# **Zriello** ups

## Master Switch STS Single-phase

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





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 singlephase 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 that 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 RS232 serial connection and a slot for housing the expansion board, thus ensuring complete availability of interface solutions for remote control and monitoring.

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MODELS	MMS 32	MMS 63	MMS 120
NOMINAL CURRENT (A)	32	63	120
INPUT			
Nominal voltage - sources S1/S2	220 - 230 - 240 Vac single-phase + N		
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		
OPERATING SPECIFICATIONS			
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)		
ENVIRONMENTAL SPECIFICATIONS			
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)		
INFO FOR INSTALLATION			
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		

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DIAGRAM	
FRONT SERIAL RS232 CONNECTORS WITH DRY CONTACTS	LED MIMIC PANEL LED DISPLAY MAINTENANCE BYPASS COMMUNICATIONS INTERFACE SLOT
IN/OUT TERMINAL	INPUT SWITCH (SWIN) S1 INPUT SWITCH (SWIN) S2

Hot swap replacement:



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

All operations are carefully described on operating manual.



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



Replace the faulty unit with a new one





RPS SpA - Riello Power Solutions - Member of the Riello Elettronica Group

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