

<u>Electronic transfer</u>

svstems

# **IT SWITCH**

from 16 to 20 A single-phase

a secure power supply close to your applications



#### The solution for

- > Data centres
- > Processes
- Telecommunications
- > Air traffic control

## Continuity of service for critical applications

- Located as close as possible to the application, the IT SWITCH allows a highly accessible architecture.
- It protects against:
- main power source outage,
- spurious tripping of upstream protection,
- the result of mutual interference caused by faults in the applications (e.g.: short-circuit) being supplied from the same source.

## A secure power supply adapted to your equipment

- IT SWITCH has been designed to be easily installed near sensitive applications, to fit into 19" racks.
- Different versions: fixed or swappable to meet all your power availability requirements.

### Easy site operation

- Easy changing of the preferred supply path without modifying the cabling.
- Switching from one path to another, carried out by the operator and secured by the IT SWITCH automatic controls and protections.

### User-friendly operation

- IT SWITCH is fitted with a control panel that is easy to operate and guarantees safe operation.
- The communication software allows easy operation of the different equipment on-site.

### Operating principle

IT SWITCH is an automatic transfer system between two sources. It is digitally controlled by microcontrollers to transfer the loads instantly, without disruption and without overlapping the sources.

#### Automatic transfer

The detection of a failure in the preferred source triggers the automatic and instantaneous transfer to the alternate source without disturbing the supply to the load. The "break before make" transfer is carried out without overlapping in order to prevent interference between the sources.

#### Manual control

The IT SWITCH manual control allows the operator to transfer the loads securely to one of the sources in order to carry out maintenance operations.

#### Choosing the preferred source

The operator chooses a preferred source for each IT SWITCH.

The parameters of each source and of the supply to the loads are permanently monitored.

#### Separating loads

The system inhibits the transfer in the event of a fault in the equipment supplied downstream. This discrimination avoids the faulty current being transferred onto the other source so as not to disturb other users.

#### "Hot Swap" power units

The extractable version of the IT SWITCH HA increases system availability. The hot swappable plug-in unit means the control and power unit can be taken out without interrupting the supply to the applications. The fixed chassis is equipped with a double maintenance bypass, which guarantees simple and totally secure operation.



from 16 to 20 A single-phase Electronic transfer systems

#### Installation and operation

Distributed redundancy

Mainframe

Server Rack

IT-SWITCH

Rack 19'

T 057 A GB

IT SWITCH HA (High Availability) is especially suited to sensitive applications thanks to its advanced transfer parameter controls: source synchronisation, power quality adaptation, operating modes and downstream fault current. IT-SWITCH HA-E swappable version (High Availability) offers an additional "hot swap" function which enables users to perform maintenance procedures without shutting down the loads.

Source 1

#### Command and control mimic panel



1. Preferred source (1 or 2)

- 2. Input voltage source 1 or 2 within tolerances
- 3. Load on source 1 or 2
- 4. Transfer not possible
- 5. Transfer blocked
- 6. Imminent stop

Source 2

Router

IT-SWITCH

Rack

- 7. Maintenance bypass on (hot swap version)
- 8. Manual transfer to source 2
- 9. Alarm reset & preferred source selection
- 10. Manual transfer to source 1
- 11. General alarm

#### Technical data

	IT SWITCH	
Model	HA 19" rack	HA-E 19" extractable rack
ELECTRICAL SPECIFICATIONS		
Rated voltage	single-phase 100/120/220/230/240 V	
Input voltage tolerance	adjustable (factory setting ±15%)	
Rated frequency	50 or 60 Hz	
Frequency tolerance	±10% adjustable	
Rated current	16 A	16 A - 20 A
Short-circuit current	20 / 15 ln <sup>(1)</sup>	
Crest factor	up to 4	
MAINTENANCE BYPASS		
Changeover switch	bipolar (phase/neutral)	
Transfer mode	synchronous/asynchronous "break before make"	
CONNECTIONS		
Input and output on terminal blocks	-	•
Input and output on IEC 16 A sockets	•	•
ENVIRONMENT		
Operating ambient temperature	0 to 40 °C	
Cooling	Natural	
MECHANICAL SPECIFICATIONS		
Dimensions W x D x H	446 <sup>(2)</sup> x 310 x 131 mm	449 <sup>(2)</sup> x 400 x 133 mm
Weight	8.5 kg	14 kg
Degree of protection	IP21	
STANDARDS		
EMC	EN 50022 class B/class A <sup>(1)</sup>	
1) Depending on model (2) 484 mm with fiving squares		

IT-SWITCH

Rack

1) Depending on model. - (2) 484 mm with fixing squares

#### Standard transfer features

- Preferred source selection.
- Automatic transfer.
- Manual transfer.
- Changeover without source overlap.
- Synchronous and asynchronous
- changeover (fully adaptable transfer modes).
- Transfer lock on downstream fault.
- Lock on repetitive transfers automatic restart setting.

#### Standard mechanical features

• 19" rack.

## Standard communication features

- Command and control mimic panel.
- Dry contacts for information transfer.
- RS 485 JBUS serial port.
- Data log.

Maintenance

- "Hot swap" pull out module (model HA-E).
- Maintenance Bypass (model HA-E).

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