

PC380 and DS470: just made for each other

At the Caravan Salon in Düsseldorf, CBE will be presenting the PC380, the latest in a new generation of control panels, together with the new DS470 distribution board, designed to dialogue with CBE panels, integrating the battery separator and ammeter, and equipped with a new SOS function.

Introduced for the 2014 series, the PC180 was the first in a new family of control panels designed by CBE to offer OEM customers an extensive range of products, proposing the same family feeling between the entry level and higher classes. This initial panel in the Basic range has now been upgraded with the PC380, a premium product that reiterates the same design, dimensions and control button positions, but now includes a centrally set 4,7" LCD screen instead of the LED indicators of the PC180. A special feature of the screen is that it is illuminated in negative, i.e. illuminated in black with headings appearing in any of the other 13 available colours. Equipped with backlit buttons, the PC380, as well as the entry level model, has a light sensor that automatically adjusts the brightness according to the ambient light level. This feature allows whoever is sleeping in the front bunk, for instance, not to be annoyed by the lighting on the panel, which, if assembled above the door, could be at eye level.

Just like on the PC180, the control buttons on the PC380 are mechanical. Unlike membrane buttons, this solution provides a tactile feeling and ensures greater resistance to wear over time. An evolution of the PC320 model, this new panel no longer consists of a main casing and outer frame (as for all of

the older panels): it is a single unit, assembled by means of two springs in a hole bored into the plywood. This allows for a simpler and quicker installation for builders. An interesting implementation on this panel (which is sold at around triple the price of the PC180) is the possibility of interfacing with the software via a USB port on the mother board. This allows for easy software upgrades, as well as the customization of alarms by changing the trigger thresholds. The PC380 is of course also designed to replace previous generation panels without requiring any components of the existing installation to be changed. The new panel features the following primary functions: graphic type and Volt control for the status of the car battery and battery services; service battery current charging and discharging control; a percentage control chart and graphics for the status of the fresh water tank and grey water; management of 3-way refrigerator functions; electronic integrated battery separator; car battery recharging; under-voltage control ("save battery" function); digital clock; indoor and outdoor temperature display.

The PC380 makes the most of all its functions when combined with a latest generation distribution panel such as the all-new DS470, also equipped with BUS technology and



capable of communicating with the panel. An evolution of the DS450, on this new distribution board (as for all other 12V distribution boards) the outputs are protected by fuses, there are relays for the lights, pump, external light, refrigerator and battery connection, including a dimmer node connection.



However, compared to other products on the market, the new DS470 integrates functions that normally require the use of additional external equipment, meaning additional wiring, codes, and labour time for assembly. In fact, this evolved distribution board integrates the battery separator (ensuring the charging of car and service battery when driving) and an ammeter of sufficient power to manage the power consumption of most medium to high range vehicles (up to ± 80 amps). The DS470 distribution board can be replaced by the RB450 model, for customers requiring a flush board assembly rather than a wall mount.

A useful and innovative feature on the new DS470 is the so-called SOS function. Although CBE products are built to the highest quality standards, these components too might be sensitive, e.g. to electric shock or external disturbances. In the rare event of a failure to the control panel or distribution module, a drawback of modern systems is that more often than not almost nothing is working, not even basic users such as the heater, water pump and lights. On the contrary, thanks to the DS470 built-in SOS function, end customers just need to insert a fuse in the fuse casing, to provide direct power for the heater, water pump and lights. This allows end customers to ensure that their vehicle will complete its journey before being brought in for servicing.

In terms of accessories, CBE features a full range of products that complete system. For tank level measurements, CBE electronic has capacitive probes that are custom designed in relation to the tank size and design. The majority of CBE control panels manage up to three sensors in standard configuration. In situations where an electronic sensor cannot be mounted because the tank doesn't allow access in the upper section, CBE has developed an interface to be connected to the distribution module, and a special screw-on system fastened onto the tank wall.

CBE IN JAPAN

CBE arrives in Japan, and does so by setting up a partnership with a first-rate manufacturer: Toy Factory. CBE has supplied this premier camper builder with hundreds of PC320 control panels, even customizing some functions. Specifically, a request was made to directly manage the heating system from the panel, in this case an Airtronic system by Eberspächer, not just commanding the ignition, but the timer and the temperature management as well.



PC180



Special Preview

NOW EVEN THE BASIC VERSION FEATURES A HIGH-TECH LOOK

The new PC210 panel represents an absolute novelty in CBE's product philosophy. It is designed to be installed even on the most compact vans, where the space between the cell door and roof is reduced. Control panels are typically quite bulky, since they need to provide a large and clearly visible monitoring area, with cumbersome electronics, and buttons that mustn't be positioned too close to each other. And then, there's also an aesthetic reason: in a large sized vehicle, a small panel looks somewhat inadequate. CBE has thus designed a new mid-priced panel (since pure campers are generally less costly than motorhomes) but with a slew of high-tech features. The custom

3" LCD display can make use of backlighting in 13 different colours. The panel features capacitive keys, i.e. touch sensitive, another novelty for CBE, which thus far had only made use of mechanical controls, membrane buttons or touch screen. The visible part of its flat design is only 9 mm thick. The fastening system is anchored to the plywood on the furnishings by means of a support, which then retracts into the body of the panel thanks to a clutch pressure. The panel's contemporary design recalls the latest high-tech trends, both in terms of styling and materials, and will be making its world premiere appearance at the Düsseldorf Caravan Salon.