

# COMPRESS PRESSURISATION SETS



- **Compressor-Controlled Pressurisation System for Heating and Cooling Systems**
- **Full Range of Vessels 350 to 5000 Litres**
- **Maintains the Pressure Level within +/- 0.1 Bar**
- **Minimum Floor Space Required on Large Systems**
- **Microprocessor Control**
- **Suitable for use with Building Management Systems**
- **Supplied with Automatic Make-Up Unit**

# COMPRESS CCV PRESSURISATION SETS

The Smedegaard ComPress CCV pressurisation unit is designed to absorb the expanded water in a heating or chilled water system, whilst maintaining a constant pressure.

The set comprises - vessel with replaceable diaphragm, compressor, microprocessor, solenoid valve, pressure sensor and fill set.

In contrast to pressurisation units fitted with conventional expansion vessels, the ComPress CCV set releases air from the vessel via a solenoid valve, as the system water temperature increases, and this keeps the pressure in the system constant. As the system water cools down, the compressor cuts in and recharges the air in the vessel to the relevant pressure.

Additional features include a continuous digital read out of the system pressure and water level, with volt free contacts for connection to a BMS system.

Vessel sizes vary between 350 and 5000 litres, for larger systems additional vessels are available for mounting in parallel to the main tank. The table below can be used to quickly size a ComPress CCV pressurisation unit. The chart has been calculated for the three most common temperatures encountered in systems requiring this type of equipment.

**\*Please note that units marked with an asterisk comprise of two tanks.**

**Static head to be considered in the standard manner.**

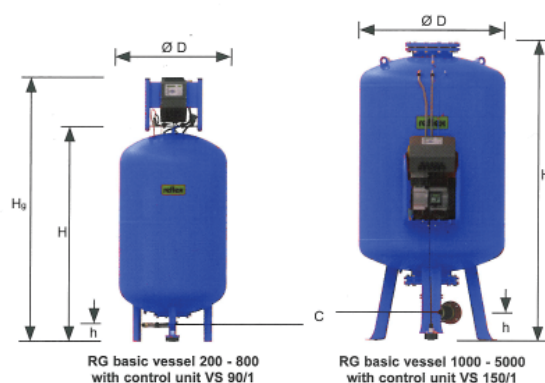
For system flow temperatures < 95°C:-

$$\text{Cold fill pressure} = \frac{(\text{Height of system in metres} + 0.3^{**})}{10} \text{ bar}$$

**\*\*This additional 0.3 metre ensures the system is flooded and facilitates venting at the top of the system.**

Minimum cold fill pressure is 0.5 bar.

**Intermediate vessels are required for high temperature systems over 95°C. Please consult Smedegaard for any assistance for these applications.**



## ComPress Features

- Suitable for up to a Maximum Flow Temperature of 120°C
- Microprocessor Control with Display in 8 Languages
- Permanent Display of System Pressure and Tank Volume
- 230V Output for Fully Automated Water Make-Up
- 2 Dry Contacts (Common Fault, Min. Water Level)
- Data Output Through RS-485 (Most Models)
- Meets or Exceeds Ec Norms for Pressure Vessels 97/23/Ec
- Superior Quality Butyl Bladder According to Din 4807 Norm Part 3 Max. Operating Temperature 70 C

## Sizing Chart for CCV Pressurisation Units

System Volume – litres			Model
82°C	100°C	120°C	
10500	7000	5250	CCV/A
14500	10000	7250	CCV/B
23000	16000	11500	CCV/C
31000	22000	15500	CCV/D
46000	32000	23000	CCV/E
62500	43000	31250	CCV/F
96000	66000	48000	CCV/G
128000	88000	64000	CCV/H
160000	110000	80000	CCV/J
21000	14000	10500	CCV/AA*
78000	54000	39000	CCV/ED*
126000	87000	63000	CCV/GF*
160000	110000	80000	CCV/GF*
193000	133000	96500	CCV/GG*
256000	176000	128000	CCV/HH*
320000	220000	160000	CCV/JJ*

## Dimensions in mm

Vessel								
Model	D	d	H	h	Weight kg.	Compressor Elect. Data 400-3-50		
						Motor kW	FLC Amps	SC Amp
CCV/A	750	40 PN/6	1395	195	156	0.37	1.4	7.0
CCV/B	750		1660	195	185	0.37	1.4	7.0
CCV/C	750		2225	195	225	0.37	1.4	7.0
CCV/D	1000	50 PN/6	1980	195	330	0.37	1.4	7.0
CCV/E	1200		2070	250	465	0.55	1.7	8.5
CCV/F	1200	65 PN/16	2550	280	565	1.1	3.6	18.0
CCV/G	1500		2460	280	795	1.7	4.5	22.5
CCV/H	1500		3035	280	1080	1.7	4.5	22.5
CCV/J	1500		3610	280	1115	2.4	6.2	31.0

*It is Smedegaard's policy to continually improve and develop its product range. We reserve the right to change specifications without prior notice. Whilst every care has been taken to ensure the data is correct, no responsibility can be taken for inaccuracies or misprints.*