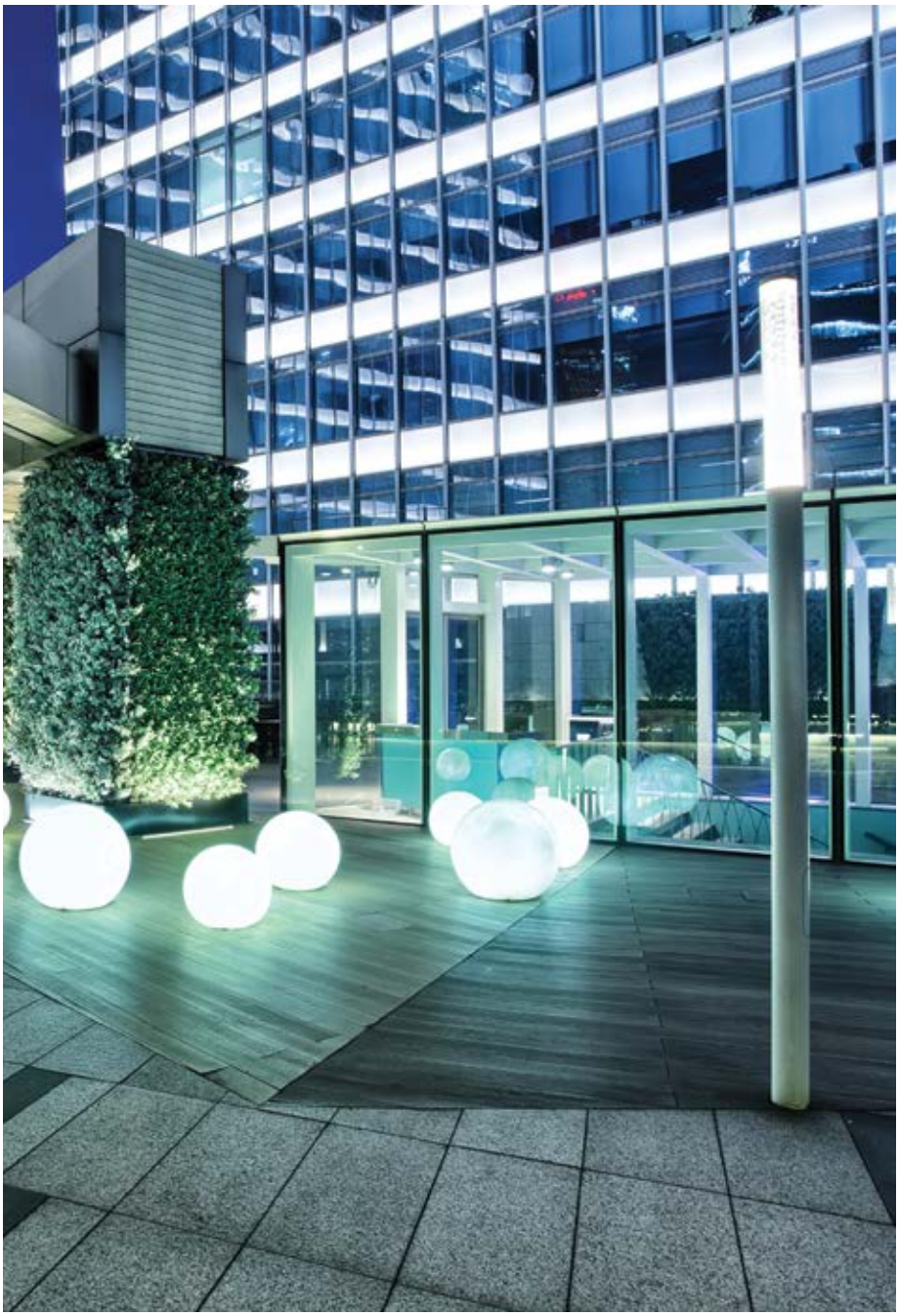
ASSA ABLOY
Opening Solutions

Securitron AQ Series Power Supplies

Product Overview

ELECTRONIC SECURITY HARDWARE SECURITRON PRODUCTS

Experience a safer
and more open world







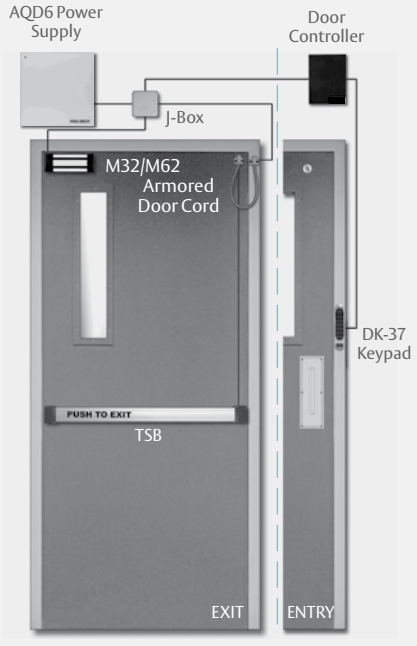
With a wide range of options, ASSA ABLOY has the power solution to fit your every need, from wall to rack mounted solutions

Power supply selection is often one of the last decisions made when designing an electrified access control solution. However, selecting the right power supply is as important as choosing the right locking devices and accessories that may be connected to it.

Securitron power supplies offer clean, efficient and reliable power solutions for any application, including options for high efficiency sustainable locking solutions. Available in configurations to support the smallest single door systems to the largest enterprise access control systems.

- For a low power solution, Securitron EcoPower® reduces standby power supply consumption by 99%; EcoPower is designed to work with low-power electrified access control devices
- Power over Ethernet extractors and injectors provide integrated power and data over low-cost CAT-5 cabling
- Linear power supplies offer multiple low noise power options for sensitive electronics
- Rack mounted power supplies offer a valuable space-saving solution to provide power to access control devices such as electrified door hardware and more
- Switching power supplies are a more cost effective, energy efficient solution for access control systems; Available in wall mount and rack mount options
- Power transfers assist in the secure transfer of power and/or data from the frame to electrified hardware on the door





Let ASSA ABLOY help determine which power supply will meet your exact requirements for any new or existing electrified access control solution.

The Securitron AQ Series of switching power supplies are dual (AQD), and single (AQS) voltage supervised units with a battery charger designed to power magnetic locks, electric strikes, card readers, sensors, access control boards and other devices in access control systems. The AQ Series can also be used to power DC cameras and other DC locking equipment. These units provide field selectable dual (AQD) or single (AQS) 12 or 24 VDC with up to 16 independently controlled power limited outputs.

Protection | Efficiency | Support

Protect and enhance the performance of access control devices and systems with Securitron AQ Power Supplies.

Mix & Match UL Listing

- Available in one to 16 Amp variants to support the smallest single door systems to the largest enterprise access control systems
- UL listed dynamic field configurable product offering
- Combine any of the seven power supplies and nine distribution boards in any UL listed enclosure and maintain UL code compliance

Protection & Efficiency

- Heavily filtered and regulated output provides better-than-linear performance
- Up to 93% efficiency, which results in decreased operating costs which lengthens the lifespan of electronics
- Low battery cutoff protects readers and other sensitive components from under-voltage

Friendly & Knowledgeable Support

- Customer Service and Technical Support offer tools and resources to address questions of all shapes and sizes
- Free, custom wiring diagram support available
- No-fault, no questions asked warranty covers installation errors



Specifications

Certifications (Both)

- UL294 Listed
- UL603 Listed
- ULC-S318 Listed
- ULC-S533 Listed
- RoHS Compliant
- REACH Compliant

Electrical

- 115 or 230 VAC input (except AQD1)
- Supports up to two (2) sealed gel, AGM or wet lead acid batteries
- Up to 93% efficiency
- Low noise design with ripple as low as 70mV p-p
- Outputs are Class 2 limited when used with PTC polyswitch distribution boards
- Dual voltage 12 or 24 VDC field selectable continuous output
- Single voltage 12 or 24 VDC continuous output

Operating Temperature

- -4° to 122°F [-20° to 50°C]

Dimensions

- 14" x 14" x 4-3/4" [355.6mm x 355.6mm x 120.65mm]

Shipping Weight

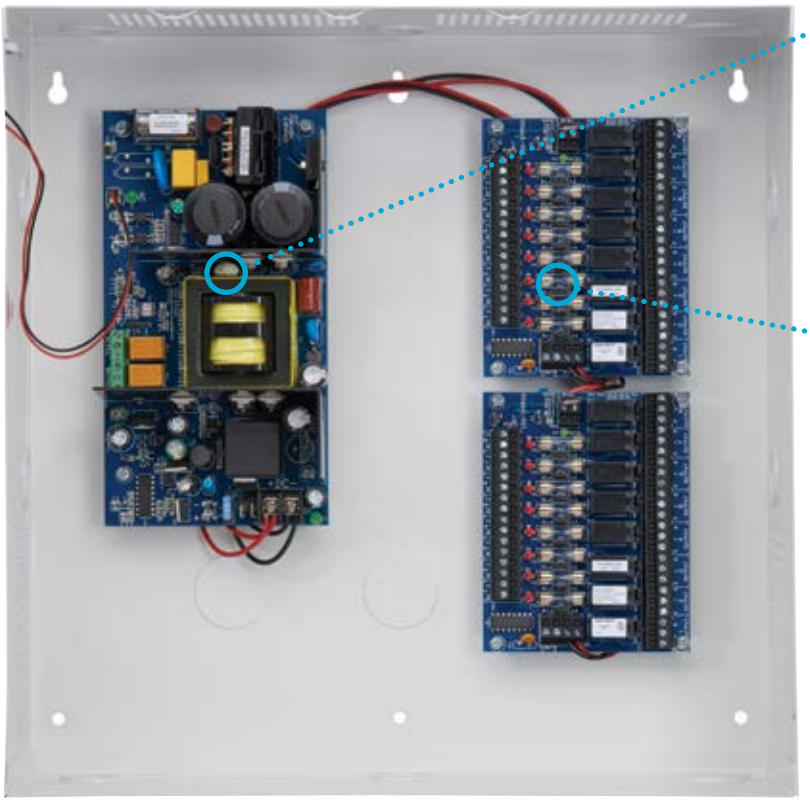
- 12.7 lbs [5.76kg]

Features

- All combinations of AQ power supplies and distribution boards are UL Listed
- Tolerates brownout or over-voltage input ± 15% of nominal voltage
- Thermal shutdown protection with auto restart
- Circuit breaker protects against over-current and reverse battery faults
- Dedicated battery charging circuit* prevents over-voltage on locking devices
- Expandable up to 16 outputs in the standard enclosure
- Available with a single relay fire trigger or individually triggered relayed outputs
- Low battery cutoff at 9V

**Except AQD1. Battery disconnect module available. Please contact the factory.*

Step by Step Configuration



*NOTE: Fuse type and size must be the same for both distribution boards for standard ordering. For custom configurations, please contact the factory at 800.626.7590.

1 *Select One Power Supply with Enclosure*

- AQD1
- AQD2
- AQD4
- AQD6
- AQS1210
- AQS2410
- AQS1216

2 *Select Up to Two Power Distribution Boards**

- PDB-1R
- PDB-4C
- PDB-4F
- PDB-8C
- PDB-8F
- PDB-8C1R
- PDB-8F1R
- PDB-8C8R
- PDB-8F8R

3 *Add Distribution Board Part Numbers*

8F1R**2** + 8F8R**2** = 16F9R**2**
*Include fuse size on end:
2A Fuse = 16F9R**2**

4 *Combine to Generate Final Part Number*

Example: AQD6-16F9R2

AQD6 + 8F8R2 + 8F1R2 = **AQD6-16F9R2**

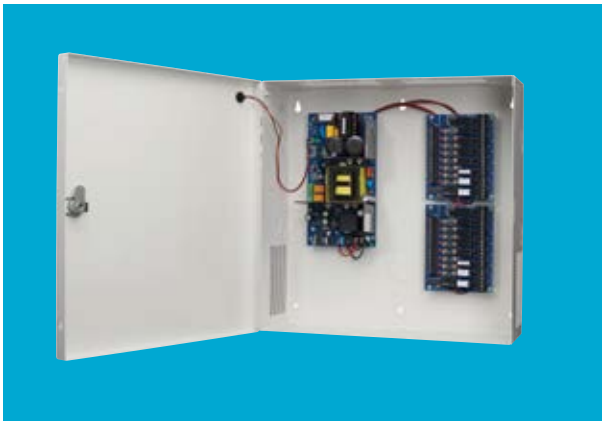




Power Supply Component Part Numbers

AQ Series Power Supply in 14" x14" Enclosure

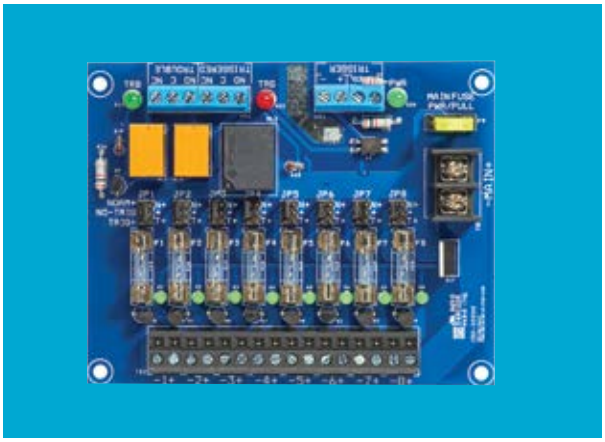
NEW PARTS	DESCRIPTIONV	REPLACES
AQD1	1 Amp, Dual Voltage Power Supply with enclosure	AQD3
AQD2	2 Amp, Dual Voltage Power Supply with enclosure	AQD3
AQD4	4 Amp, Dual Voltage Power Supply with enclosure	AQD5
AQD6	6 Amp, Dual Voltage Power Supply with enclosure	AQD6
AQS1210	10 Amp, 12 VDC Power Supply with enclosure	AQU128
AQS2410	10 Amp, 24 VDC Power Supply with enclosure	AQM20
AQS1216	16 Amp, 12 VDC Power Supply with enclosure	AQM20



AQ Series Power Distribution Board

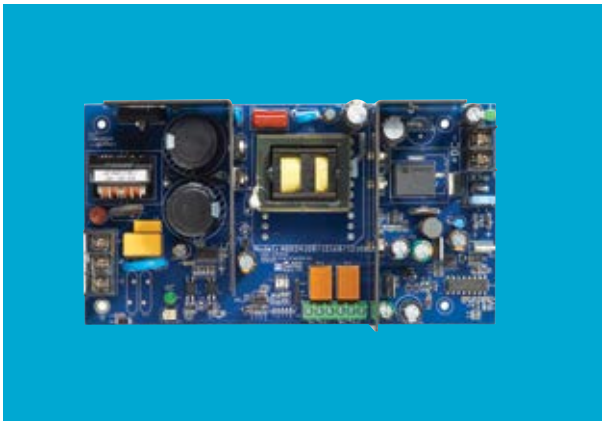
(PDB prices are the same for C and F fuse variants)

NEW PART	DESCRIPTION
PDB-1R	Fire Trigger / Relay Interface Board
PDB-4F1	PDB, 4 Output, 1A Glass Fuse
PDB-4F2	PDB, 4 Output, 2A Glass Fuse
PDB-4C1	PDB, 4 Output, 1A PTC
PDB-4C2	PDB, 4 Output, 2A PTC
PDB-8F1	PDB, 8 Output, 1A Glass Fuse
PDB-8F2	PDB, 8 Output, 2A Glass Fuse
PDB-8C1	PDB, 8 Output, 1A PTC
PDB-8C2	PDB, 8 Output, 2A PTC
PDB-8F8R1	PDB, 8 Relayed Outputs, 1A Glass Fuse
PDB-8F8R2	PDB, 8 Relayed Outputs, 2A Glass Fuse
PDB-8C8R1	PDB, 8 Relayed Outputs, 1A PTC
PDB-8C8R2	PDB, 8 Relayed Outputs, 2A PTC
PDB-8C1R1	PDB, 8 Output w/ Fire Trigger Relay, 1A PTC
PDB-8C1R2	PDB, 8 Output w/Fire Trigger Relay, 2A PTC
PDB-8F1R1	PDB, 8 Output w/ Fire Trigger Relay, 1A Glass Fuse
PDB-8F1R2	PDB, 8 Output w/Fire Trigger Relay, 2A Glass Fuse



AQ Series Power Supply Board Only

NEW PART	DESCRIPTION	REPLACES
AQD1B	1 Amp, Dual Voltage Power Supply Board Only	AQD3B
AQD2B	2 Amp, Dual Voltage Power Supply Board Only	AQD3B
AQD4B	4 Amp, Dual Voltage Power Supply Board Only	AQD5B
AQD6B	6 Amp, Dual Voltage Power Supply Board Only	AQD6B
AQS1210B	10 Amp, 12 VDC Power Supply Board Only	AQU128B
AQS2410B	10 Amp, 24 VDC Power Supply Board Only	AQM20B
AQD1216B	16 Amp, 12 VDC Power Supply Board Only	AQM20B



Common Power Supply Configurations

PART NUMBER	DESCRIPTION
AQD1-4F1	1 Amp, Dual Voltage Power Supply with enclosure, 4 outputs, 1 Amp glass fuses
AQD1-4C1	1 Amp, Dual Voltage Power Supply with enclosure, 4 outputs, 1 Amp PTC polyswitch
AQD2-1R	2 Amp, Dual Voltage Power Supply with enclosure, Fire Trigger
AQD2-4C1	2 Amp, Dual Voltage Power Supply with enclosure, 4 outputs, 1 Amp PTC polyswitch
AQD2-4F1	2 Amp, Dual Voltage Power Supply with enclosure, 4 outputs, 1 Amp glass fuses
AQD2-8C8R1	2 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 1 Amp PTC polyswitch, 8 relays, Fire Trigger
AQD2-8F8R1	2 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 1 Amp glass fuses 8 relays, Fire Trigger
AQD4-4F1	4 Amp, Dual Voltage Power Supply with enclosure, 4 outputs, 1 Amp glass fuses
AQD4-8C1	4 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 1 Amp PTC polyswitch
AQD4-8C8R1	4 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 1 Amp PTC polyswitch, 8 relays, Fire Trigger
AQD4-8F8R1	4 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 1 Amp glass fuses, 8 relays, Fire Trigger
AQD6-8C2	6 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 2 Amp PTC polyswitch
AQD6-8C8R2	6 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 2 Amp PTC polyswitch, 8 relays, Fire Trigger
AQD6-8F8R2	6 Amp, Dual Voltage Power Supply with enclosure, 8 outputs, 2 Amp glass fuses, 8 relays, Fire Trigger
AQS1210-16F2	10 Amp, 12 VDC Power Supply with enclosure, 16 outputs, 2 Amp glass fuses
AQS1210-16F16R2	10 Amp, 12 VDC Power Supply with enclosure, 16 outputs, glass fuses, 16 relays, Fire Trigger
AQS2410-16F2	10 Amp, 24 VDC Power Supply with enclosure, 16 outputs, 2 Amp glass fuses
AQS2410-16F16R2	10 Amp, 24 VDC Power Supply with enclosure, 16 outputs, 2 Amp glass fuses, 16 relays, Fire Trigger
AQS2410-16C16R2	10 Amp, 24 VDC Power Supply with enclosure, 16 outputs, 2 Amp PTC polyswitch, 16 relays, Fire Trigger
AQS1216-16F16R2	16 Amp, 12 VDC Power Supply with enclosure, 16 outputs, 2 Amp glass fuses, 16 relays, Fire Trigger

How To Order

Select a power supply and up to two distribution boards in the 14" x 14" enclosure. All combinations of power supplies and distribution boards are UL Listed and are available in a number of possible configurations. Use the tables below to build the right solution for your needs.

Model Series	Output Type	Voltage	Output Power	Enclosure Style	Number of Outputs	Fuse Type	Number of Relays	Relays	Fuse Size
AQ	D		6	–	8	F	8	R	2
AQ	**D** Dual Voltage*	**Blank** Dual Voltage*	**1***	– In Enclosure	**Blank** One Output, No Distribution Board				
	S Single Voltage**	**12** 12VDC**	**2***	**B** Circuit Board Only	**4**	**F** Glass† Fuses	**1**	**R** Relays	**1** 1 Amp
		24 24VDC**	**4***		**8**	**C** PTC† Polyswitch	**2**		**2** 2 Amp
			6*		**12**		**8**		
			10**		**16**		**9**		
			16**				**16**		

** Dual Voltage Option Only. ** Single Voltage Option Only.*

† Fuse type and size must be the same for both distribution boards for standard ordering. For custom configurations, please contact the factory at 800.626.7590.

Power Supply Cross Reference Guide

ALTRONIX	LIFESAFETY POWER	AQ SERIES
AL1012ULACM	FPO150-C8E1	AQS1210-8F8R2
AL1012ULACMCB	FPO150-C8PE1	AQS1210-8C8R2
AL1012ULACMCBJ	FPO150-C8PE2	AQS1210-8C8R2
AL1012ULACMJ	FPO150-C8E2	AQS1210-8F8R2
AL1012ULM	FPO150-F8PE1	AQS1210-8F8R2
AL1012ULX	FPO150-E1	AQS1210
AL1012ULXB	FPO150	AQS1210B
AL1012ULXPD16	FPO150-2D8E1	AQS1210-16F2
AL1012ULXPD16CB	FPO150-2D8PE1	AQS1210-16C2
AL1012ULXPD8	FPO150-D8E1	AQS1210-8F2
AL1012ULXPD8CB	FPO150-D8PE1	AQS1210-8C2
AL1024ULACM	FPO250-C8E1	AQS2410-8F8R2
AL1024ULACMCB	FPO250-C8PE1	AQS2410-8C8R2
AL1024ULACMCBJ	FPO250-C8PE2	AQS2410-8C8R2
AL1024ULACMJ	FPO250-C8E2	AQS2410-8F8R2
AL1024ULM	FPO250-F8PE1	AQS2410-8F8R2
AL1024ULX	FPO250-E1	AQS2410
AL1024ULXB	FPO250	AQS2410B
AL1024ULXPD16	FPO250-2D8E1	AQS2410-16F2
AL1024ULXPD16CB	FPO250-2D8PE1	AQS2410-16C2
AL1024ULXPD8	FPO250-D8E1	AQS2410-8F2
AL1024ULXPD8CB	FPO250-D8PE1	AQS2410-8C2
AL125UL	FPO25-E5	AQD1
AL125ULX	FPO25-E1	AQD1
AL175UL	FPO75-E5	AQD2-1R
AL175ULX	FPO75-E1	AQD2-1R
AL176UL	FPO75-E5	AQD2
AL176ULX	FPO75-E1	AQD2
AL300ULM	FPO75-F8PE1	AQD2-8F8R1
AL300ULPD4	FPO75-D8E1	AQD2-4F1
AL300ULPD4CB	FPO75-D8PE1	AQD2-4C1
AL300ULX	FPO75-E1	AQD2
AL300ULXB	FPO75	AQD2B
AL300ULXPD16CB	FPO75-2D8PE1	AQD2-16C1
AL400UL	FPO75-E5	AQD4
AL400ULACM	FPO75-C8E1	AQD4-8F8R
AL400ULACMCB	FPO75-C8PE1	AQD4-8C8R
AL400ULACMCBJ	FPO75-C8PE2	AQD4-8C8R
AL400ULACMJ	FPO75-C8E2	AQD4-8F8R
AL400ULM	FPO75-F8PE1	AQD4-8F8R1
AL400ULPD4	FPO75-D8E1	AQD4-4F1
AL400ULPD8	FPO75-D8E1	AQD4-8F1
AL400ULPD4CB	FPO75-D8PE1	AQD4-4C1

ALTRONIX	LIFESAFETY POWER	AQ SERIES
AL400ULPD8CB	FPO75-D8PE1	AQD4-8C1
AL400ULX	FPO75-E1	AQD4
AL400ULXB	FPO75	AQD4B
AL400ULXPD16	FPO75-2D8E1	AQD4-16F1
AL400ULXPD16CB	FPO75-2D8PE1	AQD4-16C1
AL600ULACM	FPO150-C8E1	AQD6-8F8R2
AL600ULACMCB	FPO150-C8PE1	AQD6-8C8R2
AL600ULACMCBJ	FPO150-C8PE2	AQD6-8C8R2
AL600ULACMJ	FPO150-C8E2	AQD6-8F8R2
AL600ULM	FPO150-F8PE1	AQD6-8F8R2
AL600ULPD4	FPO150-D8E1	AQD6-4F2
AL600ULPD4CB	FPO150-D8PE1	AQD6-4C2
AL600ULPD8	FPO150-D8E1	AQD6-8F2
AL600ULPD8CB	FPO150-D8PE1	AQD6-8C2
AL600ULX	FPO150-E1	AQD6
AL600ULXB	FPO150	AQD6B
AL600ULXPD16	FPO150-2D8E1	AQD6-16F2
AL600ULXPD16CB	FPO150-2D8PE1	AQD6-16C2
NETWAY1	NPM115	AQE15
NETWAY1512	NPE130	AQE30E
NETWAY3012	NPE130	AQE30E
ACM4	C4	PDB-8F8R
ACM4E	C4	PDB-8F8R
ACM4CB	C4P	PDB-8C8R2
ACM4CBE	C4P	PDB-8C8R2
ACM8	C8	PDB-8F8R2
ACM8E	C8	PDB-8F8R2
ACM8CB	C8P	PDB-8C8R2
ACM8CBE	C8P	PDB-8C8R2
PD16W	2D8	2x PDB-8F2
PD16WCB	2D8P	2x PDB-8C2
PD4UL	D8	PDB-4F2
PD4ULCB	D8P	PDB-4C2
PD4	D8	PDB-4F2
PD4CB	D8	PDB-4C2
PD8	D8	PDB-8F2
PD8CB	D8P	PDB-8C2
PD8UL	D8	PDB-8F2
PD8ULCB	D8P	PDB-8C2

The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, locks, perimeter fencing, access control and service.

ASSA ABLOY
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