## ATyS S - ATyS d S <br> Remotely operated transfer switching equipment from 40 to 125 A



## Function

ATyS S products are 4 pole remotely operated transfer switches with positive break indication. They enable the on-load transfer of two three-phase supplies via remote volt-free contacts, from either an external automatic controller, using pulse logic, or a switch.
They are intended for use in low voltage power supply systems where a brief interruption of the load supply is acceptable during transfer.

## Advantages

## Extensive power supply range

The ATyS S is available in four supply versions, each with a broad range (+/-30\%).
The four versions are:

- 12 VDC power supply.
- 24/48 VDC power supply.
- 230 VAC single power supply.
- $2 \times 230$ VAC dual power supply


## Safety and reliability

ATyS S products use stable position technology, ensuring constant pressure on the contacts and preventing premature aging In addition, they do not require a power supply to maintain position, thus protecting their loads from voltage fluctuations.

## Easy integration

ATyS S products can be easily installed inside enclosures. Their design, and in particular their compact size, enables integration within most 200 mm deep enclosures.

## Simplified maintenance

Maintenance can be carried out easily under load, with manual operation still available.
The control and motorisation section can be replaced simply by removing 4 screws, with no work required on the installation cabling.

## ATyS d S: Dual power supply

In addition to the functions offered by the ATyS S, the ATyS d S incorporates supply redundancy without the need for additional wiring. This is obtained by integrating a double supply ( 2 independent supplies) directly within the product.

## The solution for

> Genset < 90 kVA
$>$ Heating systems
> Climate control
> Ventilation systems
$>$ Telecommunications


## Strong points

> Extensive power supply range
$>$ Safety and reliability
> Easy integration
> Simplified maintenance
$>$ ATyS d S: Dual power supply

## Conformity to standards

$>$ IEC 60947-6-1
> IS/IEC 60947-3
> GB 14048-11


## Approvals and certifications



# ATyS S - ATyS d S 

Remotely operated transfer switching equipment
from 40 to 125 A

References
ATyS S - ATyS d S


## Accessories

Voltage tap
Use
Enables the required power supply for ATyS S 230 VAC and ATyS d S products to be tapped directly from the product's incoming power terminals. Can also be utilised in applications without neutral, to provide 400 VAC to the autotransformer.

| Rating (A) | Reference |
| :--- | :--- |

## Terminal retainer

Use
These clips have a dual function: - to prevent direct access to the power supply and control terminals and - to secure these connector terminals.

| Rating (A) | Pack | Reference |
| :--- | :---: | :---: |
| $40 \ldots 125$ | 2 pieces | 9599 4003G |



Terminal shrouds

Use
IP2X protection against direct contact with terminals or connecting parts.

| Terminal shrouds for the source side <br> Rating (A) | Pack <br> $40 \ldots 125$ | Reference <br> 9594 |
| :--- | :---: | :---: |
| Terminal shrouds for the load side |  |  |
| Rating (A) | Pack | Reference |
| $40 \ldots 125$ | 2 pieces | 9594 9012A |

Autotransformer 400/230 VAC

Use
For applications without neutral, this autotransformer provides the 230 VAC required to power these ATyS products.

| Rating (A) | Reference |
| :--- | :--- |
| $40 \ldots 125$ | 9599 4004G |

## Dimensions

$75 \times 80 \times 72 \mathrm{~mm}$

## ATyS S-ATyS d S

Remotely operated transfer switching equipment
from 40 to 125 A

## Accessories (continued)

DIN rail
Use
This 4-module DIN rail can be installed directly on the front of the ATyS S and can be utilised, for example, for the installation of a surge protection device.

| Rating (A) | Reference |
| :--- | :--- |
| $40 \ldots 125$ | 9599 4002G |



## Spares

## Motorisation unit

## Use

The motorisation module of the ATyS S can be easily replaced in case of problems, even when the load is supplied.

|  | ATyS S | ATyS S | ATyS S | ATyS d S |
| :--- | :---: | :---: | :---: | :---: |
| Rating (A) | 12 VDC | 24/48 VDC | 230 VAC | 2 x 230 VAC |
| 40 | 9505 5004G | 9506 5004G | 9503 5004G | 9513 5004G |
| 63 | 9505 5006G | 9506 5006G | 9503 5006G | 9513 5006G |
| 80 | 9505 5008G | 9506 5008G | 9503 5008G | 9513 5008G |
| 100 | 9505 5010G | 9506 5010G | 9503 5010G | 9513 5010G |
| 125 | 9505 5012G | 9506 5012G | 9503 5012G | 9513 5012G |



## Switching unit

Use
References to be used for replacing the switching module of ATyS S products.

| Rating (A) | Reference |
| :---: | :---: |
| 40 | 9509 1004G |
| 63 | 9509 1006G |
| 80 | 9509 1008G |
| 100 | 9509 1010G |
| 125 | 9509 1012G |

Manual emergency operation handle
Use
This handle can be used on the product whether the motor unit is mounted or not.

| Rating (A) | Reference |
| :--- | :--- |
| $40 \ldots 125$ | 95995012 G |



## Connector kit

Use
This kit, which includes all of the ATyS S connectors, can be ordered to replace any lost or broken terminal connectors.

| Rating (A) | Reference |
| :--- | :--- |
| $40 \ldots 125$ | 9509 0002G |

# ATyS S-ATyS d S 

Characteristics according to IEC 60947-3 and IEC 60947-6-1

| 40 to 125 A |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Thermal current $\mathrm{Ith}_{\text {th }}$ at $40^{\circ} \mathrm{C}$ | 40 A | 63 A | 80 A | 100 A | 125 A |
| Rated insulation voltage $\mathrm{U}_{\mathrm{i}} \mathrm{M}$ (power circuit) | 800 | 800 | 800 | 800 | 800 |
| Rated impulse withstand voltage $\mathrm{U}_{\text {imp }}(\mathrm{kV})$ (power circuit) | 6 | 6 | 6 | 6 | 6 |
| Rated insulation voltage $\mathrm{U}_{\mathrm{i}} \mathrm{M}$ ) (operation circuit) | 300 | 300 | 300 | 300 | 300 |
| Rated impulse withstand voltage $\mathrm{U}_{\text {imp }}(\mathrm{kV})$ (operation circuit) | 4 | 4 | 4 | 4 | 4 |
| Rated operational currents $I_{e}(A)$ according to IEC 60947-6-1 |  |  |  |  |  |
| Rated voltageUtilisation category | A/B | A/B | A/B | A/B | A/B |
| 415 VAC AC-31 B | 40 | 63 | 80 | 100 | 125 |
| 415 VAC AC-32 B | 40 | 63 | 80 | 80 | 80 |
| Rated operational currents $\mathrm{I}_{\mathrm{e}}(\mathrm{A})$ according to IEC 60947-3 |  |  |  |  |  |
| Rated voltage ${ }^{\text {a }}$ ( Utilisation category | A/B | A/B | A/B | A/B | A/B |
| 415 VAC AC-20 A / AC-20 B | 40/40 | 63/63 | 80/80 | 100/100 | 125/125 |
| 415 VAC AC-21 A / AC-21 B | 40/40 | 63/63 | 80/80 | 100/100 | 100/125 |
| 415 VAC AC-22 A / AC-22 B | 40/40 | 63/63 | 80/80 | 100/100 | 100/100 |
| 415 VAC AC-23 A / AC-23 B | -/40 | -/63 | -/63 | -/63 | -/63 |
| Fuse protected short-circuit withstand (kA rms prospective) |  |  |  |  |  |
| Prospective short-circuit current (kA rms) | 50 | 50 | 50 | 25 | 15 |
| Associated fuse rating (A) | 40 | 63 | 80 | 100 | 125 |
| Short-circuit capacity as per IEC 60947-6-1 |  |  |  |  |  |
| Rated short-time withstand current 0.03 s . (kA) | 5 | 5 | 5 | 5 | - |
| Rated short-circuit making capacity $\mathrm{I}_{\mathrm{cm}}$ (kA peak) | 7.65 | 7.65 | 7.65 | 7.65 | - |
| Short-circuit capacity as per IEC 60947-3 (without protection) |  |  |  |  |  |
| Rated short-time withstand current $1 \mathrm{~s} . \mathrm{I}_{\mathrm{cw}}(\mathrm{kA} \mathrm{rms})$ | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| Rated short-time withstand current $0.3 \mathrm{~s} \mathrm{I}_{\mathrm{cw}}(\mathrm{kA} \mathrm{rms})^{(1)}$ | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Rated peak withstand current (kA peak) | 12 | 12 | 12 | 12 | 12 |
| Connection |  |  |  |  |  |
| Maximum Cu cable cross-section ( $\mathrm{mm}^{2}$ ) | 50 | 50 | 50 | 50 | 50 |
| Tightening torque mini / maxi (Nm) | 1.2/3 | 1.2/3 | 1.2/3 | 1.2/3 | 1.2/3 |
| Switching time (Standard setting) |  |  |  |  |  |
| 1-0 or II-0 (ms) | 500 | 500 | 500 | 500 | 500 |
| I - II or II - I (ms) | 1000 | 1000 | 1000 | 1000 | 1000 |
| Duration of "electrical blackout" I-II(ms) minimum | 500 | 500 | 500 | 500 | 500 |
| Power supply |  |  |  |  |  |
| Power supply 12 VDC min / max (VDC) | 9/15 | 9/15 | 9/15 | 9/15 | 9/15 |
| Power supply 230 VAC min / max (VAC) | 160/310 | 160/310 | 160/310 | 160/310 | 160/310 |
| Control supply power demand |  |  |  |  |  |
| Power supply 12 VDC inrush / nominal (VA) | 200/40 | 200/40 | 200/40 | 200/40 | 200/40 |
| Power supply 230 VAC inrush / nominal (VA) | 200/40 | 200/40 | 200/40 | 200/40 | 200/40 |
| Mechanical characteristics |  |  |  |  |  |
| Durability (number of operating cycles) | 25000 | 25000 | 25000 | 25000 | 25000 |
| Weight ATyS S and ATyS d S 4 P (kg) | 3 | 3 | 3 | 3 | 3 |

(1) Value for coordination with any circuit breaker that ensures tripping in less than 0.3 s . For coordination with specific circuit-breaker references, higher short-circuit current values are available. Please consult us.

## ATyS S - ATyS d S

Remotely operated transfer switching equipment
from 40 to 125 A

Terminals and connections
ATyS S DC version


1 preferred source
2 altemate source
1: position 0 control
2: position I control
3: position |l control
4: auxiliary contact, closed when the switch is in position 0
5: auxiliary contact, closed when the switch is in position II 6: auxiliary contact, closed when the switch is in position I 7 : power supply : 12 VDC ( $9-15 \mathrm{VDC}$ ).

ATyS S: 230 VAC


1 preferred source
2 alternate source
1: position 0 control
2: position I control
3: position II control
4: auxiliary contact, closed when the switch is in position 0
5: auxiliary contact, closed when the switch is in position II
6: auxiliary contact, closed when the switch is in position I
7: power supply: 230 VAC (160-310 VAC)

ATyS d S: $2 \times 230$ VAC


1 preferred source
2 alternate source
1 : position 0 control
2: position I control
3: position II control
4: auxiliary contact, closed when the switch is in position 0
5: auxiliary contact, closed when the switch is in position II
6: auxiliary contact, closed when the switch is in position I
7: power supply I: 230 VAC (160-310 VAC)
8 : power supply II: 230 VAC (160-310 VAC)

[^0]Dimensions



Cut out dimension


Connection terminal



[^0]:    Includes a built-in dual power supply.

