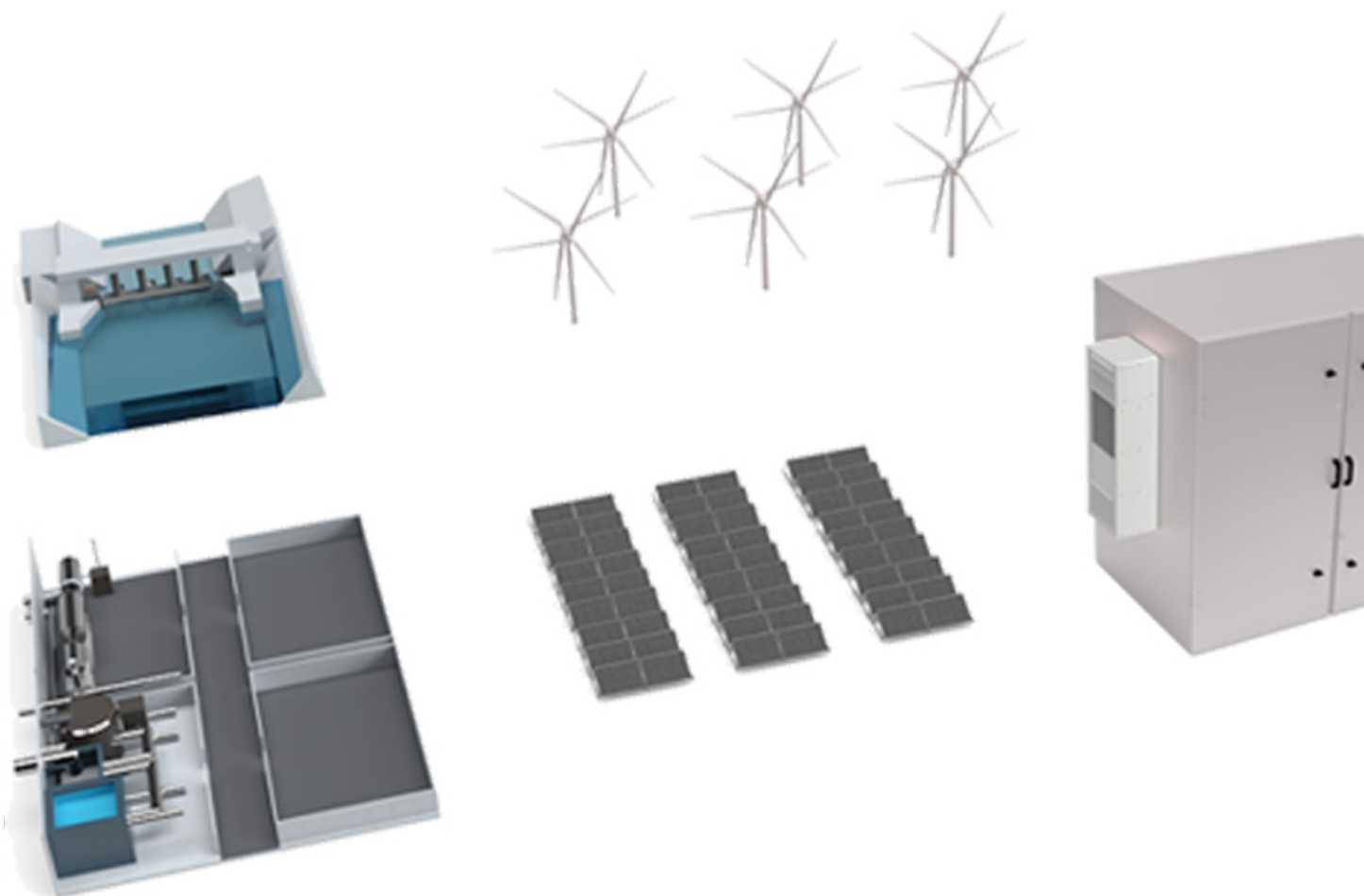


Predator

Precision air conditioners for outdoor installations



High efficiency for outdoor installations

The Predator line offers a range of high-efficiency precision air conditioners for outdoor installations such as shelters/cabinets for telecommunications, power distribution, fibre optics, etc.

48 Vdc Version

The 48Vdc version is particularly suitable for cabinets powered by **renewable energy sources**, such as solar, wind or **battery backup**.

The PRT20 at 48Vdc uses a brushless type compressor to achieve:

- continuous variation of cooling capacity
- increase in **EER**
- limitation of start-ups and consequent **increase** in compressor **lifetime**



“Energy saving
and reduced costs”

Free Cooling

Predator units can be equipped with Free Cooling. Thanks to the direct use of external air, whenever the external air temperature is lower than the internal one, the cabinet is cooled “without cost”.

Direct Free Cooling is the best solution for energy saving and ensures a considerable cost reduction.

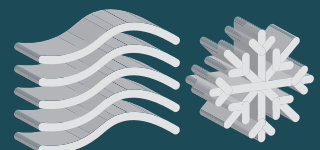
FOCUS - The “energy saving” cooling solution

The significant increase in electricity costs in recent years has led to a greater focus on energy efficiency and energy saving, including in the field of cooling equipment for telecommunications, fibre optics, traffic management, etc. A solution that allows real cost savings is **Direct Free Cooling**, integrated in the air conditioner. This “natural air-conditioning” system does not waste energy, because it is simply based on the difference in temperature between the indoor and outdoor environment and its advantages can be exploited to the full in the temperate climate zones north and south of the equator.

An alternative system to direct expansion cooling, which uses suitably filtered ambient air to cool the cabinet.

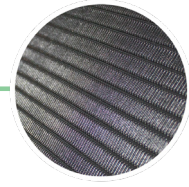
Predator air conditioners, thanks to their high air flow rate in Direct Free Cooling, represent the best solution for **energy saving**. Whenever environmental conditions allow it, Predator works in free cooling mode; in this mode the evaporator fan is the only component in operation, while compressor and condenser fan are switched off.

Direct free cooling combined with emergency ventilation guarantees **service continuity**, even in the event of a main power failure.



Microchannel condenser

Thanks to smaller thickness than copper aluminium coil it allows: smaller pressure losses, best air flow and an increase of the performance, as well as reduction of quantity of refrigerant gas.



Electrical Connections

The use of spring connector allows an easy electrical connection, both for power supply and for alarms/signals.



Air Filter

On unit with Free Cooling, the using of filters avoids the entry of large particles or insects inside the, when the external air is used.



“For all your outdoor applications,
worldwide ”

Application Practice

Cooling for Optic Fiber Cabinets

The optic fiber is a higher speed transmission data technology compared to normal copper cable. In fact, it is able to transport much more data per unit of time and it is lighter, more flexible and immune to electrical noise or weather conditions (as temperature fluctuations): thanks to all these features, they have more transmission capacity and have less failures or drawbacks, reducing the malfunctioning, as well as the maintenance costs.

The structure of the fiber is made up of a main point (point of presence) connected to the primary and secondary pivot points, which are connected to the building termination points. The several points must guarantee connectivity, continuous service and low management cost.

With the range Predator PRT, Cosmotec offers an Outdoor air conditioning solution suitable for cooling the primary and secondary cabinet.

The air conditioners are designed to work 24/7 operation, 365 days a year, ensuring continuous functioning, maximum reliability and energy efficiency.



Technical Features

General Features

- Cooling capacity: 1000-1400-2000 W
- Installation: internal, external and semi-flush
- Electronic board C100-C110
- Functioning up to 60°C
- Configurationis:
 - » without free cooling
 - » with free cooling
 - » with free cooling and emergency ventilation
- Certifications: CE, EAC

Option

- Electrical heater (HA units)

Accessories

- Keypad
- Flush and semi-flush mounting frame

CODE	M.U.	PRT10HA3201000	PRT10FA3201000
Power Supply	V - Hz	230-1-50/60 +48VDC	230 - 1 - 50/60
Cooling Capacity	L35L35 W	1000	1000
Cooling Capacity	L35L50 W	750	750
Power Consumption - L35L50	@230VAC W	600	600
	@48VDC W	110	--
Current Consumption L35L35	@230VAC A	2,5	2,7
	@48VDC A	2,6	--
External sound pressure	dB(A)	59	59
Height	mm	1200	1200
Width	mm	417	417
Depth	mm	300	300

CODE	M.U.	PRT14HA3201000	PRT14FA3201000
Power Supply	V - Hz	230-1-50/60 +48VDC	230-1-50/60
Cooling Capacity	L35L35 W	1400	1400
Cooling Capacity	L35L50 W	1000	1000
Power Consumption - L35L50	@230VAC W	770	770
	@48VDC W	100	--
Current Consumption L35L35	@230VAC A	4,3	4,5
	@48VDC A	2,4	--
External sound pressure	dB(A)	59	59
Height	mm	1200	1200
Width	mm	417	417
Depth	mm	300	300

CODE	M.U.	PRT20HA3201000	PRT20FA3201000	PRT20FD3121000	PRT200D3121000
Power Supply	V - Hz	230-1-50/60 +48VDC	230-1-50/60	48VDC	48VDC
Cooling Capacity	L35L35 W	2000	2000	2000	2000
Cooling Capacity	L35L50 W	1750	1750	1750	1750
Power Consumption - L35L50	@230VAC W	1100	1200	--	--
	@48VDC W	100	--	1390	1390
Current Consumption L35L35	@230VAC A	5,5	5,3	--	--
	@48VDC A	2,4	--	29	29
External sound pressure	dB(A)	60	60	69	69
Height	mm	1200	1200	1200	955
Width	mm	417	417	417	417
Depth	mm	300	300	300	300