DynaLock Corp.
705 Emmett Street
Bristol, CT 06010
Website: www.dynalock.com
Email: info@dynalock.com
Phone: (860) 582-4761

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5725

Power Supply / Charger for Access Control and Egress Doors.

This power supply should be installed in compliance with the National Electrical Code(NFPA 70) CSA C22.1, Canadian Electrical Code, Part 1, and all applicable Local Codes. Installation to be performed by suitably qualified technical personnel.

Description

The 5725 is a power supply / charger that supplies a total of 1.5 amps nominal continuous supply current at nominal 12/24VDC outputs. There are 2 outputs for Magnetic lock or door strike each with electronic over-current protection @ 1 Amp. It is installed in a large mild steel metal enclosure capable of accommodating two 7AH or 12AH lead-acid rechargeable Batteries. The unit can provide maximum 1.0A battery charging current. These are monitored Power Supplies for use in Access Control and Egress Doors. Listed under the UL294, CAN/ULC-60839-11-1 and CAN/ULC-S533.

General Specifications:

1. Input = 100-240VAC, 50-60Hz. 2.4A Max.
2. Output 1.5 Amps continuous supply current at Nominal 12/24 VDC controlled outputs and one auxiliary output.
3. 2 Magnetic Lock or 2 Strikes outputs each, with electronic over-current protection set at 1 Amp.
4. Built-in dedicated charger for sealed lead acid or gel cell type batteries.
5. Maximum battery charging current 1 Amps.
6. Yellow LED for Battery Fault indication including charger failure monitor.
7. Battery presence detection within 10 seconds.
8. Battery Charger Monitor.
9. Battery load test every 48hr.
10. Battery Reversal protection.
11. Low Battery indication at 11.40/22.80 Volts
12. Low Battery disconnect at 10.10/20.30 Volts.
13. Automatic switch over to stand-by battery upon AC Failure.
14. Common “Batt.Fault” CMOS relay for all battery and charger fault.
15. AC input indication by Green LED. (LED on when AC is present).
16. CMOS relay output for AC failure within 60 seconds.
17. LEDs display on enclosure door (LEDs, Green, Yellow).
19. Common “Out Fault” CMOS relay for DC failure on any of the 4 outputs.
20. Battery charging leads included.
21. Board Dimension: 195mm x 110mm
22. Enclosure Dimension: 323mm x 331 mm x 110mm.

Technical Specification:

Controlled Outputs(2)	Nominal 12 VDC or 24 VDC, Max. 500mA each Max.13.80 VDC or 27.60 VDC, Min. 11.40 VDC or 22.80 VDC
Auxiliary Output	Nominal 12 VDC or 24 VDC, Max. 500mA Max.13.80 VDC or 27.60 VDC, Min. 11.40 VDC or 22.80 VDC
Charging Current	Max. 1Amp
Reset & Fire Trigger Input	Max. Wire Resistance 100 ohm
Operating Temperature	0 deg.C to 49 deg.C

Performance Ratings

UL 294 Performance Levels:

Model	Product Type	Line Security	Destructive Attack	Endurance	Standby Power
5725	Power Supply	I	I	IV	III (when used with 7Ah battery IV (when used with 12Ah battery

CAN/ULC-60839-11-1 Performance:

Model	Product Type	Grade	Grade Achievement
5725	Power Supply	3 (when used with 7Ah battery) 4 (when used with 12Ah battery)	To achieve Grade 3 or 4 connects, the Trouble AC & Battery Relay Outputs to a Grade 3 or 4 Control Unit.

LED Indications

1. **Green LED - AC indicator**
    a. On when AC present.
    b. The normally closed (NC) AC Fault Cmos Relay activates(open) within 60 seconds after AC failure.
2. **Blue LED – DC Power indicator**
    a. Powered directly from the power supply DC output and indicates output is present. Blue LED will be OFF when no DC is present.
3. **Yellow LED – Battery Charger and Fault indicator**
    a. The Yellow LED indicates various Battery Fault Conditions and Indication. See the table Fault Condition.
4. **Red LED –Battery Test indicator.**
    a. The Red LED indicates a Battery test Failure or a Battery charger failure in conjunction with the Yellow LED to indicate other Fault Conditions. See the Fault Conditions and Indication Table for details.
5. **Red Led on individual output indicator**
    a. There are 2 Red LEDs indicating that the outputs are ON when lit.

Relay Outputs:

Output	Output Type	Description
AC FAIL RELAY	NORMALLY CLOSED OPEN = FAULT	TRIPS WITHIN 60 SEC. AFTER AC FAILS CMOS RELAY RATING: 30VDC 60mA 16 OHMS
BATTERY FAIL RELAY	NORMALLY CLOSED OPEN = FAULT	BATTERY PROBLEM CMOS RELAY RATING: 30VDC 60mA 16 OHMS
DC FAIL RELAY	NORMALLY CLOSED OPEN = FAULT	ONE OF THE 4 OUTPUTS SHORTED OR OVERLOADED CMOS RELAY RATING: 30VDC 60mA 16 OHMS
STATUS OUTPUT RELAY FACP or ACP	FORM C	TRIP WHEN FIRE ALARM IS GENERATED FROM FACP OR ACCESS CONTROL PANEL DRY CONTACT RELAY RATING: 28VDC 300mA, PF 1

Fault Condition & Indications:

FAULT	LED-G	LY	LG	RED LED 5	RED LED 1 - 2	BATT RELAY	AC RELAY	STATUS OUT RELAY	DC RELAY
BATTERY REVERSED OR NOT CONNECTED		ON				OPEN			
BATTERY LOW		ON				OPEN			
BATTERY DISCONNECTED		ON				OPEN			
BATTERY TEST FAIL		ON		5 RAPID FLASHES STOP 1 SECOND REPEAT UNTIL BATTERY IS REPLACED		OPEN			
BATTERY TEST OK		OFF		THREE FLASHES 1 SEC ON/OFF					
AC FAIL	OFF						OPEN WITHIN 60 SEC		
OUTPUT 1-4 FAIL					OFF				OPEN
Fire/ACP TRIGGER ACTIVATED			OFF					OPEN	
RESET/REX TRIGGERED WHEN FIRE/ACP TRIGGER IS NOT ACTIVATED			OFF					OPEN	
BATTERY CHARGER FAULT		ON		10 FLASHES 2 SEC STOP REPEAT UNTILL CHARGER OK		OPEN			

Operating Values

Parameter	Value	Description
Battery Disconnect voltage	10.10V 20.20V	When AC is off, the battery is disconnected when the battery voltage drops below this value. The battery is only reconnected when the AC is restored.
Minimum battery voltage to pass battery test	11.50V 23.0V	Red Led Flash 1 sec ON/OFF during 2 minutes testing. Battery Fail 5 rapid flashes and 1 sec pause. Replace Battery
Voltage low warning	11.40V 22.80V	If the output voltage drops below this value a voltage low warning is generated. See Fault Conditions and Indication

Fire Alarm/Access Control Interface

1) Normally Open (NO), Normally Closed input from the FACP or ACP are available to trigger the 5725 5725 operation. Connect the NO or NC from the FACP or ACP output to the FIRE/ACP TRIGGER terminals. Install the 2K2 Ohm end of line resistor (EOLR) provided at the FACP or ACP as shown on the diagram. Fig 1.

REX/Engineering Reset Input

This option is avaliable when the Jumper ***JL*** is removed(JL OFF). This will cause the 5725 to latch opon receiving alarm from the FACP or ACP with this option in place and when the FIRE/ACP TRIGGER resets, 5725 will only reset by activating the RESET/REX input.

JL ON will cause the unit to follow the FIRE/ACP TIGGER. Install the 2.2KOHM RESISTOR, Part #500347 provided at the Key Switch or Push Button to perform this operation.

Cascade Connection

Two(2) or more 5725 units can be connected together as follows: Connect the STATUS OUTPUT relay ***C*** and ***NC*** terminals from the 1st unit to the **RESET/REX input** of the 2nd unit (not polarity sensitive) and remove jumper **JR** of the 1st unit. Install 2.2KOHM RESISTOR, PART #500347 on 2nd unit FIRE/ACP TRIGGER. If a 3rd unit is used **JR** must be removed from the 2nd unit and so on for any additional unit. Also 2K2 EOLR must be installed on 3rd unit and so on. Note: Maximum 20 units allowed.

NOTE: *If Latch Mode is used, only **JL** jumper on the first unit must be removed. Engineering Reset will be performed from the 1st unit.*

Installation Instructions

This power supply should be installed in compliance with the National Electrical Code(NFPA 70), CSA C22.1, Canadian Electrical Code, Part 1 and all applicable Local Codes. Installation to be performed by suitably qualified technical personnel.

1 Mount the power supply in the desired location using the 4 mounting holes.
NOTE: For use in Indoor Protected Area with Controlled Environment only.
Do not Install Power Supply on Exterior Doors.

2 With the Mains power disconnected, connect the AC leads to the AC Input Terminal. Block, respecting the wiring phase and polarity :
Ground/Earth=Green/Yellow, **Neutral** = Blue (White), **Live** =Black (Brown). This equipment must be connected to the 120-240 Volt Mains via a readily dedicated accessible external disconnect device with maximum 15 Amp branch protection. Select the operating output DC voltage 12/24 with the jumper. Jumper ON=12VDC, Jumper OFF=24VDC.

3 ***Do not connect the battery at this time.***

4 Switch ON the AC. Green LED will come ON indicating AC is present and the AC Fault Relay will be energized “ON” (closed). When the AC is off the AC Fault Relay will drop open within 60 seconds (Factory set) activating the C-Mos output contact “AC Fail”. Connect this output to relevant monitoring devices.

5 Verify the DC output voltage is correct = 13.80VDC or 27.60VDC max. Blue DC LED will be ON to indicate DC output is OK.

6 Yellow LED will be on and the BAT FAULT C-Mos relay open indicating the Battery is not present.

7 Connect the Battery or Batteries respecting the polarity. Battery shall not be connected if AC is not present first.

8 If the battery is connected with the correct polarities the Yellow LED will turn OFF (See Table Fault). Within one minute the Battery Fault Relay will restore (Normally close). Connect this output to relevant monitoring devices.

9 If the battery is connected reverse polarity, the Yellow LED will be ON. (See the Table Fault). The CMOS relay will open indicating Battery Fault.

10 Connect the devices to be powered to the output terminals +DC LOCK or +DC STRIKE and NEGATIVE(2 outputs). Connect device to auxiliary output terminal block -DC+. 11

If Tamper Switch is required use part # TS1 or TS2, see Fig 3.

12 Use EOLR (end of line resistor) Part #500347

13 Connect the fault relays to FACP or ACP for trouble indication.

14 Secure the enclosure with the Key Lock if provided.

5725

ACCESS CONTROL POWER SUPPLY CHARGER
UL,ULC LISTED AS FOLLOWS:
UL294,CAN /ULC-60839-11-1, CAN/ULC-S533

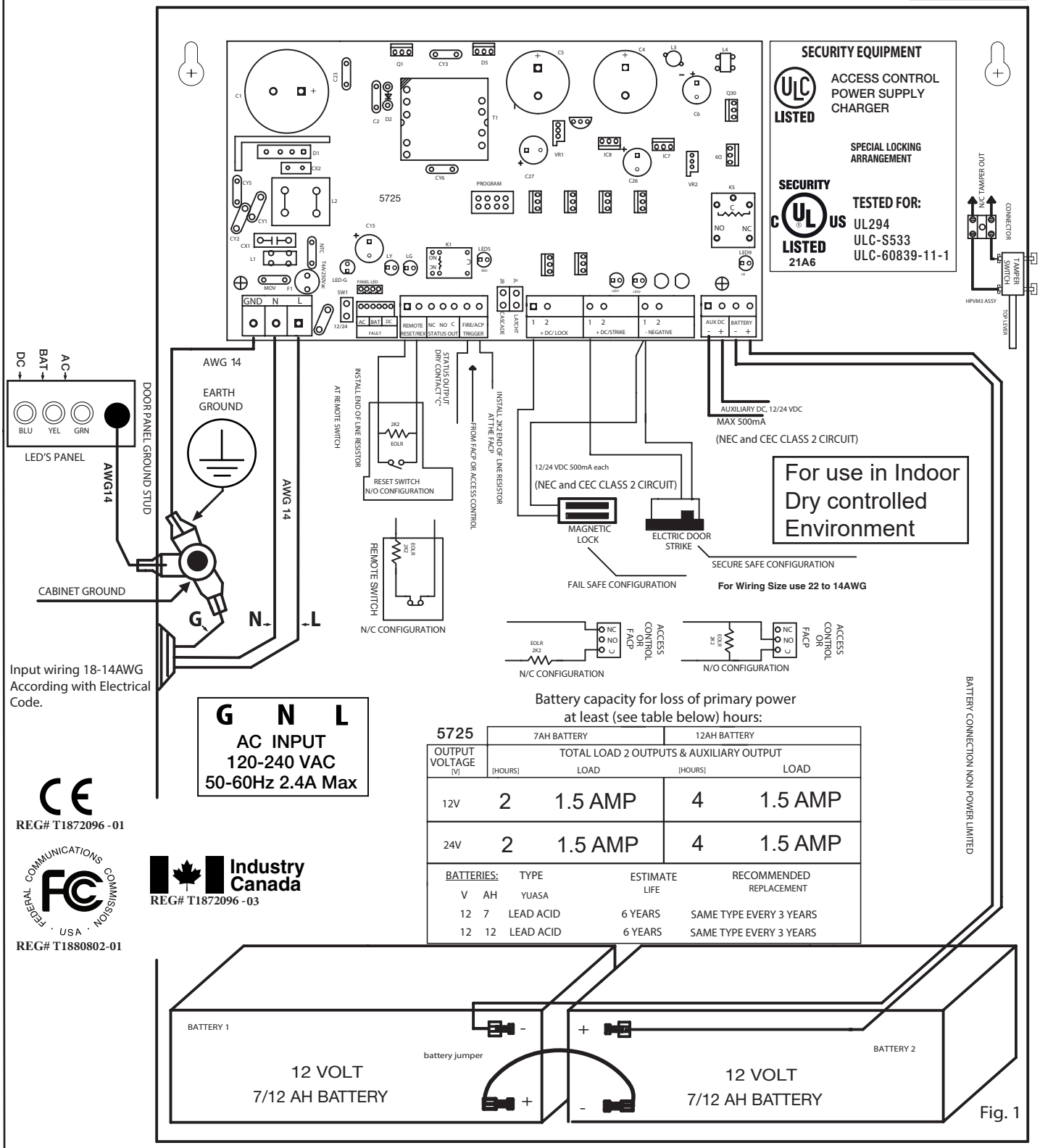
Rated according to CAN/ULC-60839-11-1
Grade 3 (with 7Ah Battery)
Grade 4 (with 12Ah Battery)

NOTE: PLEASE REFER TO 5725 INSTALLATION MANUAL

PART NO: M5725 REV:01

DynaLock™ For Life™

Date of MFG



Battery capacity for loss of primary power at least (see table below) hours:

5725	7AH BATTERY		12AH BATTERY	
OUTPUT VOLTAGE [V]	TOTAL LOAD 2 OUTPUTS & AUXILIARY OUTPUT			
	[HOURS]	LOAD	[HOURS]	LOAD
12V	2	1.5 AMP	4	1.5 AMP
24V	2	1.5 AMP	4	1.5 AMP

BATTERIES: V	AH	TYPE YUASA	ESTIMATE LIFE	RECOMMENDED REPLACEMENT
12	7	LEAD ACID	6 YEARS	SAME TYPE EVERY 3 YEARS
12	12	LEAD ACID	6 YEARS	SAME TYPE EVERY 3 YEARS

REG# T1872096 - 01

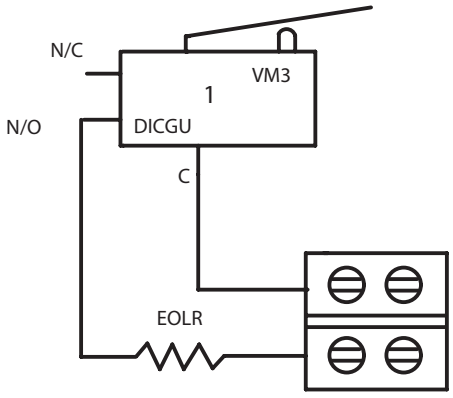
REG# T1872096 - 03

REG# T1880802-01

Fig. 1

KEEP POWER LIMITED WIRING FROM NON POWER LIMITED WIRING AT LEAST 0.25" INCH APART

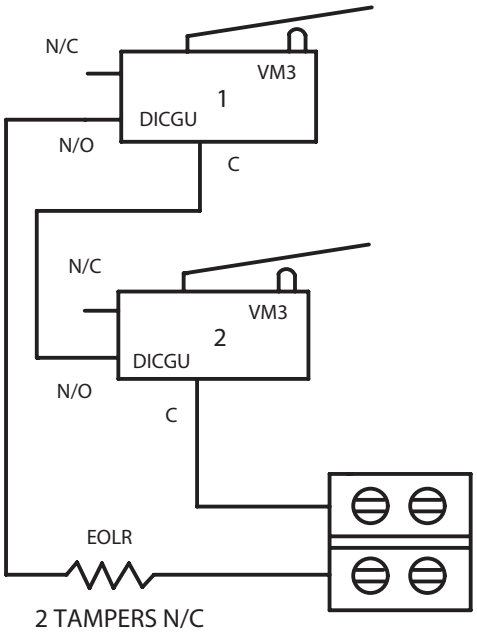
Optional Tamper Switch Connection



1 TAMPER N/C

(TS1)

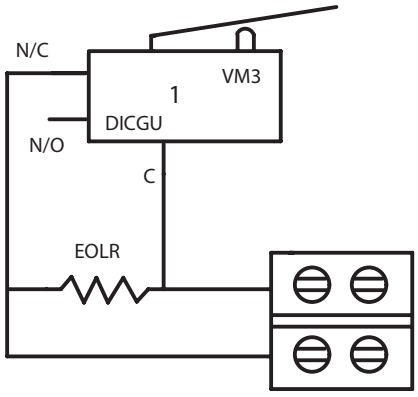
CONNECT TO MONITORING POINT



2 TAMPERS N/C

(TS2)

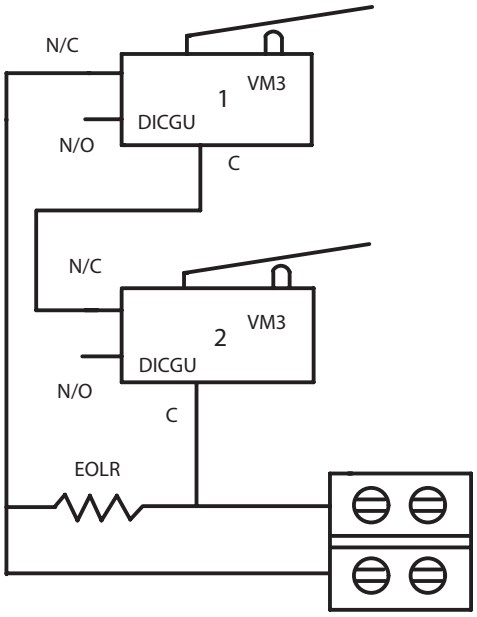
CONNECT TO MONITORING POINT



1 TAMPER N/O

(TS1)

CONNECT TO MONITORING POINT



2 TAMPERS N/O

(TS2)

CONNECT TO MONITORING POINT

Fig. 3