



## CHANGEOVER SWITCHES **35A-3200A**

THE RELIABLE AND  
MODULAR  
SOLUTION FOR  
YOUR  
TRANSFERS



INS-IN-DO-EN-61



***Energy Solutions Provider***

# SDMO CHANGEOVER SWITCHES

## 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.



(IP31 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.



(IP54 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)



(IP55 cabinet)

## > ADVANTAGES OF THE PRODUCT

(IDENTICAL FOR ALL 3 SOURCE CHANGEOVER SWITCHES)

- 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 100	VERSO 100 S					VERSO 100 D				
Ratings (A)	35	63	100	125	160	35	63	100	125	160
Type	Three phase					Three phase				
Frequency	50-60 Hz					50-60 Hz				
Voltage range	208/220/230/240v & 380/400/415/440 V					208/220/230/240v & 380/400/415/480 V				
Display and setting	Potentiometer					Via LCD display				
Voltage drop tolerated	20% of the nominal voltage @400V					30% of the nominal voltage @400V				
Maximum voltage tolerated by the equipment	288 V					305 V				
Protects against a change in the phase rotation direction	•					•				
Protection in "0" position	X					Immediate return to position 0 in the event of a fault				
Lightning arrester	X					O				
Confirmation of mains return	•					•				
EJP (for France only)	•					•				
Protection index	IP31					IP54				
Dimensions (h x w x d)	385 x 385 x 193 mm					600 x 400 x 200 mm				

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					O (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 (h x w x d)	800 x 600 x 485 mm IP55: 1200 x 600 x 485 mm		2000 x 800 x 695 mm *1600A: 2000 x 1000 x 695 mm				2000 x 1000 x 895 mm	

• Standard

O Option

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 100 S		Verso 100 D		Verso 200	
	208 to 440V		208 to 480V		208 to 440V	
Number of poles	3P	4P	3P	4P	3P	4P
Rating						
35A	INS35/3	INS35/4	INS35/3D	INS35/4D	X	X
63A	INS63/3	INS63/4	INS63/3D	INS63/4D	X	X
100A	INS103	INS104	INS103D	INS104D	X	X
125A	INS123	INS124	INS123D	INS124D	X	X
160A	INS163	INS164	INS163D	INS164D	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.

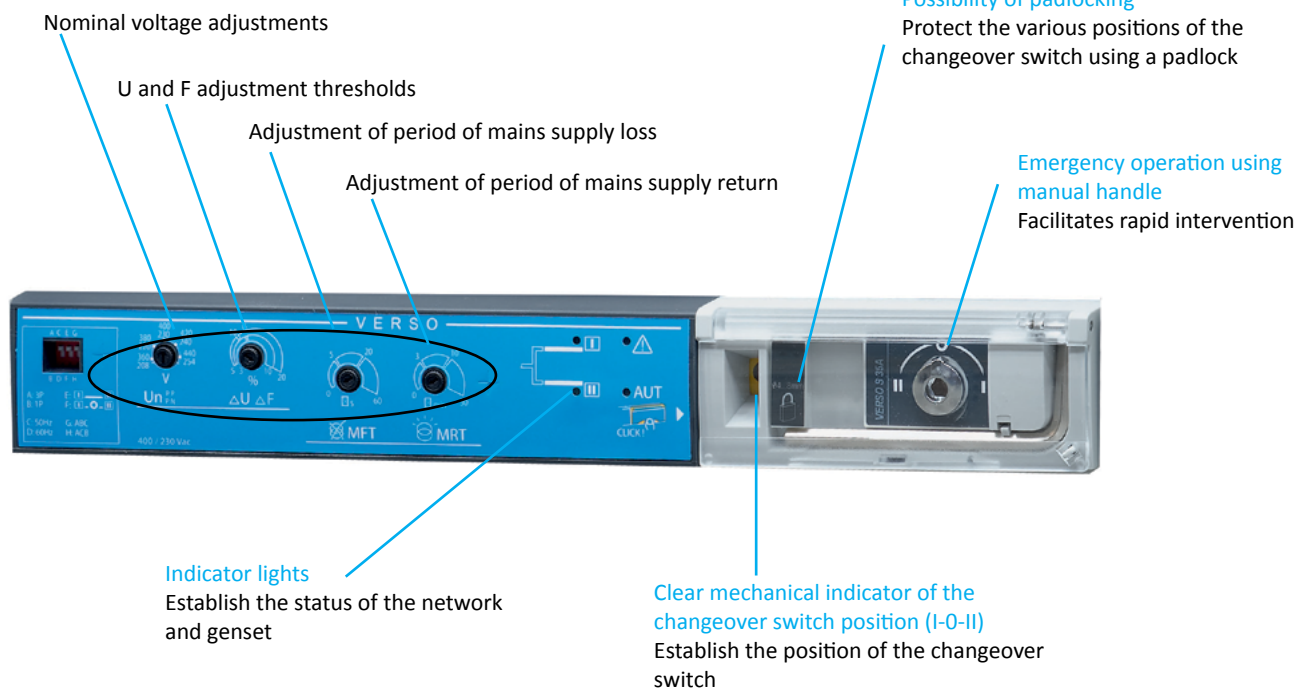


(IP31 control unit)

## > 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



\*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.

## 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.

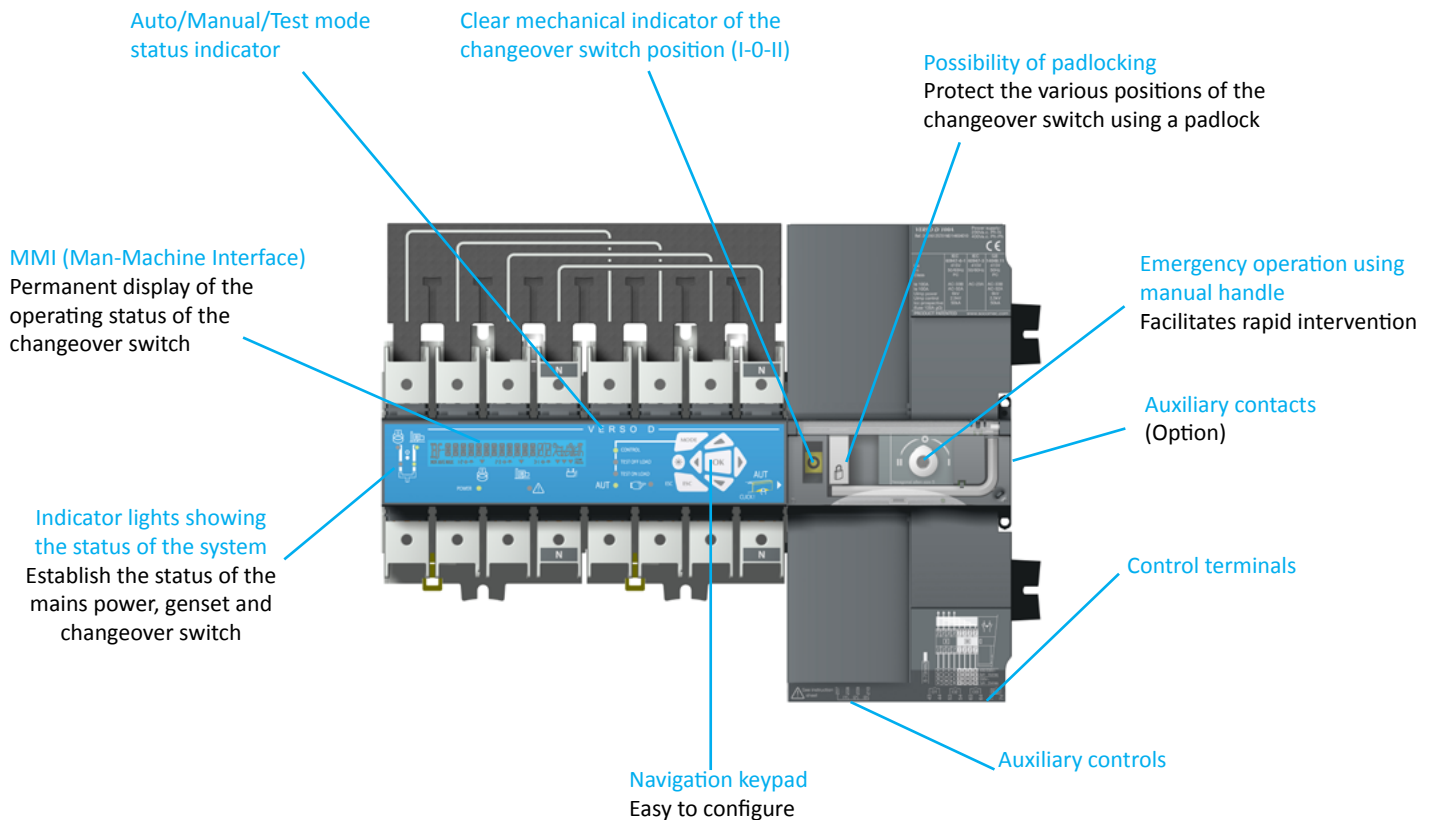
### > ADVANTAGES OF THE **PRODUCT**

- 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

Removable panel

(IP54 control unit)

- Lightning arrester
- Possibility of up to 480V
- 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



## 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.



*Verso 200 with IP20 control unit*

### > ADVANTAGES OF THE **PRODUCT**

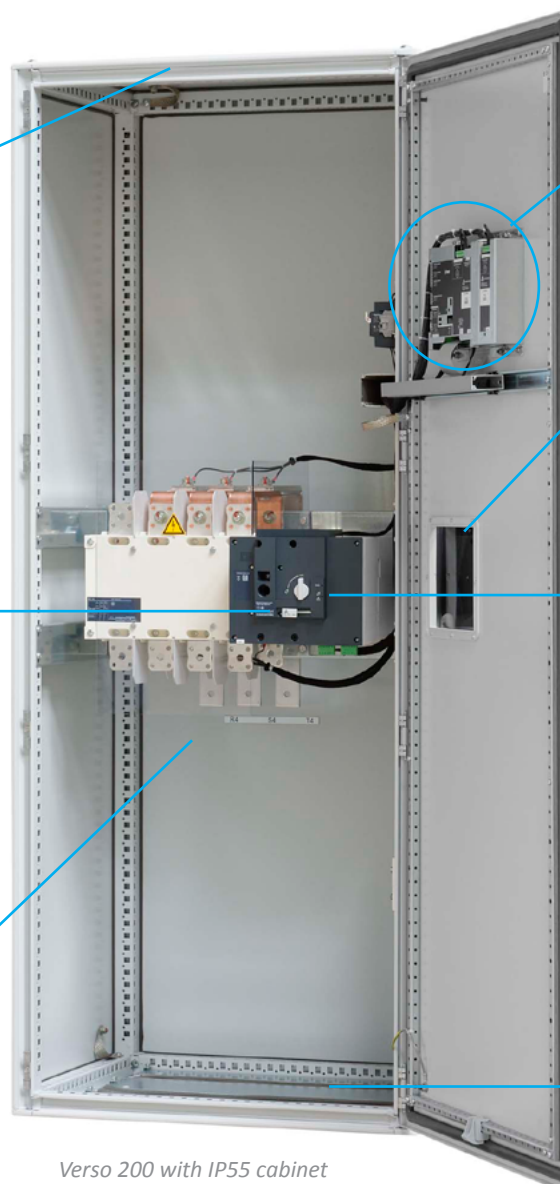
- **Detachable mains measurement board:** in the event of damage due to a mains overvoltage situation, only the mains measurement board needs to be replaced.
- **Reduced wiring:** the source changeover switch is connected as close as possible to the network protection with an emergency genset installed 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

Considerable space available to connect cables  
Ease of installation



Position of the PLC

Vision panel easy access

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



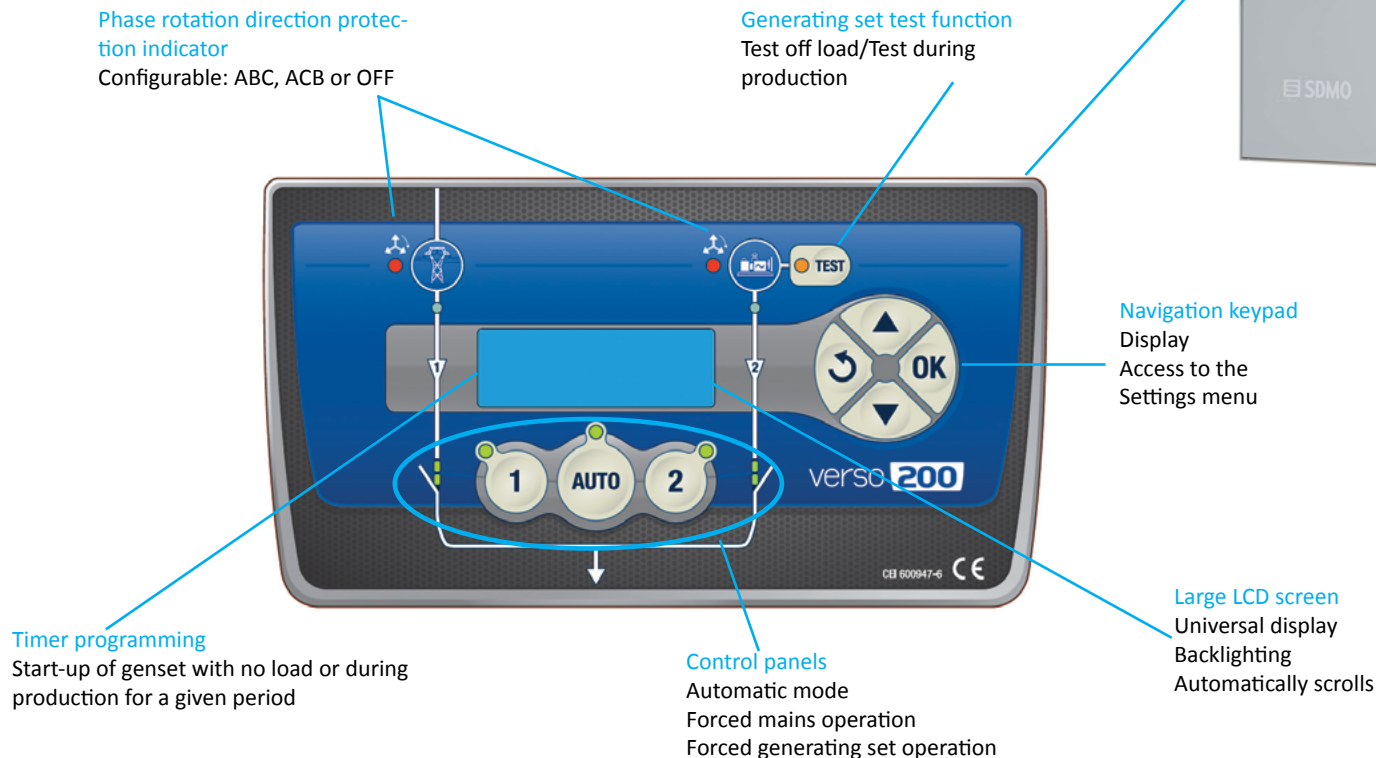
Possibility of manual switching by the user

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

*Verso 200 with IP55 cabinet*



## Verso 200 control automaton



## > ADVANTAGES OF OPTIONS

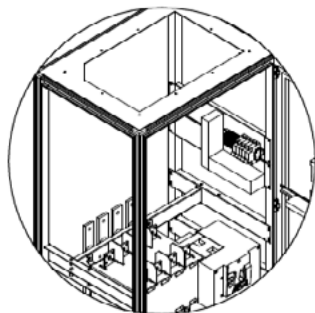
### ● Simplified connection through the top

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

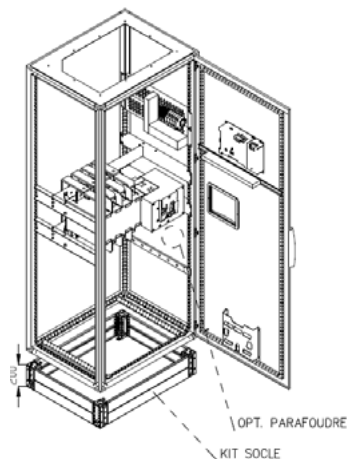
(IP55 version)

### ● 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

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