

- Executes the train logic.
- Decides which signals must be used at each moment.
- Controls the redundancy of the system logic.
- Controls the exchange of data between all the modules connected to the bus.



## DESCRIPTION

The **CCU/BA** control module of the COSMOS system permits the operation of various items of equipment connected to the bus, whereby all the items making up the train and which are connected to the communication busses **are controlled**.

The control module executes the train logic, and this is responsible for detecting, assigning the priority order and evaluating the items connected to the communication buses as well as defining variables, redundancy and tasks.

The application execution time is determinist with a period which can be set as of 64ms.

The equipment is set in a simple manner by means of setting tools developed by TRAINITIC, which automatically generates base application software for the equipment. *\*See Services sheet*

As this module is vital, the COSMOS system is supplied with the **redundant** CCU/BA module. In this way, there shall always only be a single CCU/BA with **active** control function, whilst the other equipment shall be in a **passive** control condition, waiting for an intervention request, or should the first unit fail.

## CHARACTERISTICS

- 32 bit processor.
- Memory : 2 Mbyte RAM and 2 Mbyte Flash
- Real time operation system.
- Class 4 Module.
- Equipment designed in accordance with IEC 61375-1 and EN50155.
- Interfaces:
  - > 1 RS232 interface for equipment setting.
  - > 2 MVB interfaces for bus connection.
- LEDs for fault detection and to facilitate maintenance.
- Reliability:
  - > MKBF: 17.430.000 km (Average speed of 30km/hour).
  - > MTBF: 581.000 hours (50°C air temperature).
- Operating temperature: -25 to 85 °C (T3).
- Battery voltage: 24-110 VDC.
- Consumed power: 2.5 W.

## DIMENSIONS AND WEIGHT

- Dimensions: 8HP x 3U (width x height).
- Weight: 235g.

