





WARNING PHOTO  
POWER SOURCE









 **UNIRAC**

BETTER SOLAR STARTS HERE

[www.unirac.com](http://www.unirac.com)



**253010U**

SFM SPLICE 6.5'

Pack Size: 10

WO/PO#: 6045419-01

Manufacture date: ~~As of 2011~~

Factory Code : 010A





**UNIRAC**

BETTER SOLAR STARTS HERE

[www.unirac.com](http://www.unirac.com)



**253030U**

SFM ATTACHED SPLICE 8"

Pack Size: 10

WO/PO# : 0043974-00

Manufacture date: 01/15/2011

Factory Code : 010A



810039360386









**REC**

REC Alpha Plus Series  
REC-CAP00A Type  
Serial Number: F111-231000000

REC-000000000000

Power Output (Nominal)

Watt Class Rating

Power Production Tolerances

Rated Voltage (Wattage)

Rated Current (Imped)

Open Circuit Voltage (Watt (1+1) 2%)

Short Circuit Current (Watt (1+1) 3%)

Maximum System Voltage (Watt)

Maximum Series Fuse (DCI 100)

Maximum Series Fuse (DCI 100)

Design Load

Maximum Test Load

Maximum Test Load

400 W

0 +5 W

±1.5 %

42.4 V

8.00 A

42.9 V

0.30 A

1000 V

25 A

4000 / 1000 W

4000 / 1000 W



CE UK  
CA CA



Warning: Hazardous Material - This product is a regulated substance under the RoHS Directive.

CAUTION: DO NOT DISCONNECT CABLES WHILE POWERED ON.

CAUTION: DO NOT OPEN THE CASE WHILE POWERED ON.

CAUTION: DO NOT TOUCH THE CASE WHILE POWERED ON.

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# IQ Combiner 4

Photovoltaic

Combiner Box

X-IQ-AM1-240-4



## Electrical ratings

Voltage 240VAC, 60Hz

DG Breakers 80A MAX (combined)

DG Inputs 64A MAX (combined)

Output 65A MAX, 90A MAX feeder OCPD

Temperature 46°C MAX ambient

For DG breaker, use only Eaton BR series.

  
202235046211

S/N:

  
202235046211

P/N:

  
883-00356 197556

Dedicated solar and DG Combiner box - do not add loads  
10 AMP or 15 AMP IQ Gateway Breaker not used for backfeed

Connection	Wire sizes	Torque
DG Breaker (1, 2, 3, 4)	14-10 AWG	2.2 Nm (20 lb-in)
	8 AWG	2.8 Nm (25 lb-in)
	6-4 AWG	3.0 Nm (27 lb-in)
60A Circuit Breaker only	4-1/0 AWG	5.0 Nm (45 lb-in)
IQ Gateway Breaker	14-10 AWG	2.26 Nm (20 lb-in)
	2-1/0 AWG 14-3 AWG	5.6 Nm (45 lb-in) 5.1 Nm (45 lb-in)
Neutral and ground	Large screw	6 AWG (32 lb-in)
		8 AWG (23 lb-in)
	Small screw	10-14 AWG (20 lb-in)
Main lug	10-4 AWG	5.0 Nm (45 lb-in)
	3-2/0 AWG	5.0 Nm (50 lb-in)

Copper conductors only, rated min. 75°C.

For more information, visit Eaton.com or call 1-800-451-7273. All local codes apply.



1-800-4-A-GRID  
www.4agrid.com

WARNING: PHOTOVOLTAIC  
POWER SOURCE







Lawrence Shang  
536095 13 Oct 2022









This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may be received, including interference from authorized radio communication systems.



**ENPHASE**

**IQ8+**

See [www.enphase.com](http://www.enphase.com) for more information.

Model: IQ8+ (1000W)

Part Number: IQ8+ (1000W)

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Part Number: IQ8+ (1000W)

**WARNING:** HAZARDOUS VOLTAGE. This device contains high voltage components. Do not touch internal components. Do not open the enclosure. Do not attempt to repair or modify the device. Do not use the device if it is damaged or if it has been exposed to fire, flood, or other environmental conditions. Do not use the device in a wet or damp environment. Do not use the device near flammable or explosive materials. Do not use the device near children or pets. Do not use the device near power lines or other high voltage sources. Do not use the device near water. Do not use the device near fire. Do not use the device near heat. Do not use the device near strong magnetic fields. Do not use the device near strong electric fields. Do not use the device near strong radio frequency fields. Do not use the device near strong electromagnetic fields. Do not use the device near strong static electric fields. Do not use the device near strong static magnetic fields. Do not use the device near strong static electric and magnetic fields. Do not use the device near strong static electric and magnetic fields.

**ATTENTION:** HAZARDOUS VOLTAGE. This device contains high voltage components. Do not touch internal components. Do not open the enclosure. Do not attempt to repair or modify the device. Do not use the device if it is damaged or if it has been exposed to fire, flood, or other environmental conditions. Do not use the device in a wet or damp environment. Do not use the device near flammable or explosive materials. Do not use the device near children or pets. Do not use the device near power lines or other high voltage sources. Do not use the device near water. Do not use the device near fire. Do not use the device near heat. Do not use the device near strong magnetic fields. Do not use the device near strong electric fields. Do not use the device near strong radio frequency fields. Do not use the device near strong electromagnetic fields. Do not use the device near strong static electric fields. Do not use the device near strong static magnetic fields. Do not use the device near strong static electric and magnetic fields. Do not use the device near strong static electric and magnetic fields.





SAFETY INFORMATION  
READ CAREFULLY  
BEFORE USING  
THIS PRODUCT

**WARNING!**  
ELECTRIC SHOCK CAN CAUSE DEATH OR SERIOUS INJURY.  
DO NOT TOUCH ELECTRICAL PARTS.  
TURN OFF POWER TO THE CIRCUIT BEFORE WORKING ON IT.  
USE PROPER WIRING TECHNIQUES.  
SEE THE INSTRUCTIONS FOR MORE INFORMATION.





Job Hazard Analysis

CUSTOMER NAME: Lawrence Stony  
 INSTALLATION DATE: 10-13-22

ADDRESS: 84 Red Cedar Way, Fluvay Vacon, NC 27526

HAZARD CATEGORY	POTENTIAL HAZARD	RECOMMENDATION
Ladder Safety	<ul style="list-style-type: none"> <li>• Overhead</li> <li>• Defective</li> <li>• Misapplication</li> </ul>	Ladder 3ft above eave and horns
Fall Protection	<ul style="list-style-type: none"> <li>• Fall from 6' or greater</li> </ul>	Proper anchors and harness or ropes
Electrical Safety	<ul style="list-style-type: none"> <li>• Overvoltage</li> <li>• Live parts</li> </ul>	Wear PPE, use proper tools
Heat & Related Issues	<ul style="list-style-type: none"> <li>• High heat - 80° or 90°</li> <li>• Dehydration</li> <li>• Sun exposure</li> </ul>	Break when needed and stay hydrated
Public Protection	<ul style="list-style-type: none"> <li>• Working around</li> <li>• Surroundings</li> </ul>	Caution tape around site of cones
NEAREST HOSPITAL:	Central Harnett Hospital 215 Brightwater Dr Wilmington, NC 27546	
SAFETY CONTACT:	Henry Muller 928-896-5514	
ADDITIONAL NOTES		
Falling Objects	Falls	Proper Lifting
Slips	Cuts	Weather Conditions
Trips	Weather Conditions	
Crew Members		
	Name	Signature
1	William Schell	William Schell
1		
1		
1		
1		

Devon J Brown  
Crew Lead (print)

William Schell  
Crew Lead (signature)



PHOTOVOLTAIC SYSTEM  
AC DISCONNECT

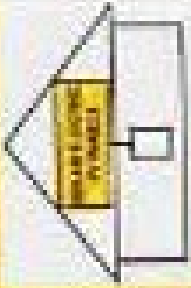
**WARNING**  
DUAL POWER SUPPLY

**ELECTRIC SHOCK HAZARD**  
TO YOU FROM THE  
TRANSFORMER OR OTHER ELECTRICAL  
PARTS OF THE SYSTEM

OPERATING VOLTAGE: **120V**  
OPENING CURRENT: **15A**

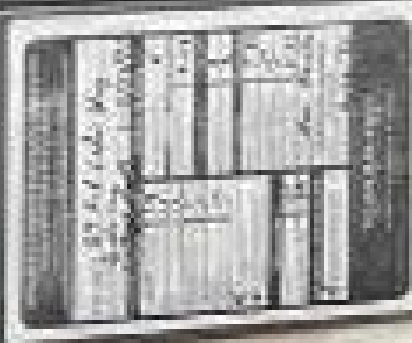
**SOLAR PV SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN**

TURN RAPID SHUTDOWN  
SWITCH TO THE  
"OFF" POSITION TO  
SHUT DOWN PV SYSTEM  
AND REDUCE  
SHOCK HAZARD  
IN THE AREA



**WARNING**  
DO NOT TOUCH THE  
INTERNAL PARTS OF THE  
SYSTEM OR THE  
ELECTRICAL PARTS OF THE  
SYSTEM

**WARNING**  
DO NOT REMOVE THE  
COVER FROM THE  
ELECTRICAL PARTS OF THE  
SYSTEM



 **WARNING**

**ELECTRIC SHOCK HAZARD**

TERMINALS ON THE LINE AND  
LOAD SIDES MAY BE ENERGIZED  
IN THE OPEN POSITION

**WARNING: PHOTOVOLTAIC  
POWER SOURCE**





PHOTOVOLTIC SYSTEM  
AC DISCONNECT

**⚠ WARNING**  
DUAL POWER SUPPLY

WARRANTY INFORMATION

**ELECTRIC SHOCK HAZARD**  
DO NOT TOUCH TERMINALS OR  
TERMINALS ON BOTH ENDS OF THE CABLES  
WHILE THE SYSTEM IS IN THE OPEN POSITION

OPERATING VOLTAGE	1000V	VOLTS
OPERATING CURRENT	300	AMPS

**⚠ WARNING**  
THIS EQUIPMENT FED BY MULTIPLE  
SOURCES. TOTAL RATINGS OF ALL  
OVERCURRENT DEVICES, EXCLUDING  
MAIN SUPPLY OVERCURRENT  
DEVICE, SHALL NOT EXCEED  
CAPACITY OF BUSBAR.

**⚠ WARNING**  
PHOTOVOLTIC SYSTEM  
COMBINER PANEL  
DO NOT ADD LOADS

**⚠ WARNING**  
THIS EQUIPMENT IS FED BY MULTIPLE SOURCES.  
TOTAL RATINGS OF ALL OVERCURRENT DEVICES,  
EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE,  
SHALL NOT EXCEED CAPACITY OF BUSBAR.



**⚠ WARNING**

**DUAL POWER SUPPLY**

**SOURCES: UTILITY GRID AND  
PV SOLAR ELECTRIC SYSTEM**



**⚠ WARNING**





















Attendance 1300000  
560000



WARNING PHOTOVOLTAIC POWER SOURCE

WARNING PHOTOVOLTAIC POWER SOURCE



**WARNING**  
DANGER OF ELECTRIC SHOCK  
DO NOT OPEN



10/2 G NMMI-B

INDOOR WIRE

250 FT

76-20 M



10/2 G NMMI-B

INDOOR WIRE



250 FT

76-20 M

10/2 G

INDOOR WIRE



250 FT

76-20 M

10 G NMMI-B



USA

ENCORE WIRE

USA



ENCORE WIRE

USA





The first part of the experiment involves the preparation of a standard solution of sodium hydroxide. This is done by weighing a precise amount of sodium hydroxide and dissolving it in a known volume of distilled water in a volumetric flask. The second part involves the titration of a known volume of this standard solution with a solution of a weak acid, such as acetic acid. The endpoint of the titration is determined by a color change in the solution, which is caused by the formation of the conjugate base of the weak acid.

The results of the titration are used to calculate the concentration of the weak acid solution. This is done by using the stoichiometry of the reaction between the weak acid and the strong base. The concentration of the weak acid is found to be approximately 0.1 M.



Diagram of a titration setup showing a burette and a flask.



Diagram of a titration setup showing a burette and a flask.

The diagram illustrates the experimental setup for the titration. It shows a burette containing the standard solution of sodium hydroxide, which is being added to a flask containing the weak acid solution. The flask is placed on a stand, and the burette is also supported by a stand. The solution in the flask is being stirred by a magnetic bar.

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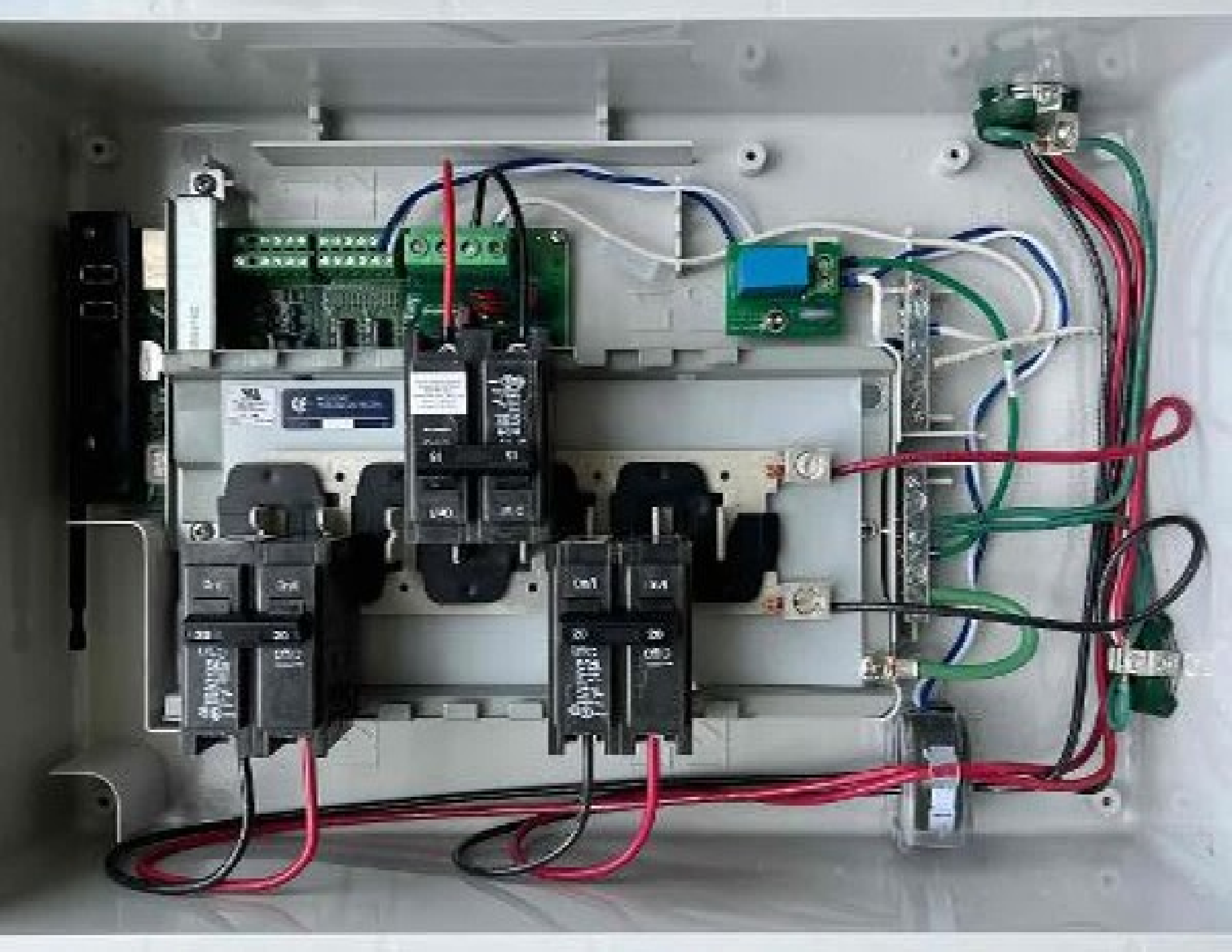
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15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
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Type BCB  
15A 120V Single Pole  
Type BCB

15

15

On/I

On/I

On/I

20

Off/O  
Common Trip

On/I

On/I

20

20

Off/O  
Common Trip

Off/O  
Common Trip

15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB

15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB  
15A 120V Single Pole  
Type BCB















**⚠**  
DANGER  
BEFORE  
USE  
READ  
BELOW  
SAFETY  
EQUIPMENT  
INSTALL  
CIRCUIT



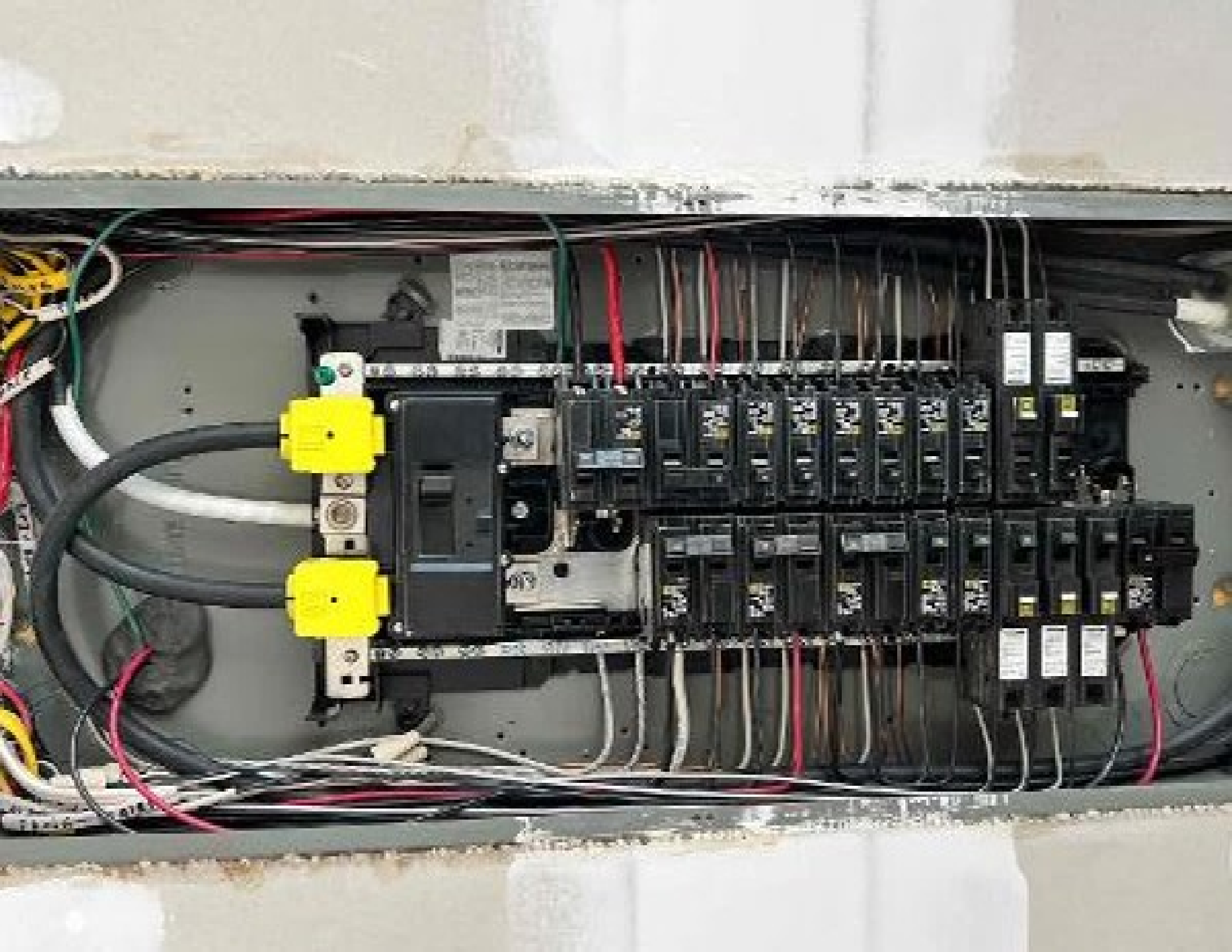
**⚠ WARNING**  
DO NOT TOUCH THE  
INTERNAL COMPONENTS OF THE  
CIRCUIT BOARD OR  
TERMINALS.























RECYCLED  
LASSAY ASSOCIATES



5 (UL) Type DG 600V THHN/TWN-2 90C 60/3C 2/C 12AWG -40C



106

840-00388-16  
250VAC 20A  
+19°C 220B

