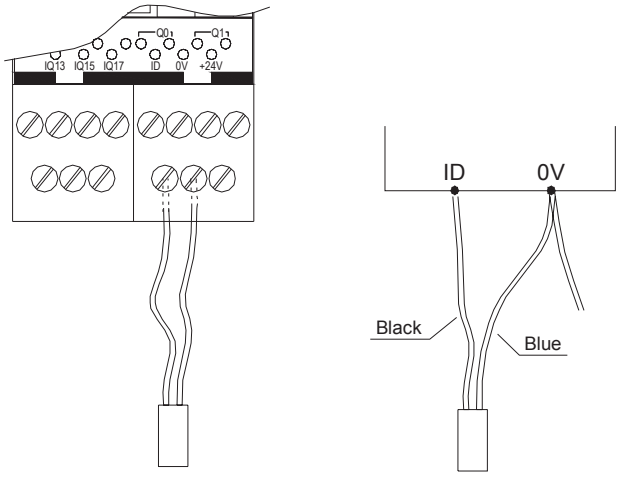
# 10 Identifier

The identifier is an external component that can be connected to the “ID” and “0V” terminals. The circuit contains a unique ID-number that can be read by the system. In the PLC program the identifier number can be declared which connects the program so that it will only work together with the correct identifier. The use of identifier is voluntarily as long as a unit works alone, but if an identifier is connected to the unit and the PLC program is declared to work without, the program will not run.
The function gives a protection against a unit being exchanged by mistake. The identifier circuit should be securely fastened to the physical location of the unit by e.g. tie it together with other connection conductors.




*Connection of identifier*

When a number of Pluto-units are interconnected with the bus, identifiers are necessary. The units are numbered 0…31. In the application program it is necessary to declare which identifier number has to be connected to which Pluto unit (0…31).
Example: ! id_pluto:01=023474526654

There are several types of identifier circuits available;
**IDFIX-R** (pre-programmed)
- The number is programmed by the circuit manufacturer who guarantees that two circuits with the same number do not exist.

**IDFIX-RW** (programmable)
- The number can be programmed by the user.

**IDFIX-DATA** (programmable & data storage)
- For Pluto AS-i and B42 AS-i.
- The number can be programmed by the user and safety codes of AS-i safe slaves can be stored.

**IDFIX-PROG 2k5 / IDFIX-PROG 10k** (programmable, data & PLC program storage)
- For Pluto with OS version 2.50 or higher.
- This IDFIX has enough memory to also store the PLC program (maximum size IDFIX-PROG 2k5: 2.3 kbyte IDFIX-PROG 10k: 10 kbyte).
- Only one Pluto is allowed in the project, and the IDFIX code is always EEEEEEEEEEE0.
- Can be used to store AS-i safety codes in the same way as IDFIX-DATA.
- When a program is downloaded to Pluto the IDFIX-PROG will automatically be updated.
- If there is a difference between the program in the IDFIX-PROG and the flash memory then Er31 will be displayed and PLC program execution is prohibited. This is checked at program download and at boot time.

- The PLC program in IDFIX-PROG can be loaded into flash memory by pressing the K button in the same way as self programming over the CAN bus. This can be done when Pluto displays error message Er20 (No program loaded), Er24 (Erroneous PLC program) or Er31 (IDFIX-PROG program mismatch).

Programmable identifiers (IDFIX-RW and IDFIX-DATA) can for example be used where it is required to deliver units with the same PLC program e.g. for a special machine or safety application.