

# Technical specifications

## Models DC 2.0 to 11.3

Model	Flow rate <sup>1)</sup> m <sup>3</sup> /min	Min./max. working pressure bar	Pressure loss <sup>1)2)</sup> bar	Min./max. ambient temperature °C	Max. temperature at compressed air inlet °C	Maximum weight <sup>2)</sup> kg	Compressed air connection at filters G	Dimensions (with ECO-DRAIN) W x D x H mm	Power supply ECO-DRAIN
DC 2.0	0.20	2 / 15	≤ 0.2	2 / 50	50	35	1/2	340 (627) x 167 x 505 (535)	95-240 V ±10% / 1 Ph / 50 - 60 Hz
DC 3.7	0.37	2 / 15	≤ 0.2	2 / 50	50	42	1/2	340 (627) x 167 x 677 (707)	
DC 5.0	0.50	2 / 15	≤ 0.2	2 / 50	50	51	1/2	340 (627) x 167 x 895 (925)	
DC 5.9	0.59	2 / 15	≤ 0.2	2 / 50	50	60	1/2	340 (627) x 167 x 1112 (1142)	
DC 7.6	0.76	2 / 15	≤ 0.2	2 / 50	50	70	3/4	380 (673) x 187 x 1005 (1035)	
DC 11.3	1.13	2 / 15	≤ 0.2	2 / 50	50	82	3/4	380 (695) x 187 x 1255 (1289)	

<sup>1)</sup> As per ISO 7183 Option A1: Reference point: 1 bar(a), +20 °C, 0% relative humidity; Operating point: Pressure dew point -40 °C, Working pressure 7 bar(g), Inlet temperature +35 °C, Ambient temperature +20 °C, 100% relative humidity

<sup>2)</sup> Including prefilter and afterfilter

## Calculating flow rate

Correction factors for deviating operating conditions (flow rate in m<sup>3</sup>/min x k...)

Deviating working pressure at dryer inlet p												
p bar <sub>(g)</sub>	4	5	6	7	8	9	10	11	12	13	14	15
k <sub>p</sub>	0.40	0.57	0.77	1.00	1.13	1.25	1.38	1.38	1.50	1.56	1.61	1.67

Compressed air inlet temperature T <sub>i</sub>						
Temperature (°C)	30	35	37.5	40	45	50
k <sub>i</sub>	1.00	1.00	0.93	0.86	0.75	0.66

Example:	
Working pressure p	10 bar(g) -> k <sub>p</sub> = 1.38
Pressure dew point PDP	-40 °C
Compressed air inlet temperature T <sub>i</sub>	+40 °C -> k <sub>i</sub> = 0.86

KAESER FILTER F 880 with flow rate of 88.50 m <sup>3</sup> /min	
Max. possible flow rate under operating conditions	
V <sub>max</sub> Operation = V <sub>Reference</sub> x k <sub>p</sub> x k <sub>i</sub>	
V <sub>max</sub> Operation = 0.76 m <sup>3</sup> /min x 1.38 x 0.86 = 0.90 m <sup>3</sup> /min	