B901 Door Controller

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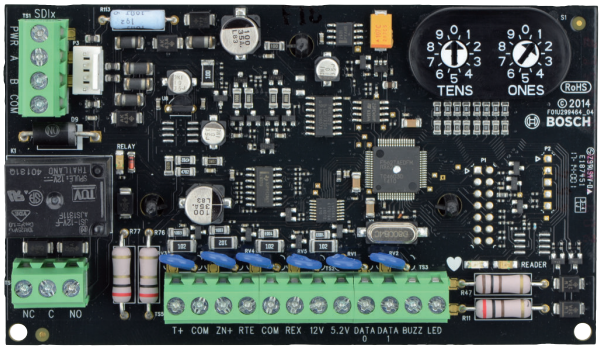

- Direct interface to compatible Wiegand card readers
- On-board buzzer output and supervised on-board points
- Request to Exit and Request to Enter inputs that can have a shunt only option
- Four door states: Locked, Unlocked, Secured, Fire Unlock
- SDI2 support as well as SDI compatible

The B901 Access Control Interface Module is a fully supervised, addressable SDI/SDI2 bus device that allows access control integration for Bosch compatible control panels. This module offers 14 programmable levels of access authority. Authority for access is controlled by the user level, the group of the user, the time of day, the door state, and the area armed state. Control each authority restriction through automatic and manual functions.
A door that has been automatically released by the control panel will require manually re-engaging to return to normal.
In a combination Fire/Intrusion system, the B901 should not be used to lock doors used for emergency egress unless these doors have a mechanical release mechanism.

Functions

Reader input
- Standard 5-wire Weigand interface.
- +5 VDC or +12 VDC supplied to power readers.
- Open collector output for reader LED.

Unsupervised inputs
- Tamper. Supports normally open devices.
- REX. Supports normally open devices. Request to Exit (REX) on short.
- RTE. Supports normally open devices. Request to Enter (RTE) on short.

Supervised input
- 1 kΩ End-of-line resistor.
- Use for door contact.

Door states
Four door states are controlled through the keypad, RPS (Remote Programming Software), scheduled events (SKEDs), and automatic programmable functions in the door controller parameters:
- Locked. The lock relay can be deactivated (door allowed to open) with a valid credential or REX/RTE input.
- Unlocked. The Lock relay is held in the deactivated state to allow access without the need of a credential.
- Secured. The lock relay is activated and no access is allowed even with valid credential (overridden by Fire Unlock).
- Fire Unlock. The lock relay is held in the deactivated state during a Fire Alarm. This allows free access to and from the building during an emergency.

Two automatic functions link the door state to the arming state of the area:
- Auto Door. When the area is Off (disarmed), the door state is switched to “Unlocked”.
- Disarm on Open. With this function as "Yes," a user with valid access rights activates the strike and turns off (disarms) the system after the door is opened. With this function as "No," the area turns off (disarms) upon the strike activation.

Indicators

- Heartbeat LED. Blue LED blinks on and off when system is operational. A rapid three-blink sequence indicates a system error.
- Reader LED. Rapidly blinking LED indicates the Card data is being received. When the LED is off, no card data is being received.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Australia	RCM	ACMA
Europe	CE	EMC, RoHS [B915, B920, B930, B430, B208, B308, B901]
USA	UL	Underwriters Laboratories
	UL	UL 294 - Standard for Access Control Units and Systems
	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL	UL 864 - Standard for Control Units and Accessories for Fire Alarm Systems (10th edition)
	UL	UL 985 - Household Fire Warning System Units (6th edition)
	UL	UL 1023 - Household Burglar Alarm System Units
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL	UL 1610 - Central Station Burglar Alarm Units
	CSFM	California State Fire Marshal (see our website)
	FCC	Part 15 Class B
Canada	ULC	Underwriters Laboratories of Canada
	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Receiving Center and Premise Burglar Alarm
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	IC	ICES-003 - Information Technology Equipment (ITE)

Installation/configuration notes

The B901 Access Control Interface Module is individually programmed through the control panel. The module is compatible with several credential models and readers.

Notice

Not all products and features are available in all regions. Consult your local Bosch representative for availability details.

Compatibility

Bosch readers and accessories	ARD-AYJ12 EM Prox Mullion ARD-MINIPROX ARD-PROX-PPL ARD-SER90-WI ARD-SER40-WI ARD-SER10-WI D8223 HID Prox Wall Mount D8224 HID Prox Mullion D8224-SP Low-profile card reader, HIDprox D8225 HID Prox Mini Mullion D8229 PIN Reader
Bosch tokens and cards	ACA-ATR13 EM Tokens ACD-ATR11ISO EM Cards ACD-ATR14CS EM Clamshell Cards ACD-IC2K26-50 iClass Cards ACT-IC2K26-10 iClass Tokens D8236-10 HID Prox Cards D8236KF-10 HID Prox Tokens

Parts included

Quantity	Component
1	B901
1	1 kΩ ½ watt end of line resistor
1	Innerconnect cable (included)
3	# 6x3/8 self-tapping screws
1	Literature pack

Technical specifications

Environmental considerations

Relative humidity	5% to 93% at +32°C (+90°F)
Temperature (operating)	0°C to +49°C (+32°F to +120°F)

Properties

Dimensions	2.9 in x 5.0 in x 0.6 in (73.5 mm x 127 mm x 15.25 mm)

Power requirements

Current	Standby:110 mA + reader current Alarm: 110 mA + reader current
Output (alarm)	Form C relay (COM, NC, NO) at 12/24 V @ 2.0 A
Voltage (input)	12 VDC nominal

Wiring

Terminal wire size	18 AWG to 22 AWG (1.02 mm to 0.65 mm)
SDI2/SDI wiring to B901 + Reader with external power supply	Maximum distance – wire size (unshielded wire only): 1000 ft (305 m) – 22 AWG (0.65 mm), 2500 ft (762 m) – 18 AWG (1.02 mm)
SDI2/SDI wiring to B901 + Reader from control panel	175 ft (61 m) – 22 AWG (0.65 mm), 500 ft (152 m) – 18 AWG (1.02 mm)
Wiring distance from B901 to Reader	200 ft (61 m) – 22 AWG (0.65 mm), 500 ft (152 m) – 18 AWG (1.02 mm) Reader dependant

Credentials

Compatible credential formats	37 bit. HID H10304 (With Site Code) 37 bit. HID H10302 (No Site Code) 26 bit. HID H10301 EM-EM4200 (3-byte or 5-byte)

Ordering information

B901 Door Controller
Fully supervised, addressable SDI2/SDI bus device that allows access control integration for Bosch G and B Series Control Panels.
Order number **B901**

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