



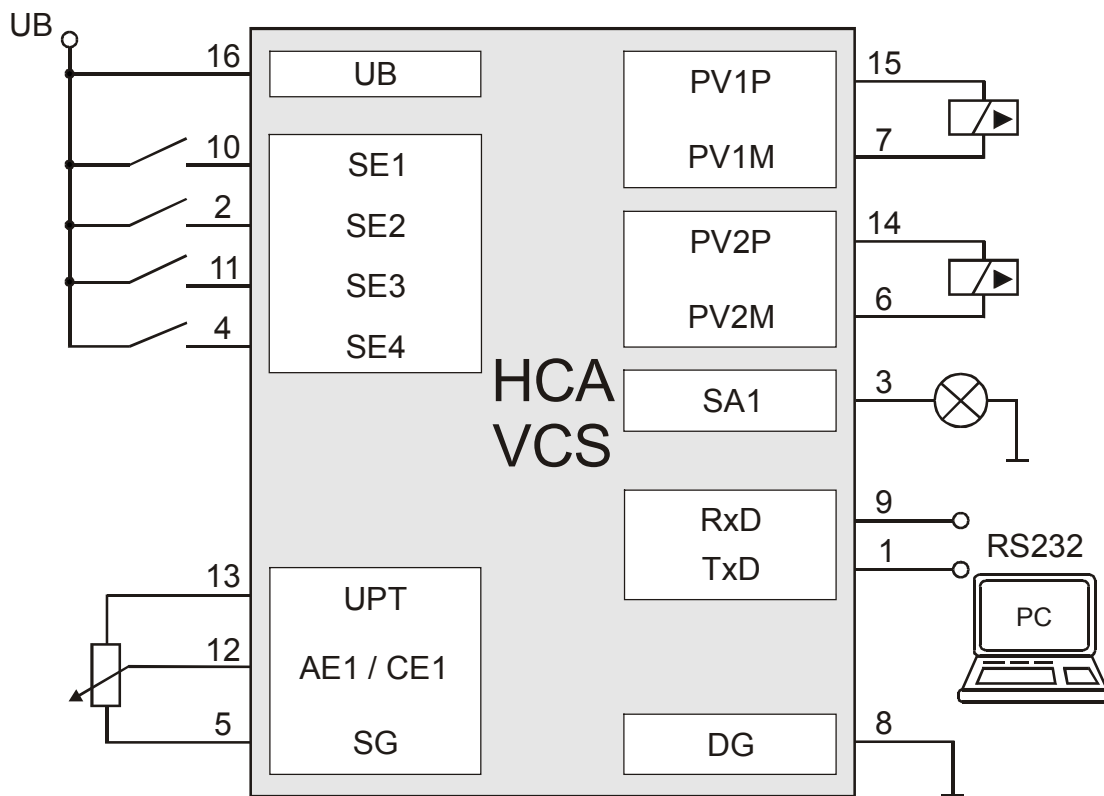
# The Hydraulic Controller VCS

ValveControlSmall is a proportional amplifier, which is suitable for basic applications in the hydraulics sector. Its robust housing makes it particularly well usable in harsh mobile environment. It is designed to control valves with one or two solenoids.

The VCS controller is developed on the HCA hardware platform. The PC program ConDoc – Control&Document® serves to help when entering the parameters.



## VCS Connection diagram





## VCS Performance features

- The setting values can be preset as voltage or as current values (4-20mA) using the analogue input via a potentiometer (such as rotary potentiometer, joystick, foot pedal), or a PLC. As an alternative four preset fixed values can be called-up using the switch inputs.
- The polarity sign of a setting value is used to determine the direction (forward or backwards operation) or to select the valve.
- Setting values without polarity signs (as with pedal operation) can be allocated to two valves using the switches.
- The way the input signal drives the valve can be freely programmed by the user. Ramps can be set with rising and falling times, non-linear characteristics with defined curvature.
- A second parameter set is available for the default of different ramp times and maximum currents. It can be activated using the switches.
- A status exit for the connection of a monitoring unit gives information on hardware or configuration errors.
- The setting value range can be set to an alternative measurement scale at the analogue input. Different areas can be selected for the forwards and backwards direction.
- An additional release input enables switching off with a variable switching-off ramp (EMERGENCY OFF).

## VCS Hardware HCA

### HCA - Technical data

Microprocessor:	C167CR, 25MHz
Program memory:	512kByte Flash-EPROM
Data memory:	32kByte RAM
Parameter memory:	64kBit EEPROM
Interfaces:	RS232
Inputs:	
Analogue operation:	2 Analogue inputs 0 ... 10V / 4 ... 20mA 3 Digital inputs
Digital operation:	1 Analogue input 4 Digital inputs
Outputs:	2 Outputs for proportional solenoids up to 3A 1 Status output
Supply:	8 ... 32V, ca. 40mA at 24V
Connection:	AMP 1-963215-1, 16 contacts
Housing:	Aluminium black, IP65, IP69K
Temperature range:	-40 ... 85°C
Dimensions:	92mm x 129mm x 49mm

The control system is protected by a robust aluminium housing

