



DESCRIPTION

The codes of the panels are:
1311005267A-CB and 1311005267B-CB.
Both versions have ABB 4-poles contactors
25A AC1 400Vac (series AF09).
Version "A" is designed for 16A and
version "B" is designed for 25A;
the only difference is the section of the power cables
(2,5mm and 4mm).
The dimensions of the panels (HxLxD) are:
850x550x250mm

APPLICATION

The typical application is for sites with n.2 generators and with only 1 mains.
This permits to have 1 generator in emergency to the other in case of mains failure.
The interlocked double switching (n.1 switching between genset 1 and genset 2,
and n.1 switching between generators and mains) permits a high reliable and safe management of the system.
It's suitable for supply sites of telecommunication systems, where it's necessary to ensure a high continuity of operation.
Since these sites are geographically placed in locations at high risk of major weather events,
the panels are already equipped with surge arresters "Class II" on the mains line, in order to reduce the risk
of malfunction caused by lightnings or overvoltage on the line.

LOGIC OF OPERATION

A three-phase min/max voltage relay is installed on the mains input, with programmable thresholds and detection of phase failure. When a mains fault is detected, one contact is closed for the remote start command of one generator. Through an internal programmable timer, it's automatically exchanged the priority of this contact for the starting of generator 1 or 2, to have a similar number of work hours on both gensets.
Alarm inputs are available to detect alarms from the generators; this way if the priority generator is not working, automatically the priority is given to the stand-by generator; the logic of exchange of priority is bypassed until the maintenance of the generator in alarm. During the work period of one generator, if the priority time ends, the stand-by generator is started, and the working generator is stopped. When the normal mains conditions are back, the working generator is stopped and the load is switched to the mains side. The command of the internal power switching is managed automatically, to have the load always supplied by the present available source.

LIGHT SIGNALS ON THE FRONT OF THE PANEL

- Load on mains side
- Load on generator 1 side
- Load on generator 2 side
- Mains voltage available
- Generator 1 voltage available
- Generator 2 voltage available
- Generator 1 priority
- Generator 2 priority

AUXILIARY SUPPLY AVAILABLE

N.2 auxiliary outputs 1P+N+T 230Vac 2A are available, protected by single-pole switch to supply external auxiliary devices.

INPUTS FROM GENERATORS

- Generator 1 in alarm
- Generator 2 in alarm
- 12Vdc voltage from batteries of generator 1
- 12Vdc voltage from batteries of generator 2

REMOVABLE OUTPUT CONTACTS

- Start generator 1
- Start generator 2
- Double contact for mains available (n.1 contact for every generator)
- Generator 1 in alarm
- Generator 2 in alarm
- Cumulative alarm of generators (if both generators are in alarm)
- Mains faulty
- Generator 1 ready
- Generator 2 ready

STANDARD COMPOSITION:

- 1 - Box IP55 Dimensions: 850x550x250
- 1 - Timer to change priority of G1 or G2
- 1 - Minimum and maximum voltage relay
- 4 - Arresters
- 4 - ABB contactors
- 8 - Led lamps
- 10 - Protection switches (no fuses)
 - Connection switches



GENERAL CONSIDERATIONS

- All the auxiliary protections are through single-poles circuit breakers, curve C
 - Auxiliary and power inputs/outputs on screw terminal blocks
 - Auxiliary supply from 12Vdc of both generators, divided by diodes.
- The 2 batteries of the generators remain externally separated, but the panel remains supplied even with only 1 battery connected (so it's possible to perform the maintenance separately on the generators without blocking the functionality of the logic).

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