

PROJECT DESCRIPTION:	
SYSTEM SIZE	92.00KW DC STC
MODULE TYPE	(184) JINKO SOLAR JKM500N-51QL6-BDV-F1-EU 500W

INDEX SHEET	
A.00	SITE PLAN
A.01	LAYOUT PLAN
S.00	FRAMING DETAILS
S.01	INVERTER FRAMING
D.00-D.01	SPECIFICATION SHEETS



C6 SPECTRUM
BUSINESS ESTATE
ANTHONY'S WAY,
ROCHESTER, KENT
ME2 4NP

PRO. DATE	20/03/2024	
DESIGN BY	DR	
CHECKED BY	JD	
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(HOTEL ROOF)

SHEET NAME

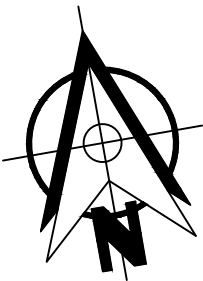
SITE PLAN

SHEET SIZE

ANSI B
279 X 432

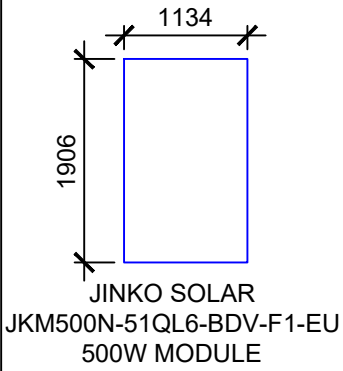
SHEET NUMBER

A.00



1 SITE PLAN
SCALE: 1:400





MODULES AREA & ROOF AREA CALC'S			
# OF MODULES	MODULES AREA (Sq. Meter)	ROOF AREA (Sq. Meter)	ROOF AREA COVERED BY MODULES (%)
184	213.44	1949.48	10.95



C6 SPECTRUM
BUSINESS ESTATE
ANTHONY'S WAY,
ROCHESTER, KENT
ME2 4NP

PRO. DATE	20/03/2024	
DESIGN BY	DR	
CHECKED BY	JD	
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(HOTEL ROOF)

SHEET NAME

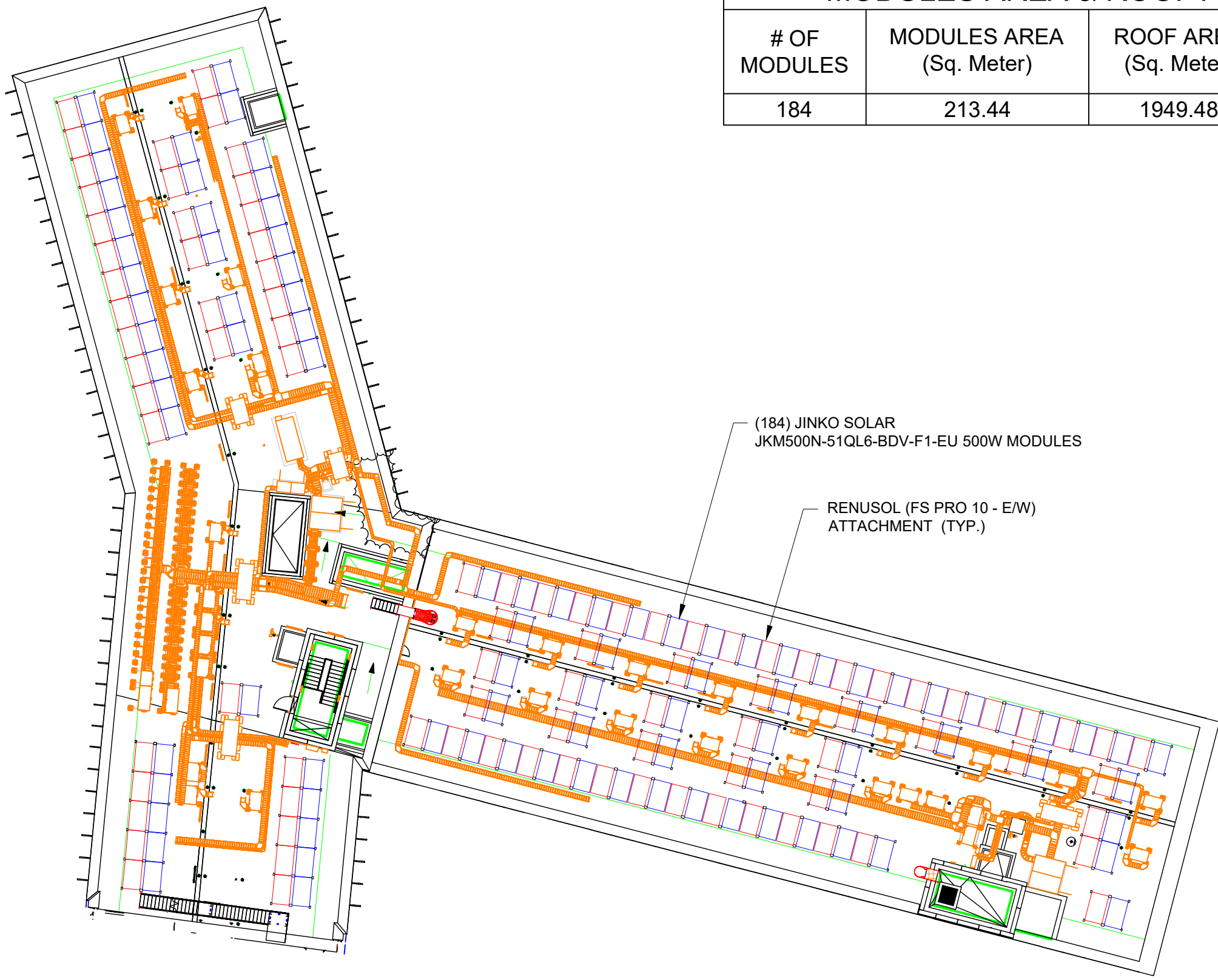
LAYOUT PLAN

SHEET SIZE

ANSI B
279 X 432

SHEET NUMBER

A.01



1

LAYOUT PLAN

SCALE: 1:300

LEGENDS

EAST FACING MODULE

WEST FACING MODULE

C6 SPECTRUM
BUSINESS ESTATE
ANTHONY'S WAY,
ROCHESTER, KENT
ME2 4NP

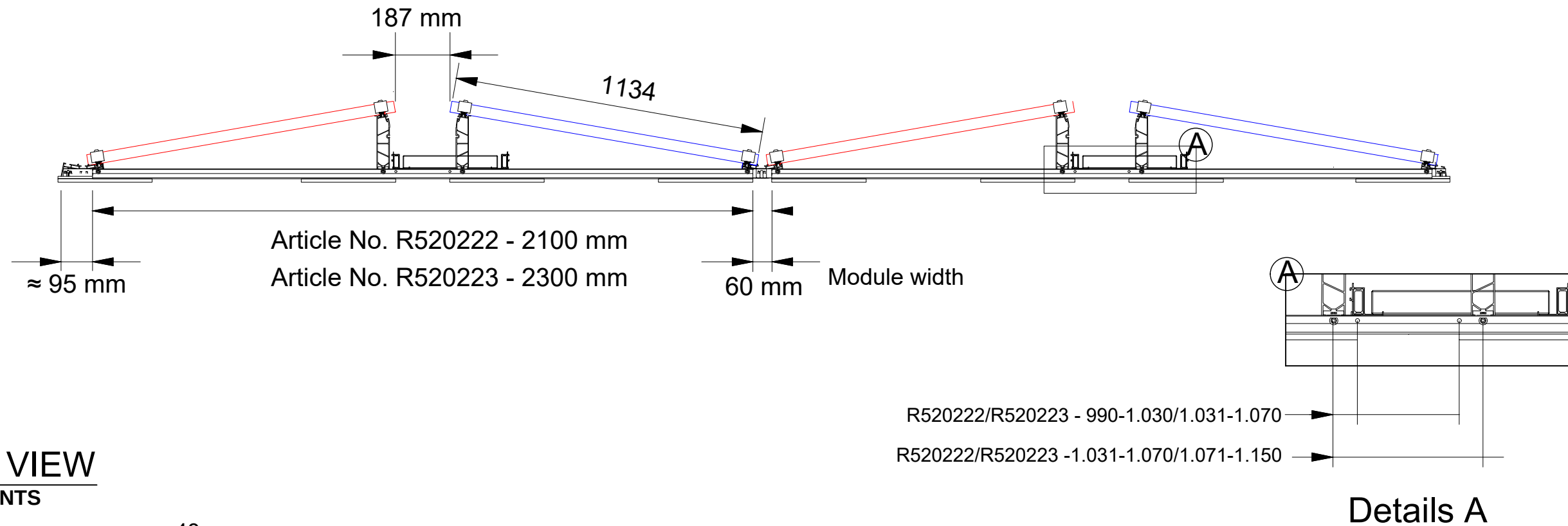
PRO.DATE	20/03/2024	
DESIGN BY	DR	
CHECKED BY	JD	
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

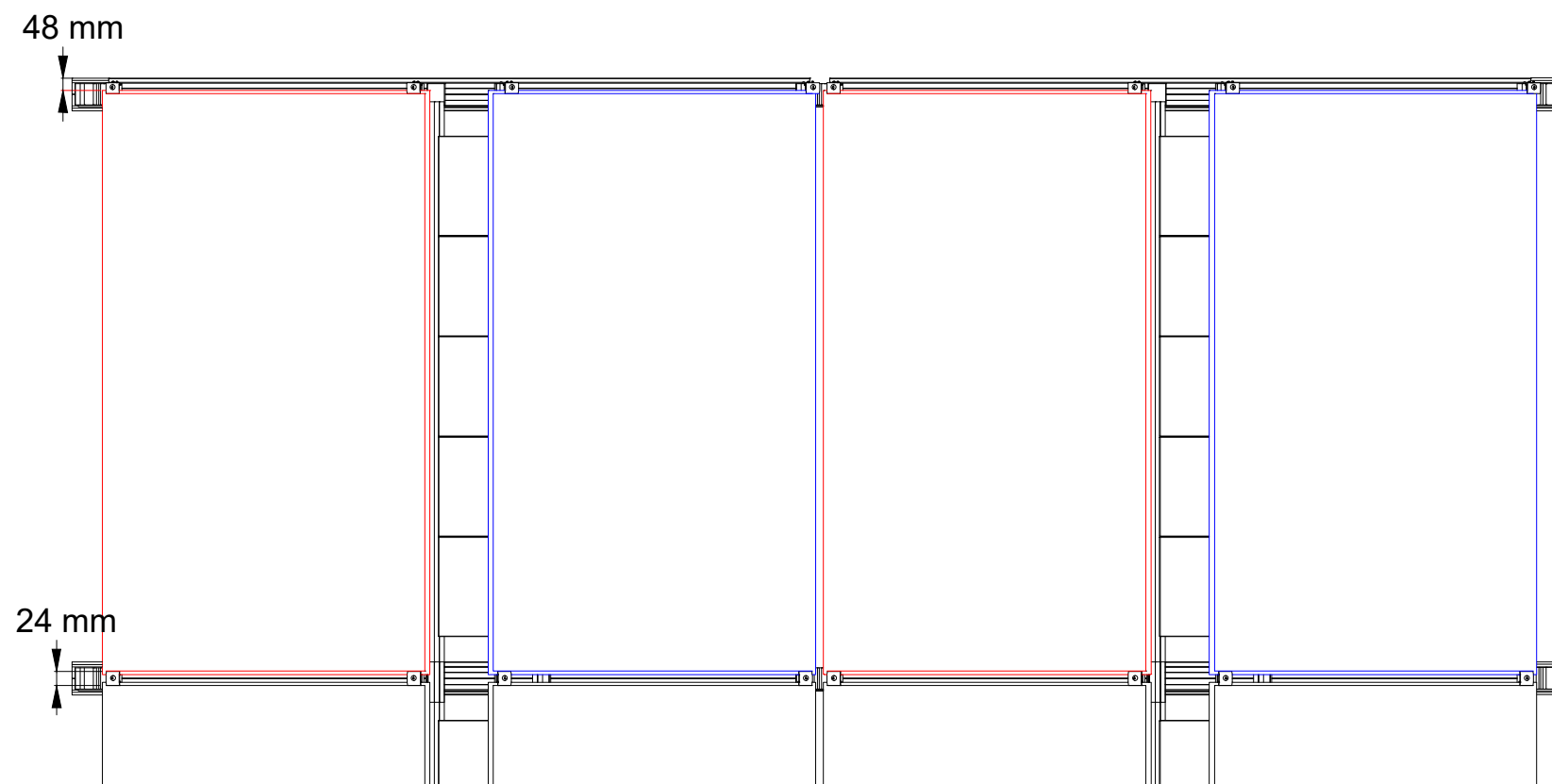
MANCHESTER CITY
NORTH STAND
(HOTEL ROOF)

SHEET NAME
FRAMING LAYOUT
SHEET SIZE
ANSI B 279 X 432
SHEET NUMBER
S.00

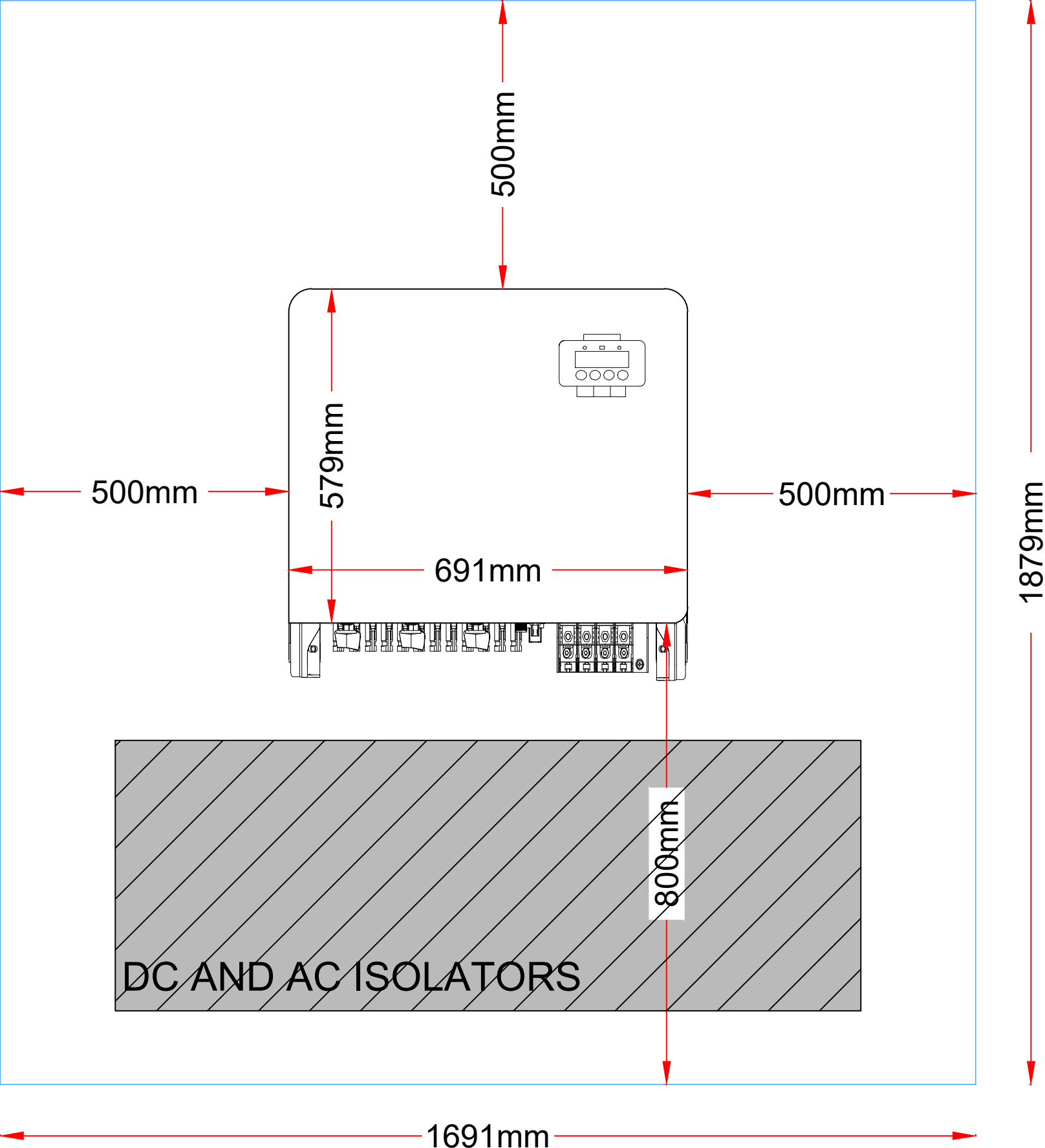
R520222/R520223 - 990-1.030/1.031-1.070



1 SIDE VIEW
SCALE: NTS



2 TOP VIEW
SCALE: NTS



SOLIS S-5GC-50K AND 60K INVERTERS:

Dimensions: W 691mm x H 579 x D 338mm

- The temperature of the inverter heat-sink can reach 75°C
- The inverter is designed to work in an ambient temperature range between -25 to 60°C.
- If multiple inverters are installed on site, a minimum clearance of 500mm should be kept between each inverter and all other mounted equipment. The bottom of the inverter should be at least 800mm above the ground or floor.
- The LED status indicator lights and the LCD located on the inverter's front panel should not be blocked.
- Adequate ventilation must be present if the inverter is to be installed in a confined space.



C6 SPECTRUM
BUSINESS ESTATE
ANTHONY'S WAY,
ROCHESTER, KENT
ME2 4NP

PRO. DATE	20/03/2024	
DESIGN BY	DR	
CHECKED BY	JD	
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(HOTEL ROOF)

SHEET NAME
INVERTER FRAMING
SHEET SIZE
ANSI B 279 X 432
SHEET NUMBER
S.01

TIGER Neo III

JinkoSolar

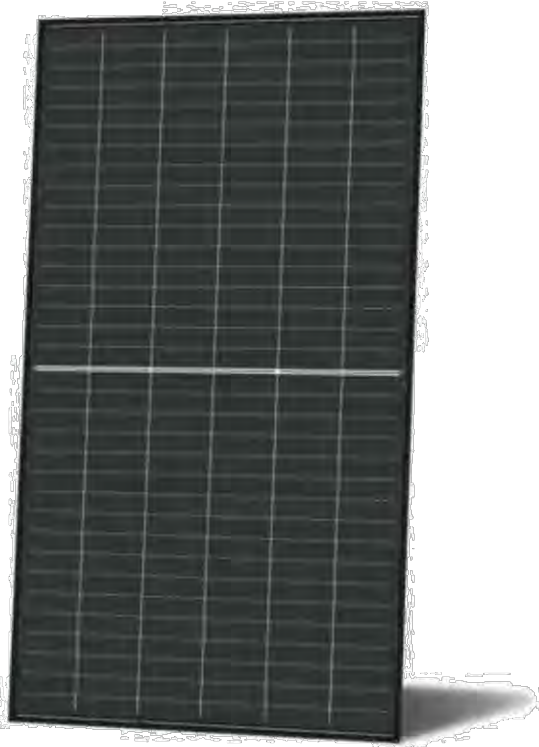
51QL6-BDV 495-520 Watt

51 QL6-BDV

495-520 Watt

85±5% Bifaciality

BIFACIAL MODULE



Higher Power on Front Side

Leading power class based on the enhanced N-type TOPCon platform, through cutting-edge technology and an optimized layout that captures more sunlight.



Optimized Heat Resistance

Optimized temperature coefficient via advanced graphical patterning, busbar and multi-cells technology.



Industry Leading Warranty

Advanced metallization and iterated module encapsulation deliver superior resistance to PID, LID / LeTID, and UV degradation.



Better Generation on Rear Side

Enabling industry-leading bifaciality in TOPCon cells through an improved structure that enhances light absorption and trapping.



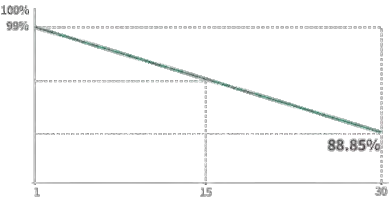
Proven Low Light Performance

Enhanced cell structure ensures superior module performance under low-light conditions.



Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load



15 Year Product Warranty
30 Year Linear Power Warranty
1% First-year Degradation
0.35% Annual Degradation Over 30 Years

- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems



JKM495-520N-51QL6-BDV-F1-EU

Mechanical Characteristics

Cell Type	N- type Mono-crystalline
No. of cells	204 (51×4)
Dimensions	1906×1134×30 mm
Weight	26.3 kg
Front Glass	2.0 mm, Anti-reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	JK03M/JK03M2/Others*
Output Cables (Including Connector)	≥4.0 mm ² (+): 600 mm , (-): 400 mm or Customized Length

*MC4-EVO2 available upon request and subject to availability

Packaging Configuration

Pallet Dimensions	1981×1140×1249 mm
Packing Detail (Two pallets = One stack)	37 pcs/pallets, 74 pcs/stack, 888 pcs/ 40'HQ Container

Specifications (STC)

Maximum Power - Pmax [Wp]	495	500	505	510	515	520
Maximum Power Voltage - Vmp [V]	32.81	32.96	33.12	33.27	33.42	33.57
Maximum Power Current - Imp [A]	15.09	15.17	15.25	15.33	15.41	15.49
Open-circuit Voltage - Voc [V]	38.35	38.60	38.85	39.10	39.35	39.60
Short-circuit Current - Isc [A]	15.76	15.81	15.86	15.91	15.96	16.01
Module Efficiency STC [%]	22.90	23.13	23.36	23.60	23.83	24.06
Bifacial Factor	85 ± 5%					
Power Sorting	0 ~ + 3 %					
Temperature Coefficient of Pmax	-0.26 %/°C					
Temperature Coefficient of Voc	-0.24 %/°C					
Temperature Coefficient of Isc	0.046 %/°C					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Specifications (BNPI)

Maximum Power - Pmax [Wp]	552	557	563	569	574	580
Maximum Power Voltage - Vmp [V]	32.81	32.96	33.12	33.27	33.42	33.57
Maximum Power Current - Imp [A]	16.82	16.91	17.00	17.09	17.18	17.27
Open-circuit Voltage - Voc [V]	38.35	38.60	38.85	39.10	39.35	39.60
Short-circuit Current - Isc [A]	17.51	17.57	17.62	17.68	17.74	17.79

BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

Application Conditions

Level T _{amb} ≤ 70 °C	- 40 °C to + 70 °C*
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	35 A
Bifaciality Coefficients	φVoc: 98±5 %, φIsc: 85±5 %, φPmax: 85±5 %

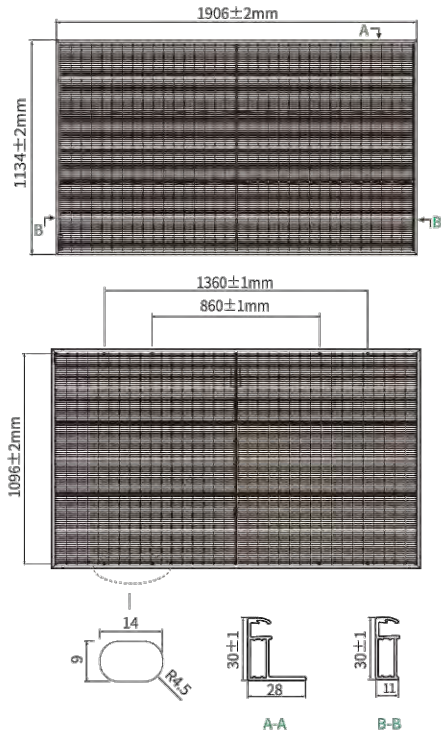
*Short-term up to 85°C; higher operation requires IEC TS 63126 testing

JinkoSolar

© 2025 Jinko Solar Co., Ltd. All rights reserved.

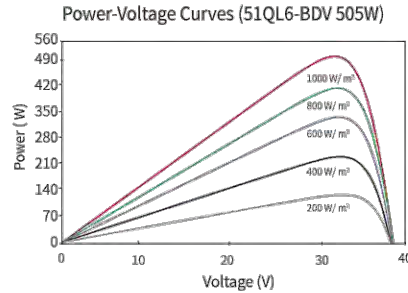
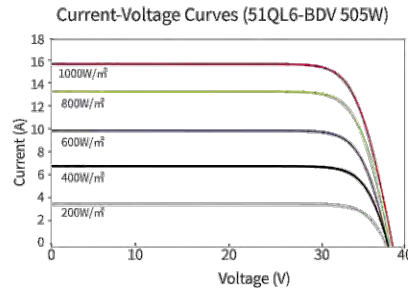
Note: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in this datasheet are subject to change without notice.

Engineering Drawings



*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Electrical Performance



JKM495-520N-51QL6-BDV-F1-EU

www.jinkosolar.com
www.jinkosolar.eu



C6 SPECTRUM
BUSINESS ESTATE
ANTHONY'S WAY,
ROCHESTER, KENT
ME2 4NP

PRO.DATE		20/03/2024
DESIGN BY		DR
CHECKED BY		JD
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

MANCHESTER CITY
NORTH STAND
(HOTEL ROOF)

SHEET NAME

SPECIFICATION
SHEET

SHEET SIZE

ANSI B
279 X 432

SHEET NUMBER

D.00

System Datasheet

Renusol FS Pro 10-EW

General

System	Ballasted PV-mounting system
Content	Base rail with pre-assembled building protection, eaves support and ridge support, eaves support, module clamps
System warranty	10 years, 20 years with PV configurator design
Application area	Flat roof on industrial, agricultural (except hydrogen sulfide exposition) and residential buildings
Roof covering	Bitumen, concrete, foil, gravel, trapezoidal sheet metal
Roof slope	max. 5° without additional measures

Montagevariante



FS Pro 10-EW

You can find further mounting options at www.renusol.com. The Renusol FS Pro 10-EW is available as a system with three rails, as portrait mounting, with a clamp on the long side, as well as a fixed version on trapezoidal sheet metal and roof-penetrating with third-party products.

System properties

System orientation	East-West
Module tilt	10°
System weight approx.	1,15 kg/m²plus ballast (project specific)
Weight PV-module included approx.	11,8 kg/m²plus ballast (project specific)
Friction coefficient approx.	$\mu = 0,5$ is to be determined and ensured upon installation surface.
Material	Aluminium, stainless steel, galvanised sheet steel, PC, PE
Minimum edge distance	0,6 m
Max. Wind Dynamic Pressure	$q_p = 1,5 \text{ kN/m}^2$ (with simultaneously acting snow load of $s_k = 1,5 \text{ kN/m}^2$)
Max. Wind Dynamic Pressure	$q_p = 1,0 \text{ kN/m}^2$ (with simultaneously acting snow load of $s_k = 2,5 \text{ kN/m}^2$)
Maximum snow load	$s_d = 2,0 \text{ kN/m}^2$ for 2 floor rails
Maximum snow load	$s_d = 3,0 \text{ kN/m}^2$ for 3 floor rails

Modules

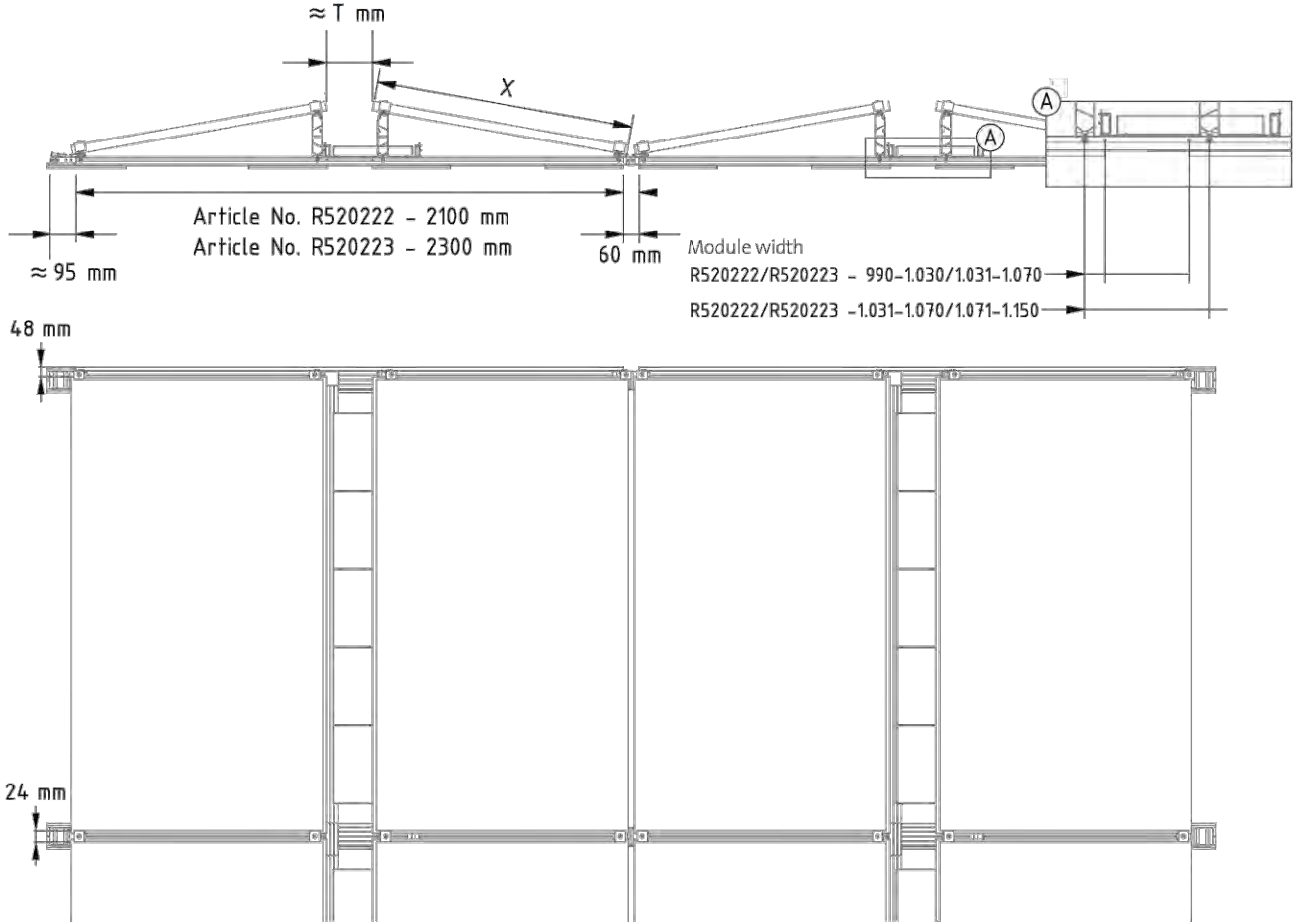
Type	Framed modules. Approval for clamping in the corner area to be provided by the customer.
Module width	R520222: 990-1.070 mm, R520223: 1.071-1.150 mm, R520229: 1.180-1.310 mm
Module guidance	Horizontal

Certifications& Services

Wind loads	Determined in wind tunnel tests by I.F.I Institut für Industrieaerodynamik GmbH
Fire behaviour	Classification: E (DIN EN 13 501-1) / Identification no. 0672
PV layout & Ballast plan	Provided by Renusol PV Configurator (www.pv-configurator.com)

System Datasheet

Renusol FS Pro 10 EW



Rail length	R520222 - 2100 mm	
Row spacing		2160 mm
Module width	X:	Min: 990 mm
		Max: 1070 mm
Passageway	T:	Min: 17 mm
		Max: 187 mm
System width		Module length + 65 mm
Shading angle	S(X):	$\approx \text{Min: } 8,7^\circ$

Rail length	R520223 - 2300 mm	
Row spacing		2360 mm
Module width	X:	Min: 1071 mm
		Max: 1.150 mm
Passageway	T:	Min: 17 mm
		Max: 187 mm
System width		Module length + 65 mm
Shading angle	S:	$\approx \text{Min: } 8,7^\circ$

C6 SPECTRUM
 BUSINESS ESTATE
 ANTHONYS WAY,
 ROCHESTER, KENT
 ME2 4NP

PRO.DATE	20/03/2024	
DESIGN BY	DR	
CHECKED BY	JD	
DATE	REV.	DESCRIPTION
18/09/2025	4	Changed 460w Panels
19/09/2025	5	Remove Panels
23/09/2025	6	1.5m Gap from the Edge of the Roof
22/10/2025	9	Module & Attachment Change
23/10/2025	10	Please Add the Orange Ductwork
07/11/2025	11	Please Replicate
07/11/2025	12	2 Panels Remove

PROJECT NAME

MANCHESTER CITY
 NORTH STAND
 (HOTEL ROOF)

SHEET NAME

SPECIFICATION
 SHEET

SHEET SIZE

ANSI B
 279 X 432

SHEET NUMBER

D.01