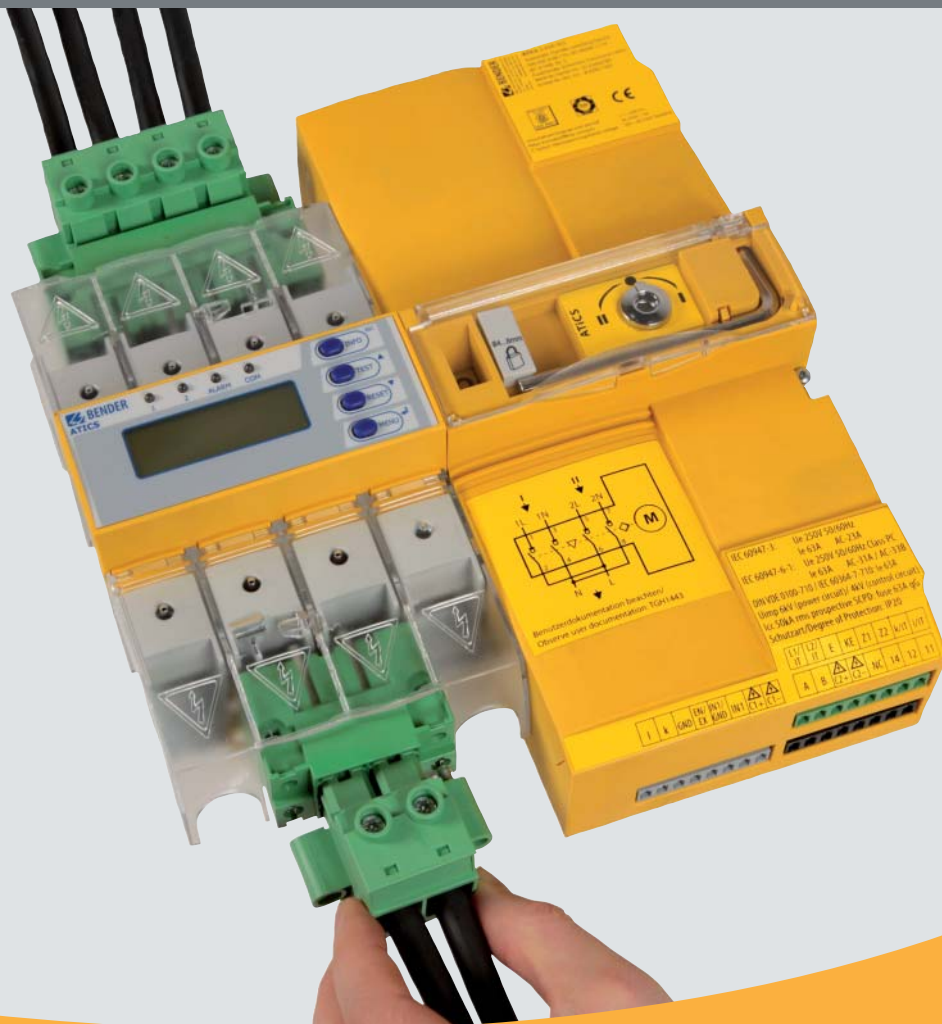


# ATICS-2-63A-ISO ATICS-2-80A-ISO

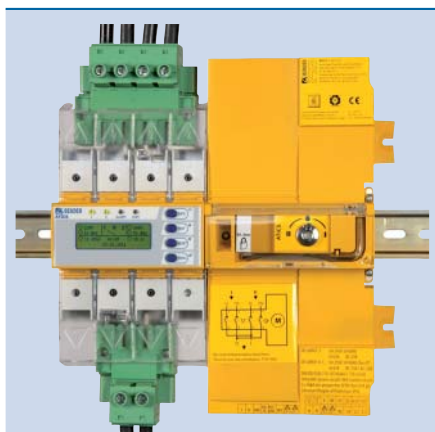
Automatic transfer switching devices with monitoring functions  
for unearthed safety power supplies



## ATICS-2-63A-ISO

## ATICS-2-80A-ISO

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



ATICS

#### Device features

- Compact device for convenient setup of safety power supplies with functional safety according to EN 61508 (SIL 2) e.g. for Group 2 medical locations in compliance with IEC 60364-7-710 / DIN VDE 0100-710 (VDE 0100-710)
- The integration of the changeover function and IT system monitoring in one device provide increased safety and availability
- Testing or replacement without power supply interruption by using plug-in connectors and an optional bypass switch
- Manual operation, optionally locked by a padlock
- Certified by TÜV SÜD (Technical Inspection Authority, Germany) in accordance with EN 61508 SIL 2 and DIN VDE 0100-710 (VDE 0100-710)

#### 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 switching devices provide all functions for changeover between two independent power supplies and for monitoring unearthed power supplies. The integration of both the electronic system and the switching elements in one flat, compact device reduces space requirements in the switchgear cabinet, minimises the amount of wiring, and reduces the fault probability. To achieve the highest reliability, ATICS has been developed closely in compliance with functional safety guidelines.

Connectors at all connecting wires in combination with by-pass switches enables 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 resp. at the distribution board downstream the transfer switching device

#### IT system (unearthed power supply)

- Insulation monitoring
- Load and temperature monitoring for IT system transformer
- Optional insulation fault location system

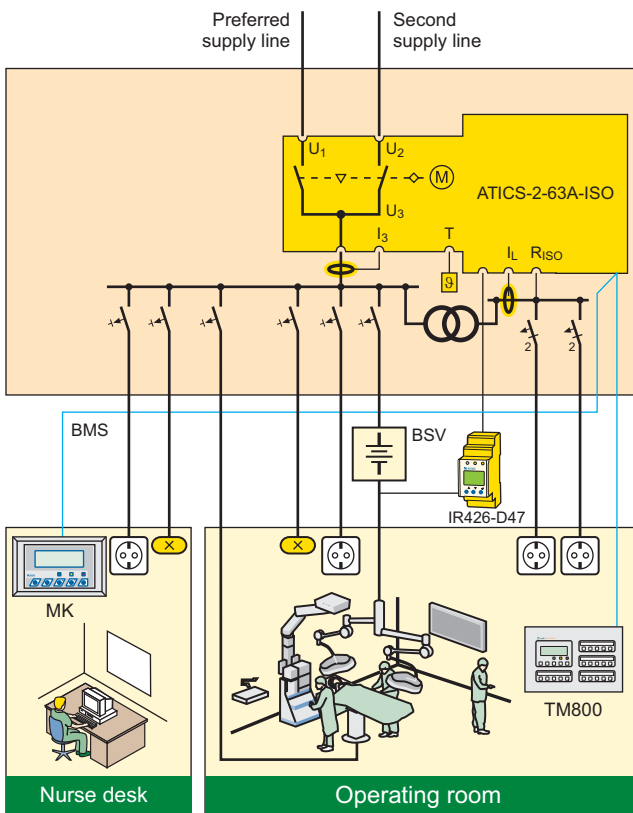
#### Messages

- 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

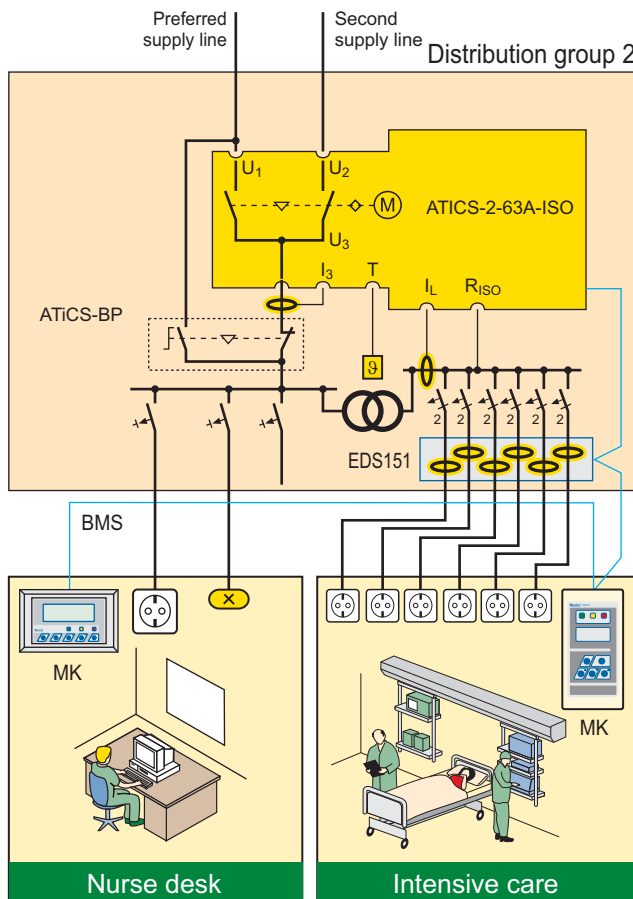
- Continuous monitoring of important internal components and connecting wires
- Programmable alarm relay
- Programmable digital input

Application examples



Application example operating theatre

- ATICS-2-63A-ISO: Automatic changeover between the preferred line and redundant line including medical IT system monitoring and monitoring of transformer load and temperature
- IR426-D47: Monitoring of the OP light IT system (optional)
- MK2430/MK800/TM800: Alarm displayed at two points guarantees functional safety



Application example intensive care unit

- ATICS-2-63A-ISO: Automatic changeover between the preferred line and redundant line including medical IT system monitoring and monitoring of transformer load and temperature
- EDSW151: Insulation fault location system for fast insulation fault location (recommended)
- ATICS-BP: Bypass switch allows testing / maintenance without interruption (recommended)
- MK: Alarm displayed at two points guarantees functional safety

## Technical data

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

Overvoltage category	III
Rated operational voltage $U_e$	230 V

### 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 (increments of 1 A)

#### Temperature monitoring (IT system transformer)

PTC resistors acc. to DIN 44081	max. 6 in series
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### Displays and data memory

Display (languages DE, EN, FR):	graphical 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 für operating theatre lighting circuits, alarm input for other electrical equipment

### Output

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

### BMS interface

Interface/protocol	RS-485 / BMS
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### EMC

Operating temperature	-25 °C...+55 °C
EMC	IEC 61326
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

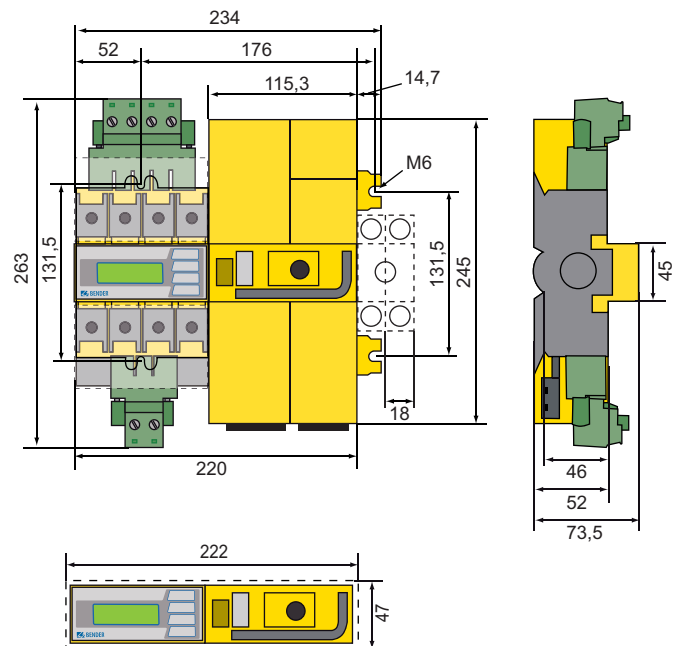
Standards	IEC 60364-7-710 / DIN VDE 0100-710 (VDE 0100-710) / Functional safety acc. to EN 61508 (SIL 2) IEC 60947-6-1 / DIN EN 60947-6-1; VDE 0660-114
Operating mode	continuous operation
DIN rail mounting	acc. to IEC 60715
Screw mounting	4 x M6
Weight	approx. 4500 g
Scope of supply	ATICS incl. measuring current transformer STW2 and STW3, bridge, connector and terminal covers

## Ordering information

Type	Designation	Rated operational current $I_e$	Art. No.
ATICS-2-63A-ISO	Automatic transfer switching device	AC 63 A	B 9205 7202
ATICS-2-80A-ISO	Automatic transfer switching device	AC 80 A	B 9205 7203
ATICS-BP-63A	Bypass switch kit	AC 63 A	B 9205 7252
ATICS-BP-80A	Bypass switch kit	AC 80 A	B 9205 7253
EDS151	Insulation fault location system		B 9108 0101

## Dimension diagram

Dimensions in mm



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