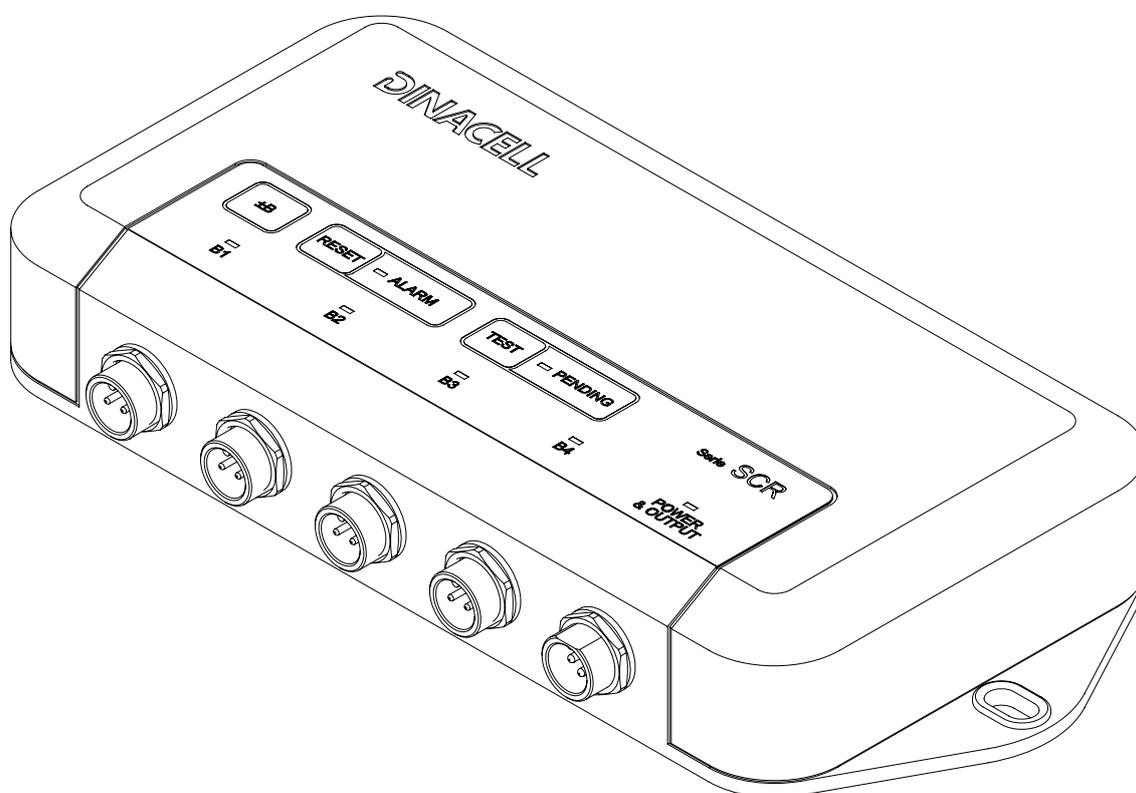


SCR

User Manual

SCR-400 (029284) | SCR-400AR (032457)



Dinacell Electrónica S.L.

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Product Notice

This document describes the features corresponding to the product in its most up-to-date version. The resources and functions included in this document apply to the family of models of this product (not all models incorporate all functions). Not all resources are available in all editions or versions of the product.

For more information

www.dinacell.com

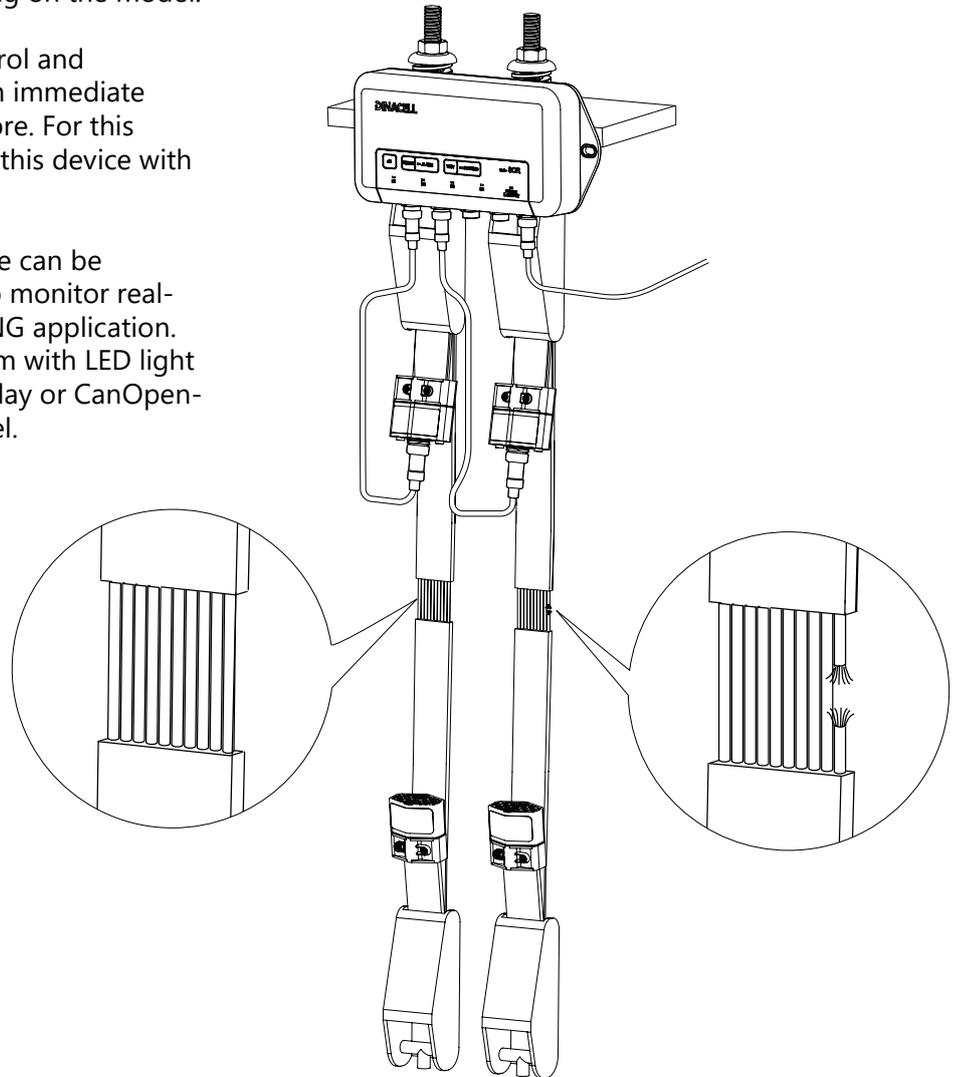
Introduction

1.1 Product Description

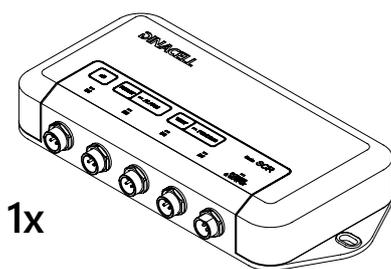
Device for load control in elevators, with individual inputs for 4 to 8 load cells depending on the model.

This solution provides efficient control and maintenance of the installation, with immediate detection of breakage in any belt core. For this purpose, it is necessary to combine this device with our broken belt connectors.

Thanks to NG technology, the device can be combined with a GD-WiFi dongle to monitor real-time data through Dinacell's Tools NG application. The device is equipped with an alarm with LED light signal. It integrates an associated relay or CanOpen-Lift CIA 417 depending on the model.

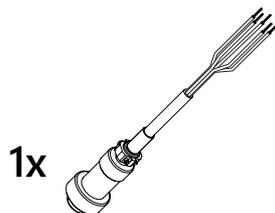


1.2 Package Contents



1x

SCR device



1x

Power and relay connection pigtail

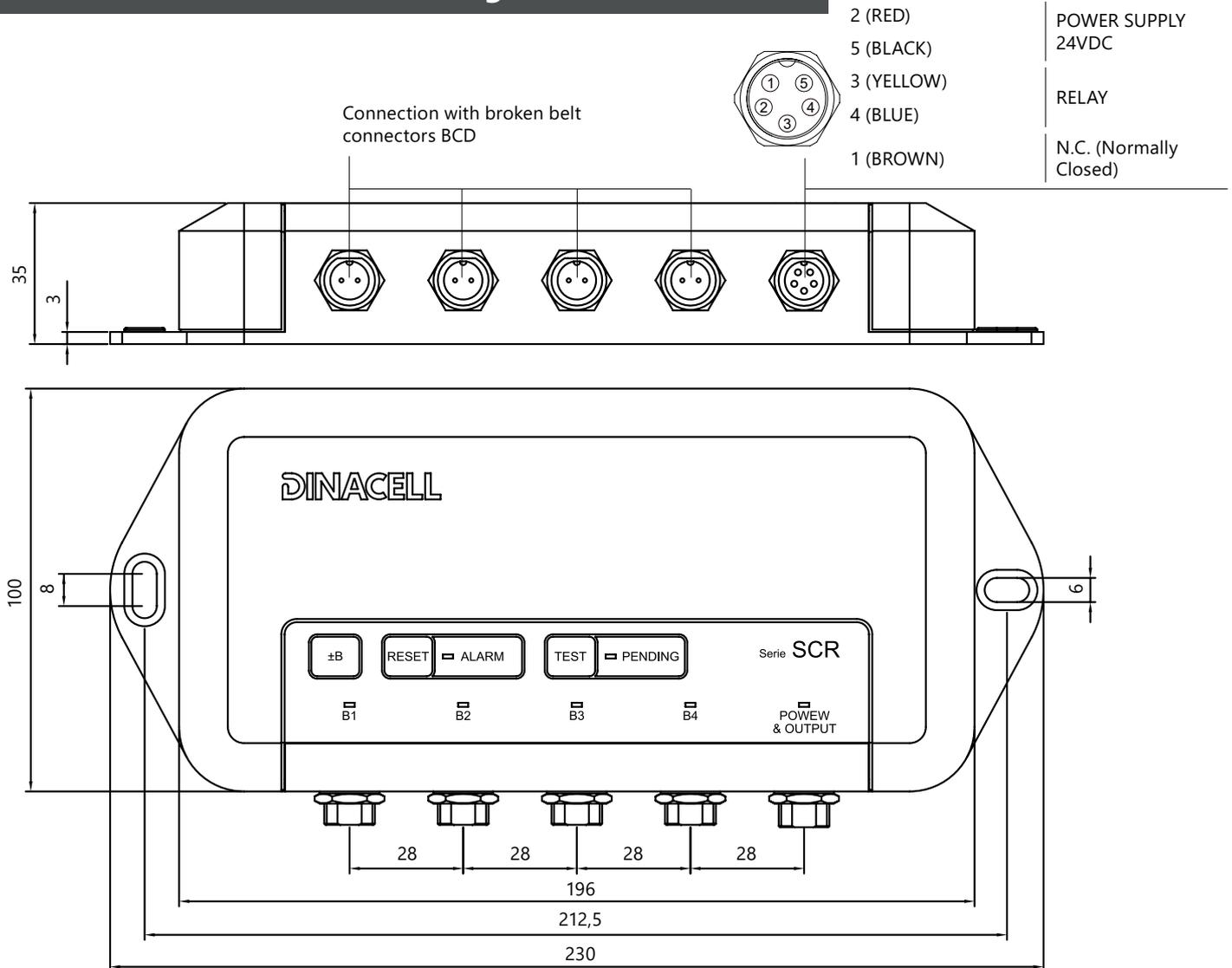


2x

Self-tapping screw

Technical data for installation

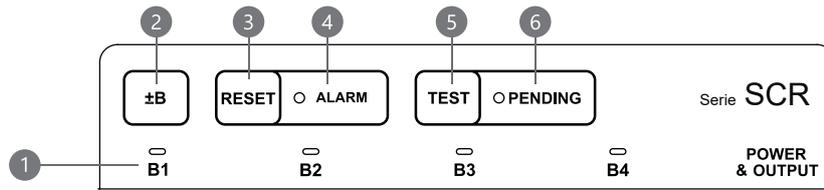
2.1 Dimensions (mm) and wiring



2.2 Electrical specifications

Parameter		Units	Specifications
Model		-	SCR
Power supply	Min.	VDC	18
	Max	VDC	36
Consumption		mA	100
Temperature range	Operating	°C (°F)	-10 ... +65 (+14 ... +149)
	Storage	°C (°F)	-20 ... +70 (-4 ... +158)
Relay	Max. voltage	VAC / VDC	48
	Max. current	A	2
	Quantity	-	1
Casing material		-	Fireproof V0
LEDs		-	7
Keys		-	3
Protection class		-	IP54

2.3 Interface and button operation



Status of elevator belts

1 LEDs indicating belt status	Solid green	Active belt, no errors
	Solid red	No electrical continuity, this may indicate a detected break in one of the belt cores, or that the BCD connector is incorrectly connected or installed.
	Flashing green	Electrical continuity has been restored. In some cases, a break in the steel cores may maintain partial electrical contact, allowing the system to detect continuity. This contact may be temporarily interrupted, for example, when the belt passes over a pulley, and then reestablished. The device maintains this status to indicate the detection of a possible break, even if electrical continuity is recorded at the time of verification.
	Off	Belt deactivated
	Blinking blue	Configuration mode for number of belts
2 Button to configure number of belts	Hold for 3 seconds until LEDs B1, B2... B4 flash. Then press the button repeatedly to select the number of belts to activate. After three seconds without pressing, the device saves and exits configuration mode.	

Alarm status

3 Button to reset the alarm	To reset the active alarm, hold for 3 seconds until the alarm LED turns off	
4 Broken belt alarm LED	Off	No errors
	On	Active alarm. The device has a relay that switches to open when the alarm is triggered. This alarm indicates that electrical contact has been lost, which may be due to: <ul style="list-style-type: none"> - A break in one of the belt cores, causing continuous or partial loss of electrical contact. - The BCD connector is incorrectly connected to the device or poorly installed on the belt.

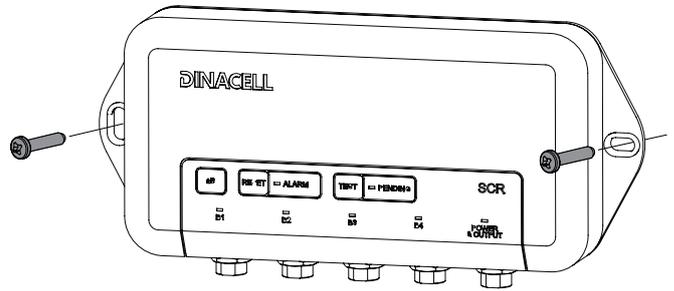
Relay status

5 Button to test alarm relay	Hold the button for 3 seconds to manually activate the relay and check correct operation by opening the contact	
6 Test pending LED	Off	No relay test required
	Flashing	Reminder to perform a relay test on the device. It activates every three months of operation if the alarm relay test button has not been pressed.
	On	The test button has been pressed to check relay operation but the alarm has not been reset

Step-by-step installation

1 Mount the device

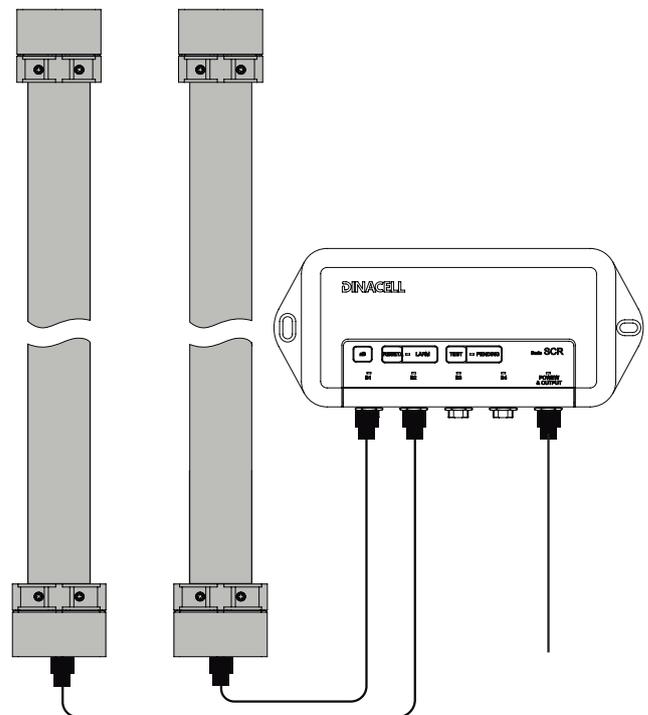
The first step involves mounting the device onto a solid surface inside the elevator. It is important to note that the broken belt detection system consists of an SCR device and two types of connectors, one of which includes a cable connection. These connectors are installed at the free ends of the elevator belt. Specifically, the device should be placed close to the cable connectors.



2 Wiring

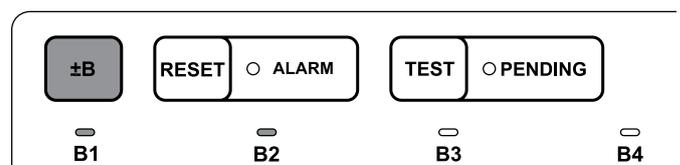
i More information about wiring can be found in sections 2.1 and 2.2.

- Install the broken belt connectors at the belt ends as described in the corresponding manual.
- Connect the connectors to the device following the order B1, B2 ... B4.
- Then connect the alarm relay to the control panel. Note that the relay contact is normally closed when the system is correct, and it will open if power is lost or a broken belt alarm is detected.
- Finally, connect the 24VDC power supply to the device and check that the power LED is on.



3 Programming the number of belts

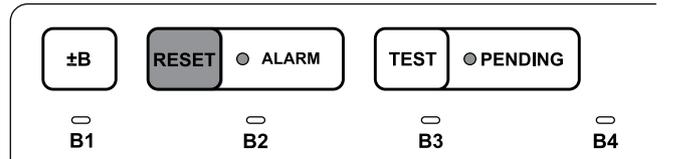
By default, the device has all four belt status LEDs active. If they do not match the number of belts connected to the device, you must configure them using the $\pm B$ keys, as indicated in section 2.3.



5 Reset the alarm and check the belts

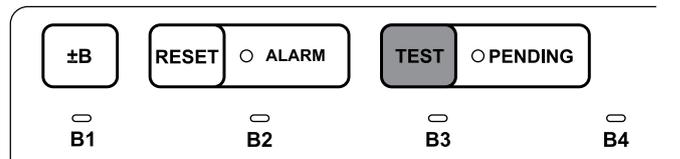
Reset the device by holding the "RESET" button until the alarm LED turns off.

After resetting, if any LED remains red or flashing green, it may be due to incorrect installation of the broken belt connector. Check the installation following the instructions in the corresponding manual.



6 OPTIONAL - Perform a relay test

It is advisable to perform a test on the alarm relay as indicated in section 2.3. When the alarm is active, check that the relay contact has opened, and then reset the alarm.



 For proper maintenance of the device, it is advisable to repeat this procedure every three months of operation.

Broken belt alarm

4

The first step is to analyze the cause of the alarm. To determine whether the device is issuing a broken belt alarm, it is necessary to rule out whether the activation was the result of a relay test or if it occurred during the initial installation due to incorrectly placed connectors.

The device detects a broken belt alarm when electrical continuity in the belt is interrupted. This interruption can be either temporary or permanent, depending on the type of break. For example, it is possible for the system to momentarily recover electrical continuity, and for the break to be detected only when the belt passes over a pulley.



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