

Automatic load switching board

- Continuous automatic monitoring of power on the main and backup inputs
- Reliable supply of power
- Visual monitoring of power at main and backup inputs, operation of devices for main and backup power switching

Purpose

Automatic load switching board (ALSB) is used to re-connect the load to a source of power by automatically switching to a second (backup) input when power is lost at the first (main) input. Normally, the switchboard is reset automatically when the main source of power is restored (priority of the first input). The main input is typically a stationary power mains $U_n = 380 \text{ V}$, $f = 50 \text{ Hz}$. The backup input can be a stationary power mains or a diesel generator. ALSBs are widely used at industrial and civil engineering sites, cellular communication stations, etc., and are also used to supply power during scheduled maintenance and repair work. State-of-the-art electronic devices are used to automate the switchboard. The most frequently used set of control circuits is a full-function phase-monitoring relay; special controllers are specified less often. These devices control power elements – contactors, breakers, or circuit breakers with servo drives.

Technical data

Rated operational voltage, U_n	380 V
Rated current, I_n	160–3200 A (for ALSB up to 160 A)
Rated frequency, f	50 Hz
Time switching from the main input to the backup and vice versa	0.5–0.8 sec
Earthing system	TN-S; TN-C; TN-C-S
Protection class	IP31 – IP54
Climatic versions and placement category	UHL4
Design option	floor-mounted/wall-mounted (ALSB)



Ordering information

When placing an order, depending on its type, the customer should provide the following technical documentation:

1. Completed questionnaire in case of ordering to customer specifications. The design of the equipment usually is required.
2. Ordering standard items, please, indicate standard diagram numbers, enclosure types (wall-mounted/integrated/floor-mounted, housing material, IP protection), manufacturers of components, other technical parameters.
3. When ordering to custom design, design documentation is required: single-line or schematic diagram, specifications of components, drawings. When ordering control cabinets and automation devices, a control system diagram (functional diagram) is required.

To order, please, fill in questionnaire at p. 191

Approvals

№ TC RU C-RU.PC52.B.00586

