

## Starkstrom External UPS Maintenance By-Pass Panel (Standard - Single UPS)

The Starkstrom External UPS Maintenance By-Pass Panel (Standard) is suitable for single UPS systems ranging from 6kVA 1:1 to 80kVA 3:3.

Products are also available for UPS ratings above 80kVA and for parallel system configurations.

It is a requirement of HTM06-1, that any UPS system feeding a Group 2 / Category 5 Clinical Area be installed with an External UPS Maintenance By-Pass Panel.

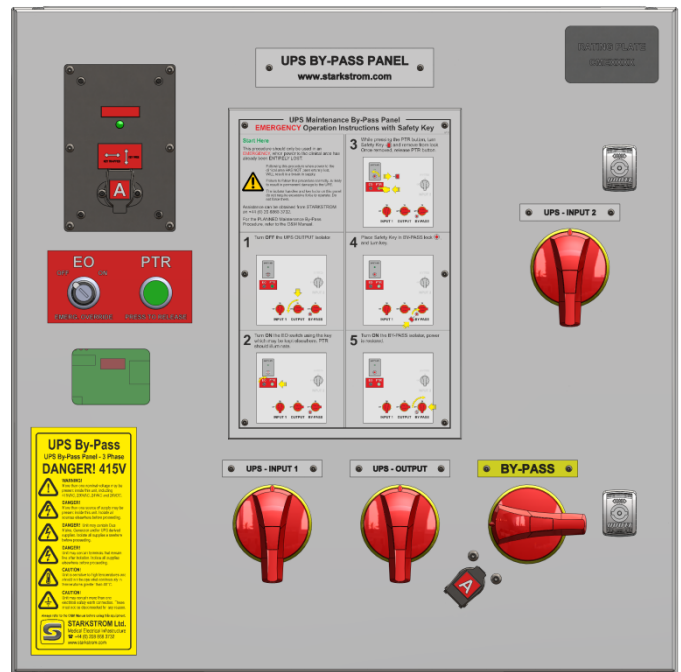
The By-Pass Panel allows a manual 'no break' transfer of power from the UPS, to normal mains power, whilst the UPS is isolated for routine maintenance, testing, repair or battery replacement. This ensures the clinical area can continue to function without interruption. It also allows power to be restored quickly, in the event of an emergency.

The By-Pass Panel can be fitted with an optional Safety Key Interlock. This increases operator, operational and system safety by helping to prevent unintentional 'back feed' switching. It also increases operator confidence during the by-pass procedure, and provides flexibility to an engineer during routine maintenance, testing, repair or battery replacement.

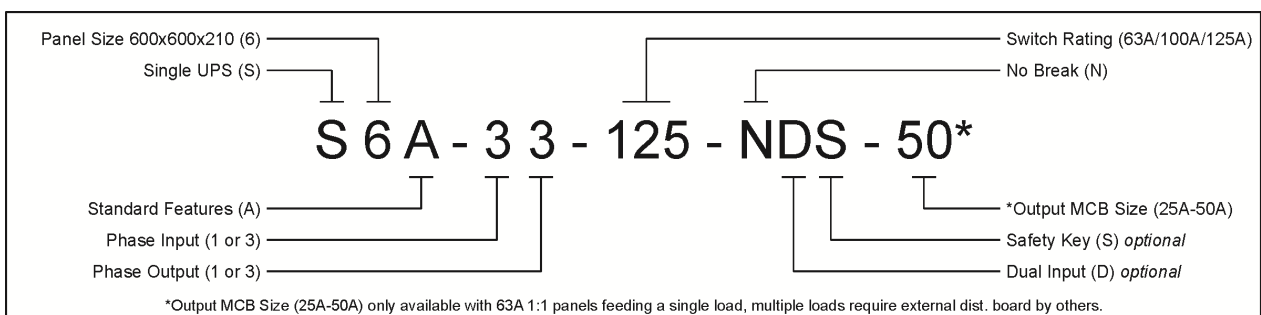
The By-Pass Panel contains Starkstrom's unique UPS Relay Interface Card (URIC), providing easily configurable and expandable UPS status signals to a BMS, Remote Alarm or Theatre Control Panel. A URIC viewing window allows the direct status of the incoming UPS status signal LED's to be viewed without the need to open the enclosure door.

Depending on UPS model, the By-Pass Panel can be fitted with the optional Dual Input Mains (rectifier and static by-pass), giving greater power supply resilience.

All Starkstrom By-Pass Panels are fully CE Marked and manufactured in the UK.



Model shown: S6A-33-125-NDS (with opt. Dual Input isolator)



FEATURE	S6A-11-63-N-50	S6A-31-100-N	S6A-33-63-N	S6A-33-100-N	S6A-33-125-N
UPS kVA Range	6-10kVA	20kVA	30-40kVA	60kVA	80kVA
Phase configuration in / out	1 : 1	3 : 1	3 : 3	3 : 3	3 : 3
Nominal voltage input	230VAC 50Hz	400VAC 50Hz			
Nominal voltage output	230VAC 50Hz		400VAC 50Hz		
Nominal control voltage	24VDC				
Standards	BS EN 61439-1, HD 60364-7-710, HTM-06, BS 7671:2008+A2:2013, BS EN 5372				

## Switching Devices

Nominal switch rating	63 Amp	100 Amp	63 Amp	100 Amp	125 Amp
Type of switching operation	3 Switch 'no break' (make before break)				
Duty Rating / kA Rating	AC-23A / 50kA				
Separated by-pass supply	Standard, configurable as required				
Padlockable switch handle	Yes, in OFF position (padlocks not included)				
Defeatable switch handle	Yes (for supervised and approved / emergency use only)				
Output device	25kA MCB 'D' 50A*	Terminals, for external dist. board (dist. board not included)			

## Enclosure

Enclosure size	600mm (h) x 600mm (w) x 210mm (d)				
Weight	46 Kg	48 Kg	50 Kg	52 Kg	53Kg
Mounting	Wall mounted (4x M6, Fix. Cen. 560mm (h) x 560mm (w))				
Cable entry	Top entry only (via. gland plate 500mm (w) x 95mm (d))				
Door configuration	Single (130 deg. opening angle) hinged on LHS				
Material	1.2mm thick, mild steel				
Finish	Powder coated RAL 7035 (Grey)				
IP Rating	IP44				

## Alarming

Inputs from UPS	Four Individual UPS Status Signals (mains fail, battery low, UPS running, by-pass)**
Remote alarm unit	1x Powered output for Starkstrom RA006
Volt free contacts	4x Four Individual UPS Status Signals (mains fail, battery low, UPS running, by-pass) 7x Common alarm for BMS and IPS Alarm Integration (N.O. closed when healthy, open on fault)**
Contact Rating	125V AC/DC (60W) 2.0A p.f.=1 (min. 10µA, 10mVDC)
Contact Operation	Fail Safe**

## Connections

Mains input cable max. CSA	2x 35mm <sup>2</sup>	4x 35mm <sup>2</sup>			
UPS input/output cable max. CSA	(in) 2x 35mm <sup>2</sup> / (out) 2x 35mm <sup>2</sup>	(in) 4x 35mm <sup>2</sup> / (out) 2x 35mm <sup>2</sup>	(in) 4x 35mm <sup>2</sup> / (out) 4x 35mm <sup>2</sup>		
Load cable max. CSA	2x 35mm <sup>2</sup>		4x 35mm <sup>2</sup>		
Internal cabling max. CSA (for mains cables, excl. ELV DC)	16mm <sup>2</sup> power 1.5mm <sup>2</sup> control	25mm <sup>2</sup> power 1.5mm <sup>2</sup> control	16mm <sup>2</sup> power 1.5mm <sup>2</sup> control	25mm <sup>2</sup> power 1.5mm <sup>2</sup> control	
Earth connections	9x M8 bolted connection (8 available)				
Control cable max. CSA	2.5mm <sup>2</sup>				

## Environmental

Operating altitude	0 – 2000m
Operating relative humidity	5 – 95 % RH NC
Operating temperature	10 – 40 deg. C

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