

INFORMAZIONI TECNICHE

FEATURES

- suitable to control four EV395 or SCL01 spark detectors
- temporized command for 4 output relays for the following functions:
 - command 1 or 2 electrovalves feeding water spraying nozzles for spark extinguishing
 - command acoustic and visual alarms
 - automatic activation of shutters to block the accumulation of materials in a silo
 - verification of electrovalves opening using pressure meters in the hydraulic circuit

ADVANTAGES

- simple and easy installation
- provided with all the elements necessary for a spark detection system
- provided with an internal stabilized power supplier



In spark detection systems, devices other than the specific detector are normally required.

Usually these additional devices allow the detected sparks extinguishing, the acoustic signalling of alarms, the control of extinguishing systems and the eventual block of the silo material feeding system.

The operations described above are carried on by the SCU04 Control Unit in very short times, with precision, in the right sequence and so definitely in the best way.

The EVSCU04 Control Unit has been designed to be used together with our EV395 or SCL01 spark detectors. It can control up to four spark detectors.

This unit automatizes all the operations and so allows to use the spark detectors in a simple and reliable way.

Moreover the SCU04 Control Unit avoids the necessity to buy a lot of devices coming from different manufacturers and so the problem of coupling this eterogenous devices.

The SCU04 installation is very simple and can be carried out in a short time.

FUNCTIONING

The typical installation of a spark detection system in a silo feeding pipe consists at least of:

- 1 spark detector
- 1 electrovalve to open/close the water feeding
- 1 water spraying nozzle (sprinkler head) for spark extinguishing
- 1 visual/acoustic signalling unit

For the maximum safety it is good to double all the elements above described to obtain the following result:

- the first section performs the detecting and the extinguishing
- the second allows the final control and if the spark is not extinguished yet, executes the extinguishing and the system block

The example of page 2 is about a complete installation with two EV395 or SCL01 and an SCU04 Control Unit.

The SCU04 functioning mode is the following: it is connected with the spark detectors by means of the supplied terminal board, so that it can supply the detectors with power and receive the signals from them.

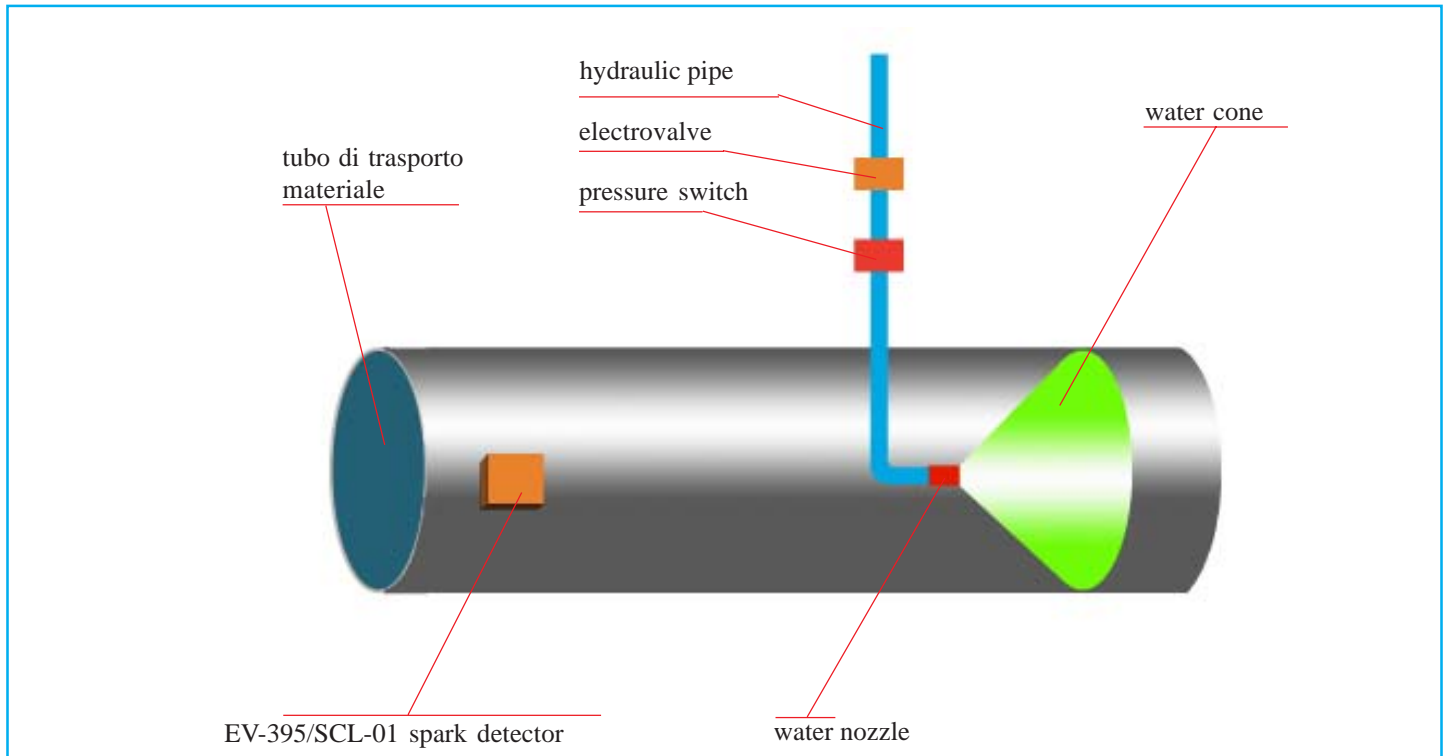
- if an alarm signal is sent from the **first spark detector** the SCU04 powers the internal output relay R1
- R1 activates the VL1 electrovalve. The VL1 opening causes, by means of the SS1 nozzle (sprinkler head), an extinguishing water spray in the pipe. The spraying time length is regulated by an internal timer T1 (time adjustable between 0-30 sec.) of SCU04.
- R1 activates also the optical (warning flasher) and acoustical (warning siren) devices
- if the **second spark detector** gives out an alarm, the SCU04 powers the internal output relay R2
- R2 activates the VL2 electrovalve that commands the SS2 extinguishing sprinkler head. The R2 relay will be eventually useful to command the automatic pipe shutter closing of silos.
- the PRS1 and PRS2 pressure meters are mounted on both the feeding water pipes for the SS1 and SS2 nozzles. The contacts of the main board of pressure meters are used to command external board memory system with signalling Led. In this way a confirmation of the sprinkler heads intervention is provided

If the pipes have a large diameter (over 0,5 m.) two spark detectors installed diametrically opposite, can be used to obtain a better security level. In this case we need 4 spark detectors. To each spark detector, in the SCU04 is associated an output relay (R1 - R2 - R3 - R4)

TECHNICAL DATA

- power supply: 220 Vac
- power consumption: 20 VA
- power supply fuse
- fuse for 24Vcc output voltage
- 4 detection zones for 4 spark detectors EV-395 or SCL-01
- ON - OFF Led
- Led for 1-2-3-4 electrovalve powered
- Led for memory 1-2-3-4 electrovalve powered
- timers: 4 adjustable between 0-30 sec. with a trimmer
- memory reset push button
- 4 push buttons for spark detectors Test from distance
- 4 output relays
- enclosure: metal epoxy painted
- eprotection index: IP 54
- dimensions: 275x325x110 mm
- heigt: 4,5 Kg

Example installation with one spark detector



Example installation with two spark detector

