

631 Series

1.5 Amp Power Controllers



Access control system power requirements are uniquely different from other systems. Unlike camera system power requirements, access control systems draw more current for locking hardware and during access control-related events. 75 – 85% of access control operating problems and technical support calls are due to power issues.* Access control systems require steady and clean (filtered) low-voltage DC current with surge suppression to protect printed circuit boards and connected devices from damage due to dirty power (transients and voltage spikes).

SDC power supplies have been developed specifically to help reduce power system issues and to support electric locks and access control requirements. Our hybrid design combines the efficiency of switching power supplies with the inductive load handling capability of linear power supplies in various 12/24 VDC current output capabilities and enclosure sizes. Filtering and output voltage regulation provide protection and ensure the longevity of all system components.

The high performance, heavy-duty circuitry is ideal for inductive loads and multi-door applications. With the addition of SDC programmable controllers or relay modules, the user-friendly modular designs ensure versatility, interface capability and easy installation of virtually any electric locking devices, access controls and related fire & life safety equipment.

* SDC technical support logs.



MODELS

631RF 1.5 Amp DC Power Controller With Cabinet

631RFA 1.5 Amp DC Power Controller With Large Cabinet



STANDARD FEATURES

- Regulated and filtered linear DC power
- Class 2 output
- Field selectable dual voltage
- Fire/emergency release input
- Isolated battery charging circuit
- Low battery disconnect
- Input and output surge protection
- Troubleshooting visual status indicators (LED)
- Cabinet enclosures with pre-configured control module mounting holes



OPTIONAL FEATURES

- 230 VAC, 50/60 Hz input
- Cover visual status indicator (LED)
- Key lock cover
- 6' power cord
- System on/off switches
- Choice of compatible door control modules



APPLICATIONS

ISOLATED BATTERY CHARGING CIRCUIT

A separate charging output provides 13.5 or 27 volts to fully charge the batteries. The secondary output is always precisely maintained at 12 or 24VDC to protect locking devices and components from over voltage while the batteries are charging. The specified secondary output current is also maintained while batteries are charging. Derating of the secondary output current is not required when charging batteries.

LOW BATTERY DISCONNECT

Batteries are disconnected from the output circuit prior to deep discharge preventing battery destruction. Batteries are not included and should be ordered separately.*

INPUT & OUTPUT SURGE PROTECTION

Input and output surge protection is built-in. The AC input voltage is circuit breaker protected and the outputs are PTC protected.

TROUBLESHOOTING VISUAL STATUS INDICATORS (LED)

LED visual status indicators are included on the board to provide information regarding the AC input, DC output and battery backup status.

INTERNATIONAL STANDARD INPUT

An alternative 230VAC international standard input is an available option.

COVER VISUAL STATUS INDICATOR (LED)

An optional LED tri-color visual status indicator mounted on the cabinet enclosure cover to provide information regarding DC output status.

KEY LOCK COVER

Optional key lock mounted on the cabinet enclosure cover available where tamper-resistance is required.

* See related products for backup batteries.

6' POWER CORD

An optional 6' power cord simplifies installations that do not require conduit where permitted by code.

FIRE/EMERGENCY RELEASE INPUT

A fire alarm input provides simultaneous release of all fail safe locks and door holders in case of an emergency.

SYSTEM ON/OFF SWITCHES

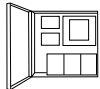
Optional System On/Off switches are available both inside the cabinet enclosure or on the cabinet enclosure cover.

DOOR CONTROL MODULES

Door control relay modules are available to meet virtually any application need. All wiring for lock hardware, access controls, remote controls and monitoring is terminated at one central location. Installation and troubleshooting is simplified. Modules may be factory installed or ordered separately for field installation as needed. Cabinet enclosures are pre-configured with mounting holes to accommodate door control modules. All modules are individually fused for protection of multiple station systems.



CROSS REFERENCE



	602	631	632	634	636
DC Output Rating	1 Amp	1.5 Amp	2 Amp	4 Amp	6 Amp
Small Cabinet	602RF	631RF	632RF	-----	-----
Large Cabinet	602RFA	631RFA	632RFA	634RFA	636RFA
Less Cabinet	602RFL	631RFL	632RFL	-----	-----
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SPECIFICATIONS

	631RF	631RFA
Input	115 VAC 800 mA 50/60 Hz	115 VAC 800 mA 50/60 Hz
Output	12/24 VDC 1.5 Amp	12/24 VDC 1.5 Amp
Battery Charger	13.5/27 VDC 250 mA	13.5/27 VDC 250 mA
Cabinet	12" x 12" x 4" 20 Gauge	16" x 14" x 6½" 16 Gauge
Weight	9 lbs	20 lbs

BACKUP BATTERY DISCHARGE TIME

Standby Power	12 VDC			
Battery	RB12V4	RB12V4	RB12V4	RB12V4
Battery Qty*	1	2	3	4
Current Load	Power Backup Time (Hours)			
250 mA	19.6	49.4	84.8	124.4
500 mA	7.8	19.5	33.5	49.2
750 mA	4.5	11.3	19.5	28.6
1 Amp	3.1	7.7	13.3	19.4
1.5 Amp	1.8	4.5	7.7	11.3

Standby Power	24 VDC**	
Battery	RB12V4	RB12V4
Battery Qty*	2	4
Current Load	Power Backup Time (Hours)	
250 mA	19.6	49.4
500 mA	7.8	19.5
750 mA	4.5	11.3
1 Amp	3.1	7.7
1.5 Amp	1.8	4.5

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DOOR CONTROL MODULE CAPACITY***

Power Supply	631RF		631RFA	
Battery Qty*	0-2	3-4	0-2	3-4
VR	1	1	1	1
ACM	2	2	2	2
EMC	1	1	2	1
FB	2	2	2	2
UR1	4	2	4	2
CR	2	1	2	1
UR2	-----	-----	2	1
UR4	-----	-----	2	1
IPDC	-----	-----	1	-----
IPDS	-----	-----	1	-----

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* Battery quantity based on size of SDC's RB12V4 backup batteries.

** For 24 VDC standby power, minimum order of (2) batteries. Batteries must be ordered in pairs.

*** Total combined load of modules and access control hardware may not exceed power supply rating.



CERTIFICATIONS

UL 294 Access Control System Units

UL 603 Power Supplies for Use with Burglar-Alarm Systems

ULC-S318 Power Supplies for Buglar Alarm Systems

UL 864 Control Units and Accessories for Fire Alarm Systems

UL 1481 Power Supplies for Fire-Protective Signaling Systems



HOW TO ORDER

FOLLOW STEPS FOR ORDERING

Designates optional step

1| SPECIFY MODEL

631RF 1.5 Amp DC Power Controller With Cabinet

631RFA 1.5 Amp DC Power Controller With Large Cabinet

2| SPECIFY OPTIONS

220 230 VAC, 50/60 Hz

CL Cover Visual Status Indicator (LED)

KL Key Lock Cover

PC 6' Power Cord

3| SPECIFY ON/OFF

PS1 Power On/Off Inside Cabinet Enclosure

PS1A Power On/Off On Cabinet Enclosure Cover

4| SPECIFY BOARDS

VR Voltage Power Converter, 12VDC

ACM Six Input Control Relay

EMC Dual Channel Exit Device Sequencer

FB Four Output Power Distribution Module

UR1 Microprocessor Controller, Two Relays

CR Four Station Control Relay

UR2* Microprocessor Controller, Four Relays

UR4* Microprocessor Controller, Eight Relays

IPDC* IPPro Controller, VR Included

IPDS* IPPro Door Expansion, VR Included

*UR2, UR4, IPDC and IPDS boards can only be accommodated in the RFA large cabinet enclosure.

STEP NUMBER:	1	2	3	4
ORDERING EXAMPLE:	631RFA	CL KL PC	PS1A	UR1 UR2



RELATED PRODUCTS

631RFL 1.5 Amp DC Power Controller
Less Cabinet



BACKUP BATTERIES

SDC power supplies equipped with batteries provide continuous operation of access controls, locking devices and peripheral components during a power failure.

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RB12V4 12V/5Ah Battery

RB12V4-2 12V/5Ah Battery, Qty 2 Pack

RB12V7 12V/7Ah Battery

RB12V7-2 12V/7Ah Battery, Qty 2 Pack

