

# Master Switch STS *Single-phase*

**1:1** 32-63-120 A



DATACENTRE



E-MEDICAL



INDUSTRY



TRANSPORT



Plug & Play  
installation

## HIGHLIGHTS

- **Operating flexibility**
- **Load protection**
- **Complete diagnostics**
- **Hot Swap function**

Master Switch Single-phase (MMS) is part of the Master Switch range and offers solutions suitable for protecting single-phase loads with different power ratings. MMS is available in three sizes - 32, 63 and 120 A - and is therefore able to satisfy various requirements for the protection of single-phase loads.

### Flexibility of use

All MMS versions are designed with criteria that facilitate on-site installation as well as diagnostics, control and maintenance operations. All models are equipped with a manual bypass and the hot swap function allows for rapid corrective interventions by non-specialised personnel in the event of faults.

### Load protection

With MMS transfer switch loads are protected against critical environmental situations and mains power interference. Microprocessor control and the use of thyristor static switches ensure continuous monitoring of the power supply sources and reduced switching times between the two sources in the event of a fault.

The constant monitoring of the output current allows for the rapid identification of any short circuit currents in the consumers, preventing short circuits from propagating to other loads.

MMS is equipped with thermal-magnetic protection for the two sources, ensuring rapid intervention in the event of faults and integrated back feed protection.

MMS ensures switching times between the two power sources of less than a quarter of a cycle, both in the event of manual switching and in the event automatic switching triggered by a fault in the power source.

### Complete diagnostics

All MMS versions are equipped with 32-character LCD displays and control panels with multi-function keys. This allows for rapid and intuitive monitoring of supply readings, switch status and environmental conditions. MMS is equipped with three standard programmable dry contacts, an input for emergency shutdown, a 232 serial connection and a slot for housing the expansion board, thus ensuring complete availability of interface solutions for remote control and monitoring.

MODELS	MMS 32	MMS 63	MMS 120
<b>NOMINAL CURRENT (A)</b>	<b>32</b>	<b>63</b>	<b>120</b>
<b>INPUT</b>			
Nominal voltage - sources S1/S2	220 - 230 - 240 Vac single-phase + N		
Input voltage tolerance	180-264 Vac (selectable)		
Switched input phases	ph+N (two poles)		
Nominal frequency	50/60 Hz		
Input frequency tolerance range	+/-10% (selectable)		
Distribution compatibility	IT, TT, TNS, TNC		
<b>OPERATING SPECIFICATIONS</b>			
Transfer type	"Break Before Make" (no overlapping sources)		
Intervention method in the event of failure	hot swap function		
Available transfer methods	Automatic / Manual / Remote		
Transfer time following source failure	< 4 msec (S1/S2 synchronised) 10 msec (S1/S2 non synchronised)		
<b>ENVIRONMENTAL SPECIFICATIONS</b>			
Efficiency at full load	> 99%		
Noise at 1 m from front (from 0 to full load)	< 40 dBA		
Storage temperature	-10 °C up to +50 °C		
Operating temperature	0 °C - 40 °C		
Relative humidity	90% non-condensing		
Max. installation height	1000 m at nominal power (-1% power for every 100 m above 1000 m) - Max 4000 m		
Reference standard	EN 62310-1 (safety) EN 62310-2 (electro-magnetic compatibility)		
<b>INFO FOR INSTALLATION</b>			
Weight (kg)	10	12	20
Dimensions (WxDxH) (mm)	19" x 520 x 2U		19" x 520 x 3U
Colour	RAL 7016		
IP rating	IP 20		

## OPTIONS

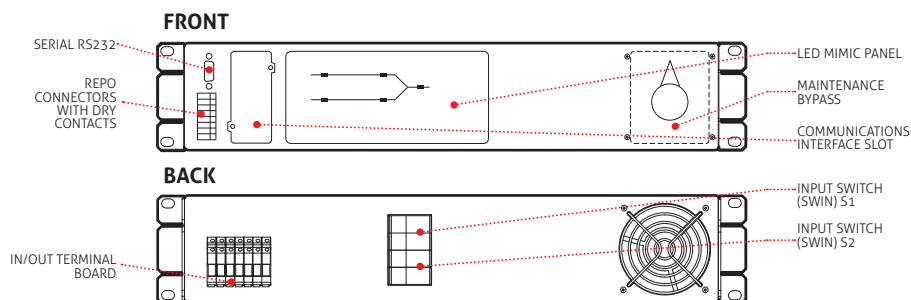
### SOFTWARE

PowerShield<sup>3</sup>  
PowerNetGuard

### ACCESSORIES

NETMAN 204  
MULTICOM 302  
MULTICOM 352

## DIAGRAM



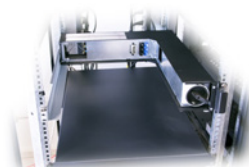
Hot swap replacement:



Carry out manual bypass operation on faulty unit selecting S1 or S2



Remove the screws placed on left/right side and extract the unit



Replace the faulty unit with a new one



Fix the parts, follows start up procedure and return back from manual bypass

All operations are carefully described on operating manual.



RPS SpA - Riello Power Solutions - Member of the Riello Elettronica Group  
Viale Europa, 7 - 37045 Legnago (Verona) - ITALY | www.riello-ups.com  
Tel: +39 0442 635811 - Fax: +39 0442 629098 | riello@riello-ups.com