



ICS C4100/C4200



ICS : Integrated Circuit Selector
Type C4100 for DIAM4100 CCR
Type C4200 for DIAM4200 CCR

- ✓ Optimized operation.
- ✓ Integrated design.
- ✓ Vacuum switching technology .
- ✓ Safety of operation.
- ✓ Robust, flexible, economical.



FABRIQUÉ EN
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C4100/C4200 - INTEGRATED CIRCUIT SELECTOR

COMPLIANCE

- **OACI** (Aerodrom design manual, part 5).
- **CEI** (61 822)
- **FAA** (AC150/5345-5 - L847)

APPLICATIONS

The C4100 / C4200 Integrated Circuit Selectors (ICS) series represents the latest generation of equipment designed to power and switch up to 6 circuits from a DIAM4XXX regulator. (2 circuits maximum for FAA model)

They are controlled through the same interface and MODBUS table than the CCR, facilitating their commissioning and their use. The operating mode can be simultaneous (any number of circuits powered simultaneously) or alternated (only 1 circuit powered at a time).

DESIGN

Each ICS selector is included in a metal box fixed under the regulator frame. This arrangement minimizes the HV connections, and allows a direct management by the regulator controls and automation .

This HV compartment is then located in the lower part of the assembly, and includes components galvanically connected to circuits, such as lightning arresters, high voltage relays or connection terminals.

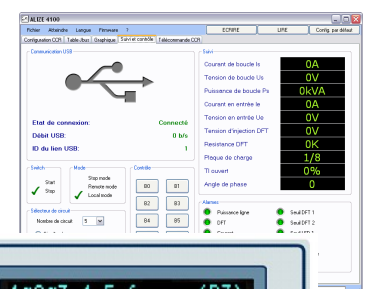
Connection terminals of the ICS (either directly on the connecting plate or onj each CSE type Cut-Out), can be reached after dismounting the front panel (circuits 1 to 4 of the C4100, or circuits 1 to 3 of the C4200) and back pannel (circuits 5 and 6 of C4100, or circuits 4 to 6 of C4200). The selector is set with the ground support options of the regulator (casters or feet).

ADVANTAGES

- **Integrated design** : Selector and regulator work together and are seen as one only equipment. Operations, the state of each circuit as well as error messages are visible on the CCR's display.
- **Safety of operation** : Switching to zero current is automatically ensured without any external connection or control, and all these elements as weel as their timing are transparent for the user, for the maximum safety of equipment or loads .
- **Simple design** : Digital control technology and high reliability HV relays.
- **The USB port** of the controller allows, with the same software ALIZE, to access the configuration parameters of the selector, current state and local operation.
- **Local operation** of the selector as well as the CCR can be done from the front display.



Safety green handle for cut-out isolator



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OVERVIEW

The default display of the CCR can be changed when in STOP mode, and can be selected (after long press on STOP) between the controller information and the selector information.

EXAMPLES OF DISPLAY AND DEFINITIONS :

« ICS status » mode: (CCR on stop) :

The display here after shows circuits 1, 4, 5 shorted (not selected), and circuits 2 & 3 powered :

1 - 2 ≈ 3 ≈ 4 - 5 - STOP
stop local auto menu

This display shows circuits all selected (powered) :

1 ≈ 2 ≈ 3 ≈ 4 ≈ 5 ≈ STOP
stop local auto menu

All circuits short-circuited :

1 - 2 - 3 - 4 - 5 - STOP
stop local auto menu

The following display shows loop 1 short-circuited and loop 2 powered, in the case where only 2 circuits are validated :

1 - 2 ≈ STOP
stop local auto menu

BACK INDICATION AND REMOTE CONTROL

The ICS is controlled by the same means as the REGULATOR, which can be a multi-wire interface or a network with or without redundancy (see controller options).

CHARACTERISTICS

Circuit number : Up to 6 (IEC) or 2 (FAA)

Dielectric strength : Compliant with the regulator, and with IEC or FAA standards (AC150/5345-5 - L847).

Supply voltage : As constant current regulator.

CONFIGURATION MENU

The « Configuration » menu is used to set the number of circuits, from 2 to 6. The operating mode can be selected between « Simultaneous » or « Alternate ».

LOCAL MODE

When the CCR is in LOCAL or STOP mode, it is possible to manually select one (or more) circuit, through the « Circuit Selection » menu.

In « Simultaneous » mode, each circuit can be activated or not by using the left or right arrow keys, and then « modif » (In this example, circuit 1 is activated, circuit 5 deactivated) :

Circuit 1:Yes				
esc	←		→	modif

Circuit 5:No				
esc	←		→	modif

In « Alternate » mode, the circuit number to be activated must be selected using the arrow/right keys and then « Modif » :

Circuit number:2				
esc	←		→	modif

EXTRACTIBLE CUT OUT (option)

Optionally, the ICS can be equipped with FAA type isolators which allow the sectioning and short-circuiting of the regarding circuit.

In this case, loop cables are connected directly to the Cut Out terminals.

If one of the cut-out handles is removed, the CCR will stop unless a green safety handle replaces it.

Protection index : IP 21.

Dimensions : H 300mm , ground surface as CCR.

Operation: -20/+55°C (CEI) or -40/+55°C (FAA). , humidity : 95%.

Accessibility : Front, back and side pannels.

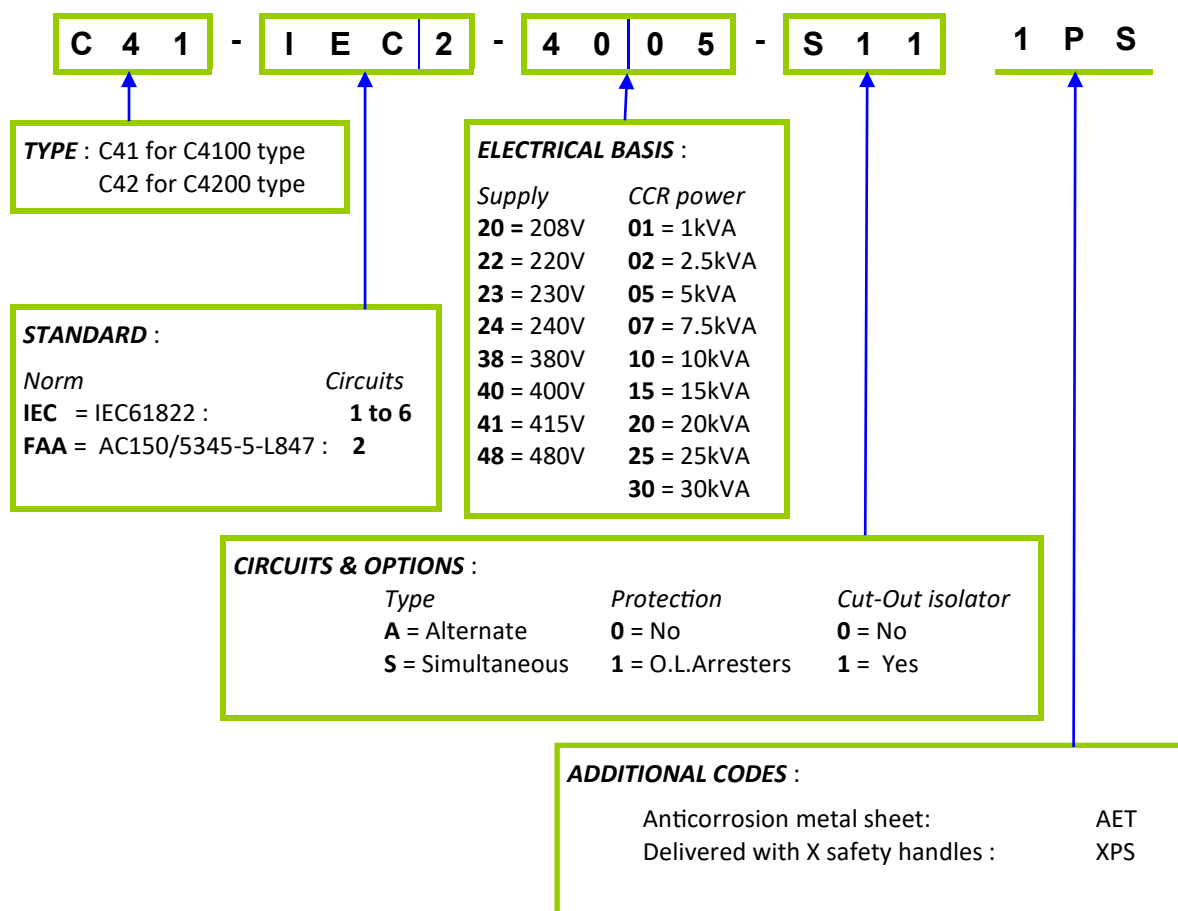
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The integrated circuit selector ICS is identified by a ordering code which precisely defines its type, its options and particularities. The model C4100 is designed for the DIAM4100 and DIAM3100 CCRs, and the model C4200 for the DIAM4200.

Example : **C41-IEC2-4005-S11 1PS** = 2 circuits Integrated Circuit Selector, for IEC regulator DIAM3100 or 4100, output power 5kVA, 400V.

Device with output lightning arresters, with output FAA cut-out isolators. Delivered with 1 safety shutter handle.

Note : As default, the devices include: Tropicalization - Swivel casters (those of the regulator).
The type of remote control of the selector is the same as that of the CCR.



60 21222 - In the interest of constant improvements, the manufacturer reserves the right to modify its models without notice