



PC770-LK gets new functions

The PC770-LK control panel, designed specifically for Laika Kreos motorhomes, is now equipped with new functions. It will be installed in the new A-class Laika Kreos 9009 in the coming 2013 season

Complete with 7" LCD colour display and touch screen control, the PC770-LK control panel now has new functions.

Integration with ALDE heater

The main control functions of the ALDE heating system have now been integrated into the new PC770-LK. The renowned water heating system is connected through the BUS technology to the CBE panel. It is in this way that the elements of the circuit (heater, CBE panel and the original ALDE control panel) are made to communicate with each other, and every command made on one of the panels is also communicated to the other.

Precise reading of the tank level

Thanks to the use of high precision electronic sensors and the crea-

tion of conversion parameters calibrated to the irregular shapes of the different tanks, the PC770-LK can now provide data on the liquid levels in one-per cent increments.

Residual capacity meter

Developed first for Laika, the residual capacity meter could be defined as an intelligent ammeter or as a battery computer. Thanks to the introduction of this new ammeter that can measure the charge and discharge currents of the accumulator, the system is able to calculate the residual amount of energy in the battery. For the first time in Europe, CBE has designed an algorithm that elaborates the data coming from the ammeter and voltmeter and manages to provide readily understood information for the end user: the remaining time before the alarm threshold is reached.

CBE and MORELO: excellence in design

CBE introduces the new PC770-MO control panel featuring an innovative design and cutting-edge functions

A leader in the design and manufacture of electrical and electronic equipment for recreational vehicles, CBE has created, in collaboration with Morelo, a new panel integrating cutting-edge functions with a very elegant design, combining the lustre of aluminium with a special, extremely glossy, black type of plastic. The PC770-MO is a latest generation 7" LCD

touch-screen panel enabling the user to operate all the technical equipment onboard the vehicle through one single device – a smart control panel capable of commanding any kind of appliance and of intervening directly in special circumstances (for instance blocking the gas system in case of leakage), and with a high level of customisation to meet the requirements of its user also in terms of



comfort (courtesy lights, adjusting internal and external temperature sensors).

Company Profile

With a history of more than 36 years, CBE is a leading company in Europe in the field of electrical and electronic systems for recreational vehicles and boats. Headquartered in Trento, Italy, CBE is a project partner of motorhome and caravan manufacturers around the world. CBE develops customised solutions for all aspects of on-board electrical systems, from control panels to distribution boards, from chargers to sensors, sockets, switches and even complete vehicle wirings. Quality, reliability and safety are constant features of CBE's operational dynamics. CBE has obtained UNI EN ISO 9001:2000 certification.



ENTRY-LEVEL panel with an excellent design

CBE introduces the new PC770-ST control panel limited to basic functions, but featuring an elegant design and the latest generation 7" LCD touch-screen

The idea behind the new CBE control panel is to also allow users who do not need very sophisticated and complex products to take full advantage of a control unit at the top end of design and quality. The new PC770-ST manages only the basic functions needed to control and operate the onboard appliances while preserving the typical reliability and efficiency of all CBE products.

CBE partners with TECNOFORM DESIGN LAB

CBE has participated in the design and creation of the electrical equipment of the TDL (Tecnoform Design Lab) – a challenge accepted by the Trento-based company that allowed the Italian venture to offer solutions to take the caravanning industry to a new level

The TDL (acronym of Tecnoform Design Lab) is a caravan manufactured by the American company Airstream, whose interior has been entirely designed and produced by the Italian company Tecnoform. The TDL project, which was presented at the most recent edition of the Caravan Salon in Düsseldorf, has won the awards "Best Interior Design" and "Best Practice" in the prestigious contest "Caravanning Design Award: Innovations for New Mobility 2012/2013." The interior layout features a U-shaped rear dinette and a front bedroom with a central double bed typical of boats. At the centre there is a large, functional kitchen with a linear layout and opposite it a large bathroom with a domestic-size shower cubicle. The furnishings consist of solutions derived from yacht interiors. Designed in elegant oak wood tones, they harmonise perfectly with the leather inlays while the chromed elements and contrasting stitching highlight the exquisite environment typical of excellent Italian style. Yet not only the appearance, but the technical and innovative aspects of the TDL are surprising as well. The wall cupboards, for example, have three-dimensional shapes and were created using a cutting-edge production system allowing the use of lightweight materials. Most noticeable among many other original solutions are the highly efficient, super-flat, glare-free central light, the rear bed with a remote-controlled opening mechanism allowing easy access to the ample storage space underneath, and the new control panel by which the concept of home automation has been introduced for the first time in a caravan. The control panel, the wiring and the entire electrical system have been designed and implemented by CBE.

"We've contributed to the creation of a caravan which, in terms of accessories and equipment, is equivalent to a premium motorhome," - says Paolo Moiola, export manager of CBE - "It has been a very inspiring task, because Tecnoform gave us carte blanche. Thus we were able to build a system exactly as we had conceived it, housing all the equipment in one single compartment and building wiring paths freely on the basis of the most efficient layouts. Usually, we are precluded from doing so by the motorhome manufacturers, whose specific designs impose certain limitations."



The Airstream caravan arrived in Italy with basic 230V wiring. CBE has designed and created all the wiring at 12V and implemented the 230V cabling. The operation of the entire electric and electronic system is controlled by the very best devices offered by CBE's technology. In fact, the system has been implemented using the BUS technology, while the control panel is the brand-new PC770-ST, which houses a 7" hi-res touchscreen and whose design features a modern black frame and an aluminium profile. It is equipped with the latest-generation software including all functions. As for the 230V segment, CBE has created five separate circuits to power the air conditioner, the inverter, the two TV sets and the sockets. This guarantees that all devices are equipped with thermal and magnetic protections. When the caravan is disconnected from the grid, a 230V supply is provided by a 1500W pure sine wave inverter of the highest technological level available on the market. The inverter is switched into the circuit automatically without requiring any manual intervention. Of course, the system is powered by a series of service batteries providing a large overall capacity. Thanks to a BUS node that intelligently controls the charging by choosing between the car battery and the service batteries, the batteries can be charged in several ways: by the 22A CBE switch-mode charger when the caravan is connected to the grid, but also by the engine's alternator when on the road. When connected to the 230V grid, the node also allows the car's battery to be recharged. The system is ready for the installation of solar panels and pre-equipped with a charge controller.

The lights have intensity regulators controlled by the dimmer node which operates on



as many as 8 different circuits. The 12V distribution board has abundant lines and fuses to provide adequate protection to each installed device.

"We are proud of having participated in this important project," adds Paolo Moiola, "as it highlights not only the quality of designs and interior architectures made in Italy, but also the excellence that many Italian companies deliver in the areas of technology and electronics. CBE is an internationally renowned first-rate company in the field of electrical and electronic systems for recreational vehicles and boats. This collaboration has given us the opportunity to apply new solutions in the caravan sector and to confirm, even overseas, our primary role as reliable and qualified project partners of recreational vehicle manufacturers around the world."