

CFA 5 Carbon Dioxide Filling Unit

**Filling from low-pressure tanks with
cryogenic carbon dioxide**

**For CO₂ fire extinguishers and bottles
up to 50 kg**

Short setup times and fast working cycles

The CFA 5 Carbon Dioxide Filling Unit works with high processing reliability, as the CO₂ is only transferred in the liquid phase. Short setup times and fast working cycles guarantee rational and cost-effective operation.

The CFA 5 is a carbon dioxide filling unit with a pump stand, a control panel on a stand and electronic floor scales. It may only be used on tank systems with cryogenic liquid carbon dioxide (-20°C, 15-20 bar).

The carbon dioxide is permanently in motion while the unit is in operation: it is drawn from a low-pressure tank in liquid form, and the pump stand either pumps it back into the tank or into the CO₂ bottle to be filled on the floor scales.

The pump stand is connected to the CO₂ storage tank directly.

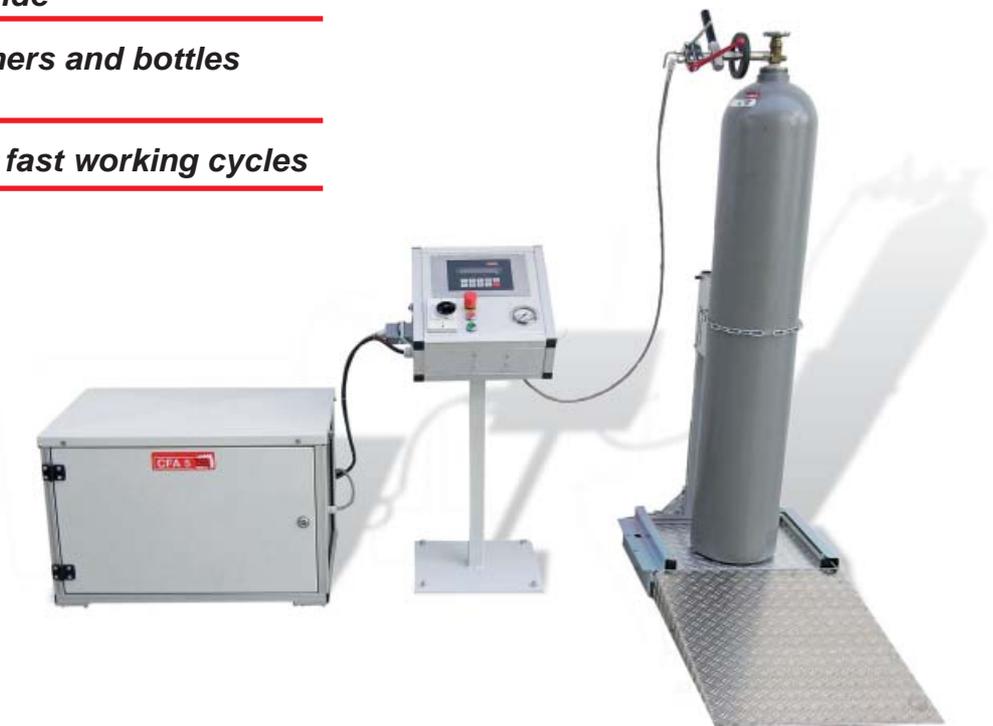


Fig. 1: The CFA 5 Carbon Dioxide Filling Unit is designed for the precise filling of CO₂ from the liquid phase. It is used to fill CO₂ bottles from 2 to 50 kg with cryogenic carbon dioxide from low-pressure tanks (15 to 20 bar).

The control panel is connected to the pump stand with a supply line.

The CO₂ bottle to be filled is placed on the scales and connected to the filling line of the control stand via the filling valve.

The filling weight is programmed into the digital scales and the scales are tared at the press of a button. After opening all the CO₂ supply lines the filling process is started on the control panel. When the filling weight is reached the filling process is terminated automatically.

When the valve on the filled CO₂ bottle has been closed the filling valve is closed, vented and unscrewed.

Technical data for the CFA 5

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)



Protection Class: IP54

Art. No. 186170

Electric motor: 400 V, 50 Hz, 1.5 kW, 1400 min⁻¹
Filling output: 5 kg/min

Art. No. 186173

Electric motor: 400 V, 50 Hz, 2.2 kW, 1400 min⁻¹
Filling output: 8 kg/min

Art. No. 186172

Electric motor: 400 V, 50 Hz, 4.0 kW, 1400 min⁻¹
Filling output: 15 kg/min

Safety devices:

Electrical pressure switch:
100 bar
Mechanical safety valves:
2 x 130 bar

5 m cable feed, oil and
acid resistant:
H07RN-F 5 G 1.5 mm²

Freely programmable
electronic floor scales

Dimensions and weights:

	Pump Stand	Control panel with stand	Floor scales with drop-down ramp
Height mm:	570	1035	1000
Width mm:	905	500	580
Depth mm:	615	505	1050
Weight kg:		37	40
Weight kg:	98 (Art. No. 186170)		
Weight kg:	136 (Art. No. 186172)		
Weight kg:	110 (Art. No. 186193)		

Colour: RAL 7032 pebble grey

CFA 5-1W and CFA 5-2W Carbon Dioxide Filling Units

The CFA 5-1W and CFA 5-2W Carbon Dioxide Filling Units are the two more powerful versions of the CFA 5, whose method of operation (described overleaf) also applies in this case. Instead of the control panel they have a control stand which is equipped with even more convenient operating features.

In addition, the pump motor has a 2-stage speed control with which the filling speed can be optimally set depending on the size of the CO₂ bottles to be filled.

Furthermore, the CFA 5-2W (without picture) has a second set of scales, so that a higher level of efficiency is possible through alternating operation.



Fig. 2: CFA 5-1W Carbon Dioxide Filling Unit with pump stand, control stand and floor scales, incl. drop-down ramp.



Fig. 3: The control stand is ergonomically designed to ensure comfort and convenience during operation. It contains displays for weight on the scales, filling pressure, circulating initial pressure, excess pressure control and an operating hour counter. 3 different freely programmable cut-out weights can be called up for the scales with a selector switch.

Accessories (extra charge):

Fast-fill connection
Art. No. 186217

Label printer
available on request

Technical data for the CFA 5-1W and CFA 5-2W

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)



CFA 5-1W

Art. No. 186167

Filling output: 8 kg/min

Electrical pressure switch: 100 bar

Mechanical safety valves: 3 x 130 bar

Electrical protection
class: IP54

CFA 5-2W

Art. No. 186168

Filling output: 8 kg/min

Electrical pressure switch: 100 bar

Mechanical safety valves: 4 x 130 bar

Electric motor, 2-stage:

400 V, 50 Hz, 1.4 kW, 705 min⁻¹

or
400 V, 50 Hz, 2.2 kW, 1435 min⁻¹

5 m cable feed, oil and
acid-resistant:
H07RN-F 5 G 1.5 mm²

Freely programmable electro-
nic floor scales with
3 switching points

SPS control

Dimensions and weights:

CFA 5-1W

	Pump stand	Control panel with stand	Floor scales with drop-down ramp
Height mm:	565	1200	1000
Width mm:	845	695	580
Depth mm:	555	620	1150
Weight kg:	110	91	40

CFA 5-2W

	Pump stand	Control panel with stand	Floor scales with drop-down ramp
Height mm:	565	1200	1000
Width mm:	845	695	580
Depth mm:	555	620	1150
Weight kg:	110	103	2 x 40

Colour: RAL 7032 pebble grey