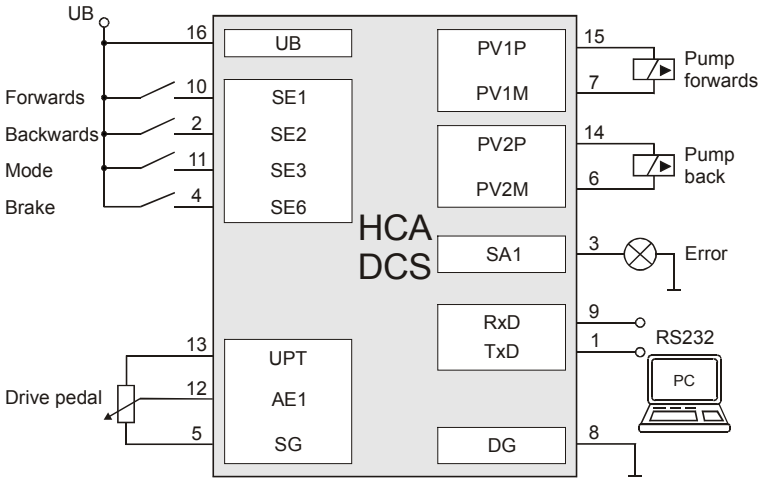
DriveControl DCS

DCS controls a hydrostatic drive via adjustment of the hydraulic pump. The robust housing makes it well-suited for heavy duty use. The DriveControl DCS is based on the hardware platform HCA.

DCS Connection diagram

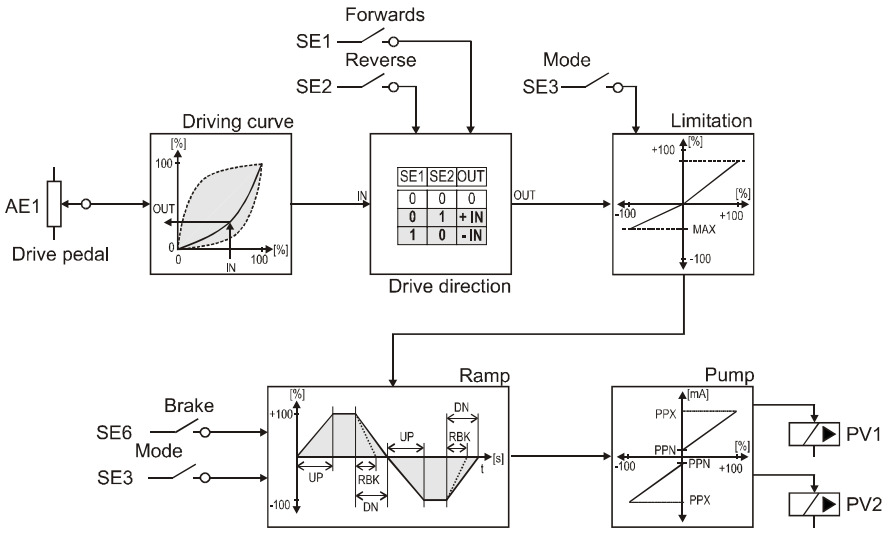


Preset set value using the drive pedal or joystick, voltage (0-10V) or current (4-20mA)

Switch for:
- Driving direction
- Mode of operation (work/transport)
- Brake

Switch output optional for
- Error signal
- Signal for drive direction (forwards/backwards)
- Stop signal

DCS Block diagram



Driving characteristics adjustable dependent on the desired driving mode.

Speed limitation for each operation mode and driving direction.

Ramp times for each operation mode and driving direction freely selectable.

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DCS Performance features

- The user can enter all parameters easily using the PC program ConDoc -Control&Document®, monitor and change them on-line. The graphic depiction of measurement data on the PC supports quick diagnosis.
- Proportional valves and analogue inputs are checked for short-circuits and cable break; if there are errors, the drive is blocked.
- Error display using a flashing code
- The drive characteristic can be individually adapted to the vehicle using the following functions:
  - Speed limit for forwards and reverse driving can be separately set for work and transport operation
  - Acceleration, deceleration and brake ramp times can be parameterised separately for each operation mode and direction of motion
  - The drive curve can be selected freely
  - Characteristic output curve can be parameterised for different valve types
  - Hysteresis function for the output characteristics.
- Switching thresholds (high, low) can be parameterised per switch input.
- Switch type (open or closed contact) can be parameterised per switch input and switch output.
- Test functions

DCS Hardware HCA

HCA - Technical data

Microprocessor:	C167CR, 25MHz
Program memory:	512kByte Flash-EPROM
Data memory:	32kByte RAM
Parameter memory:	64kBit EEPROM
Interfaces:	RS232
Inputs:	1 Analogue input 0 ... 10V / 4 ... 20mA 4 Switch 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

Subject to change, status 04/04