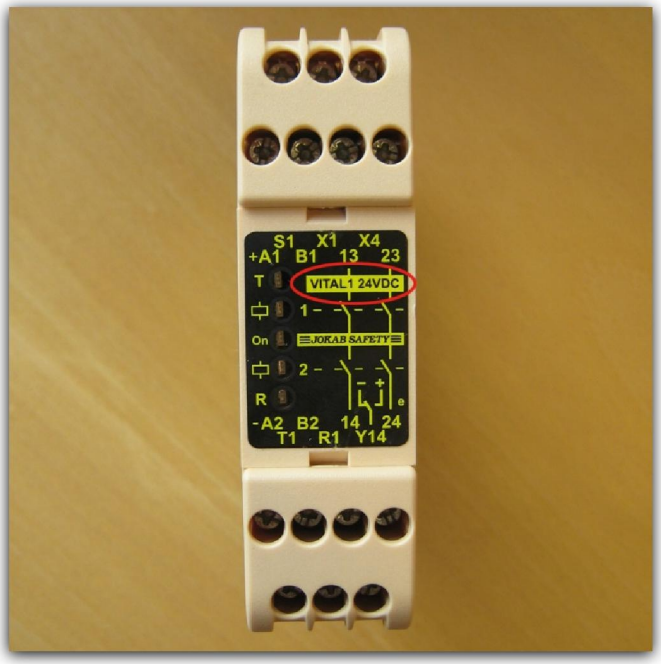
Instructions

Vital 1

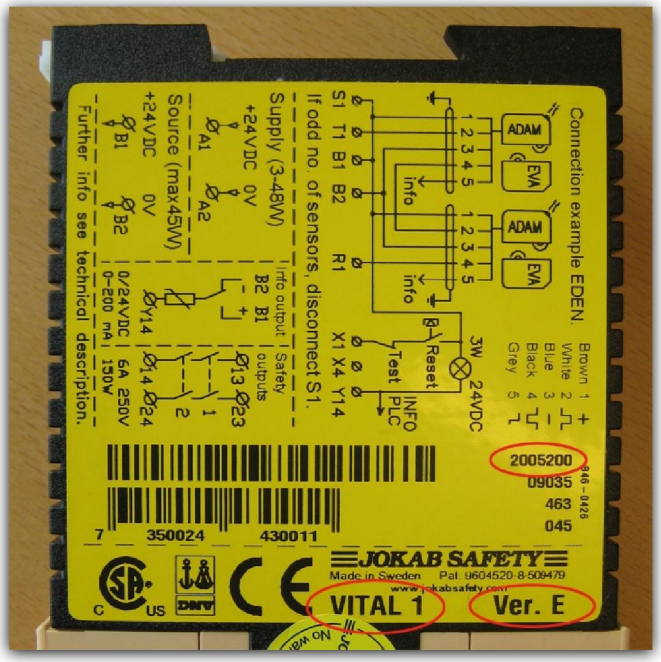
Identification

Identifying a Vital 1 safety module

When installed in an electrical cabinet, the easiest way to identify a Vital 1 unit is by checking the front panel, where the product name is printed as shown in the picture below.



The article number for all versions of the Vital 1 safety module is 20-052-00. The **article number** (printed as 2005200), **model version** and **product name** can all be found on the label at the side of the unit, as shown in the picture below.



Identifying different Vital 1 versions

Version B

Version C

Version E

Version F

Version F2

Version G

Instructions

Vital 1

Testing the safety functions

General information

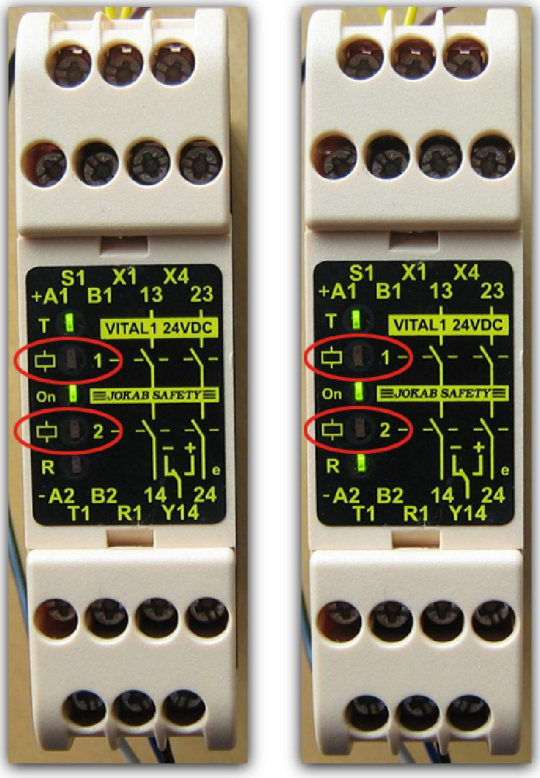
Checking the safety functions of Vital 1 is normally easy to perform at a machine where Vital 1 is in operation. Do not disconnect the VITAL 1 for testing. This should only take a few minutes. The normal check is performed by using the safety devices connected to Vital 1 to verify that the safety functions are working properly. Proper functionality is indicated by the LEDs on the front panel of Vital 1. Specifically, LEDs #2 and #4 (marked with red circles in the pictures below) indicate the status of the safety outputs.

Instructions

1) When power is supplied and all safety devices connected to Vital 1 are un-interrupted (i.e. the safety circuit is closed), all five LEDs on the front panel should be turned ON, as shown in the picture below.

In this state, the machine/process is allowed to start.

2) Interrupt any of the safety devices connected to the Vital 1 unit. Both safety outputs should then be deactivated. LEDs #2 and 4 indicate the status of the safety outputs and should now be turned OFF. The state of the LEDs should be the same as either of the two pictures below.



In this state, the machine/process is stopped by Vital 1.

⚠ If either LED #2 or LED #4 is still turned ON when the safety circuit is interrupted, the safety outputs are not functioning properly and the unit may not be put back into operation.

Instructions

Vital 1

Unit replacement

Replacing a Vital 1 safety module

Carefully read through the entire instructions before replacing the Vital 1 unit.

General information

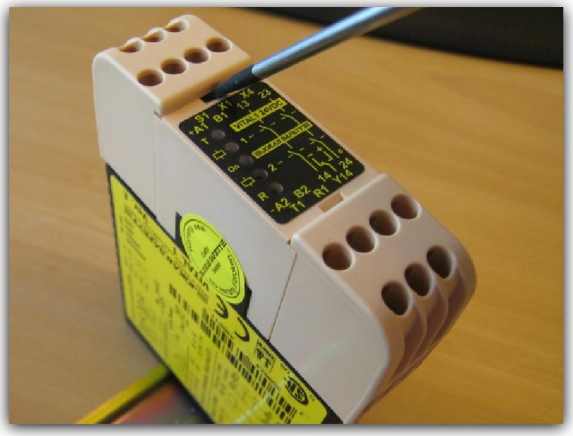
Note! No cables are connected to the Vital 1 unit in the pictures below only to increase visibility. Vital 1 is designed for easy replacement, using detachable connection blocks. Cables connected to the Vital 1 unit can therefore stay connected in the connection blocks, simplifying the replacement as well as making it safer, ensuring that the cables are reconnected correctly to the new Vital 1 unit.

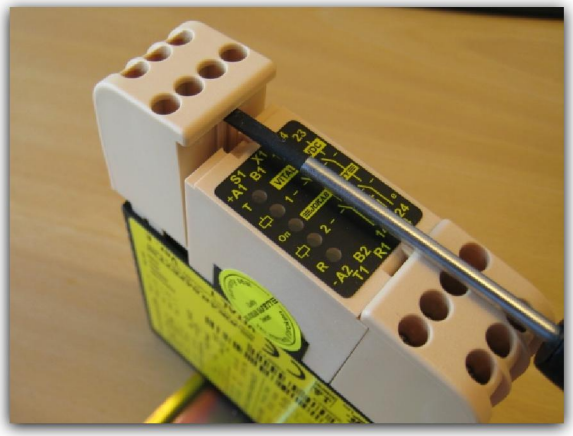
Instructions

1) Disconnect the power supply to Vital 1.

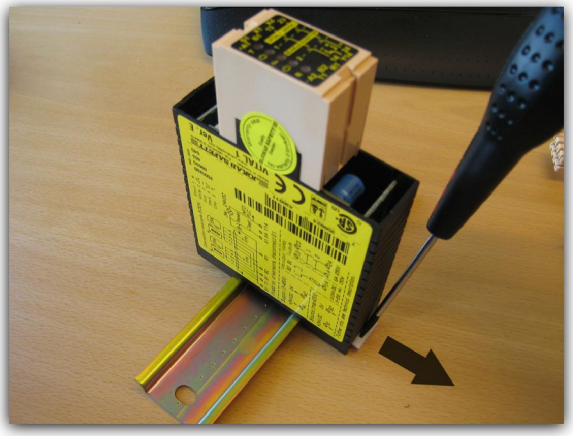
2) Before detaching the connection blocks, tighten the screws to make sure all connected cables are properly fastened.

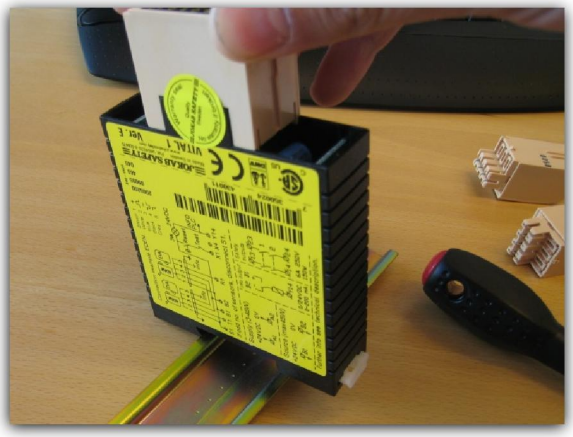
3) Detach the connection blocks using a screwdriver according to the pictures below. The cut-outs are intended for this.



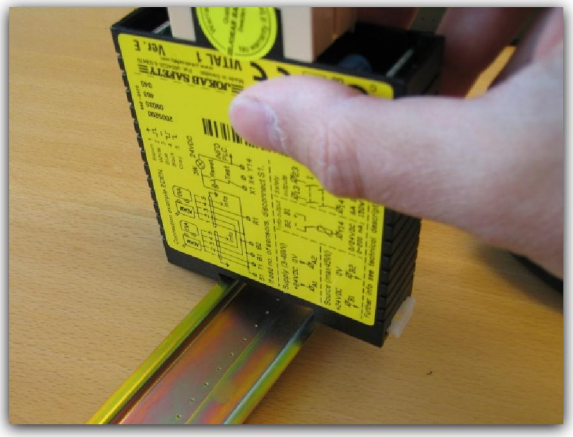
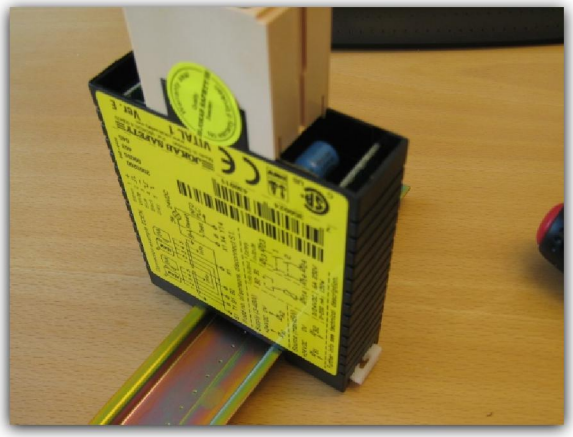


4) Detach the Vital 1 unit from the 35 mm DIN rail using a screwdriver as shown in the pictures below. First use the screwdriver to pull back the white latch at the bottom of the unit, then turn the unit forward from the top to detach it from the DIN rail.

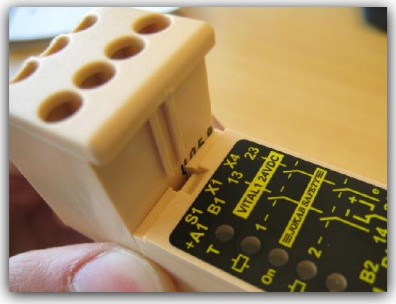
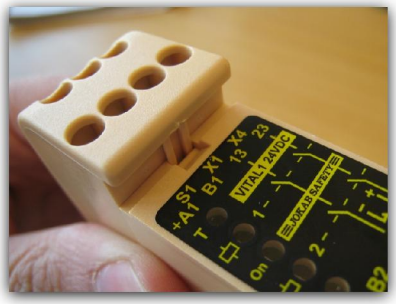
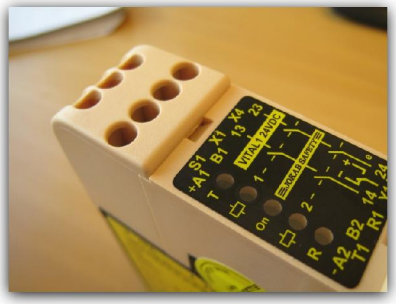




5) Mount the new Vital 1 unit (delivered without terminal blocks) to the 35 mm DIN rail according to the pictures below. The latch should snap into place.

6) Reattach the connection blocks to the new Vital 1 unit. Make sure all cables connected to the connection blocks are in place. The grooves on the unit are used to slide the connection blocks into the correct position, see pictures below. Make sure the top connection block is attached to the top slot, and the bottom block is attached to the bottom slot.

7) Reconnect the power supply. The new Vital 1 unit is now ready for operation.

8) Inspect the LEDs and make sure that **all** safety devices connected to Vital 1 are working correctly and activate the safety outputs on Vital 1.

9) The replacement is completed.