

Package Hygienic Air Handling Units

- GCP Series



GCP Series

- GCP : Standard
- GCP HP : Heat Pump
- GCP CR : Clean Room Air Handling Unit

- **Up to 11.000 m³/h Air low**
- **Complying with DiN 1946/4 Hygiene Criteria Tests in TUV Laboratories**
- **CE Approved PED, LVD and EMC Conditions from Third Party Institutions**
- **Energy Saving Customized Solutions for All Hygienic Environments**

Structural features

- **Production Quality:** Casing Strength, Casing Air Leakage, Filter By-Pass Leakage, Thermal Transmittance, Thermal Bridging and Acoustical Insulation In Accordance with EN 1886
- **Structure & Panel:** Self Supporting Frame and Double Sheet Sandwich Panels
- **Profile:** Aluminum Alloy (AlMgSi0.5)
- **Sheet Material:** 304 Quality Stainless Steel
- **Panel Thickness:** 50mm (PHK-50)
- **Air Tightness:** EPDM Leak Proof Gaskets to Provide Full Air Tightness On The Panels
- **Heat and Sound Insulation:** Rock Wool
- **Heating / Cooling Coil:** Cu Pipe / Al Fin, Cu Pipe / Cu Fin, Epoxy Coated
- **Fan:** Plug Fan, EC Motor Fan
- **Humidification:** Sterile Steam
- **Heat Recovery:** Run Around Heat Recovery
- **Compressor:** Scroll Hermetic
- **User Panel:** Programmable Touch Screen
- **Air Control Technology:** Constant Airflow / Pressure Control
- **Capacity / Thermal Control:** Proportional Cooling Capacity Control Hot Gas By Pass
- **Power And Regulation:** On Board Power and Electric Regulation Board
- **Monitoring / Management:** BMS Management Compatibility



Types

- GCP : Standard (%100 Fresh air and mixed air unit / Heat recovery unit)
- GCP HP: Heat Pump
- GCP CR: Clean Room Air Handling Unit

Options / Accessories

- **User Panel:** Programmable Touch-Screen Display
- **Heat Recovery:** Water to air / Thermodynamics
- EC Motor Fan

GCP Series - Standard

GCP Series		022~101						
		022	033	045	058	070	085	101
Technical Specifications								
❶ Ventilator Air Flow Rate	m³/h	2.200	3.300	4.500	5.800	7.000	8.500	10.100
Max. External Static Pressure	Pa	800	800	800	800	800	800	800
Ventilator Motor Power	kW	1,50	3,00	4,00	5,50	5,50	2x4,00	2x5,50
❶ Aspirator Air Flow Rate	m³/h	2.200	3.300	4.500	5.800	7.000	8.500	10.100
Max. External Static Pressure	Pa	350	350	350	350	350	350	350
Aspirator Motor Power	kW	0,75	1,10	1,50	2,20	3,00	2x1,50	2x2,20
❷ Total Cooling Capacity	kW	19,0	23,6	32,0	39,7	44,5	54,1	66,4
Compressor Absorbed Power	kW	5,30	5,30	7,10	12,4	11,9	17,0	21,7
❸ Heating Capacity (Hot Water)	kW	34,1	51,5	64,7	84,1	94,6	122,5	140,8
Steam Humidifier								
❹ Steam Humidifier Capacity	kg/h	10,0	15,0	20,0	30,0	40,0	50,0	60,0
Steam Humidifier Power	kW	7,5	11,3	15,0	22,6	30,1	37,6	45,1
Electrical Heater Capacity	kW	5,0	7,5	10,0	16,0	16,0	20,0	20,0
Cooling Circuit								
Refrigerant		R410a						
Compressor Type		Scroll						
Number of Compressor(s)		2	2	2	2	2	2	2
Number of Circuit(s)		2	2	2	2	2	2	2
Acoustics Data								
Sound Power - Outside Unit	dB(A)	59	60	62	62	65	62	64
Sound Power - Air Inlet	dB(A)	78	81	84	86	90	83	87
Sound Power - Air Outlet	dB(A)	81	82	84	84	87	84	86
Dimensions								
Height (H)	mm	1.880	2.070	2.150	2.150	2.270	2.270	2.270
Width (W)	mm	1.865	2.150	2.150	2.150	2.150	2.255	2.255
Depth (D)	mm	910	910	1.060	1.300	1.350	1.840	1.840

- ❶ Air flow rates are nominal values. Ventilator and Aspirator flows can be chosen differently within the range ±10%.
- ❷ Coil inlet temperature is 19°C WB. Cooling values may differ within the range ±%2 according to coil inlet air DB temperatures.
- ❸ Coil inlet-outlet temperature is 90°C/70°C and outside temperature is 0°C.
- ❹ Steam humidifying capacities are nominal values and for different values it is possible to make selection.



GCP HP Series - Heat Pump

022~101

GCP HP Series

		022	033	045	058	070	085	101
Technical Specifications								
❶ Ventilator Air Flow Rate	m ³ /h	2.200	3.300	4.500	5.800	7.000	8.500	10.100
Max. External Static Pressure	Pa	800	800	800	800	800	800	800
Ventilator Motor Power	kW	1,50	3,00	4,00	5,50	5,50	2x4,00	2x5,50
❶ Aspirator Air Flow Rate	m ³ /h	2.200	3.300	4.500	5.800	7.000	8.500	10.100
Max. External Static Pressure	Pa	350	350	350	350	350	350	350
Aspirator Motor Power	kW	0,75	1,10	1,50	2,20	3,00	2x1,50	2x2,20
❷ Total Cooling Capacity	kW	21,7	31,8	43,1	56,5	66,8	86,6	103,4
Std. Compressor Power (Cooling)	kW	1,90	2,80	4,00	4,30	4,60	6,80	8,60
Inv. Compressor Power (Cooling)	kW	5,90	7,70	11,7	16,4	19,7	23,3	28,5
❸ Total Heating Capacity (Dx)	kW	20,9	29,2	40,8	56,8	68,5	85,7	101,0
Inv. Compressor Power (Heating)	kW	4,90	6,30	9,70	14,4	17,8	21,0	25,9
❹ Electrical Preheater	kW	12,0	18,0	23,0	29,0	35,0	43,0	51,0
Steam Humidifier								
❺ Steam Humidifier Capacity	kg/h	10,0	15,0	20,0	30,0	40,0	50,0	60,0
Steam Humidifier Power	kW	7,5	11,3	15,0	22,6	30,1	37,6	45,1
Electrical Heater Capacity	kW	5,0	7,5	10,0	16,0	16,0	20,0	20,0
Cooling Circuit								
Refrigerant					R410a			
Compressor Type					Scroll			
Number of Compressor(s)		2	2	2	2	2	2	2
Number of Circuit(s)		2	2	2	2	2	2	2
Acoustics Data								
Sound Power - Outside Unit	dB(A)	59	60	62	62	65	62	64
Sound Power - Air Inlet	dB(A)	78	81	84	86	90	83	87
Sound Power - Air Outlet	dB(A)	81	82	84	84	87	84	86
Dimensions								
Height (H)	mm	1.770	1.960	2.080	2.080	2.140	2.160	2.160
Width (W)	mm	2.500	2.800	2.850	2.975	2.975	2.975	2.975
Depth (D)	mm	910	910	1.060	1.300	1.350	1.840	1.840

❶ Air flow rates are nominal values. Ventilator and Aspirator flows can be chosen differently within the range $\pm 10\%$.

❷ Coil inlet temperature is 20°C WB. Cooling values may differ within the range $\pm 2\%$ according to coil inlet air DB temperatures.

❸ Outside temperature is 0 °C.

❹ Electrical preheaters are used with 3 stages, when outside temperature below 0°C.

❺ Steam humidifying capacities are nominal values and for different values it is possible to make selection.



GCP CR Series - Clean Room Air Handling Unit

33~101

GCP CR Series


		033	045	058	070	085	101
Technical Specifications							
❶ Ventilator Air Flow Rate	m ³ /h	3.300	4.500	5.800	7.000	8.500	10.100
Max. External Static Pressure	Pa	1.000	1.000	1.000	1.000	1.000	1.000
Ventilator Motor Power	kW	3,00	4,00	5,50	5,50	2x4,00	2x5,50
❷ Total Cooling Capacity	kW	18,8	23,5	28,7	34,1	42,7	50,6
Compressor Absorbed Power	kW	6,36	7,33	9,00	10,52	13,46	15,58
Total Heating Capacity (Electric)	kW	14,0	18,0	24,0	30,0	35,0	42,0
Steam Humidifier							
❸ Steam Humidifier Capacity	kg/h	15,0	20,0	30,0	30,0	40,0	40,0
Steam Humidifier Power	kW	11,3	15,0	22,6	30,1	37,6	45,1
Cooling Circuit							
Refrigerant		R410a					
Compressor Type		Scroll					
Number of Compressor(s)		2	2	2	2	2	2
Number of Circuit(s)		1	1	1	1	1	1
Acoustics Data							
Sound Power - Outside Unit	dB(A)	60	62	62	65	62	64
Sound Power - Air Inlet	dB(A)	81	84	86	90	83	87
Sound Power - Air Outlet	dB(A)	82	84	84	87	84	86
Dimensions							
Height (H)	mm	1.960	2.005	2.005	2.105	2.055	2.155
Width (W)	mm	1.600	1.760	2.040	2.140	2.530	2.530
Depth (D)	mm	1.405	1.505	1.505	1.505	1.665	1.665

- ❶ Air flow rates are nominal values. Ventilator and Aspirator flows can be chosen differently within the range ±10%.
- ❷ Coil inlet temperature is 19 °C WB. Cooling values may differ within the range ±%2 according to coil inlet air DB temperatures.
- ❸ Conditions of entry of the air cooling the table values battery 26 ° C dry thermometer and 50% relative humidity.
- ❹ Condenser air inlet dry thermometer temperature is 35 °C
- ❺ The values given are nominal steam humidification capacity of different values for device selection is possible.

NOTES





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