

ATICS®

Compact. Reliable.
Cost-effective.

Benutzerdokumentation beachten /
Observe user documentation. 000046

Protecting people – reducing costs



The safety in group 2 medical locations such as operating theatres and intensive care units is of vital importance for patients and staff. Therefore, the electrical system must function at any time, even in the event of voltage faults. The compact ATICS® automatic transfer switching device combines maximum safety with smart additional functions and pays for itself within a short period of time.

Proven and unique

As a specialist for innovative solutions in the area of electrical safety, we have developed the ATICS® automatic transfer switching device. This device operates with a resilient changeover shaft and smart control electronics. Its compact design clearly stands out from other conventional solutions and thereby offers distinct advantages to consultants, electricians, hospital operators as well as staff and patients.



BENDER
 ATICS-2-80A-ISO
 CE
 Automatisches Umschaltgerät /
 Automatic Transfer Switching Device
 DIN VDE 0100-710 / IEC 60364-7-710
 IEC 61508, SIL 2
 Funktionale Sicherheit / functional safety
 Werk-Nr./Serial-no: 1612509850
 Artikel-Nr./Art.-no: B92057203
 Umschaltzeit / Change over period: t<500ms... 100s
 Überspannungskategorie / overvoltage category III
 IT System Nennspannung / Rated voltage: UN = AC230V 50/60Hz
 Ansprechzeit / Response value: 50... 250Ks



Us 230V 50/60Hz 17A for 30ms
 IEC 60947-3 Ue 240V 50/60 Hz
 Ie 80A AC-23A
 IEC 60947-6-1 Ue 240V 50/60 Hz Class PC
 Ie 80A AC-32A / AC-33B
 DIN VDE 0100-710 / IEC 60364-7-710: Ie 80A
 Uimp 6kV (power circuit) 2.5kV (control circuit)
 Icc 30kA rms prospective SCPD: fuse 100A gG

L1	L2	L3	E	KE	Z1	Z2	kWT	INT
A	B	NC	NC	NC	14	12	11	

ATICS® core advantages:

Versatile compact solution

Numerous standard functions and additional options are supported within this compact all-in-one device.

Uncompromising safety

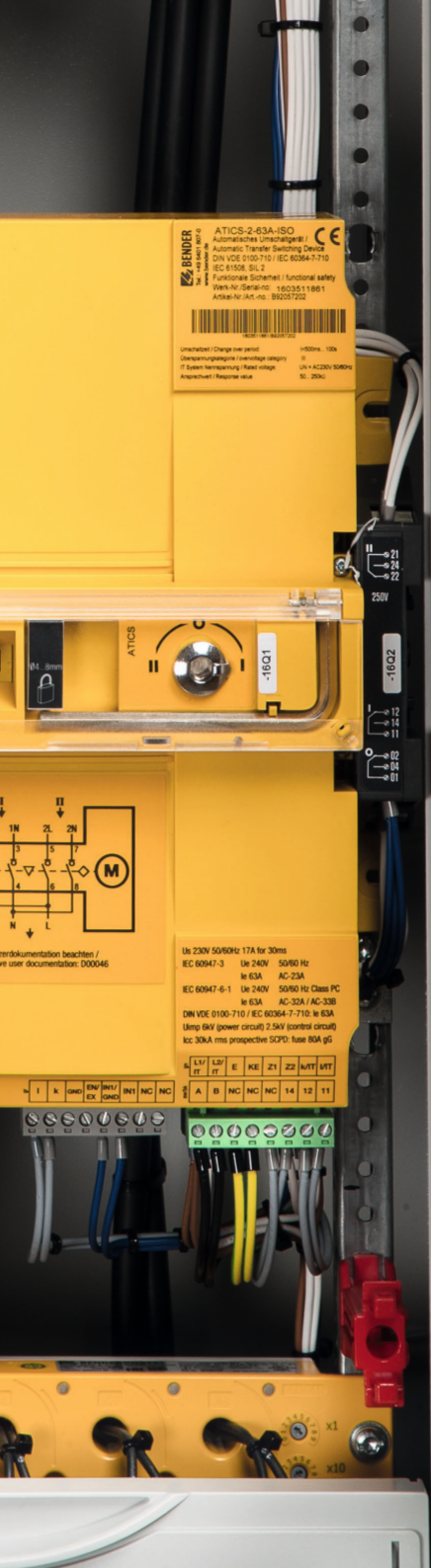
The unique operating principle with an innovative changeover shaft separates safety and offers maximum functional safety.

Low follow-up costs

Thanks to easy installation and reduced maintenance and service costs, the system pays for itself within a short period of time.

**Maximum
performance –**
minimum space
requirements





The ATICS® automatic transfer switching and monitoring device is a highly compact all-in-one solution. It replaces traditional multi-component systems with high space requirements and installation effort. At the same time, it offers more standard functions and additional expansion options.

Compact system solution

The ATICS® all-in-one device is currently the most compact solution on the market. All components are integrated in one enclosure and are optimally adjusted to one another. This reduces the connection effort and the probability of errors. In addition, it offers clear advantages in terms of maintenance and service.

Changeover function

ATICS® is a patented changeover solution with mechanical and electrical interlocking as well as weld-free switching contacts.

Integrated load switch

The load switch integrated in the automatic transfer switching and monitoring device reduces the connection effort and minimises possible sources of error.

Short-circuit monitoring

The system continues to operate properly and avoids contact welding, even in the event of a short circuit. The patented short-circuit detection enables fast changeover in the event of a power failure on the incoming supply, and when a short circuit occurs, it implements a predetermined changeover delay so that the fuses can trip.

Voltage monitoring

Voltage monitoring at both inputs and at the output provides maximum safety.

Insulation measurement (internal)

Thanks to the internal insulation measurement, external components and additional cabling can be omitted. At the same time, the design remains highly compact.

Insulation fault location

Thanks to the integrated locating current injector, the optionally available insulation fault location system can be easily connected.



Easy operation –
**uncompromising
safety**

The top priority in group 2 medical locations is the safety of patients and staff. The ATICS® automatic transfer switching and monitoring device carries out comprehensive self tests and actively signals voltage faults. The normative requirement of a changeover time < 0.5 seconds is fulfilled.

Proven safety

ATICS® has been developed in close cooperation with TÜV Süddeutschland (Technical Inspection Authority, Southern Germany) and is equipped with a special load switch element. ATICS® has been tested more than 10,000 times and meets or exceeds all common national and international standards and regulations.

- DIN VDE 0100-710
- IEC 60364-7-710
- Functional safety in accordance with IEC 61508 (SIL 2)

Single-fault tolerance

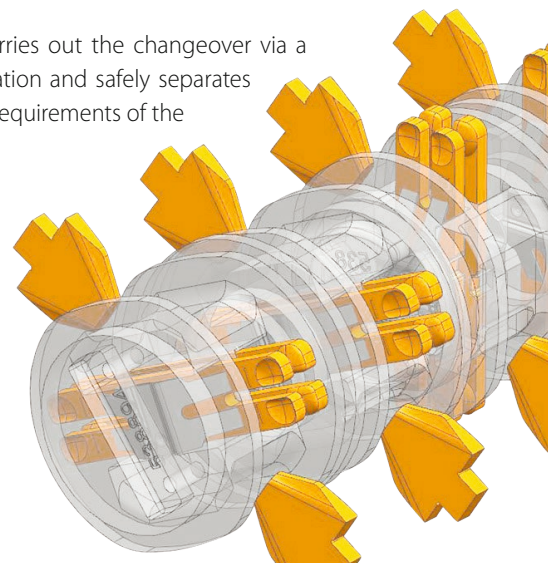
ATICS® reliably fulfils the requirements of single-fault tolerance in accordance with the hospital standard. This means that, even in case of a single internal fault, a reliable voltage supply of the operating theatre is guaranteed.

Safe separation


To achieve maximum safety, ATICS® carries out the changeover via a central shaft. This prevents wrong operation and safely separates the incoming supplies according to the requirements of the relevant standards.

Manual mode

In case of an emergency, ATICS® can be easily set to manual mode and then manually switched; The signalling devices connected via a bus system inform automatically about this mode.



**Easy
installation –**
low service costs


 **BENDER**
ATICS-BP

I+II

ON |
NORMAL

BY

-12Q1



Thanks to the smart all-in-one device concept, ATICS® reduces the installation, maintenance and service effort significantly. This minimises downtimes, protects against possible contractual penalties and improves the return on investment.

Reduced installation costs

Fewer connections and interfaces translate into a faster, safer and more cost-effective installation. Of course, this also applies to the rare case that an ATICS® device has to be replaced.

Reduced downtimes

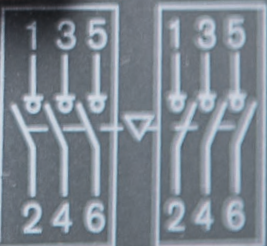
ATICS® operates extremely reliable. The user can easily carry out the mandatory annual tests without interrupting the power supply of the operating theatre by using the optional bypass module. This saves time and money and reduces the risks during inspection work.

Reduced damage

The smart monitoring system helps preventing expensive damage to other system components. Insulation faults are immediately signalled. The optional EDS insulation fault locator can be used to quickly detect the fault source and allocate it to the corresponding load. This technology is already standard in many locations.

NORMAL | BYPASS

ON
PASS



12P1



**Drawing on
experience –
offering system solutions**



Bender is one of the world's leading providers of electrical safety in hospitals. In addition to the ATICS® automatic transfer switching and monitoring device, we offer a range of components which are optimally adjusted to it.

ATICS BP bypass switch

The bypass switch enables maintenance and service works during ongoing operation as well as the mandatory annual functional test.

IT system

The standard-compliant, medical IT system is the heart of the power supply of group 2 medical locations and protects patients, staff and the equipment.

Insulation fault locator EDS151

The compact EDS151 insulation fault locator enables automated localisation of insulation faults in medical IT systems.

Additional system components

Depending on the requirements, additional components can be integrated and connected to design an optimally coordinated system.

- Residual current monitoring systems
- Measuring instruments
- Isolated power panels
- Isolating transformers
- Alarm indicator and test combinations
- Alarm indicator and operator panels

Our service range

We offer competent and comprehensive support to our customers in terms of planning, realisation and operation of their group 2 medical location. We will be happy to advise you on our service components.



Bender GmbH & Co. KG

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