

PRODUCT DATASHEET M 420 N 54 LB -BB-F7

PV PANELS N-TYPE BIFACIAL FULL BLACK | TopCon bifacial photovoltaic panels in full black version



Areas of application

- Commercial and industrial installations
- Residential installations

Product benefits

- TopCon technology provides higher efficiency due to better sunlight conversion than standard panels
- Glass-glass modules offer improved protection against moisture, mechanical loads and fire protection
- 25-years of product guarantee, 30-years of linear power output guarantee
- Limited PID-effect (potential induced degradation) thanks to strict quality control in production process
- Very low yearly degradation of the cells thanks to the better resistance to high temperatures
- Durable design and highest production standards guarantees operational reliability and quality

Product features

- Bifacial both sides of the panel are absorbing the light
- Original Stäubli MC4 EVO 2 connectors
- Available in a long cable version
- Frame made of anodized aluminum alloy
- Multi-bus bar (MBB) technology
- Maximum static load up to 5400 Pa

TECHNICAL DATA

ELECTRICAL DATA STC

Maximum Power Pmax (STC)	420 W
Maximum Power Current Imp (STC)	13.19 A
Short Circuit Current Isc (STC)	13.99 A
Maximum Power Voltage Vmp (STC)	31.85 V
Open Circuit Voltage Voc (STC)	37.89 V
Module efficiency factor (STC)	21,51 %

ELECTRICAL DATA NMOT

Maximum Power Pmax (NMOT)	319 W
Maximum Power Current Imp (NMOT)	10.67 A
Short Circuit Current Isc (NMOT)	11.29 A
Maximum Power Voltage Vmp (NMOT)	29.93 V
Open Circuit Voltage Voc (NMOT)	36.20 V

ELECTRICAL DATA STC and NMOT

Power tolerance	3 %

MECHANICAL DATA

Type of Faciality	Bifacial	
Cell material	Mono crystalline	
Number of cells	108	
Number of bypass diodes	3	
With frame	Yes	
Type of connection	Staubli MC4 EVO2	
Width	1134 mm	
Length	1722 mm	
Height	30 mm	
Product weight	24000.000 g	
Cable length	1.2 m	
Glass with anti-reflection coating	Yes	
Colour cells	Dark blue	
Colour frame	Black	
Front Glass	2.0 mm coated semi-tempered glass	
Back Glass	2.0 mm glazed semi-tempered glass	

TEMPERATURE RATINGS

Nominal operating cell temperature	45 °C
Temperature coefficient lsc	0.046 %/K

Temperature coefficient Pmpp	-0.290 %/K
Temperature coefficient Uoc	-0.250 %/K

OPERATING CONDITIONS

Maximum series fuse rating	30 A	
Temperature range in operation	-40+85 °C	
Front Side Maximum Static Loading	5400 Pa	
Rear Side Maximum Static Loading	2400 Pa	
Reverse current load	30 A	

EQUIPMENT / ACCESSORIES

- Product is delivered as a whole, no assembly required from customer
- MC4 EVO 2 connectors are fitted to the panel
- 3 bypass diodes are already installed in the panel

DOWNLOAD DATA

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	PV MODULE	
PDF	Declarations of conformity	CE Certificate PV Panels	
PDF	Product family datasheet	M410~430N54LB-BB F7	

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854277276	Shipping box 36	1,770 mm x 1,140 mm x 1,144 mm	886882.00 g	2308.36 dm ³

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

- For Guarantee see www.ledvance.com/guarantee

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