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External UPS Maintenance By-Pass Panel – (Compact - Single UPS)

Product Description

The External UPS Maintenance By-Pass Panel (Compact) is suitable for single UPS systems ranging from 6kVA 1:1 to 10kVA 1:1.

Products are also available for UPS ratings above 10kVA and for parallel system configurations.

It is a requirement of HTM06-01, that any UPS system feeding a Group 2 Medical locations is to be installed with an External UPS Maintenance By-Pass Panel.

The By-Pass Panel uses a simple, single switch, changeover output configuration, making emergency operation intuitive and eliminating the possibility of unintentional 'back feed' switching.

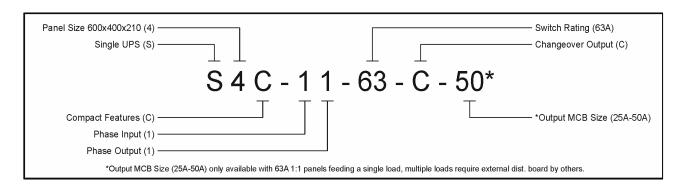
The By-Pass Panel is intended to supply a single output load*, most commonly an Isolated Power Supply (IPS) and comes supplied with a 50A 'D' Type MCB (25A, 32A, and 40A available on request).



The By-Pass Panel has the ability to accept a common alarm status signal from the UPS, and provides the following connections for remote alarming:

- Powered output for Starkstrom RA006, giving a visual Ready condition and a visual and audible Fault condition, with mute facility (RA006 to be ordered separately).
- Common alarm contact to BMS.
- Common alarm contact to a Theatre Control Panel.

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





Feature	S4C-11-63-C-50
UPS kVA Range	6-10kVA
Phase configuration in / out	1:1
Nominal voltage input	230VAC 50Hz
Nominal voltage output	230VAC 50Hz
Nominal control voltage	24VDC

Switching Devices

Nominal switch rating	63 Amp
Type of switching eneration	1 x Changeover Output Switch (break before making) Normal - Off - By-Pass
Type of switching operation	Internally mounted isolator for UPS input isolation
Duty Rating / kA Rating	AC-23A / 50kA
Separated by-pass supply	No
Lockable 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' Type 50A (25A, 32A and 40A available on request) *

Enclosure

Enclosure size	600mm (h) x 400mm (w) x 210mm (d)		
Weight	48 Kg		
Mounting	Wall mounted (4x M6, Fix. Cen. 560mm (h) x 360mm (w))		
Cable entry	Top entry only (via. gland plate 310mm (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	IP66		

Alarming

Inputs from UPS	1x Common Alarm (N.O. closed when healthy, open on fault) **	
Remote alarm unit	1x Powered output for Starkstrom RA006	
Volt free contacts	2x Common alarm for BMS and IPS Alarm Integration	
Contact Rating	(N.O. closed when healthy, open on fault) **	
Contact Operation	125V AC/DC (60W) 2.0A p.f.=1 (min. 10μA, 10mVDC)	

Connections

Mains input cable max. CSA	2x 35mm2
UPS input/output	(input) 2x 16mm2 / (output) 2x 16mm
cable max. CSA	Via. MCB 2x 35mm2 / Via. Terminals 2x 35mm2 (Optional)
Load cable max. CSA	10mm2 power / 0.5mm2 control
Internal cabling max. CSA	6x M8 bolted connection (5 available)
Earth connections	2.5mm2

Environment

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



Product legislation and standards of conformity

EU Ref	EU Title	UK Ref	UK Title
2014/ 35/EU	Low Voltage Directive	2016/1101	Electrical Equipment (Safety) Regulations 2016
2014/ 30/EU*	Electromagnetic Compatibility Directive	2016/ 1091	Electromagnetic Compatibility Regulations 2016
2011/ 65/EU	Restriction of Hazardous Substances (RoHS) Directive	2012/3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Reference	Title	Edition
EN 60947-1	Low-voltage switchgear and control gear - General rules	2007+A2:2014
BS EN 60947-6-1	Low-voltage switchgear and control gear - Multiple function equipment. Transfer switching equipment	2005+A1:2014
EN 61000-6-1*	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments	2019
EN 61000-6-3*	Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments	2021
EN IEC 63000	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances	2018
HTM 06-01	Health Technical Memorandum 06-01	2017

^{*} EMCD only applies to active devices like contactors, not to manual switching.

