# The ecological solution for numerous areas of application



**Detached houses** 



Swimming pool heating



Hotels and restaurants



**District solutions** 



public buildings



Camping sites



Sports and wellness centre



**Garden centres** 



Hospitals and retirement homes



Regeneration geothermal probes



**Paint shops** 



Car washes



**Ground mounted systems** 



Our products can only be purchased from specialist dealers or retailers. Further information can be found on our website.



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## PRISMA® PVT RBX

Electricity and heat from a hybrid collector



KI optimised absorber for PVT heat pump systems. The extraordinary absorber plates play a decisive role in increasing the efficiency of this collector.



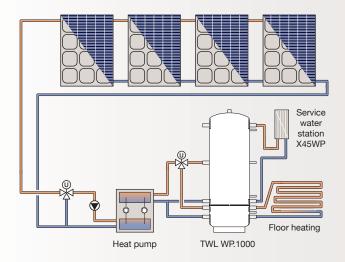


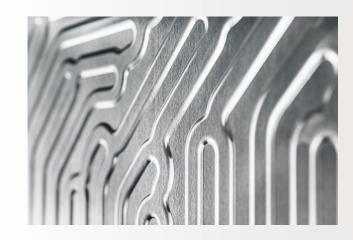
The PRISMA® PVT RBX collector combines state-of-the-art photovoltaic technology with solar thermal energy and is specially developed for brine heat pumps. The high-performance double glass PV module with Topcon cells generates electricity, while the fully bonded absorber recovers waste heat from the PV wafers and thermal energy from the ambient air - around the clock.

The generated heat is fed to the heat pump via the brine circuit. The system can be used monovalently as a pure roof solution or bivalently with a ground source and is suitable for detached family homes, neighbourhood solutions, municipal heat planning and industry with high process heat requirements.

Your advantages: Up to 10% higher annual average electricity yield through active cooling of the PV laminate. Three times the total energy yield (thermal + electrical) compared to a PV system with identical electrical output. Silent operation of the rooftop system in contrast to an air/water heat pump with outdoor unit and fan. Scalable, efficient and sustainable - PRISMA® PVT RBX makes your projects future-proof!

The PRISMA® PVT RBX hybrid module is developed in cooperation with a leading international automotive supplier, which has gained its expertise in the production of cooling plates for e-mobility and is now using it for the first time in the renewable energy sector.





### Maximum efficiency via Al-optimised technology

#### Uniform heat transfer:

The channel geometry of the heat exchanger has been optimised for uniform heat transfer using AI simulations.

#### Thermal performance increase:

Enlarged exchanger surface area to the ambient air enables highly efficient operation with brine heat pumps.

#### Flexible system integration / Wide range of application options:

Can be combined as a pure roof system or bivalent with ground source.

#### Superior efficiency:

Higher seasonal performance factor than with air/water heat pumps, completely silent in outdoor operation, no outdoor unit with fan is required.



PRISMA® PVT RBX

Developed and manufactured in Germany.

Technology that sets standards!

Module		RBX
Dimensions	(mm)	1762 x 1134 x 30
Module type		Double glass WISC PVT
Unladen weight	(kg)	33

Photovoltaic properties		RBX
Test conditions		STC
Tolerance	(%)	0~+5
Efficiency of the modules	(%)	22,5
Nominal PV power	(W)	450
Open-circuit voltage	Voc (V)	52,9
Short circuit current	Isc (A)	10,74
Voltage at maximum power	Vm (V)	44,6
Amperage at maximum power	Im (A)	10,09
Cell type		Topcon cells
Number of cells	(pcs)	144
Connection cable/plug		4 mm <sup>2</sup> MC4-plug
Snow load	(Pa)	5400
Wind load	(Pa)	4000
25 years performance guarantee		87 %
Maximum system voltage	(V)	1500

Heat exchanger		RBX
Maximum thermal output	(W)	1100
Heat transfer medium		Solar fluid
Volume of heat transfer medium	(1)	1,75
Pressure loss	(mbar)	17 bei 144l/h
Hydraulic connections		PlugIn quick connector
Operating pressure	(bar)	1-3
Flow rate	(l/h)	40-150
Stagnation temperature	(C°)	80