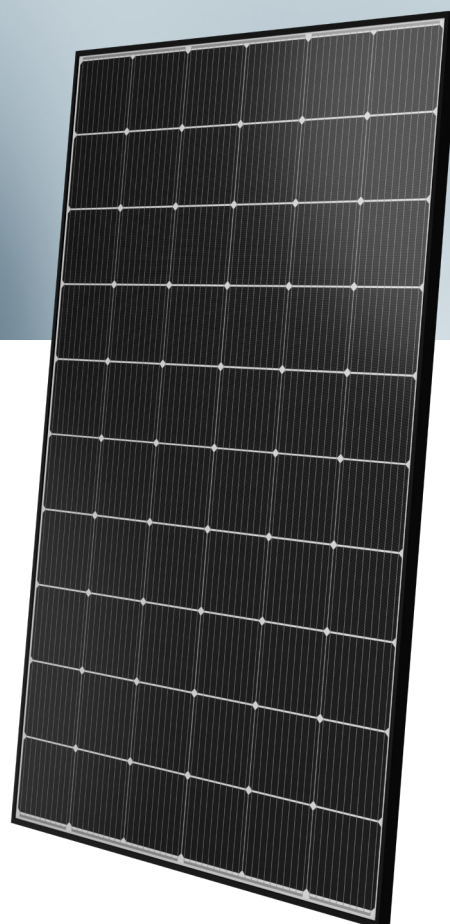


# SA460M (BF)

S Series – 460 W

60 cells  
MONO M10 | PERC



## Made in Italy module

Manufactured in our production factory



## PERC monofacial technology



## Anti-reflective glass

Maximum efficiency and high performance



## Compact and sturdy frame

Anchorable also on the short side <sup>(5)</sup>



## Class of reaction to fire

Class 1 (UNI 9177),  
B-s1, d0 (EN 13501-1)  
B<sub>ROOF</sub>(t1) (EN 13501-5)



## RoHS compliance

(Restriction of Hazardous Substances Directive 2011/65/UE)



## 30 years

Linear power warranty

## 30 years

Product warranty



## QBE Insurance

QBE Product Liability Insurance

QBE is a global leader in the insurance sector, offering comprehensive solutions for business risk management. With a worldwide network, it protects clients against a wide range of risks and provides flexible insurance solutions tailored to various industries, including the energy sector.

Electrical Characteristics (STC) <sup>(1)</sup>

|                                                         |               |
|---------------------------------------------------------|---------------|
| Nominal Output (P <sub>max</sub> ) <sup>(2)</sup>       | 460 W         |
| Sorting Tolerance                                       | 0/+5 W        |
| Voltage at P <sub>max</sub> (V <sub>mp</sub> )          | 34,54 V       |
| Current at P <sub>max</sub> (I <sub>mp</sub> )          | 13,32 A       |
| Open Circuit Voltage (V <sub>oc</sub> ) <sup>(2)</sup>  | 42,49 V       |
| Short Circuit Current (I <sub>sc</sub> ) <sup>(2)</sup> | 14,13 A       |
| Maximum System Voltage                                  | 1500 V        |
| Maximum Series Fuse Rating                              | 20 A          |
| Module Efficiency                                       | <b>21,53%</b> |
| Protection class against electric shock                 | Class II      |

1. STC: (Standard Test Condition) Irradiance 1000 W/m<sup>2</sup>; Module Temperature 25 °C; Air Mass 1,5  
2. P<sub>max</sub>, V<sub>oc</sub>, I<sub>sc</sub> measurement tolerance: ±3%

Mechanical Characteristics

|                           |                                               |
|---------------------------|-----------------------------------------------|
| Solar Cells               | 60 M10 monocrystalline <b>PERC</b>            |
| Solar Cells Size          | 182 x 182 mm / 7,16 x 7,16"                   |
| Front Cover               | 3,2 mm / 0,13" thick, low iron tempered glass |
| Back Cover                | TPT (Tedlar-PET-Tedlar)                       |
| Encapsulant               | EVA (Ethylene vinyl acetate)                  |
| Frame                     | Anodized aluminium alloy, double wall         |
| Frame finishing           | Black                                         |
| Backsheet finishing       | White                                         |
| Diodes                    | 3 Bypass diodes                               |
| Junction Box              | IP68 rated                                    |
| Connector                 | MC4 or compatible connector                   |
| Cables Lenght             | 1300 mm / 51,18"                              |
| Cables Section            | 4,0 mm <sup>2</sup> / 0,006 in <sup>2</sup>   |
| Dimensions                | 1884 x 1134 x 30 mm / 74,17 x 44,65 x 1,18"   |
| Weight                    | 21,4 kg / 47,18 lbs                           |
| Max Load (Test Load) - SF | 5400 Pa - 1,5 <sup>(5)</sup>                  |

5. Consult the installation manual for the relative mounting configurations

Temperature Characteristics

|                                             |                 |
|---------------------------------------------|-----------------|
| NMOT <sup>(3)</sup>                         | 43±2 °C         |
| Temperature Coefficient of P <sub>max</sub> | -0,29 %/°C      |
| Temperature Coefficient of V <sub>oc</sub>  | -0,25 %/°C      |
| Temperature Coefficient of I <sub>sc</sub>  | 0,046 %/°C      |
| Operating Temperature                       | -40 °C ~ +85 °C |

3. NMOT: Nominal Module Operating Temperature: Irradiance 800 W/m<sup>2</sup>; Air 20 °C; Wind speed 1 m/s

Packaging <sup>(4)</sup>

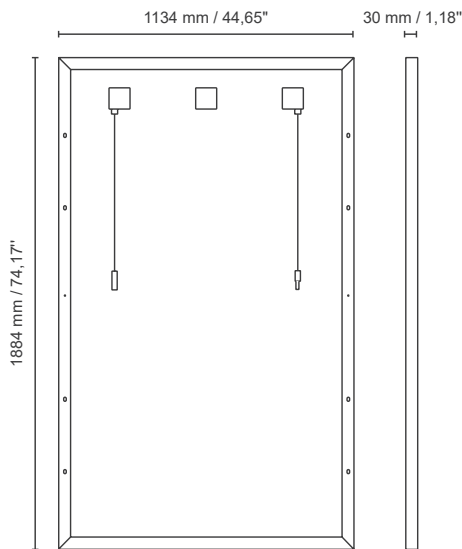
|                   |                                                |
|-------------------|------------------------------------------------|
| Pallet dimensions | 1935 x 1120 x 1260 mm / 76,18 x 44,09 x 49,61" |
| Pieces per pallet | 36                                             |
| Weight            | 794 kg / 1750,32 lbs                           |

4. Pallets can be stacked up to two

Certifications

|                             |                                                                                |
|-----------------------------|--------------------------------------------------------------------------------|
| Reaction to fire            | Class 1 (UNI 9177), B-s1, d0 (EN 13501-1), B <sub>ROOF</sub> (t1) (EN 13501-5) |
| Product Certificate         | IEC 61215-1, IEC 61215-1-1, IEC 61215-2, IEC 61730-1, IEC 61730-2              |
| Salt mist                   | IEC 61701:2020                                                                 |
| Ammonia                     | IEC 62716:2013                                                                 |
| RoHS - Directive 2011/65/EU | EN 62321                                                                       |

Dimensions



Current/Voltage Characteristics

