

## AXIblackperfect FXXL

### 400 - 425 Wp

High performance solar module  
108 halfcell, N-Type TOPCon

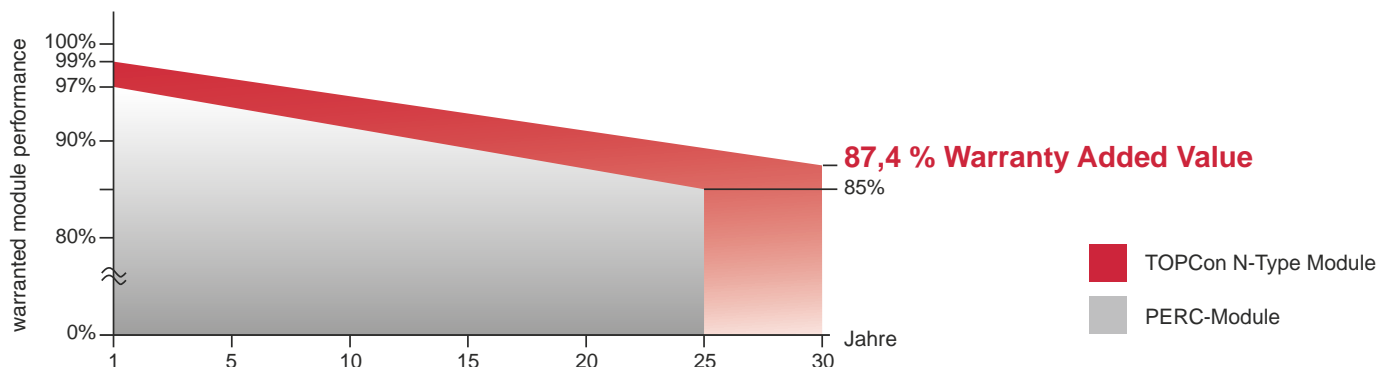
#### The advantages:

- 15** Years 15 years Manufacturer's warranty
- 30** Years 30 years Performance guarantee
- HC** High module performance through Half-Cut-technology and selected materials
- + Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 100%** 100% visual electroluminescence inspection in production
- Frame** High stability due to innovative frame design
- IP 68** High quality junction box and connector systems
- TOP** More performance through innovative N-Type TOPCon-Technology



Fig. similar 08TFMEN230316A

#### Exclusive linear AXITEC high performance guarantee!



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**Electrical data** (at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>, spectrum AM 1.5 at a cell temperature of 25°C)

Type	Nominal output P <sub>mpp</sub>	Nominal voltage U <sub>mpp</sub>	Nominal current I <sub>mpp</sub>	Short circuit current I <sub>sc</sub>	Open circuit voltage U <sub>oc</sub>	Module conversion efficiency
AC-400TFM/108BB	400 Wp	31.08 V	12.88 A	13.73 A	37.10 V	20.48 %
AC-405TFM/108BB	405 Wp	31.10 V	13.10 A	13.81 A	37.30 V	20.74 %
AC-410TFM/108BB	410 Wp	31.13 V	13.18 A	13.91 A	37.73 V	21.00 %
AC-415TFM/108BB	415 Wp	31.32 V	13.26 A	13.99 A	37.92 V	21.25 %
AC-420TFM/108BB	420 Wp	31.51 V	13.33 A	14.07 A	38.11 V	21.51 %
AC-425TFM/108BB	425 Wp	31.70 V	13.41 A	14.15 A	38.30 V	21.76 %

### Design

Frontside	3.2 mm hardened, low-reflection white glass
Cells	108 N-Type TOPCon high efficiency cells
Backside	Composite film
Frame	30 mm black aluminium frame

### Mechanical data

L x W x H	1722 x 1134 x 30 mm
Weight	21.8 kg with frame

### Mechanical load

Design load (pressure/suction)	3600 Pa / 1600 Pa
Test load (pressure/suction)	5400 Pa / 2400 Pa

### Power connection

Socket	Protection Class IP68
Wire	approx. 1.2 m, 4 mm <sup>2</sup>
Plug-in system	Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable

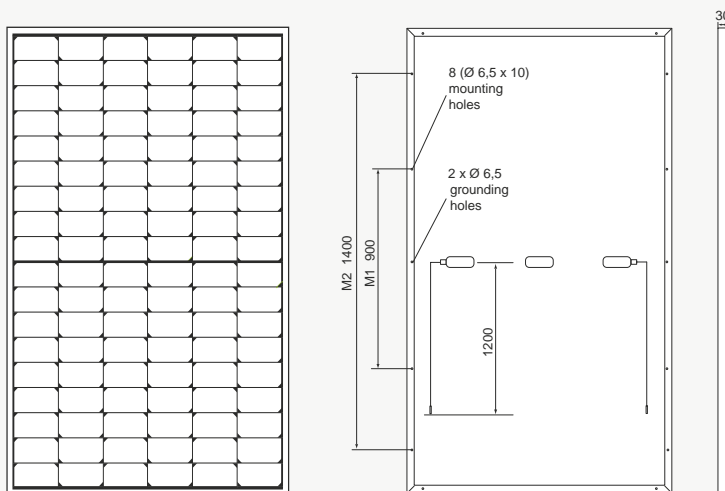


Fig. principle sketch

All dimensions in mm

### Limit values

System voltage	1500 VDC
NOCT (nominal operating cell temperature)*	45°C +/-2K
Reverse current feed IR	25.0 A

Permissible operating temperature -40°C to 85°C / -40F to 185F

(No external voltages greater than U<sub>oc</sub> may be applied to the module)

\* NOCT, irradiance 800 W/m<sup>2</sup>; AM 1,5; wind speed 1 m/s; Temperature 20°C

### Temperature coefficients

Voltage U <sub>oc</sub>	-0.26 %/K
Current I <sub>sc</sub>	0.047 %/K
Output P <sub>mpp</sub>	-0.31 %/K

### Low-light performance (Example for AC-425TFM/108BB)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2.74 A	30.51 V
400 W/m <sup>2</sup>	5.53 A	30.86 V
600 W/m <sup>2</sup>	8.26 A	31.10 V
800 W/m <sup>2</sup>	10.92 A	31.37 V
1000 W/m <sup>2</sup>	13.41 A	31.70 V

### Packaging

Module pieces per pallet	36
Module pieces per HC-container	936

