

## CHANGEOVER <br> SWITCHES 35A-3200A

## THE RELIABLE AND

 MODULARSOLUTION FOR
YOUR
TRANSFERS

INS-IN-DO-EN-61


ESDMO
Energy Solutions Provider

## SDMO CHANGEOVER SWITCHES <br> ARE PERFECTLY SUITED TO ALL POWER FAILURE SITUATIONS

Thanks to its expertise and knowledge in the energy business, SDMO offers a wide range of automatic changeover switches. SDMO Industries is able to meet all your requirements and adapt to each of your needs. The SDMO offer comprises 3 product ranges.

## VERSO 100 S

This automatic changeover switch, which is reliable and simple to use, is equipped with the main functions of this type of equipment. The adjustments are made via potentiometers and commutators. The range extends from 35 to 160A in an IP31 plastic control unit.


## VERSO 100 D

The 100 D version is a more advanced automatic changeover switch which enables additional adjustments to be made via a MMI (Man-Machine Interface).
The ratings proposed range from 35 to 160A in an IP54 metal control unit.

VERSO 200
The Verso 200 is an automatic changeover switch intended for larger installations. This version is available from 200 to 630A in an IP20 metal control unit (IP55 on request) and from 800 to 3200A in an IP55 control unit.

(IP20 control unit)

## ADVANTAGES OF THE PRODUCT


(IP54 control unit)


- A complete product, supplied in the form of a fully assembled solution and tested according to standard IEC* 60947-6-1
- Double integrated power supply (autonomous)
- Padlocking can be configured in 3 positions (I, O, II)
- Robust switch-disconnector
- Clear mechanical indicator of the changeover switch position (I-O-II)
- Intrinsic mechanical locking
- Automatic genset start-up
- High dynamic resistance for even greater safety, in the case of a short circuit closure
- Presence of a manual control for all emergency interventions
- Simple and clear readout of the status of the installation

A protected power supply is available on the 3 equipment models, in order to supply the charger and preheat the water of the genset.

TECHNICAL SPECIFICATIONS


| VERSO 200 |  |  |  |
| :---: | :---: | :---: | :---: |
| Ratings (A) | $200,250,400,630$ | 800, 1000, 1250, 1600 * | $2000,2500,3200$ |
| Type | Three phase |  |  |
| Frequency | 50-60HZ |  |  |
| Voltages | 208/220/230/240v \& 380/400/415/440 V |  |  |
| Configuration | Auto-configuration of voltage/frequency min/max and configurable thresholds |  |  |
| Display and setting | By LCD - Supplied with manually-operated key - Can be padlocked in manual mode. |  |  |
| Voltage drop tolerated | $30 \%$ of the nominal voltage @400V |  |  |
| Maximum voltage tolerated by the equipment | 332 V |  |  |
| Protects against a change in the phase rotation direction | - |  |  |
| Lightning arrester | 0 (IP55) |  |  |
| EJP function (for France only) | - (configurable) | - (configurable) | - (configurable) |
| Confirmation of mains return | - (configurable) |  |  |
| Protection index | IP20 (55 on request) | IP55 | IP55 |
| Inputs/outputs | 3 configurable dry contact inputs/2 configurable relay outputs |  |  |
| Dimensions ( $\mathrm{h} \times \mathrm{w} \times \mathrm{d}$ ) | $\begin{gathered} 800 \times 600 \times 485 \mathrm{~mm} \\ \text { IP55: } 1200 \times 600 \times 485 \mathrm{~mm} \end{gathered}$ | $\begin{gathered} 2000 \times 800 \times 695 \mathrm{~mm} \\ * 1600 \mathrm{~A}: 2000 \times 1000 \times 695 \mathrm{~mm} \end{gathered}$ | $2000 \times 1000 \times 895 \mathrm{~mm}$ |
| - Standard OOption | X Not available |  |  |

## PART NUMBERS FOR ORDERS

In order to make it easy to place orders, please find below all of the SDMO part numbers.
Please get in touch with your SDMO commercial contact and provide the desired parts list, below.
Your contact is also available for any advice or opinions regarding the choice of source changeover switch.

| Nominal voltage range | Verso | 00 S | Verso 100 D |  | Verso 200 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 208 to 440V |  | 208 to 480V |  | 208 to 440V |  |
|  | 3P | 4 P | 3P | 4 P | 3P | 4 P |
| Rating |  |  |  |  |  |  |
| 35A | INS35/3 | INS35/4 | INS35/3 + INS20 | INS35/4 + INS20 | X | X |
| 63A | INS63/3 | INS63/4 | INS63/3 + INS20 | INS63/4 + INS20 | X | X |
| 100A | INS103 | INS104 | INS103 + INS20 | INS104 + INS20 | X | X |
| 125A | INS123 | INS124 | INS123 + INS20 | INS124 + INS20 | X | X |
| 160A | INS163 | INS164 | INS163 + INS20 | INS164 + INS20 | X | X |
| 200A | X | X | X | X | INB203 | INB204 |
| 250A | X | X | X | X | INB253 | INB254 |
| 400A | X | X | X | X | INB403 | INB404 |
| 630A | X | X | X | X | INB633 | INB634 |
| 800A | X | X | X | X | INB803 | INB804 |
| 1000A | X | X | X | X | INB1003 | INB1004 |
| 1250A | X | X | X | X | INB1253 | INB1254 |
| 1600A | X | X | X | X | INB1603 | INB1604 |
| 2000A | X | X | X | X | INB2003 | INB2004 |
| 2500A | X | X | X | X | INB2503 | INB2504 |
| 3200A | X | X | X | X | INB3203 | INB3204 |

## VERSO 100 S

The Verso 100 S is the first changeover switch offered as part of our industrial range. It covers three-phase ratings from 35 to 160A. It is one of the most compact solutions on the market.


## ADVANTAGES OF THE PRODUCT

- Adjustments made using potentiometers
- Complies with standard IEC* 60947-6-1
- Secure maintenance (no contact with conducting parts)
- Handle for manual emergency operation supplied as standard
- EJP function (without management of EJP priority) - (for France only)
- Kit for earthing neutral
- Programmable timings
- Stable positions not affected by vibrations and impacts
- Monitoring by a microprocessor


## Adjustments made using potentiometers



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## VERSO 100 D

This product is a more advanced automatic changeover switch. It is available, as standard, with the IP54 protection rating. The Verso 100 D is available up to 160A.

## ADVANTAGES OF THE PRODUCT

- Adjustments (thresholds and timings) facilitated by a MMI
- Complies with standard IEC* 60947-6-1
- One of the most compact solutions on the market
- Secure maintenance (no contact with conducting parts)
- Handle for manual emergency operation (supplied as standard)
- Monitoring by a microprocessor
- Return to position 0 in the event of faults on the mains power side

- Lightning arrester
- Possibility of up to 480 V
- Complete EJP function (for France only)
- IP54 wall-mounted control unit with panel
- The cables can be installed through the top or bottom, which makes connection easy. The control unit is therefore suited to all situations.
- Programmable timings


## Auto/Manual/Test mode

status indicator

Clear mechanical indicator of the changeover switch position (I-0-II)


MMI (Man-Machine Interface)
Permanent display of the operating status of the changeover switch


## VERSO 200

The Verso 200, available from 200 to 3200A is autonomous and complete. This changeover switch is perfectly suited to low voltage industrial applications.

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## ADVANTAGES OF THE PRODUCT

Detachable mains measurement board: in the event of damage due to a mains overvoltage situation, only the mains measurement board needs to be replaced.

- Reduced wiring: the source changeover switch is connected as close as possible to the network protection with an emergency genset installed at a distance.
- By programming: the product is fully adaptable to the customer's network
- Electrical measurements of the mains power and genset: indicates the status of the installation, fault finding, settings ...
- Continuity of service: in the event of a motorisation fault, the supply to the installation is maintained.Protection: protection present for the genset auxiliaries.

Adaptability to unstable networks: this control unit is suited to all types of unstable networks.

- Event history

Removable panel to allow cables to be routed through the top Adaptability to all types of installation


Possibility of padlocking
Protect the various positions of the changeover switch using a padlock


## Verso 200 control automaton

Phase rotation direction protec-
tion indicator
Configurable: ABC, ACB or OFF

Generating set test function Test off load/Test during production

Navigation keypad
Display
Access to the
Settings menu

## ADVANTAGES OF OPTIONS

Simplified connection through the top
On the IP55 control unit, all connections are made through the bottom but with the possibility, on request, to add the "connection through the top" option.
This feature includes inversions:

- of the bus bars
- of the voltage references
- of the protection connections
- of the auxiliary connections

In addition, for the 800A to 3200A changeover switches, this option includes removal of the roof and supply of the cable gland panel.


- Lightning arrester (IP55 version)
- IT neutral system

For an installation with an IT neutral system, a charge will be incurred (see price list).
Base kit
The kit allows the source changeover switch to be raised. This option is only available with an IP55 configuration from 200 to 3200 A .


SALES OFFICES
FRANCE
WEST
SDMO BREST
TEL. 0298411348
FAX 0298411357
CENTRAL WEST
SDMO CHOLET
TEL. 0241759670
FAX 0241759671
PARIS/NORTH \& NORMANDY
SDMO ARRAS
TEL. 0321733826
FAX 0321731459
SDMO GENNEVILLIERS
TEL. 0141883800
FAX 0141883837
EAST
SDMO METZ
TEL. 0387378850
FAX 0387378859
SOUTH EAST
SDMO AIX-EN-PROVENCE
TEL. 0442525160
FAX 0442525161
SDMO VALENCE
TEL. 0475813100
FAX 0475813110
SOUTH WEST
SDMO TOULOUSE
TEL. 0561247575
FAX 0561247579

SUBSIDIARIES
GERMANY
SDMO GMBH
TEL. +49 (0) 633297150
FAX +49 (0)63 32971511
LATIN AMERICA
\& CARIBBEAN
SDMO GENERATING SETS
TEL. +1 (305) 8630012
FAX +1 (954) 4328330
BELGIUM
SDMO NV/SA
TEL. +32 36460415
FAX +32 36460625
BRAZIL
SDMO MAQUIGERAL
TEL. +55 (11)37 896000

SPAIN
SDMO INDUSTRIES IBERICA
TEL. +34 (9)35 863400
FAX +34 (9)35 863136
UK
SDMO ENERGY LTD
TEL. +44 (0)16 06838120
FAX +44 (0)16 06837863

OFFICES
SOUTH AFRICA
SDMO SOUTH AFRICA
TEL. +27 (0)8 32335561
FAX +33 (0)1 72276151
ALGERIA
SDMO ALGIERS
TEL. +213 (0) 21681212
FAX +213 (0) 21681414

DUBAI
SDMO MIDDLE EAST
TEL. +97144587020
FAX +9714458 6985

EGYPT
SDMO CAIRO
TEL./ FAX+ 20222671278
KENYA
SDMO NAIROBI
TEL. : +25 4707605400
RUSSIA
SDMO MOSCOW
TEL./ FAX +7 4956651698
TOGO
SDMO WEST AFRICA
TEL. + 22822226565
TURKEY
SDMO ISTANBUL
TEL. +90 5307350910

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[^0]:    *IEC: the "International Electrotechnical Commission" or the "Commission électrotechnique internationale" (CEI) in French, is the international standardisation organisation responsible for the fields of electricity, electronics, electromagnetic compatibility, nanotechnology and related techniques. It complements the
    International Organisation for Standardisation (ISO), which is responsible for other fields.

