



OFF the grid



The new "Plein-Aircon 12V" roof-mounted A/C module that automotive sector leader Indel B is introducing to the RV sector breaks the mould and transfers years of experience acquired as OEM of refrigerators and DC A/C systems for some of the best-known brands in the heavy commercial vehicle industry to the recreational vehicle world

Words Andrea Cattaneo

We spoke with Gabriele Morbidelli of Indel B to discover more about the main features of Plein-Aircon 12V and why this product is set out to revolutionise the RV A/C market.

Aboutcamp BtoB: We asked Gabriele Morbidelli, Business Unit Manager - Automotive & Retail and OFF Brand Development Manager to tell us something more about the Plein-Aircon 12V.

Gabriele Morbidelli: The Plein-Aircon 12V is dedicated to RV users who are seeking top-notch comfort in the open air and in close contact with nature (and their inner selves). This need is growing at a fast pace expressing an apparent eagerness to step away from an increasingly connected and often too interactive lifestyle. A much more basic and practical on the road tourism has developed over the last few years, one that gives priority to the essential nature of things, preferring more scaled-back vehicles that are less wired, more laid-back

and yet still comfortable.

Aboutcamp BtoB: What recreational vehicles is your 12-volt A/C system intended for?

Gabriele Morbidelli: Undoubtedly, camper vans. This type of vehicle is experiencing steady growth and we estimate is now a major slice of all RV registrations. It best identifies the type of tourism we were talking about and that we are addressing with all our products. But Plein-Aircon 12V is suited for up to 6-metre-long semi-integrated models as well.

Aboutcamp BtoB: What are the main features of the Plein-Aircon 12V?

Gabriele Morbidelli: First of all, this product was created and designed with a dedicated 12-Volt DC compressor to be more energy-efficient, this being one of the key factors in RVs. With an output power of up to over 4000 btu it effectively and efficiently cools even in the hottest weather condi-

tions, rebalancing the indoor microclimate and bringing the temperature and humidity back to optimal values. These levels will be maintained by running the system in 16 amp/h standard mode. It can also be used as a simple dehumidifier (which is the true



Gabriele Morbidelli



functional principle of any air conditioner) further reducing consumption. Another important factor is the ease of installation also for enthusiasts who like to kit out their own vehicles (and there are plenty of them). No particular abilities or tools are needed, just good manual skills and a flair for DIY. With its compact dimensions and a design created in collaboration with Alex Terziol (CEO of MM Design) that we are proud to say is all Italian and attractive our product is ideal for any vehicle, either new or old.

Aboutcamp BtoB: So, we are right in saying it has a native DC system without the use of inverters?

Gabriele Morbidelli: Yes, that's right. Our system does away with inverters because they consume a great deal of power and would make the product useless. Plein-Aircon 12V works at 12 Volts with a direct current compressor to reduce consumption so you can get a good night's sleep.

Aboutcamp BtoB: Tell us about the installation.

Gabriele Morbidelli: Plein-Aircon 12V is designed to be used in the sleeping area and that is where it should be placed. For instance, in camper vans based on MB Sprinter, Fiat Ducato, Volkswagen Crafter and the like, the sleeping area is at the back of the vehicle and this is where the PleinAircon 12V should be positioned making use of the skylight (40x40 cm), if one is already there, or cutting a hole with the same dimensions. Once you have created the 40x40 cm hole or removed the existing skylight, just position the gaskets included in the kit and then the preloaded external unit. The Plein-Aircon 12V can be installed on roofs from 30 to 70 mm thick by using an adaptable manifold that connects the external condensing unit to the internal splitter. Once the manifold has been adapted, all that remains is to join the two parts through an internal flange which is then covered by the splitter. Then connect it to the auxiliary battery and you're done.

Aboutcamp BtoB: Is the Plein-Aircon 12V exclusively a 12-Volt product?

Gabriele Morbidelli: The Plein-Aircon 12V is designed and developed to run at 12 Volts for use on the road in complete freedom but it can be connected to a 220-Volt power source if you spend time during your holidays on an equipped camping site. We have a Smart Switch Transformer accessory that automatically switches from 12 V DC to 220 V AC when a 220 V power source is available. This simple system saves the battery amps when you are staying at a camping site.

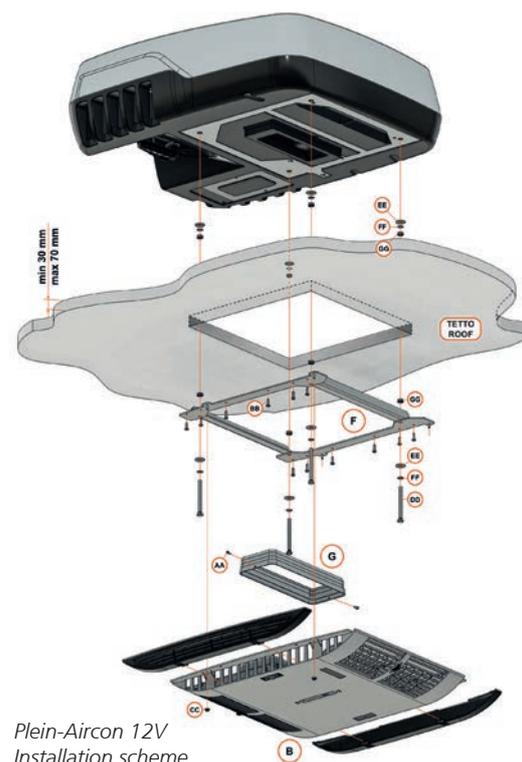
Aboutcamp BtoB: Does "on the road" mean you can use Plein-Aircon 12V even on the move?

Gabriele Morbidelli: Exactly. If you want to cool the sleeping area down before reaching your destination, the Plein-Aircon

12V can also be switched on while traveling. Contrary to 220-Volt air conditioning systems, our compressor was created to be used on automotive applications, that is while moving, like all the products we have been producing for more than 50 years. Using Plein-Aircon 12V even on the move is a further prerogative that distinguishes the product on today's marketplace.

Aboutcamp BtoB: What are the prospects for Plein-Aircon 12V for 2021 and beyond?

Gabriele Morbidelli: The product was officially presented in Düsseldorf at the last edition of Caravan Salon 2020 and as we expected it aroused huge interest among the public and the insiders (accessory and component distributors and RV manufacturers) who welcomed it as the missing product that filled a gap. The spread of a new way of experiencing nature, the search for unique, personal spaces and the desire to move freely and quickly on a whim are generating a shift in demand towards more off-the-grid RVs, making ours the must-have product. We believe that the sector will continue moving in this direction for a long time to come, also given the current situation, and this opens up new horizons for the development of increasingly efficient and greener batteries and devices. And it is precisely in this direction that the OFF project was created and along which we want to expand over the next few years following the pipeline that we have already traced.



Plein-Aircon 12V
Installation scheme

Technical Data - Plein-Aircon 12V

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| Input Voltage | 12V DC (optional 115V-230V smart switch power supply) |
| Ventilation Air Flow | 350 m ³ /h |
| Refrigerant | R134a |
| External Unit Weight | 23,1 Kg |
| Internal Air Diffuser Weight | 2,1 Kg |
| Fixing Kit Weight | 1,7 Kg |
| Cooling Capacity at 32°C (internal and external) - Turbo Mode | 1200 Watt |
| Power Consumption at 32°C (internal and external) -Standard Mode | 16,0 A |
| Power Consumption at 32°C (internal and external) -Turbo Mode | 42,0 A |
| Deumidification Mode at 32°C (internal and external) - Standard Mode | 14,0 A |
| Ventilation Mode | 1,5A (min) - 5,0 (max) |