

Standalone Controller

Anti-Vandal Backlit PIN AC-Q41HB & AC-Q41SB

Datasheet



AC-Q41HB / AC-Q41SB

1. Introduction

The AC-Q41 series represents advanced anti-vandal standalone access control technology designed for demanding environments. These controllers support up to 500 users and feature illuminated blue metal keys for PIN code entry. Both models in the series offer all-weather operation, flexible programming capabilities including a unique code search function for simplified user management, and non-volatile memory that protects the storage of the user database, modes, and parameters.

The series combines large backlit metal keys with built-in heaters, providing enhanced accessibility in low-light conditions and cold temperatures. The controllers are robust, reliable and durable and are available in two models.

The **AC-Q41HB** features a rugged metal body ideal for installation in high-traffic environments. This model includes removable terminal blocks for quick installation and utilizes advanced programming options.

The controller has an attractive profile, free from sharp edges, making it ideal for installations where style and functionality are highly important.

The **AC-Q41SB** features a slim metal construction designed for space-conscious installations. This model is epoxy-filled, designed to withstand the rigors of the outdoor environment, and supports advanced programming options.

The controller offers enhanced user accessibility in low-light areas through its combination of large backlit metal keys and built-in heater.

2. Main Features

Feature	AC-Q41HB	AC-Q41SB
User Capacity	500 PIN users with credentials for granting access	
Design	Smooth attractive design, with anti-vandal body	
Keypad	Highly visible blue backlit keypad	
Security Levels	3 operational security levels can be selected with special PIN codes	
PIN Code Support	Supports up to 8-digit PIN codes, with timed wrong code lockout after 3 wrong attempts	
Indicators	2 tri-colored LEDs and integral sounder for programming and operation	
Additional Features	Removable terminal blocks for unit wiring	Wide range of low voltage AC/DC power input

3. Professional Grade Features

- Optical tamper detection
- Automatic internal heater prevents key freeze at -20 °C (4 °F)
- 10 programmable modes for auxiliary input and output (2 Amp Form C Relay)
- 2 Amp Form C Lock Strike Relay, for fail-safe and fail-secure, with input for REX
- Supports: Door Ajar, Forced, Shunt, Monitor, and Secure mode
- Doorbell key feature operation (from '*' key), with Rosslare's BL-D40 accessory

4. Specifications

Electricity	AC-Q41HB	AC-Q41SB
Operating Voltage Range	Regulated power supply: 12 to 24 VDC	
	Transformer: 16 to 24 VAC	Transformer: 12 to 24 VAC
Input Current (Heater Off) Standby:	70 mA, Maximum: 130 mA, at 12 VDC	
Input Current (Heater On) Standby:	550 mA, Maximum: 610 mA, at 12 VDC	
Relay Outputs	Lock Strike: 2 A, N.O. and N.C. Auxiliary: 2 A, N.O. and N.C.	
Tamper	Optical back tamper sensor, O.C. active low 32 mA max sink current	
Inputs	REX: N.O. Dry Contact Auxiliary (In/Monitor): N.O. Dry Contact, 10 programmable modes	

Operations	AC-Q41HB	AC-Q41SB
Capacity	500 users, single / dual code each	
Keypad	3x4 Blue illuminated Keys for local programming and 4-to-8-digit PIN codes entry	
User Levels	Normal, Secure, Master	
Security Modes	Normal, Bypass, Secure	
Audio/Visual	Interface for BL-D40 (bell, chime, and siren annunciator) Two tri-color LED indicators, built-in sounder	
Design	Suitable for extremely harsh environments.	
	Rugged metal enclosure, highly strong construction, metallic keys.	Epoxy potted, fully sealed in a rugged metal enclosure, highly strong construction, blue backlit metallic keys.

Environment	AC-Q41HB	AC-Q41SB
Operating Environment Water resistant, suitable for outdoor use	IP54	IP65
Operating Temperature Range	Built-in heater to prevent key freezing: -20 °C to 60 °C (-4 °F to 140 °F)	
Operating Humidity Range	0 to 95 % (non-condensing)	

Hardware	AC-Q41HB	AC-Q41SB
Dimensions (H x W x D)	120 x 76 x 27 mm (4.72 x 3 x 1.06 in.)	120 x 76 x 22 mm (4.72 x 3 x 0.85 in.)
Weight	440 g (1 lb)	521 g (1.18 lb)

5. System Components

Component Type	AC-Q41HB	AC-Q41SB
Compatible Accessories	BL-D40 alarm, chime and doorbell enunciator/strobe unit EX-06/16/07/17 Push to Exit	

6. Product Warranty

Model	Warranty
AC-Q41HB	2-Year Limited Product Warranty
AC-Q41SB	5-year Limited Product Warranty



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