

PHOTOVOLTAIC SYSTEM
AC-DISCONNECT

WARNING
DUAL POWER SUPPLY
ELECTRIC SHOCK HAZARD

SAFETY NOTICE
100V
1000VA

**SOLAR PV SYSTEM EQUIPPED
WITH RAPID SHUTDOWN**

THIS BOARD SHUTS DOWN
POWER TO THE
"OFF" POSITION TO
SHUT DOWN PV SYSTEM
AND REDUCE
ELECTRIC SHOCK HAZARD
IN THE AREA



WARNING
This panel is not to be removed
without the manufacturer's written consent.
Unauthorized removal may void the warranty.

WARNING
DO NOT DISCONNECT
THE PHOTOVOLTAIC SYSTEM

⚠ WARNING

DUAL POWER SUPPLY

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



PHOTOVOLTAIC SYSTEM
AC DISCONNECT

⚠ WARNING

DUAL POWER SUPPLY

FOR 100, 120, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900, 4000, 4100, 4200, 4300, 4400, 4500, 4600, 4700, 4800, 4900, 5000, 5100, 5200, 5300, 5400, 5500, 5600, 5700, 5800, 5900, 6000, 6100, 6200, 6300, 6400, 6500, 6600, 6700, 6800, 6900, 7000, 7100, 7200, 7300, 7400, 7500, 7600, 7700, 7800, 7900, 8000, 8100, 8200, 8300, 8400, 8500, 8600, 8700, 8800, 8900, 9000, 9100, 9200, 9300, 9400, 9500, 9600, 9700, 9800, 9900, 10000

ELECTRIC SHOCK HAZARD

DO NOT TOUCH TERMINALS
WHILE SWITCHES ARE OPEN. LOADS MAY
BE ENERGIZED IN THE OPEN POSITION.

OPERATING VOLTAGE VOLTS

OPERATING CURRENT AMPS

120V
15A

⚠ 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

PHOTOVOLTAIC SYSTEM
COMBINER PANEL

DO NOT ADD LOADS

⚠ WARNING

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

 ENPHASE

 **WARNING**

ELECTRIC SHOCK HAZARD

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



TEMPERATURE

The thermostat display shows the following information:

- Current temperature: 74
- Set temperature: 70
- Time: 11:55 AM
- Mode: Fan Auto
- Menu options: System & Fan, Use Schedule, Permanent Hold, Clean & Restore

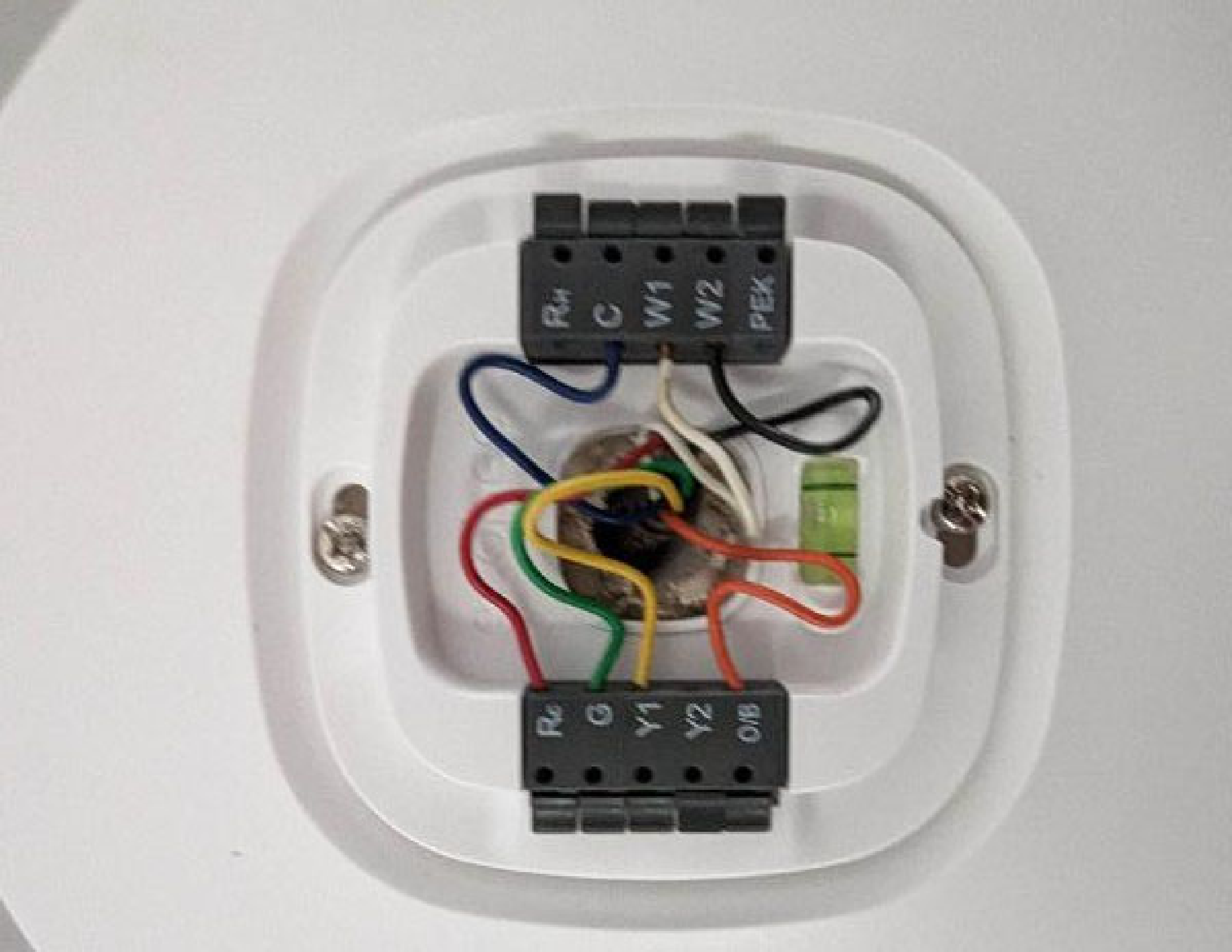
Carolina Comfort Air
910-339-2374





32003725

CONVENTIONAL
HEAT PUMP



R4
C
W1
W2
PEK

R6
G
Y1
Y2
O/B

Honeywell

The LCD display shows the following information:

- Current temperature: 75
- Setpoint temperature: 75
- Time: 12:20 PM
- System status: System Cool
- Mode: Fan Auto
- Buttons: Clean & Filter, Sleep, Schedule, Clean & Filter
- Navigation: Up/Down arrows

Control Comfort Air
910-339-2374



32003725-009



R_H C W1 W2 PEK

R_c G Y1 Y2 O/B



IQ GATEWAY 1

IQ Gateway

202305055245

IQ Microinverters & Array

- ✓ Scanned
- ✓ Detected
- ✓ Communicating
- ✓ Array created
- 🔴 Producing power
- ✓ Profile set

2/21

2/21

2/21

1

0/21

2/21 06:00 1547.2018

PJM v2.2018Q4.1.2.71

[Add site notes and pictures](#)

[Start syncing now](#)

Connection

Cellular

UNSYNCED ITEMS

Projects

0

Media

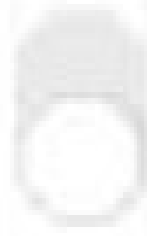
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Fields

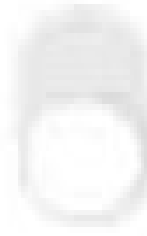
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SYNC SETTINGS

Sync on Wifi only



Optimize photo download



Issues syncing?

Start Provisioning Devices

IO Gateway 2023050555245



IO Gateway successfully connected to Emphase Cloud and Installer Toolkit

IO Gateway Connectivity Status



Wi-Fi



Ethernet



Cellular



Software up-to-date



11/11/11	11/11/11	11/11/11	11/11/11	11/11/11
11/11/11	11/11/11	11/11/11	11/11/11	11/11/11
11/11/11	11/11/11	11/11/11	11/11/11	11/11/11
11/11/11	11/11/11	11/11/11	11/11/11	11/11/11
11/11/11	11/11/11	11/11/11	11/11/11	11/11/11



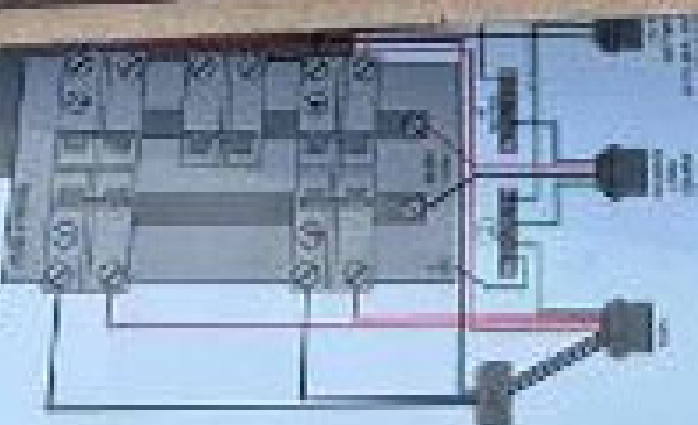
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WARNING
 Do not touch the metal parts of the circuit board while the power is on. The circuit board is hot. Please refer to the manual for more information.

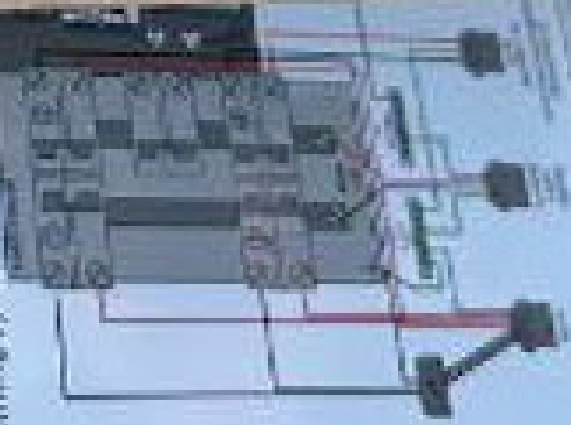
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for IC-6/7 and IC-8
Tied Systems



for IC-8 Grid
Forming Systems





ecobee

ecobee

IQ Combiner 4

Photovoltaic
Combiner Box

X-IQ-AM1-240-4



NOM



UL 489
E341154

Electrical ratings

Voltage 240VAC, 50-Hz
DG Breakers 80A MAX (combined)
DG Inputs 64A MAX (combined)
Output 65A MAX, 90A MAX feeder CCPD
Temperature 46°C MAX ambient
For DG breaker, use only Eaton BR series.


202305055245

S/N:


202305055245

P/N:


883-00356 25

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)	
60A Circuit Breaker only	6-4 AWG	3.0 Nm (27 lb-in)	
	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	5.5 Nm (45 lb-in)	
Neutral and ground	14-3 AWG	5.1 Nm (45 lb-in)	
	Large screw	6 AWG	3.6 Nm (32 lb-in)
		8 AWG	2.6 Nm (23 lb-in)
Main lug	10-14 AWG	2.3 Nm (20 lb-in)	
	10-4 AWG	5.0 Nm (45 lb-in)	
	3-2/0 AWG	5.5 Nm (50 lb-in)	

Copper conductors only, rated min. 75°C.

Follow NEMA 70 (NEC), or CSA C22.1 part 1, and all local codes.

For DG Breakers larger than 20A, use wire insulated for 90°C based on 75°C ampacity.

Designed in California and New Zealand
Made in Mexico









WARNING
ELECTRICAL SHOCK HAZARD
DO NOT TOUCH THE WIRING
OR COMPONENTS INSIDE THE BOX
UNLESS YOU ARE A QUALIFIED
ELECTRICIAN

ETL
LISTED
UL 100

PV SOLAR BREAKER
DO NOT RELOCATE
THIS OVERCURRENT
DEVICE

50A

50A

50A

50A

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

Garage Kitchen
Light

Bath









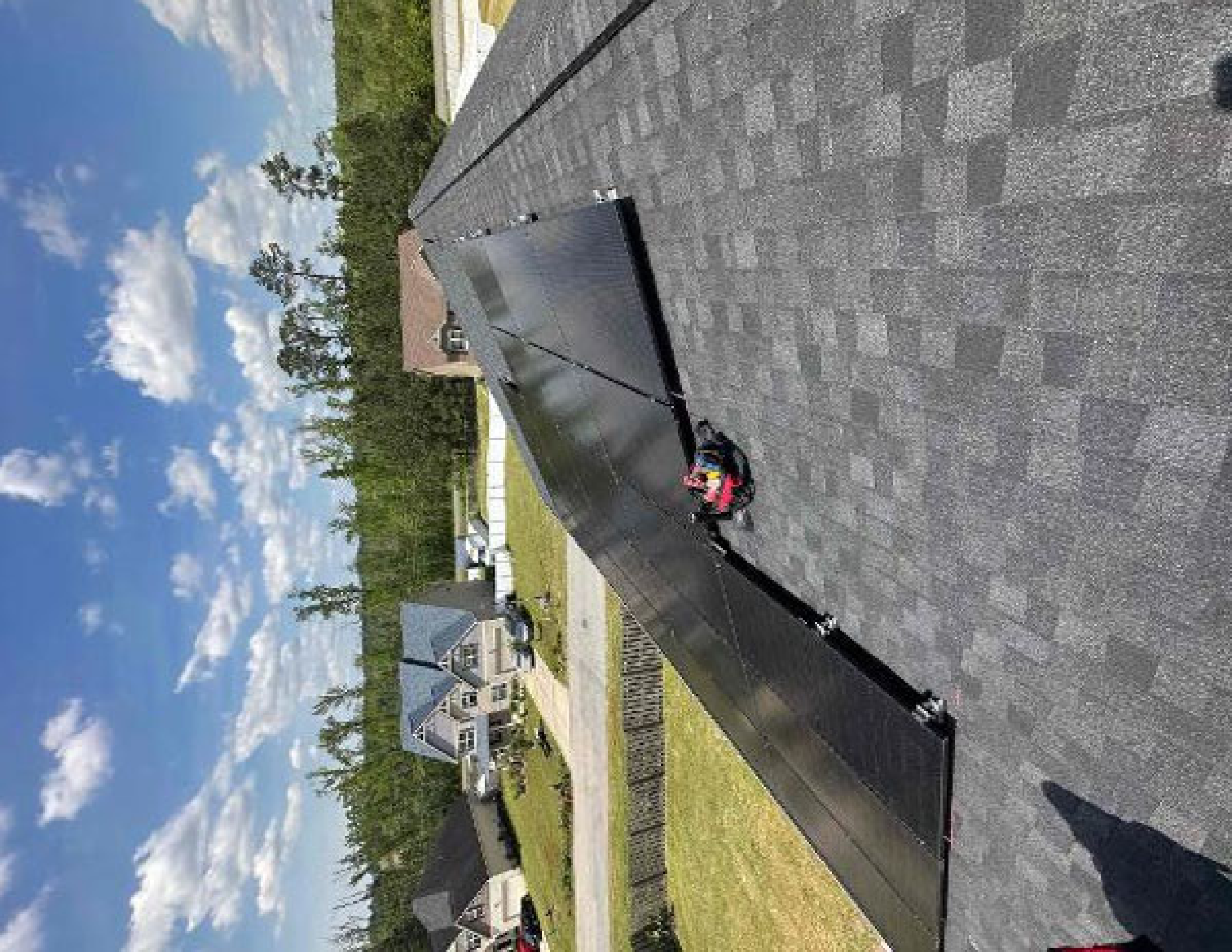


















Cerromar
Copper Building Wire

cerromar
Copper Building Wire

250 ft indoor
Copper Building Wire

250 ft indoor
Copper Building Wire



Copper Building Wire

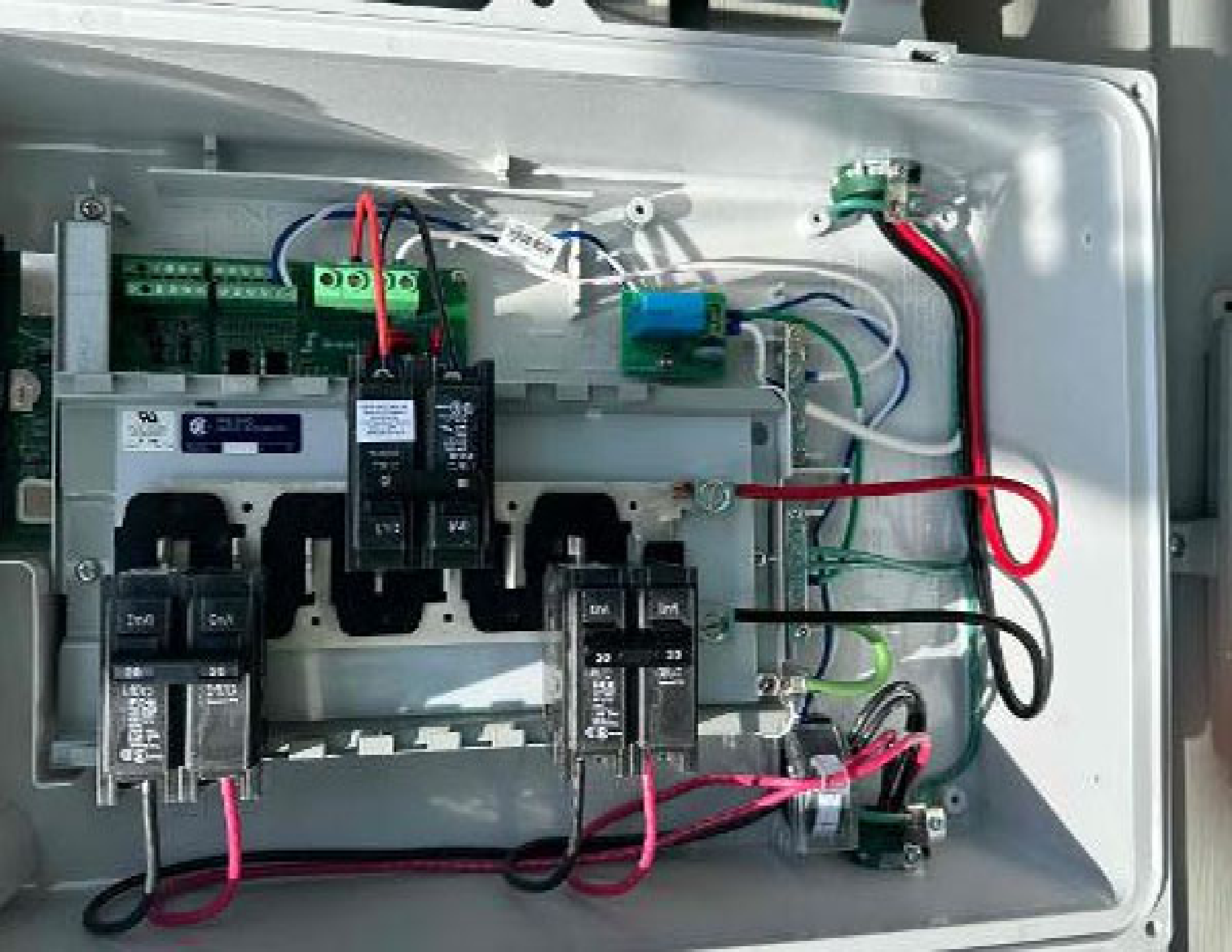
NM-B 10/2

NM-B 10/2

100%
COPPER
INSULATED
WIRE

100%
COPPER
INSULATED
WIRE

















E121488
3/4" COVER



E121488
3/4" COVER









UL LISTED
UL 508
UL 508A
UL 508B
UL 508C
UL 508D
UL 508E
UL 508F
UL 508G
UL 508H
UL 508I
UL 508J
UL 508K
UL 508L
UL 508M
UL 508N
UL 508O
UL 508P
UL 508Q
UL 508R
UL 508S
UL 508T
UL 508U
UL 508V
UL 508W
UL 508X
UL 508Y
UL 508Z

35
OFF

100A
EFT-M
TYP

UL LISTED
UL 508
UL 508A
UL 508B
UL 508C
UL 508D
UL 508E
UL 508F
UL 508G
UL 508H
UL 508I
UL 508J
UL 508K
UL 508L
UL 508M
UL 508N
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UL 508X
UL 508Y
UL 508Z





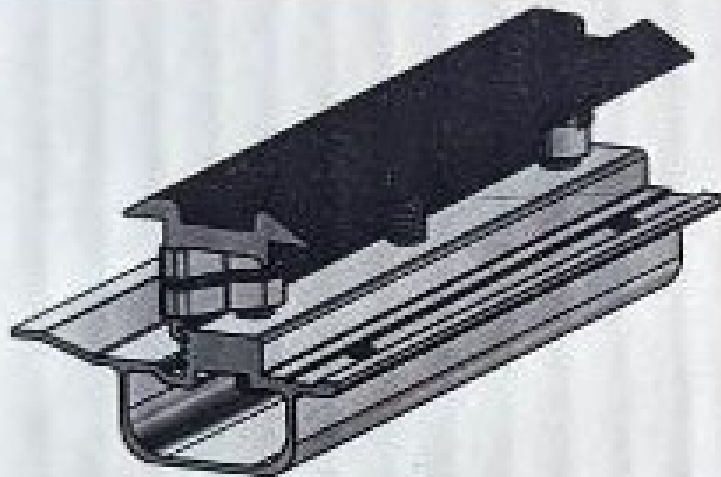


UL Type DC 600V THRU/THRN-2
30C
12AWG
FT4

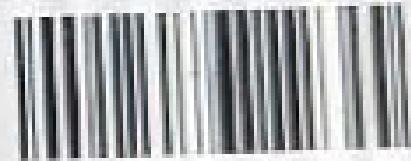


UNIRACTM
.com
 BETTER SOLAR STARTS HERE

30MM SPLICE 6.5" SFM



253010U



PACKAGE QTY: 10 EA
 WO/PQ#: 0045726-01
 MANUFACTURE DATE: 06/2022
 FACTORY CODE: 026A



California Proposition 65 WARNING: Cancer &
 Reproductive Harm www.P65Warnings.ca.gov

unirac.com/2020ca







BETTER SOLAR STARTS HERE

www.unirac.com



253030U

SFM ATTACHED SPLICE 8"

Pack Size: 10

WO/PO# : 0045419-01

Manufacture date: JAN 17

Factory Code : 010A



8 10039 36118 4









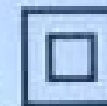
SEG Solar Inc.
Add:973 Ecom Road, San Antonio,
TX 78216 USA
www.segsolar.com

System Fire Class Rating: See installation manual
Made in Thailand

Module Type:	SEG-405-SMD-TB
Rated Maximum Power: Front	405W
Power Sorting:	0L±4.0%
Current at P _{max} : Front	13.10A
Voltage at P _{max} : Front	30.91V
Short-Circuit Current: Front	13.70A
Open-Circuit Voltage: Front	37.22V
Weight:	21.5kg
Dimension:	1732 x 1134 x 30mm
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	25A
Cell Technology:	Mono-Si
Fire Rating:	Type 1

Power Production Tolerance:	±3%
Short-circuit Current Tolerance:	±4%
Open-circuit Voltage Tolerance:	±2%

All technical data measured at STC:
1000W/m² AM1.5, 25°C
PV Module Classification: Class 0





FLASHKIT SFM TRIM S

004201D

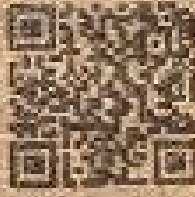
FLASHKIT SFM TRIM S COMP DARK

Packet Size : 10

Factory Code: 5-1



WCIPOS 0045324-00 Manufacture date: 12/22-2/20/22



FLASHKIT SFM SLIDER S

004271D

FLASHKIT SFM SLIDER S COMP DRK
DARK Pack Size : 10
Factory Code: 5-1



WCI/PC# 0045416-00 Manufacture date: 3/10/22-4/10/22

8 1 0039 36213 1 0











SEG Solar Inc.
 2540778 Bldg. Manufacturing Division
 TEL: 214-281-1611
 www.seg-solar.com

Model: SEG-SOLAR-100-100-100-100-100-100
 Main: 100-100-100-100-100-100

Model: SEG-SOLAR-100-100-100-100-100-100
 Main: 100-100-100-100-100-100

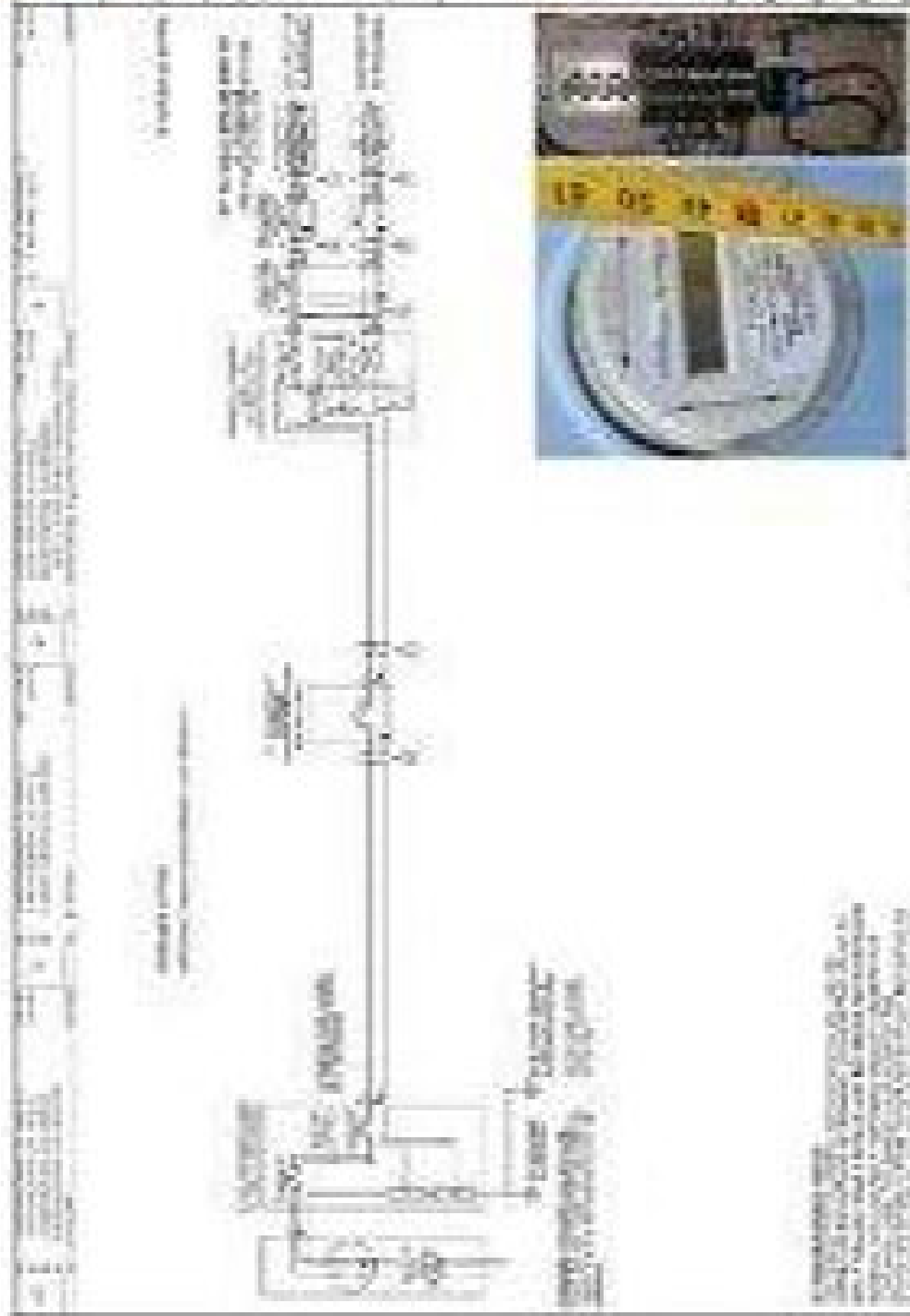
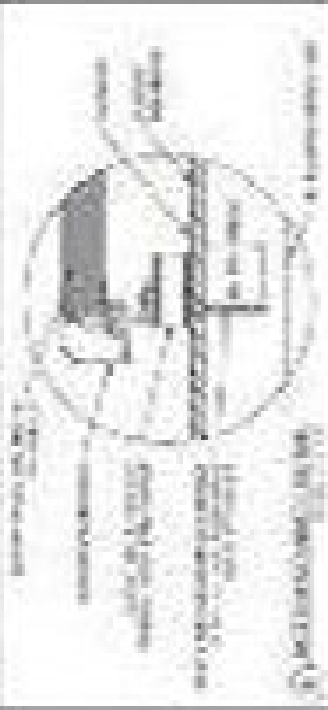
SEG SOLAR

Model: SEG-SOLAR-100-100-100-100-100-100
 Main: 100-100-100-100-100-100

Model: SEG-SOLAR-100-100-100-100-100-100
 Main: 100-100-100-100-100-100







Flower diagram showing the structure of a flower.



DATE _____

TOPIC _____

NAME _____

CLASS _____

SECTION _____

TEACHER _____

Sl. No.	Topic	Page No.	Score
1	Plant Kingdom	1-10	10
2	Plant Tissues	11-20	10
3	Morphology of Flowering Plant	21-30	10
4	Reproduction in Flowering Plant	31-40	10
5	Human Reproduction	41-50	10
6	Heredity and Evolution	51-60	10
7	Biotechnology	61-70	10
8	Environmental Issues	71-80	10
9	Health and Disease	81-90	10
10	Drugs and Alcohol	91-100	10
Total			100

DATE _____

TOPIC _____

NAME _____

CLASS _____

SECTION _____

TEACHER _____















Designated Competent Person - Fill out this portion of the form

In Case of Emergency, call 911 immediately and proceed to the nearest emergency room

For non-emergency injuries, please report the injury to your manager, follow the Injury Standard Operating Procedures - Notify managers.

Nearest Urgent Care (circle one)	Cape Fear Valley Medical Center 1678 Owen Dr., Fayetteville, NC 28304
Nearest Emergency Room:	
Safety Contact:	James Jones (252) 808-1327
Additional Notes:	

Report Injury



Workers

Compensation Provider: Berkshire Hathaway Homestate Companies
Berkshire Hathaway Address: PO Box 881716, San Francisco CA 94188
Berkshire Hathaway Fax Number: (800) 661-0384
Berkshire Hathaway Policy Number: BWWC224029 (OR, FL) - BWWC225858 (all other states)
Blue Raven Fax Number: (385) 458-408

Job Hazard Analysis



Customer Name: **William Lopez**

Address: **17 Valley South Cir
Spring Lake, North Carolina 27586**

BLUE RAVEN

SOLAR Version: 0.2

Installation Date:
4/26/23

Designated Competent Person:
Patricia Gomez

Activity	Hazards	Steps to Mitigate	Controls
Climbing ladders	Fall Hazards	<input checked="" type="checkbox"/> Ladder standoff/brake arms installed <input checked="" type="checkbox"/> Secured with ladder strap	<input checked="" type="checkbox"/> Inspected for damage <input checked="" type="checkbox"/> Set up at 0-14 Ratio Initial Y.B
Working over 6'	Falls from roofs Falls from attics	<input checked="" type="checkbox"/> Harness/Rope/Anchor/SPUs inspected <input checked="" type="checkbox"/> Anchor points installed correctly <input checked="" type="checkbox"/> 100% tie off over 6'	<input type="checkbox"/> Fall restraint in use <input checked="" type="checkbox"/> Fall arrest in use <input checked="" type="checkbox"/> Potential swing falls identified Initial Y.B
Work in high (80'-99') or extreme (100'+) heat	Heat stress/fatigue/dehydration/heat stroke Sunburn	<input checked="" type="checkbox"/> Awareness - buddy system/ break when necessary <input checked="" type="checkbox"/> Hydration (water available)	<input type="checkbox"/> Electrolytes Initial Y.B
Working within the RAZ	Struck by hazard (falling objects)	<input type="checkbox"/> Everyone within RAZ wearing hard hats	<input checked="" type="checkbox"/> All four sides of RAZ enclosed Initial Y.B
Electrical work	Electrical shock/arc flash Arc flash	<input checked="" type="checkbox"/> Arc flash PPE: CAT1 (HVP, pants, safety glasses, face shield, boots, earplugs, electrically insulated gloves within 12" of exposed live components, CAT1 arc flash gloves within 3' of electrical panel)	Initial Y.B
Other/general hazards	Struck by flying objects (nails) Cut hazards	<input checked="" type="checkbox"/> Safety glasses worn at all times. <input checked="" type="checkbox"/> Cut 4 gloves worn at all times.	Initial Y.B
Other tasks	Ergonomic hazards (lifting) Other hazards	<input checked="" type="checkbox"/> Proper lifting techniques/ team lifting <input type="checkbox"/> Steps to mitigate (specify)	Initial Y.B

Draw Members	Signature	Date
Name		
Draw Lead: Yanick Berthelot - Electrician	Yanick Berthelot	4/26/23
Yanick Lopez	Patricia Gomez	
Yanick Lopez	Patricia Gomez	



BLUE RAVEN
SOLAR

