

TECHNICAL SPECIFICATION

Dual power change-over switch EQ1 series (ATS)



Description:

The system for dual power change-over switch EQ1 is designed to provide continuous power supply and two electrical sources automatic switch in case of failure or deviation from the set parameters. The system for dual power change-over switch consists of two molded case circuit breakers mounted on a metal frame connected with common operating mechanism and controlled by a command device that controls the system parameters' correspondence.

Functions:

- Switching on/off heavy loaded electrical circuits at main power supply discrepancy
- Switching to dual power change-over at power supply phase lack
- With option to connect to fire alarm controller. In case of fire, the ATS switches off both power supply sources
- Breaking of electrical circuits and control of powerful consumers

- Used as a main breaker in housing or industrial distributing installations supplied with a generator or a second power supply source (hospitals, post offices, military sites, control rooms)
- Remarkable with high reliability of current characteristics
- Control: motor
- Controls the following circuit parameters:
 - presence of the three phases
 - the phase voltage to be in the set limits
 - overload
 - short circuit at the outlet

Technical data:

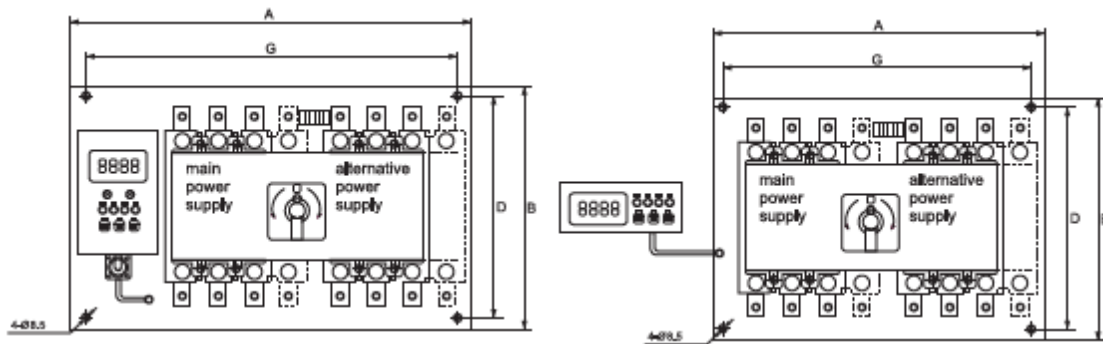
- Rated operating voltage: 690V; 50/60Hz
- Surge voltage wear resistance: $\geq 6000V$
- Joining terminal: bolt connection with 4 bolts to the power supply rail
- Connecting:
 - copper rails
 - flexible or rigid conductors
- Electrical wear resistance (number of cycles): ≥ 60000
- Mechanical wear resistance (number of cycles): ≥ 10000
- IP code: IP21
- Plastic material of the breakers of UV rays and non-flammable
- Ambient temperature: $-10^{\circ}C + 65^{\circ}C$
- Installation altitude: up to 2000m
- Mounting:
 - clamping with bolts
 - mounting position: vertical gradient – maximum 5°

Basic function of the control device:

- Overload protection
- Instantaneous short circuit protection
- Under phase protection
- Undervoltage protection

- Possibility for setting the change-over time between the two sources – min 3s
- Possibility for automatic switch-over to the main power supply source after restoring its parameters
- The system for dual power change-over switch is offered in two types:
 - with display (control device) mounted on the mounting plate (integrated type)
 - with separated control display

Dimensions:



| Type of the breaker | Type | A | B | C | D | H |
|---------------------|------------|-----|-----|-----|-----|-----|
| EQ1-100 | inner type | 480 | 240 | 450 | 210 | 140 |
| EQ1-225 | inner type | 480 | 240 | 450 | 210 | 140 |
| EQ1-400 | inner type | 620 | 300 | 590 | 270 | 235 |
| EQ1-630 | inner type | 660 | 300 | 630 | 270 | 240 |
| EQ1-800 | inner type | | | | | |
| EQ1-100* | moved type | 420 | 230 | 390 | 200 | 145 |
| EQ1-225* | moved type | 420 | 230 | 390 | 200 | 145 |
| EQ1-400* | moved type | 570 | 300 | 540 | 270 | 235 |
| EQ1-630* | moved type | 610 | 300 | 580 | 270 | 240 |
| EQ1-800* | moved type | | | | | |

Variants

| Type | Rated current In(A) | Max. breaking capacity Icu (kA) | Operating breaking capacity Ics (kA) | Section of the power supply conductor (mm ²) | Electrical wear resistance (number of cycles) | Mechanical wear resistance (number of cycles) | Packing / Box (pcs) | Catalogue number |
|----------|------------------------|------------------------------------|---|---|--|--|------------------------|------------------|
| EQ1-100 | 100 | 50 | 35 | 35 | 2000 | 6000 | 1 / 1 | 44100 |
| EQ1-225 | 225 | 50 | 35 | 70 | 2000 | 6000 | 1 / 1 | 44225 |
| EQ1-400 | 400 | 100 | 65 | 180 | 2000 | 6000 | 1 / 1 | 44403 |
| EQ1-630 | 630 | 100 | 65 | 240 | 1000 | 3000 | 1 / 1 | 44633 |
| EQ1-800 | 800 | 100 | 65 | 240 | 1000 | 3000 | 1 / 1 | 44833 |
| EQ1-100* | 100 | 50 | 35 | 35 | 2000 | 6000 | 1 / 1 | 44101 |
| EQ1-225* | 225 | 100 | 35 | 70 | 2000 | 6000 | 1 / 1 | 44226 |
| EQ1-400* | 400 | 100 | 65 | 180 | 2000 | 6000 | 1 / 1 | 44404 |
| EQ1-630* | 630 | 100 | 65 | 240 | 1000 | 3000 | 1 / 1 | 44634 |
| EQ1-800* | 800 | 100 | 65 | 240 | 1000 | 3000 | 1 / 1 | 44834 |

Standards:

EN 60947-1

EN 60947-2

EN60947-6-1