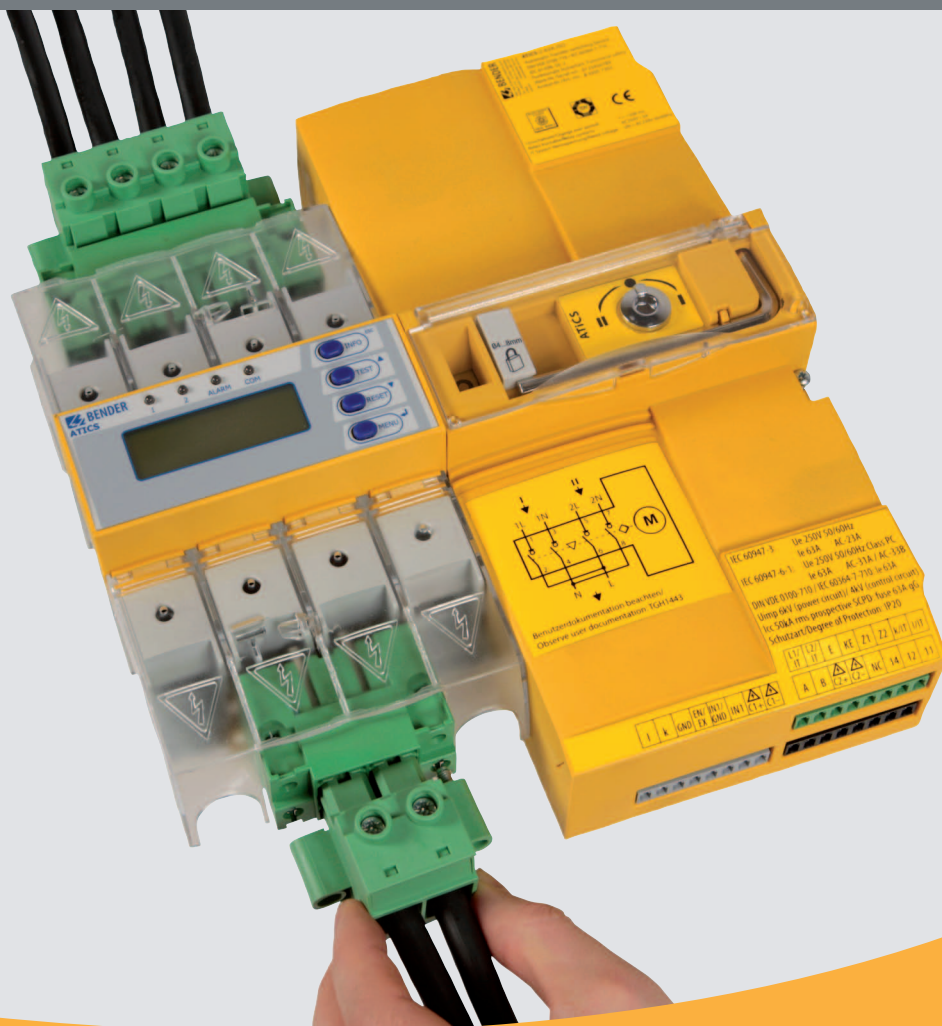


# ATICS®-2-63A-ISO ATICS®-2-80A-ISO

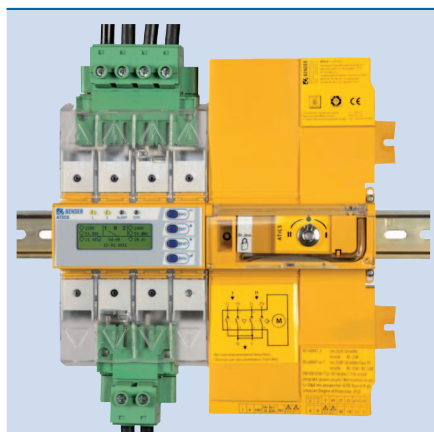
Automatic transfer switching devices with monitoring functions  
for unearthed safety power supplies



# ATICS®-2-63A-ISO

# ATICS®-2-80A-ISO

Automatic transfer switching devices with monitoring functions  
for unearthed safety power supplies



ATICS®-...-ISO

## Device features

### Perfectly suitable for space-saving installation/retrofitting

- Compact device for designing safety power supplies with functional safety more easily, in accordance with DIN VDE 61508 (SIL 2) e.g. for Group 2 medical locations in compliance with IEC 60364-7-710:2002/ DIN VDE 0100-710 (VDE 0100-710)
- The integration of both the switching elements and the IT system monitoring electronics in one compact device provides increased safety and availability
- All-in-one: Integration of switch disconnector, control and monitoring electronics for unearthed safety power supplies
- Solutions for any application

### Convenient installation and commissioning

- Saves time and money

### Safe operation

- Switch disconnector contacts of robust design
- Mechanical locking
- Manual operation directly on the device
- Functional safety SIL 2
- Certification by TÜV SÜD in accordance with EN 61508 (VDE 0803) SIL 2 and DIN VDE 0100-710 (VDE 0100-710)

### Uninterrupted maintenance

- Plug connectors and optional bypass switch
- Excellent communication and parameterisation options

## Task

Power supplies for sensitive equipment used in Group 2 medical locations, for example, must function safely and reliably even under fault conditions.

A major contribution to achieve this are two redundant supplies and the design of an unearthed power supply system (IT system).

## Product description

ATICS®-...-ISO switching devices provide all functions for changeover between two independent power supplies and for monitoring unearthed power supplies. The power section and the electronic section integrated in one flat, compact enclosure allow space-saving installation into the respective distribution board, simplifies wiring and reduces error potential. ATICS® has been developed consistently according to the Functional Safety standards (SIL 2) guarantee highest reliability.

Connectors at all connecting wires – in combination with the optional bypass switch – allow ATICS® to be tested or replaced during service works without interruption of the power supply. ATICS® considerably enhances the safety level particularly in intensive care units and operating theatres.

## Changeover

- Automatic changeover to the second (redundant) line on loss of the preferred supply voltage or when the values are outside the permissible voltage range
- Voltage monitoring line 1/2 (input) and line 3 (output)
- Automatic return to the preferred line on voltage recovery
- Monitoring for short-circuits at the output of the transfer switching device
- Manual operation, optionally locked by a padlock
- Freely configurable assignment of the preferred/redundant line

## IT system (unearthed power supply)

- Insulation monitoring
- Load and temperature monitoring for IT system transformer
- Optional insulation fault location system (integrated PGH function)

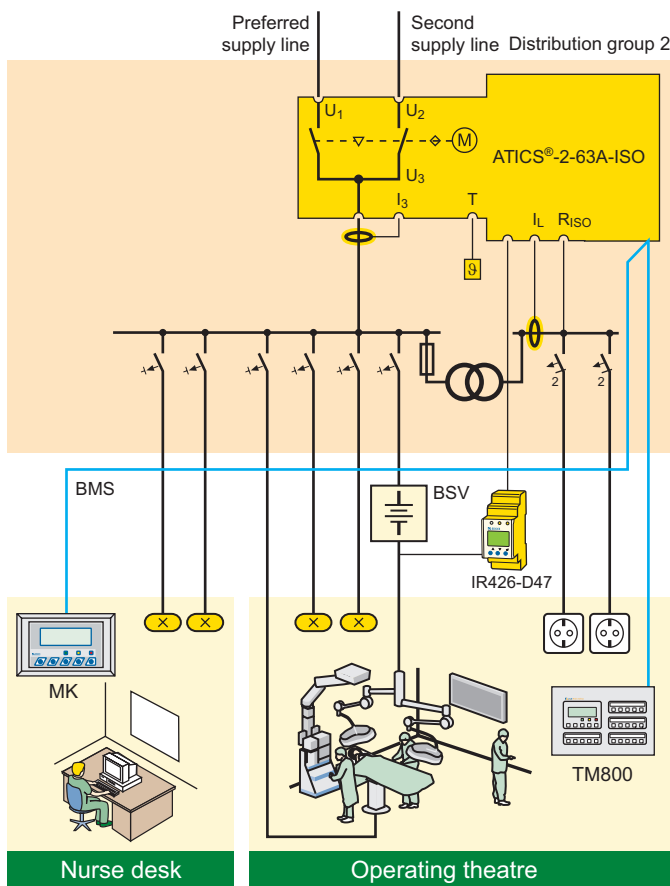
## Messages

- Status indication of operating, warning and alarm messages via integrated graphic display and external MK2430 / MK800 / TM800 alarm indicator and operator panels
- Automatic reminder for prescribed tests and service intervals
- History memory for events, messages, tests and parameter changes
- Connection between ATICS® and alarm indicator and operator panels via BMS bus

## Additional functions

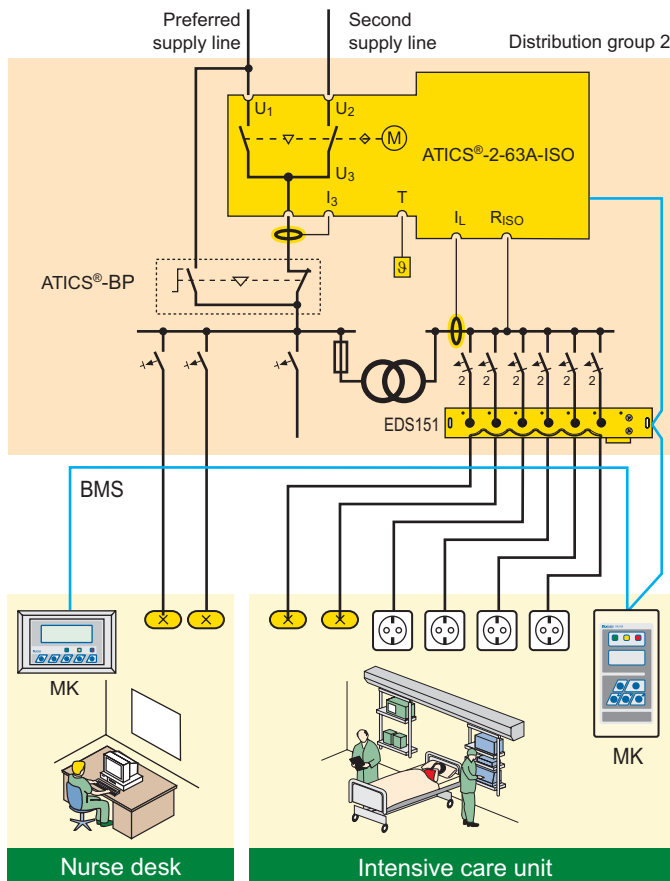
- Continuous monitoring of important internal components and connecting wires
- Programmable alarm relay
- Programmable digital input

Application examples



Example intensive care unit

- ATICS-2-63A-ISO: Automatic changeover between the preferred and the redundant line while monitoring the medical IT system with transformer load and temperature monitoring
- EDS151: Insulation fault locator for fast insulation fault location (recommended)
- ATICS-BP: Bypass switch for uninterrupted test/maintenance (recommended)
- MK2430/MK800/TM800: Alarm at at least two points for functional safety



Example application operating theatre

- ATICS-2-63A-ISO: Automatic changeover between the preferred and the redundant line while monitoring the medical IT system with transformer load and temperature
- IR426-D47: Monitoring the operating theatre light IT system (optional)
- MK2430/MK800/TM800: Alarm at at least two points for functional safety

## Ordering information

| Rated operational current $I_e$ | Type            | Art. No.    |
|---------------------------------|-----------------|-------------|
| AC                              |                 |             |
| 63 A                            | ATICS-2-63A-ISO | B 9205 7202 |
| 80 A                            | ATICS-2-80A-ISO | B 9205 7203 |

## Accessories

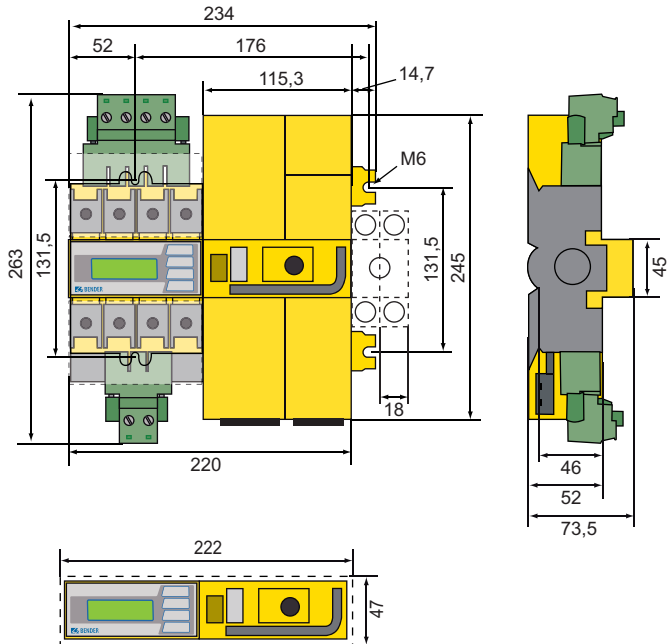
| Type designation  | Rated operational current $I_e$ | Type             | Art. No.    |
|-------------------|---------------------------------|------------------|-------------|
|                   | AC                              |                  |             |
| Bypass switch kit | 63 A                            | ATICS-BP-63A-SET | B 9205 7252 |
|                   | 80 A                            | ATICS-BP-80A-SET | B 9205 7253 |

## Suitable system components

| Type designation         | Type   | Art. No.    |
|--------------------------|--------|-------------|
| Insulation fault locator | EDS151 | B 9108 0101 |

## Dimension diagram

Dimensions in mm



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## Technical data

### Insulation coordination acc. to IEC 60664-1/ IEC 60664-3

|                          |                                 |
|--------------------------|---------------------------------|
| Overvoltage category     | III                             |
| Rated insulation voltage | 250 V                           |
| Supply voltage $U_s$     | from the system being monitored |

### Power section/switching elements

|  |                           |
|--|---------------------------|
| Nominal system voltage $U_n$ (operating range) | AC 230 V (AC 160...276 V) |
| Frequency range $f_n$                          | 48...62 Hz                |

### IT system monitoring

#### Insulation monitoring

|                                    |                               |
|------------------------------------|-------------------------------|
| Measuring range                    | 10 k $\Omega$ ...1 M $\Omega$ |
| Response value $R_{an1}$ (ALARM 1) | 50...500 k $\Omega$           |

#### Load current monitoring (IT system transformer)

|                              |                                  |
|------------------------------|----------------------------------|
| Measuring range $I_L$ (TRMS) | 10...110 % of the response value |
| Response value adjustable    | 5... (50) 100 A (1 A steps)      |

#### Temperature monitoring (IT system transformer)

|                                 |                  |
|---------------------------------|------------------|
| PTC resistors acc. to DIN 44081 | max. 6 in series |
|---------------------------------|------------------|

### Displays and data memory

|                                |                          |
|--------------------------------|--------------------------|
| Display (languages DE, EN, FR) | graphic display          |
| History memory                 | 500 data records         |
| Data logger                    | 500 data records/channel |
| Config. logger                 | 300 data records         |
| Test logger                    | 100 data records         |
| Service logger                 | 100 data records         |

### Input

|                     |   |
|---------------------|---|
| Digital inputs      | 1   |
| Function selectable | switching back interlocking function, manual/automatic mode, bypass operation, functional test, changeover for the preferred supply, alarm input for operating theatre lights, alarm input for other electrical equipment |

### Output

|                                |  |
|--------------------------------|--|
| Switching element              | 1 potential-free changeover contact                                |
| Operating principle adjustable | N/O or N/C operation   |
| Function selectable            | alarm or operating message/common alarm message/generator start-up |

### BMS interface

|                    |            |
|--------------------|------------|
| Interface/protocol | RS-485/BMS |
|--------------------|------------|

### Environment/EMC

|                       |                           |
|-----------------------|---------------------------|
| EMC                   | IEC 61326-1/IEC 61326-2-4 |
| Operating temperature | -25...+55 °C              |
| Degree of protection  | IP20                      |

### Terminals

#### Power section

|               |                           |
|---------------|---------------------------|
| Connection    | pluggable screw terminals |
| rigid max.    | 35 mm <sup>2</sup>        |
| flexible max. | 25 mm <sup>2</sup>        |

#### Other

|                   |   |
|-------------------|---|
| Operating mode    | continuous operation  |
| DIN rail mounting | according to IEC 60715  |
| Screw mounting    | 4 x M5  |
| Weight            | approx. 4500 g  |
| Scope of delivery | ATICS® incl. STW2 and STW3 measuring current transformers, bridge, connector and terminal cover |