



Survey

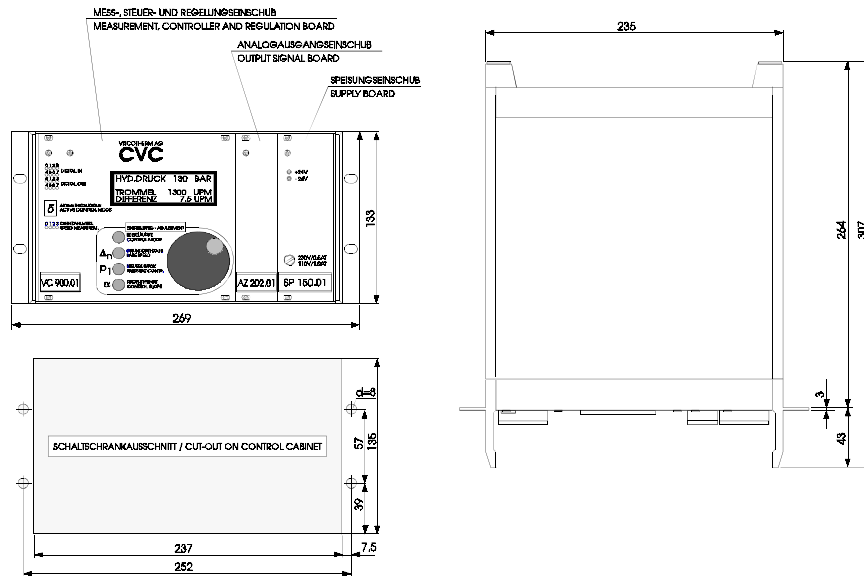
CVC 410

Electronic Display and Control Unit

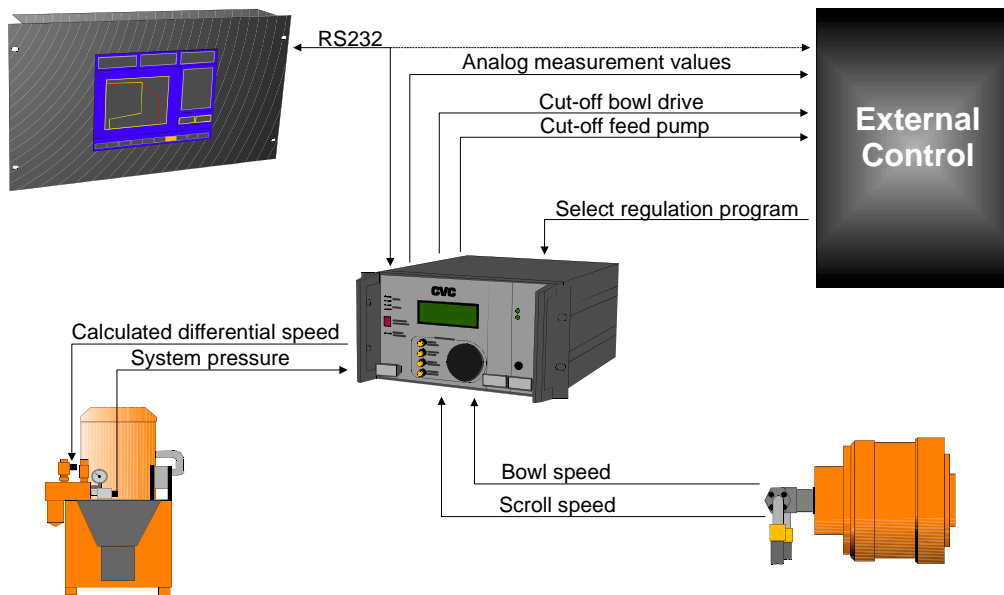
This electronic instrument is used for the continuous monitoring of VISCOTHERM hydraulic scroll drives on centrifuges. The Display and Control Unit CVC 410 works with an integrated high-performance microprocessor which insures absolute precise measuring and regulation (digital signal processing). All important operation parameters can directly be adjusted on the CVC Unit. Due to the software supported universal high level valve modulation various pump types can be triggered without any hardware modifications, positioning regulated pumps included.

Plug connector terminals insure a quick and trouble free installation or exchange. The CVC base unit is based on a modular system and complies with the Euro-rack arrangement, therefore additions are possible.

Display of:	Bowl speed	in rpm
	Differential speed	in rpm
	System pressure	in bar
	1 reserve channel configuration (f.i. oil temperature,)	
	Operating hours of Rotodiff	
Plain language display of:	Cut-out pressure p2 in bar	Feed pump „OFF“
	Cut-out pressure p3 in bar	Bowl drive motor „OFF“
	Stationary bowl	
	Indication of faulty situation	
Language selection:	German	
	English	
	French	
	Portuguese	
	Spanish	
	Dutch	
	Norwegian	
	Italian	
	Danish	
Regulation parameters: (Process adjustments)	10 individual process regulation programs (linear or non linear)	
	The following parameters are individually adjustable on each individual regulation program.	
	- Base speed	$\Delta n1$
	- Regulation pressure	p1
	- Regulation stiffness	α (only linear regulation programs)
	- Cut-out pressure	p2 (Feed pump „OFF“)
	- Cut-out pressure	p3 (Bowl drive „OFF“)
	- Pressure limitation	(only with Visualization)
	- Differential speed range	(only with Visualization)
	- Character and form of each regulation program	(only with Visualization)
Differential speed regulation:	Regulation of the adjusted set value as well as automatic internal leakage compensation.	
External adjustment:	Through relays contacts all 10 process regulation programs can be individually selected.	



Voltage range: 110 V / 220 V (switchable)
 Protection class: IP 40
 Temperature range: 10 - 40 °C
 Weight: 4 kg
 Scope of delivery: Base CVC Unit in Euro-rack case. Complete set of connector terminals. CVC is factory tested and pre-set according to Pump Unit and Rotodiff specification.



Options to CVC Base Unit as follows:
 Wash down waterproof case for CVC410 (Casing protection class, IP 55)
 Extended temperature range 0 - 40 °C (with casing IP 55)
 Speed pick-up sensors and pressure transducer
 Speed pick-up sensors and pressure transducer in Ex-proof version
 Analog output signal board (4-20 mA signals for bowl-, scroll speed, pressure and reserve channel)
 CVC 510 for Full Hydraulic Drive Systems.
 Visualizing software (Disc with visualizing software, ISA card for fix installation on PC or External industrial Touch Screen complete)
 Connecting cables for long distances between CVC and Visualizing (Interface connection RS 485)
 As per first quarter of 2000 Profibus DP connection for PLC.