



DA774 Access control power centres

Installation

Installation of this product must be carried out by a competent technician and in accordance with current regulations. Before undertaking ANY work, ensure the electricity supply is disconnected from any relevant wiring and/or supply.

Prepare unit for installation

- 1. Choose a suitable location for mounting, taking into consideration necessary interconnections.
- 2. Remove the unit from the packaging.

Wall mounting models

- 1. Using the keys taped to the back of the unit, unlock the door and open to a 90° angle.
- 2. Locate door earth wire and pull the spade connector from the door to release the cable.
- 3. Lift the door to unhook door hinges from the main unit and place in a safe location.
- 4. Remove the included installation 'spares kit' taped to the inside of the unit.
- 5. Remove any required 'knock-outs'

Caution!

*This product may retain current or residual charge whilst isolated from the mains voltage supply

*Self-resetting fusses may become hot during fault conditions

Outputs

There are 10 load outputs available for use. All load outputs use automatic self-resetting fuses rated for continuous use and will allow a momentary inrush. Two of the outputs are designed to carry a higher load than the other eight. Please refer to product data sheet for more information.



Fire panel status **normal**

Fire panel status ALARM!

All load outputs can be selected as either: **(1)** Continuously powered or **(2)** Fire alarm switched. Simply move the associated jumper link to either position 1 or 2 for each load output.

Status LEDs:

The PSU power LED is illuminated during normal operation. Individual output LEDs are illuminated in normal operation. Individual output LEDs that are not illuminated indicate that the corresponding output is overloaded (*fuse tripped*) or is disabled (*Fire jumper link removed*).

Fire switching

Installer selectable integrated relay switching of all lock power outputs is provided. It is possible to use a single fire panel contact to control all selected lock power outputs. This feature can be used where it is preferred to directly switch the lock power in the event of a fire alarm event. If used, other individual outputs can also remain permanently powered (eg. high security areas not subject to fire release, alternative load types).

Each load output has a corresponding mode selection jumper link. Output selection options are as follows:

- 1) Jumper in un-switched position The output is permanently powered.
- 2) Jumper in switched position The output is fire input controlled.
- 3) Jumper removed The output is disabled.

Operation

Wire from the Fire Control '+F' feed terminal, via a normally closed fire panel contact, to the Fire Control '+R' return terminal. When the fire panel contact is closed the selected outputs will be active; deactivating when the fire panel contact opens. *n.b. to test switching operation of switched lock outputs, apply wire link between '+F' and '+R' fire control terminals.*





It is possible to control multiple units (of any voltage type) from a single fire panel contact input, as follows:

1)On the first lock power supply, wire Fire Control '+F' via fire alarm volt free contact to Fire Control '+R'.

2)Connect Fire Control '0V' on PSU one to the same terminal Fire Control '0V' on PSU two.

3)Connect Fire Control '+R' on PSU one to the same terminal Fire Control '+R' on PSU two.

Continue, repeating steps 2 and 3 to control additional units. Please consider cable distance volt-drop when designing a system. The 'fire loop' will be of the same voltage as the first unit providing the '+F' feed.



EXAMPLE OF MULTIPLE LOCK PSUS CONTROLLED BY A SINGLE FIRE ALARM CONTACT

! Confirm correct operation of fire system lock control as part of system commissioning !



Battery Connection:

Connect VRLA standby battery (Yuasa NP range or equivalent) using the battery leads provided.

Ensure correct battery or configurations of batteries in series are suitable for the model being used e.g. 12V for 12V models and 24V for 24V models. It is not recommended to exceed 17Ah of total battery capacity.

Battery Protection:

Following extended mains failures where battery capacity is exhausted, the battery is electrically disconnected to prevent deep discharge damage. It is re-connected and re-charged when mains power is restored. This is an automatic process which does not require engineer action.

Monitoring:

The PSU provides "OUTPUT FAIL" and "BATTERY LOW" status monitoring SPCO 30V 1A contacts which can be connected for system monitoring. There is a delay of approximate-ly 60 seconds on power failure to reduce false trigger alarms.



Model: 12V 8A DC



Outputs	
Voltage	12V DC (13.7V)
Current	8A Maximum total load
Outputs	8x 1A (2A Trip) + 2x 3A (6A Trip)
Connection type	PCB terminal block (2.5mm ²)
Fused	Self-resetting fusses
Output status indication	Green LED indication
Fire control	
Fire enable control	+12V DC Feed (+F) to Return terminals (+R) with 0V common for additional units
Fire enabled output(s) configuration	Individual PCB Jumper per output to set powered or non-powered during fire condition
Integrated UPS VRLA Battery	
VRLA Battery protection	20x5mm 10A Quick blow glass fuse and automatic deep discharge protection
Connection type	PCB terminal block (2.5mm ²)
In-built back-EMF Spike protection	Yes
VRLA Battery included	No
VRLA Battery support	1x 13.7V DC for 12V VRLA battery
Mains fail signalling contacts	
Contact configuration	Single pole change over (Approx. 30 < 60 second delay)
Voltage	Maximum 30V DC
Current	Maximum 1A
Connection type	PCB terminal block (2.5mm ²)
Battery low volts signalling contacts	
Contact configuration	Single pole change over (Battery at 10.5V change over)
Voltage	Maximum 30V DC
Current	Maximum 1A
Connection type	PCB terminal block (2.5mm ²)
Input	
Voltage	110V - 240V AC @ 50Hz
Power consumption	< 250VA (Approximate under full load)
Connection type	10mm ² internal terminal block (3x 1.5mm ² or 2x 2.5mm ²)
Fused	3A Mains fuse (BS1362)
Mains on indication	Green LED indication
Environmental	
Operating temperature	-10°C to +40°C
Storage temperature	-20°C to +50°C
Operating relative humidity	Maximum 95% non-condensing
Note: Only a maximum of 8A (12V DC) in total can be drawn from this unit in any combination of outputs.	

Model: 24V 4A DC



Outputs	
Voltage	24V DC (27.0V)
Current	4A Maximum total load
Outputs	8x 500mA (1A Trip) + 2x 1.5A (3A Trip)
Connection type	PCB terminal block (2.5mm ²)
Fused	Self-resetting fusses
Output status indication	Green LED indication
Fire control	
Fire enable control	+24V DC Feed (+F) to Return terminals (+R) with 0V common for additional units
Fire enabled output(s) configuration	Individual PCB Jumper per output to set powered or non-powered during fire condition
Integrated UPS VRLA Battery	
VRLA Battery protection	20x5mm 10A Quick blow glass fuse and automatic deep discharge protection
Connection type	PCB terminal block (2.5mm ²)
In-built back-EMF Spike protection	Yes
VRLA Battery included	No
VRLA Battery support	1x 27V DC for 24V (or 2x 12V in series) VRLA battery
Mains fail signalling contacts	
Contact configuration	Single pole change over (Approx. 30 < 60 second delay)
Voltage	Maximum 30V DC
Current	Maximum 1A
Connection type	PCB terminal block (2.5mm ²)
Battery low volts signalling contacts	
Contact configuration	Single pole change over (Battery at 10.5V change over)
Voltage	Maximum 30V DC
Current	Maximum 1A
Connection type	PCB terminal block (2.5mm ²)
Input	
Voltage	110V - 240V AC @ 50Hz
Power consumption	< 250VA (Approximate under full load)
Connection type	10mm ² internal terminal block (3x 1.5mm ² or 2x 2.5mm ²)
Fused	3A Mains fuse (BS1362)
Mains on indication	Green LED indication
Environmental	
Operating temperature	-10°C to +40°C
Storage temperature	-20°C to +50°C
Operating relative humidity	Maximum 95% non-condensing
Note: Only a maximum of 4A (24V DC) in total can be drawn from this unit in any combination of outputs.	



At the end of the electrical product's useful life, it should be disposed of responsibly. Please recycle where facilities exist. Check with your Local Authority for recycling advice in your area. This product conforms to the essential requirements of all relevant EU Directives, such as the Electromagnetic Compatibility Directive (EMC) and the Low Voltage Directive (LVD), where applicable, please contact us if you require further information.

The enclosed information is believed to be correct. Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E&OE. Registered Proprietor: Benham (General Engineers) Ltd (No. 1181752) Registered at 3 Galliford Road Industrial Estate, Heybridge, Maldon, Essex CM9 4XD, UK. Directors: R.A.Scott, K.E.Horwood, T.J.Scott, N.J.Scott. VAT Reg. GB 28276273 Tel:+44(0)1621 856 850 Fax:+44(0)1621 856 162 sales@dantech.uk.com

