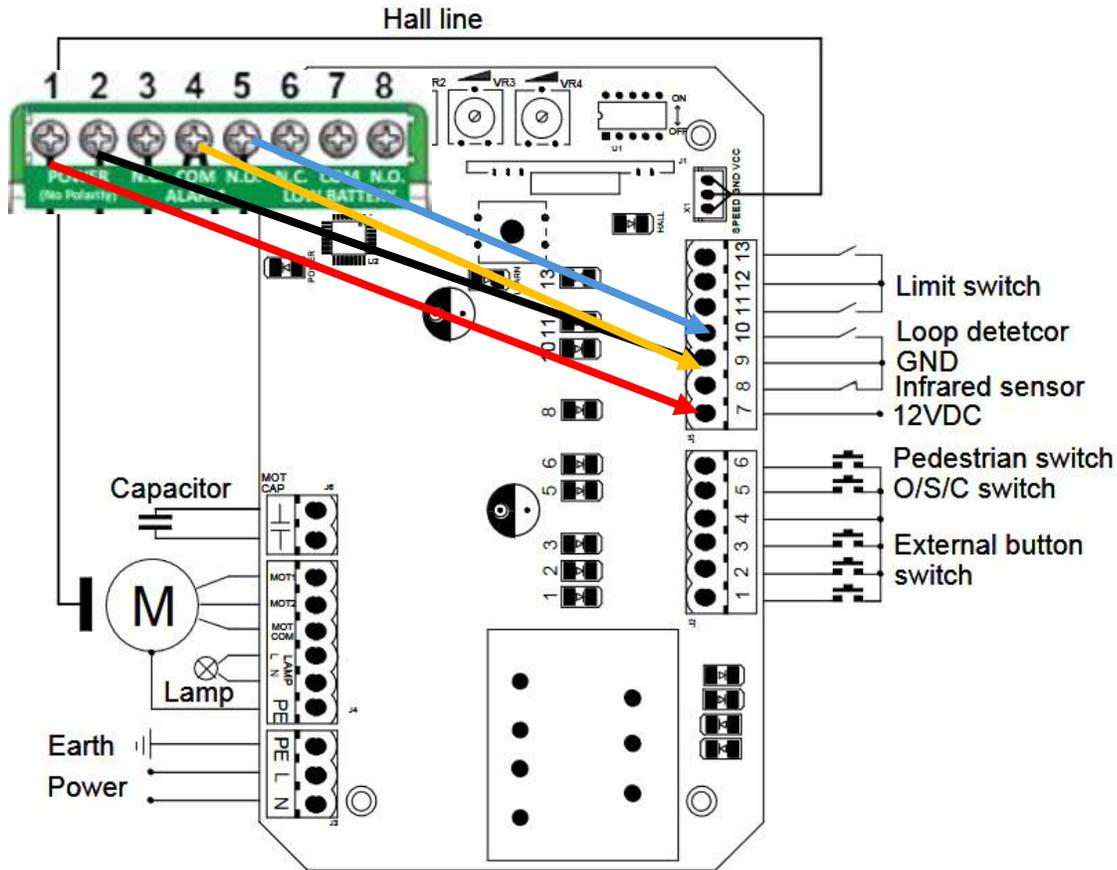
Figure 15

Wiring instruction:

Integrator Terminal	Operator Board
#1 Power	# 7 +12V
#2 Power	#9 Ground (GND)
#4 Relay Common (COM)	#9 Ground (GND)
#5 Normally Open (NO)	#10 Loop Detector (NO)

CW-SYS to LA-500 Connection

Power connection (Terminals 1 & 2) are not polarity sensitive, can be either way. Can also be powered by any other constant power source within range: 8 -24 VAC or 8 -28 VDC.
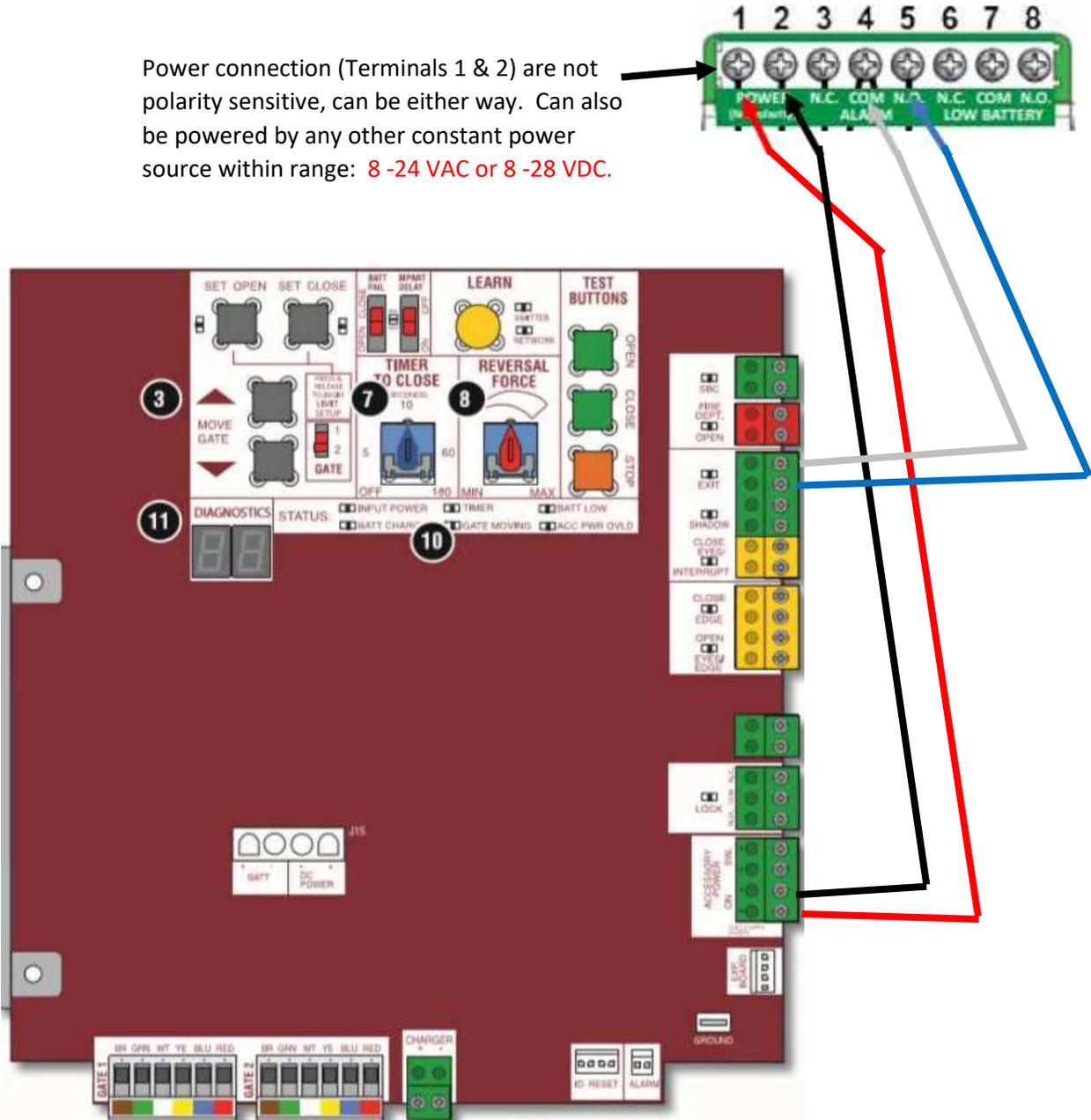
CW-SYS to LA-MSWDCBB
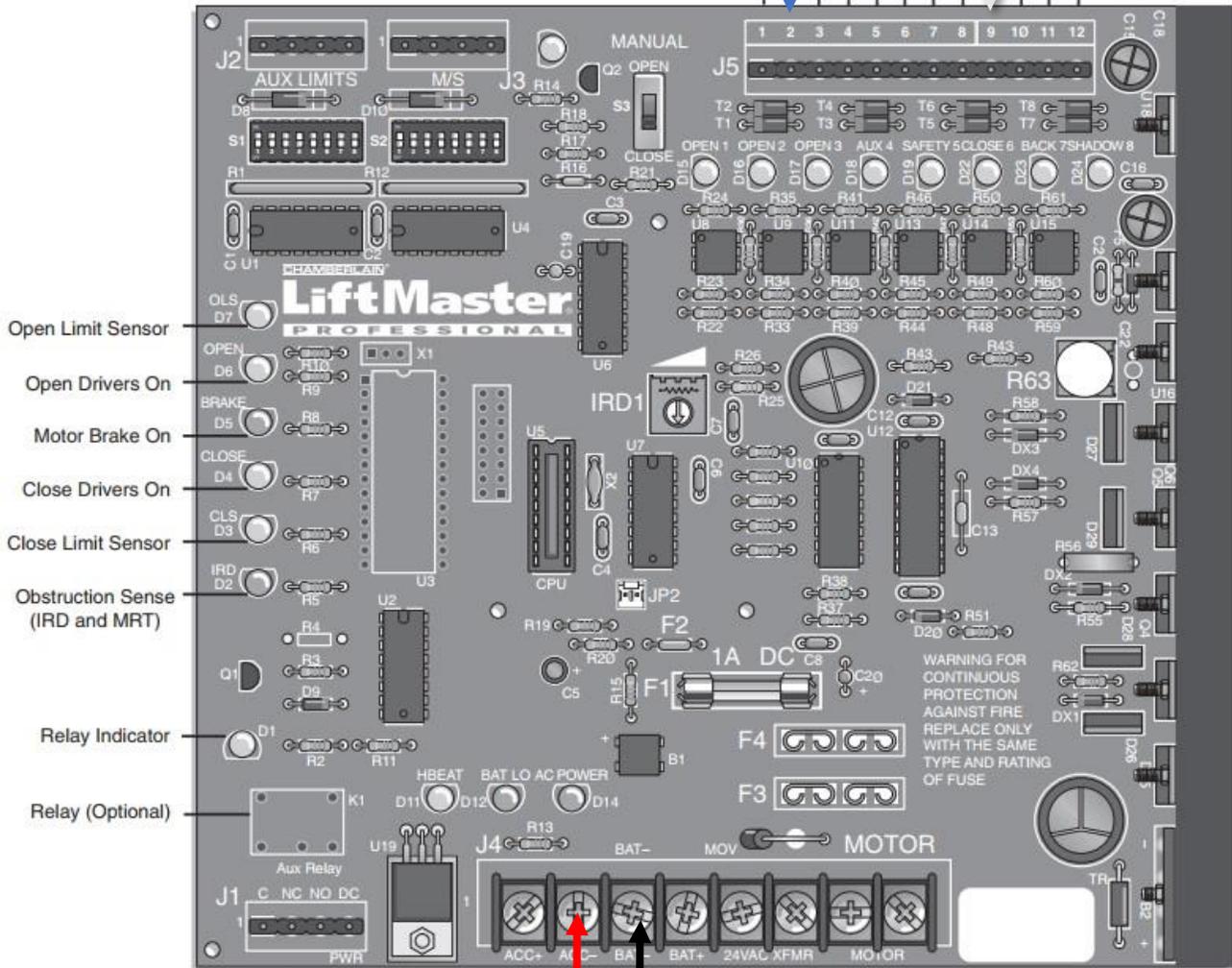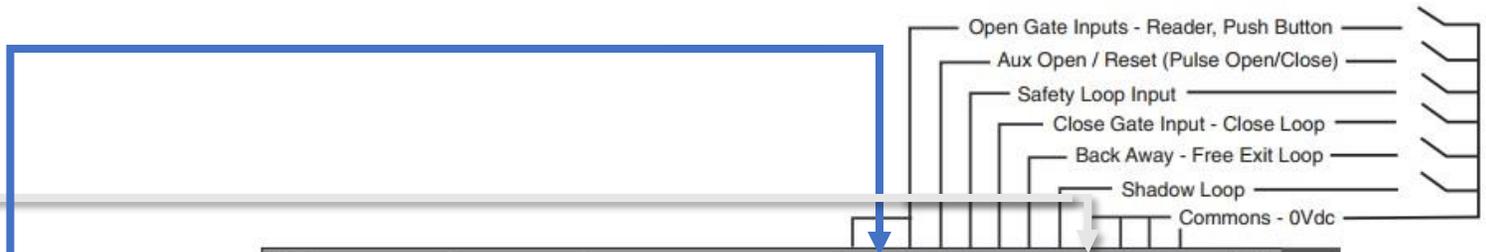
Open Gate Inputs - Reader, Push Button
Aux Open / Reset (Pulse Open/Close)
Safety Loop Input
Close Gate Input - Close Loop
Back Away - Free Exit Loop
Shadow Loop
Commons - 0Vdc
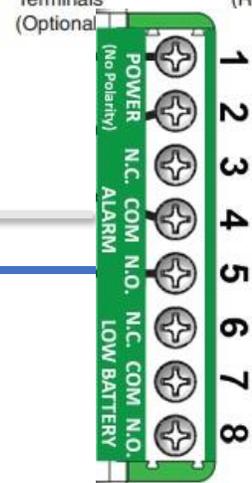
1 to ACC +

2 to ACC –

4 to 9, 10, 11, or 12

5 to 1, 2, or 3

If this is a solar application, you will need to compensate for the 25mA standby current of the integrator.
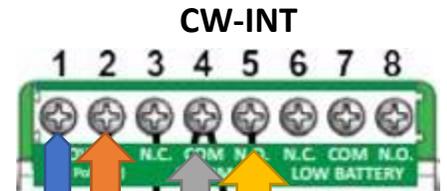
CWSYS to US Automatic Patriot.

(Solar application must compensate for 25 Milliamp mA stand-by current draw)

"J2" Terminal Block:
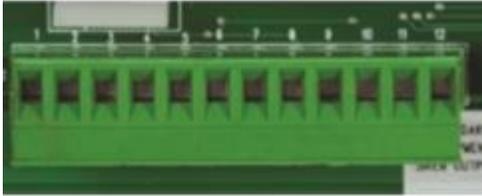
CW-INT Teminals 1 & 2 are power.

CW-INT Terminals 4 & 5 provide the relay closure.

CW-INT

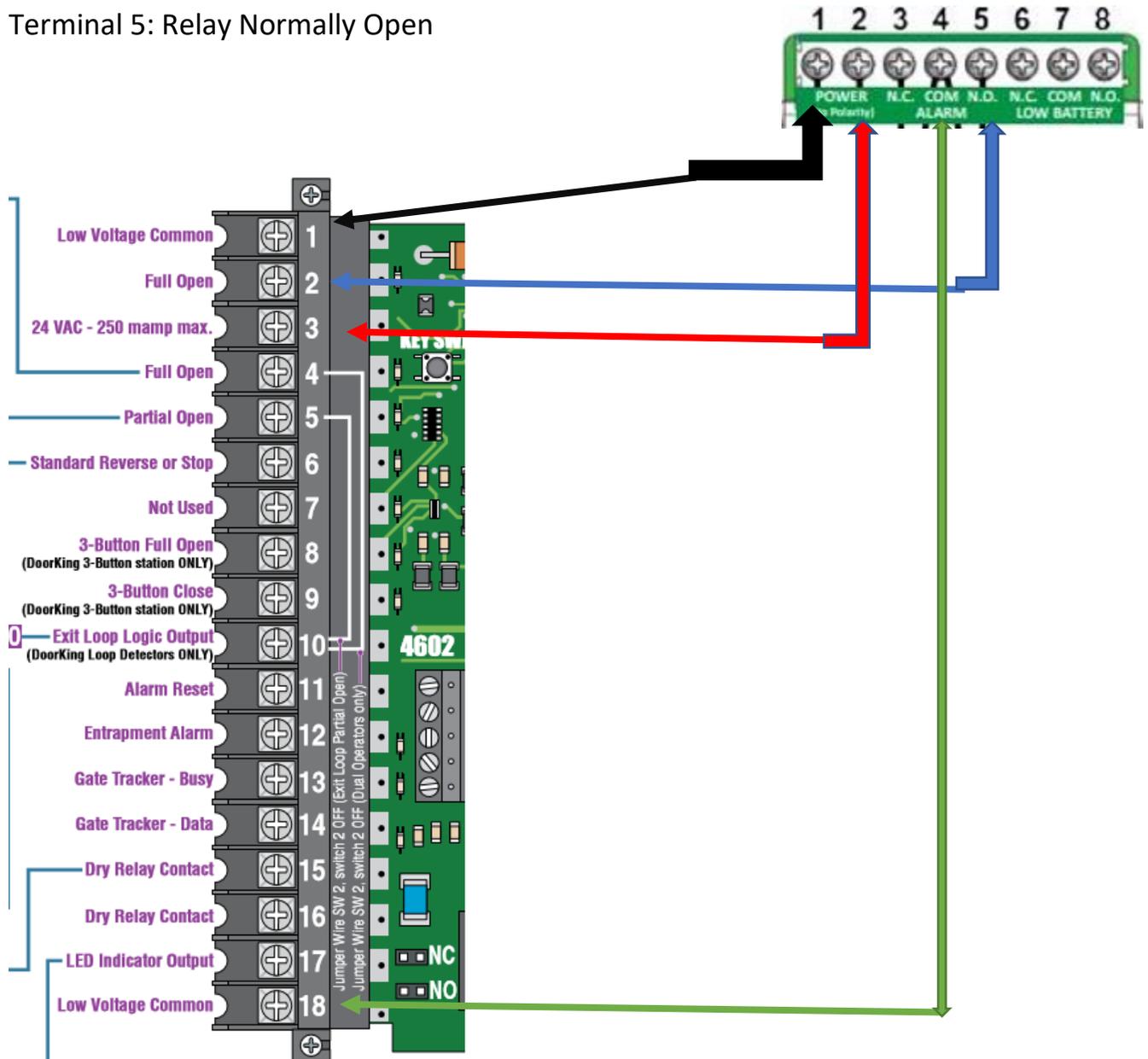| Terminal	
1	+12 vdc Output *(Maximum current output 1.5 amp - 1500 milliamps)*
2	Common Ground Input -12 vdc
3	Push Button Input *(normally open contacts)* *(Push button, radio control, keypad, etc.)*
4	Open Safety Edge *(normally open contacts)* *(Stops gate when opening)*
5	Close Input *(normally open contacts)*
6	Contact Edge N/O connection monitored entrapment *DS2 switch 4 must be ON when monitored edge is connected or when* **Secondary Entrapment Input is connected when in pre 2016 configuration*
7	Common Ground Input -12 vdc
8	Photo Eye N/C connection monitored entrapment *DS1 switch 8 must be on when monitored eye is connected* **Not used in pre 2016 configuration*
9	Free Exit / Open Input *(normally open contacts)* *Loop input or any hold open input such as a 7-day timer, telephone access unit, or maintain contact switch (normally open contacts). The ___ open the gate and will prevent the gate from closing if the contact is maintained. Once the contacts have been released, the gate can be closed with a closed signal device or the automatic close timer feature. Receiver relay2 pre-wired for latching open.*
10	Center Loop or Under Gate Loop Input *(normally open contacts)*
11	Safety Loop / Photo-eye / Reversing Edge Input used for vehicular protection devices. *(normally open contacts)*
12	Photo Eye Power +12 vdc output 1 amp max current *Only present when DS1 switch 10 is ON and gate is moving or DS1 switch 3 and 4 are OFF and DS1 switch 10 is ON used for installation.*

CW-SYS to DoorKing 9150 Control Panel

CW-INT

Terminals 1 & 2 are AC/DC input power.

Terminal 4: Relay Common

Terminal 5: Relay Normally Open

Wiring CWSYS to Viking R-6

CW-INT terminals 1 & 2 are AC/DC input power (8-24 VAC, 8-28 VDC). Terminals 4 & 5 provide the relay closure to open the gate.