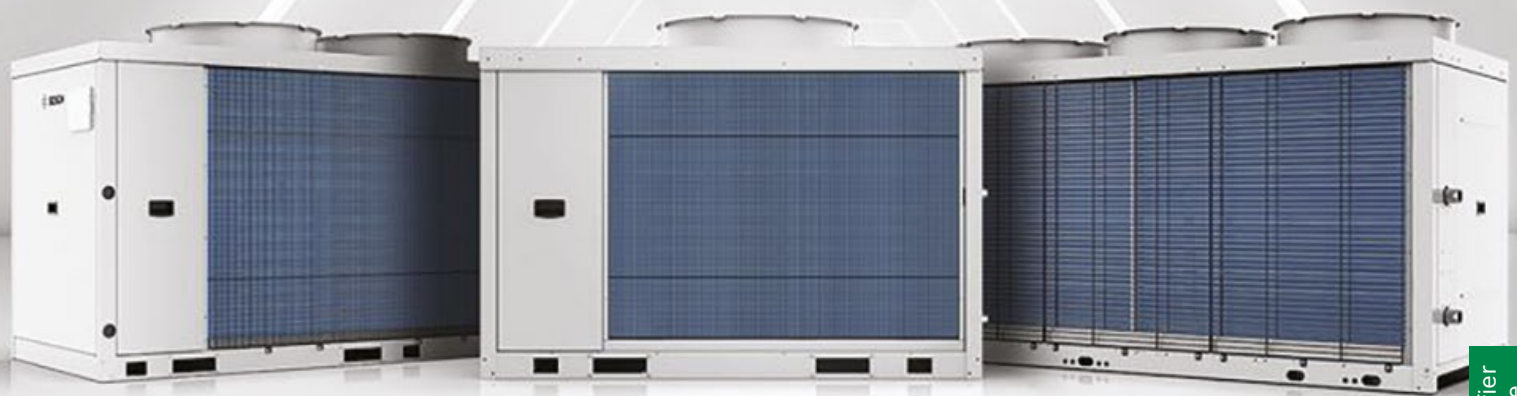




BOSCH

Compress 3000 AWP Specifier guide

Energy saving and efficient

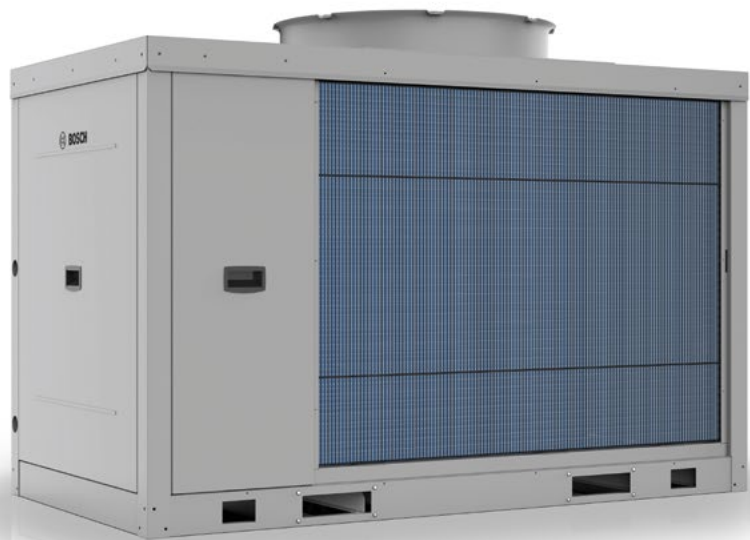


Compress 3000 AWP

Power meets flexibility

Our Compress 3000 AWP is a state-of-the-art commercial heat pump that is perfect for both existing and new build installations in commercial and multi-family dwelling properties.

Available in individual outputs ranging from 16kW to 59kW*, it can be cascaded up to 8 units to achieve an output of up to 944MW*. With 8 output capacities and the ability to be used for heating, domestic hot water and cooling, it is a versatile heat pump.



Lower carbon heating*

High performance, proven efficiency



Why specify the Compress 3000 AWP?

2 year guarantee
2 years peace of mind for you and your customers**.

High outputs
Available in 16kW to 59kW, with the ability to cascade upto 8 units*.

Versatile
Can be utilised for heating, cooling and DHW.

Connected
Monitor energy use with our innovative controls.

Efficient
Inverter driven compressor reducing energy consumption.

Easy installation
Can be used as a standalone or part of a hybrid system.

Straightforward to install and maintain, the Compress 3000 AWP can be used as standalone or as part of a hybrid system. The heat pump is available in four hydraulic variants making it quick and easy to install with existing heat sources such as gas and oil boilers.

Why choose Bosch?

End-to-end support
Full project support, from buying and design to installation and spares.

Reliable heating
Enjoy peace of mind with reliable Bosch quality.

Hybrid heating
An easier route into electrified heating, by fitting our heat pumps in your hybrid system.

High output, simple maintenance

Our electrified heating solution



Tailored solutions

Our Compress 3000 AWP's wide output range from 16kW to 59kW* and the ability to cascade up to 8 units to achieve up to 944MW* means it provides an effective solution for many commercial properties.



Electrified solution

The Compress 3000 AWP is a great addition to a pre-existing heating system. It detects the most economical combination based on outside temperatures.

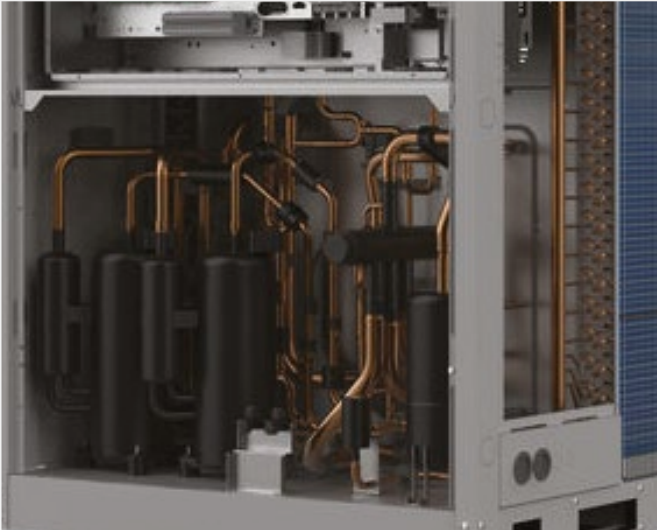
Easy installation

Installation of the heat pump is simple as all four hydraulic variants come prefabricated meaning less work onsite and reduced installation time.



Full inverter compressor

The Compress 3000 AWP is designed with an inverter driven compressor, which reduces overall energy consumption and improves performance by modulating the compressor to meet the required demand and reducing energy waste.



Simple maintenance

Set up and adjustment of the heat pump is seamless with the use of our controls. The controls are also easily accessible and can be placed in a convenient location for your customer.



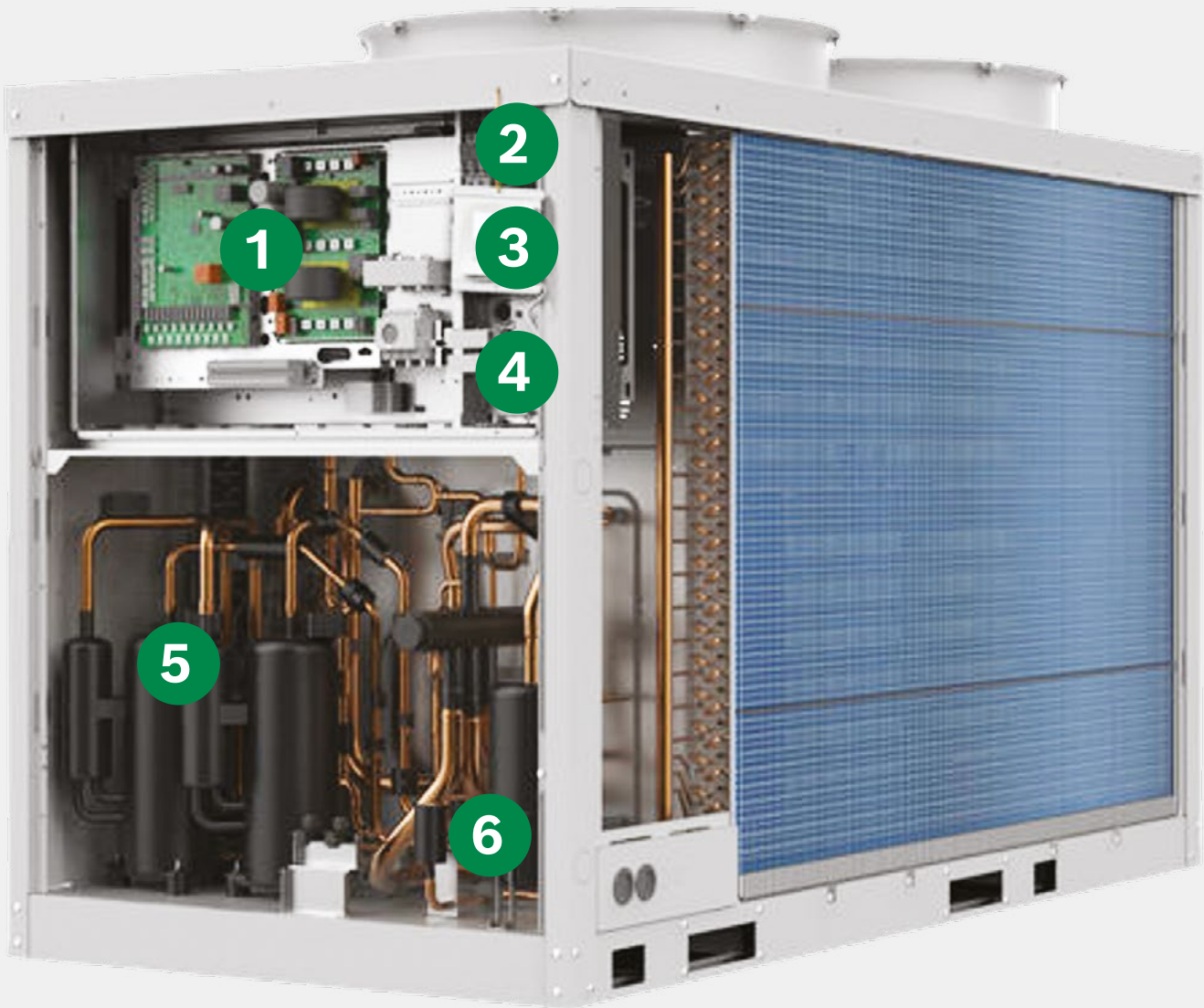
Suitable for roof installation

The Compress 3000 AWP has the ability to be installed on your customers roof where space may be limited.

*Under A-7/W35 conditions.

Compress 3000 AWP

The inside story



- 1. Offers heating and cooling
- 2. Modbus RTU included as standard
- 3. Integrated HMI (can be mounted remotely from the unit)
- 4. Up to 16 units can be cascaded together via integrated HMI
- 5. Twin inverter driven compressors (single compressors for 16, 19, 24)
- 6. R32 refrigerant with a GWP of 675

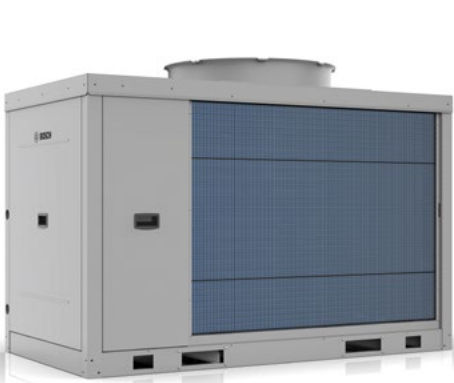
Hybrids made simple

The Compress 3000 AWP is a great addition to existing heating systems for those wanting to reduce their reliance on gas.. The hybrid system set up with the Bosch 8000 controller will prioritise the heat pumps wherever possible, using the outside temperature to determine the required flow temperature for the heating circuits and only boosting the temperature with condensing boilers in the colder weather or at times of high demand.

It is the perfect solution for increasing a property’s energy efficiency without replacing the entire heating system, reducing costs and disruption. Its ability to further integrate into building management systems enables building service professionals to track energy usage.

Hybrid example

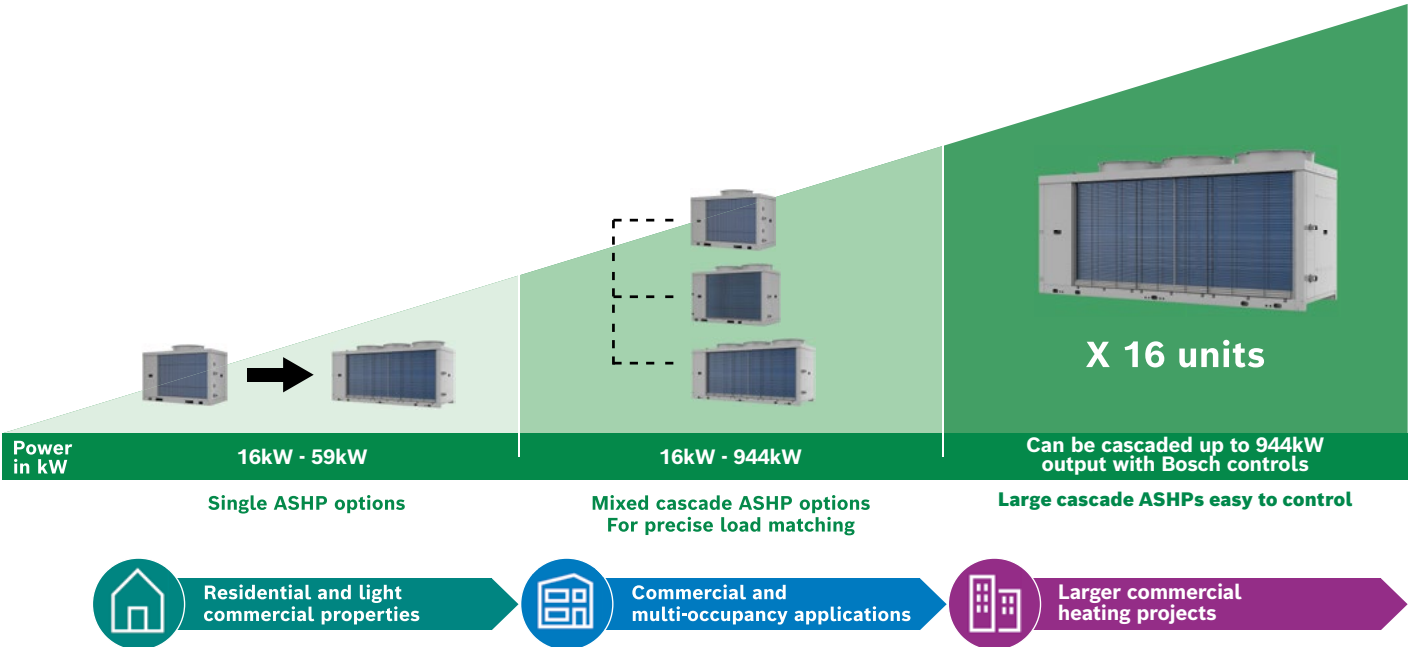
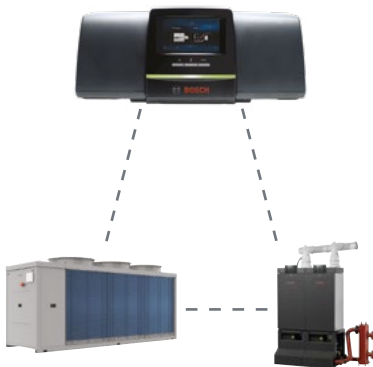
1. Compress 3000 AWP



2. Condens 7000 WP gas boiler



3. 8000 controller



Product data

Standard units

kW @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16	8 738 213 956	1
20	CS3000AWP 19	8 738 213 957	1
23	CS3000AWP 24	8 738 213 958	1
33	CS3000AWP 31	8 738 213 959	2
36	CS3000AWP 36	8 738 213 960	2
40	CS3000AWP 41	8 738 213 961	2
54	CS3000AWP 53	8 738 213 962	3
58	CS3000AWP 59	8 738 213 963	3

Units with integrated pump and buffer vessel

kW @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 P	8 738 213 966	1
20	CS3000AWP 19 P	8 738 213 967	1
23	CS3000AWP 24 P	8 738 213 968	1
33	CS3000AWP 31 P	8 738 213 969	2
36	CS3000AWP 36 P	8 738 213 970	2
40	CS3000AWP 41 P	8 738 213 971	2
54	CS3000AWP 53 P	8 738 213 972	3
58	CS3000AWP 59 P	8 738 213 973	3

Units with integrated buffer vessel

kW@ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 MB	8 738 213 976	1
20	CS3000AWP 19 MB	8 738 213 977	1
23	CS3000AWP 24 MB	8 738 213 978	1
33	CS3000AWP 31 MB	8 738 213 979	2
36	CS3000AWP 36 MB	8 738 213 980	2
40	CS3000AWP 41 MB	8 738 213 981	2
54	CS3000AWP 53 MB	8 738 213 982	3
58	CS3000AWP 59 MB	8 738 213 983	3

Units with integrated pump and DHW 3-way valve

kW @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 S	8 738 213 986	1
20	CS3000AWP 19 S	8 738 213 987	1
23	CS3000AWP 24 S	8 738 213 988	1
33	CS3000AWP 31 S	8 738 213 989	2
36	CS3000AWP 36 S	8 738 213 990	2
40	CS3000AWP 41 S	8 738 213 991	2
54	CS3000AWP 53 S	8 738 213 992	3
58	CS3000AWP 59 S	8 738 213 993	3

Units with coastal coil

kW A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 C	8 738 214 026	1
20	CS3000AWP 19 C	8 738 214 027	1
23	CS3000AWP 24 C	8 738 214 028	1
33	CS3000AWP 31 C	8 738 214 029	2
36	CS3000AWP 36 C	8 738 214 030	2
40	CS3000AWP 41 C	8 738 214 031	2
54	CS3000AWP 53 C	8 738 214 032	3
58	CS3000AWP 59 C	8 738 214 033	3

Units with coastal coil

kw @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 PC	8 738 213 996	1
20	CS3000AWP 19 PC	8 738 213 997	1
23	CS3000AWP 24 PC	8 738 213 998	1
33	CS3000AWP 31 PC	8 738 213 999	2
36	CS3000AWP 36 PC	8 738 214 000	2
40	CS3000AWP 41 PC	8 738 214 001	2
54	CS3000AWP 53 PC	8 738 214 002	3
58	CS3000AWP 59 PC	8 738 214 003	3

Units with integrated pump, DHW 3-way valve, and marine coil

kW @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 MBC	8 738 214 006	1
20	CS3000AWP 19 MBC	8 738 214 007	1
23	CS3000AWP 24 MBC	8 738 214 008	1
33	CS3000AWP 31 MBC	8 738 214 009	2
36	CS3000AWP 36 MBC	8 738 214 010	2
40	CS3000AWP 41 MBC	8 738 214 011	2
54	CS3000AWP 53 MBC	8 738 214 012	3
58	CS3000AWP 59 MBC	8 738 214 013	3

Units with integrated pump, DHW 3-way valve, and coastal coil

kW @ A-7/W35	Description	Part number	Chassis size
17	CS3000AWP 16 SC	8 738 214 016	1
20	CS3000AWP 19 SC	8 738 214 017	1
23	CS3000AWP 24 SC	8 738 214 018	1
33	CS3000AWP 31 SC	8 738 214 019	2
36	CS3000AWP 36 SC	8 738 214 020	2
40	CS3000AWP 41 SC	8 738 214 021	2
54	CS3000AWP 53 SC	8 738 214 022	3
58	CS3000AWP 59 SC	8 738 214 023	3

Accessories

Dirt traps/Strainers

Description	Part number	Chassis size
Dirt trap/Strainer 16-24	8 738 214 116	1
Dirt trap/Strainer 31-59	8 738 214 117	2 & 3

Anti-vibration mounts

Description	Part number	Chassis size
Anti-vibration mounts 16-24	8 738 214 119	1
Anti-vibration mounts 31-41 (Chassis 1 with Buffer)	8 738 214 120	1 & 2
Anti-vibration mounts 53-59	8 738 214 121	3
Anti-vibration mounts 31-41 (with buffer)	8 738 214 123	2
Anti-vibration mounts 53-59 (with buffer)	8 738 214 124	3

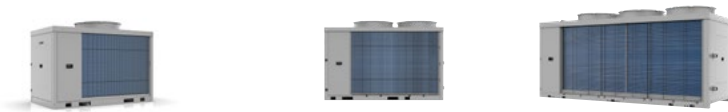
Protection grilles

Description	Part number	Chassis size
Protection grille 16-24	8 738 214 133	1
Protection grille 31-41	8 738 214 134	2
Protection grille 53-59	8 738 214 135	3

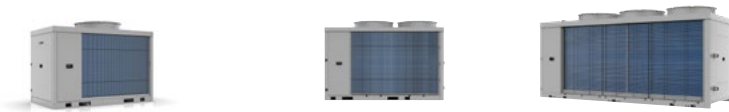
Condensation drain pan heaters

Description	Part number	Chassis size
Condensate drain pan heater 16-24	8 738 214 139	1
Condensate drain pan heater 31-41	8 738 214 140	2
Condensate drain pan heater 53-59	8 738 214 141	3

Technical data



	ODU 1			ODU 2			ODU 3	
Compress 3000 AWP	AWP 16	AWP 19	AWP 24	AWP 31	AWP 36	AWP 41	AWP 53	AWP 59
Heating Data								
Max. power output at A2/W35 (kW)	22.49	25.22	27.90	43.28	47.45	52.12	64.53	71.2
COP at A2/W35	3.62	3.35	3.08	3.45	3.40	3,25	3.25	3.10
Max. output at A7/W35 (kW)	27.32	31.0	35.78	54.50	58.20	62.21	78.37	87.40
COP at A7/W35	4.23	4.14	4.09	4.20	4.10	4.03	4.22	3.91
Power output at A7/W35 nominal (kW)	25.38	29.53	35.78	49.95	54.15	62.21	78.37	87.40
COP at A7/W35 nominal	4.37	4.20	4.09	4.41	4.22	4.03	4.22	3.91
Max. power output at A7/W55 (kW)	23.06	27.70	32.64	46.50	51.91	56.69	75.56	85.9
COP at A7/W55	2.55	2.41	2.33	2.70	2.68	2.70	2.53	2.45
Max. output at A-7/W35 (kW)	17.29	20.11	23.07	33.09	35.98	39.8	53.5	58.2
COP at A-7/W35	2.85	2.79	2.71	2.87	2.86	2.73	2.65	2.55
Max. output at A-10/W35 (kW)	14.95	18.65	21.67	30.65	33.22	35.92	47.65	52.3
COP at A-10/W35	2.64	2.59	2.53	2.75	2.69	2.59	2.45	2.37
SCOP at W35 Average Climate	4.41	4.36	4.31	4.33	4.33	4.28	4.22	4.19
SCOP at W55 Average Climate	3.24	3.22	3.18	3.24	3.19	3.16	3.2	3.16
Space Heating Energy Efficiency Class (Hight Temp)	A++	A++	A+	A++	A++	A+	A++	A+
Seasonal space heating energy efficiency η_s at 35°C for average climate condition. (%)	173	172	169	170	170	168	166	164
Seasonal space heating energy efficiency η_s at 55°C for average climate conditions. (%)	127	126	124	126	125	124	125	123
Cooling Data								
Max. cooling capacity at A35/W7 (kW)	23.29	25.80	29.30	42.50	48.20	55.03	68.6	78.8
EER at A35/W7	3.11	2.84	2.78	3.02	2.95	2.75	2.99	2.8
Max. cooling capacity at A35/W18 (kW)	33.20	37.10	41.90	63.70	69.9	79.6	95	103.1
EER at A35/W18	3.88	3.65	3.32	3.91	3.64	3.19	4.02	3.61
Cooling capacity at A35/ W18. nominal (kW)	29.90	34.60	38.90	59.07	65.70	77.70	95	103.1
EER at A35/W18. nominal	4.28	3.94	3.62	4.07	3.67	3.35	4.02	3.61
Electrical wiring specifications								
Power supply				380-415V 3N~ 50Hz				
Recommended automatic circuit breaker/fuse ² (A)	25	25	25	50	50	50	63	63
Maximum current (A)	18.5	19	20	37.5	38.5	40.5	57	59

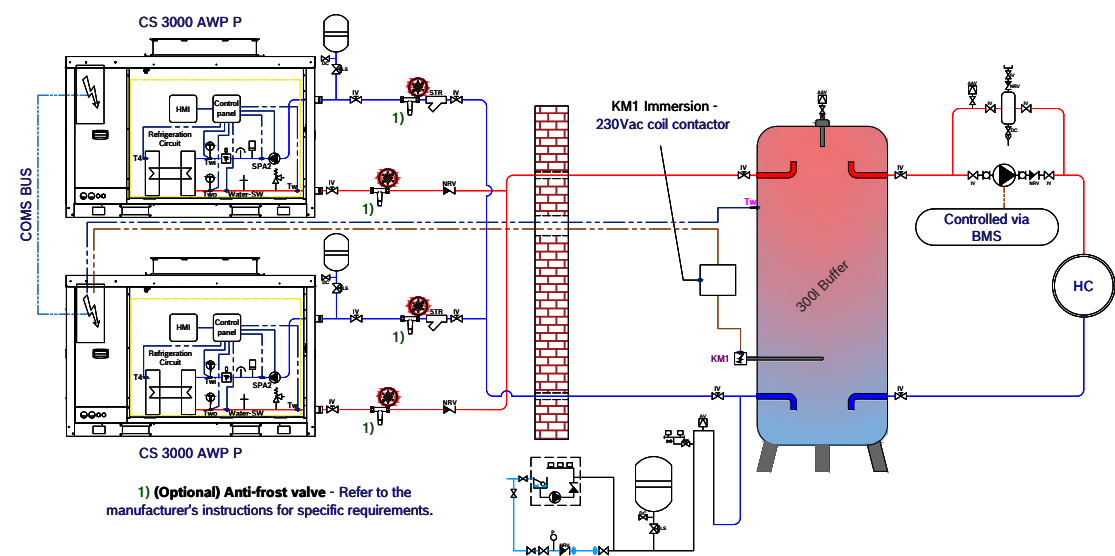


	ODU 1			ODU 2			ODU 3	
Compress 3000 AWP	AWP 16	AWP 19	AWP 24	AWP 31	AWP 36	AWP 41	AWP 53	AWP 59
Startup current (A)	10	10	10	20.25	20.25	20.25	28.5	29.5
Max. number of compressor starts (1/h)	6	6	6	6	6	6	6	6
Performance factor cos φ with maximum output	0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.93
Refrigerant circuit								
Refrigerant type ³	R32	R32	R32	R32	R32	R32	R32	R32
Refrigerant charge (kg)	7.9	7.9	7.9	14.0	14.0	14.0	17.5	17.5
CO ₂ (e) (ton)	5.3	5.3	5.3	9.5	9.5	9.5	11.8	11.8
Air and noise generation								
Nominal air flow rate (m³/h)	11500	11500	11500	23000	23000	23000	34500	34500
Maximum air flow rate (m³/h)	14500	14500	14500	29000	29000	29000	43500	43500
Sound pressure level at distance of 1m ⁴ (dB(A))	57	60	60	57	57	61	59	64
Sound power ⁵ (dB(A))	75	78	78	75	75	80	78	83
Heating system								
Connection type	Victualic 1" 1/2			Victualic 2"				
Maximum operating pressure (kPa/bar)	42	42	42	42	42	42	42	42
Minimum operating pressure (kPa/bar)	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Flow Range (l/s)	0.9-2.6	0.9-2.6	0.9-2.6	1.8-5.0	1.8-5.0	1.8-5.0	2.9-6.4	2.9-6.4
Minimum system volume for defrost (l)	200	200	200	400	400	400	650	650
Min/max water operating temperature (cooling ⁴)/ heating mode/DHW) (°C)	0/60	0/60	0/60	0/60	0/60	0/60	0/60	0/60
Operation limit temperatures in cooling mode (°C)	48	48	48	48	48	48	48	48
Operation limit temperatures in heating mode (°C)	-20	-20	-20	-20	-20	-20	-20	-20
Max. supply temperature at A-20 (°C)	45	45	45	45	45	45	45	45
General								
IP rating	IP45	IP45	IP45	IP45	IP45	IP45	IP45	IP45
Max. Installation altitude temperature derating as by manual revision (m)	2000	2000	2000	2000	2000	2000	2000	2000
Dimensions (WxDxH) excluding packaging (mm)	1005x1920x1340			1060x2274x1480			1100x3300x1510	
Weight excluding packaging in operation (with water inside) (kg)	315	315	315	496	496	496	784	784
ENA heat pump register No.	HP_3445	HP_3445	HP_3445	HP_3447	HP_3447	HP_3447	HP_3449	HP_3449

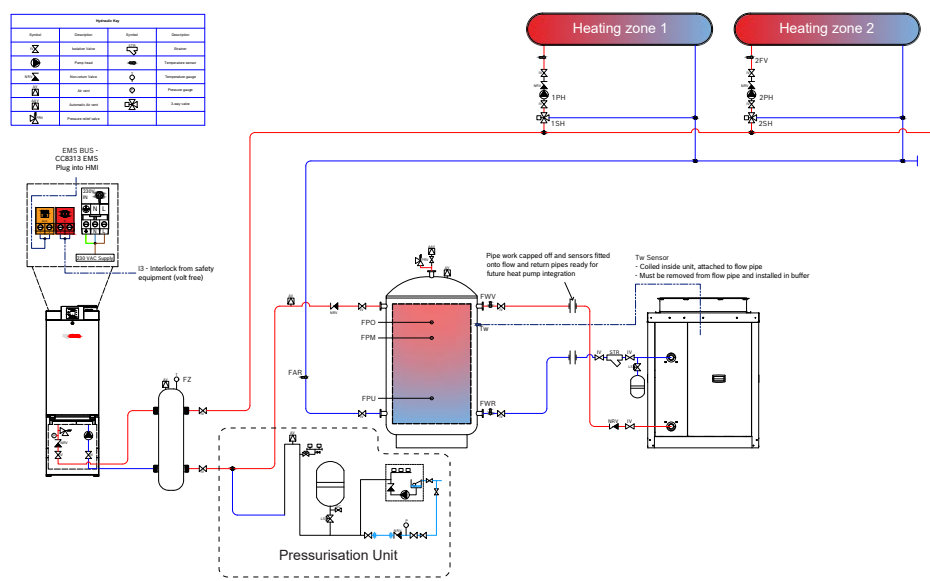
1) Performance data in accordance with EN 14511
2) Fuse characteristics gL/C
3) GWP100=675 for R32
4) acc. to Reg. (EU) No 811/2013
5) Sound power level in accordance with EN12102 (Nominal output with A7/W55)
6) According to DIS47315 / 150257, April 2004 and following requirements of TA Lärm

Example schematics

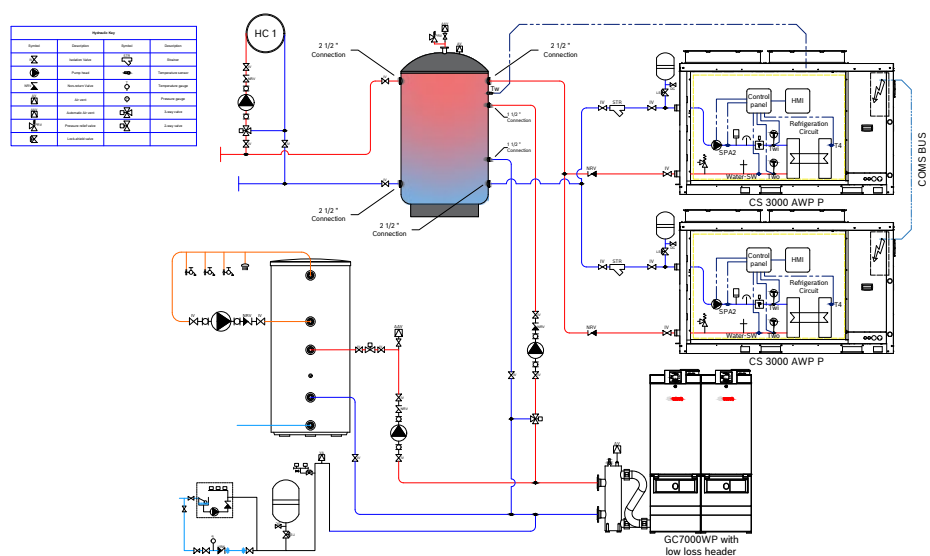
Hydraulic arrangement for 2x CS3000 AWP (Chassis 1) with 300l Buffer.



Single GC7000WP Hybrid ready solution

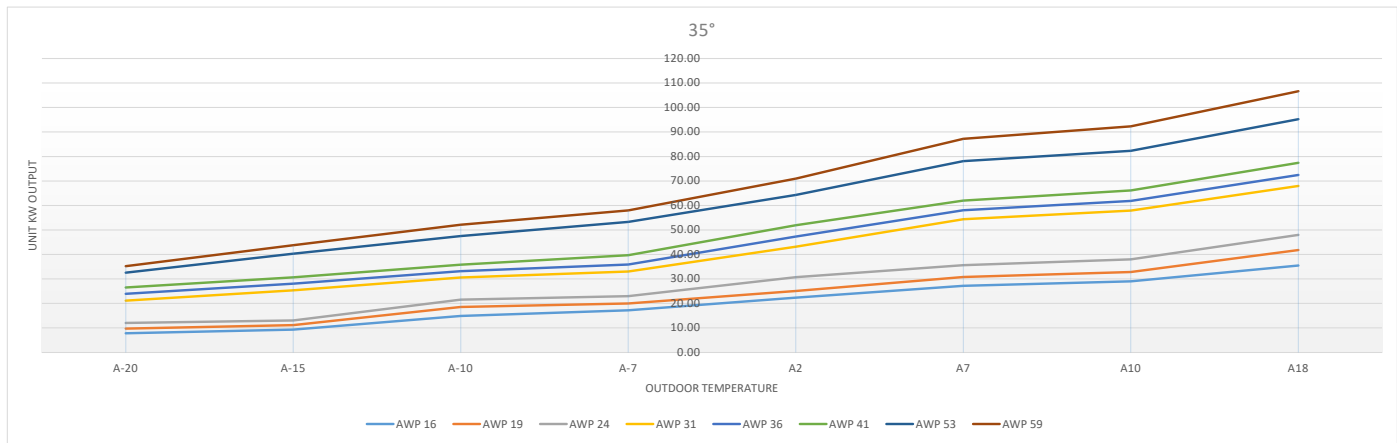


Cascade GC7000WP Hybrid, 1DHW, 1VT All systems controlled via BMS

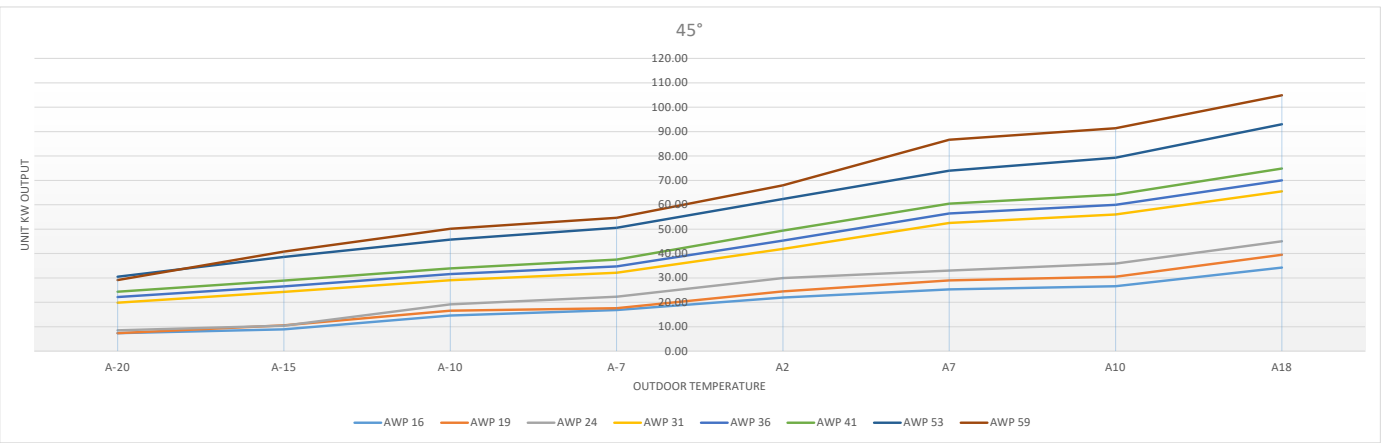


Heating performance

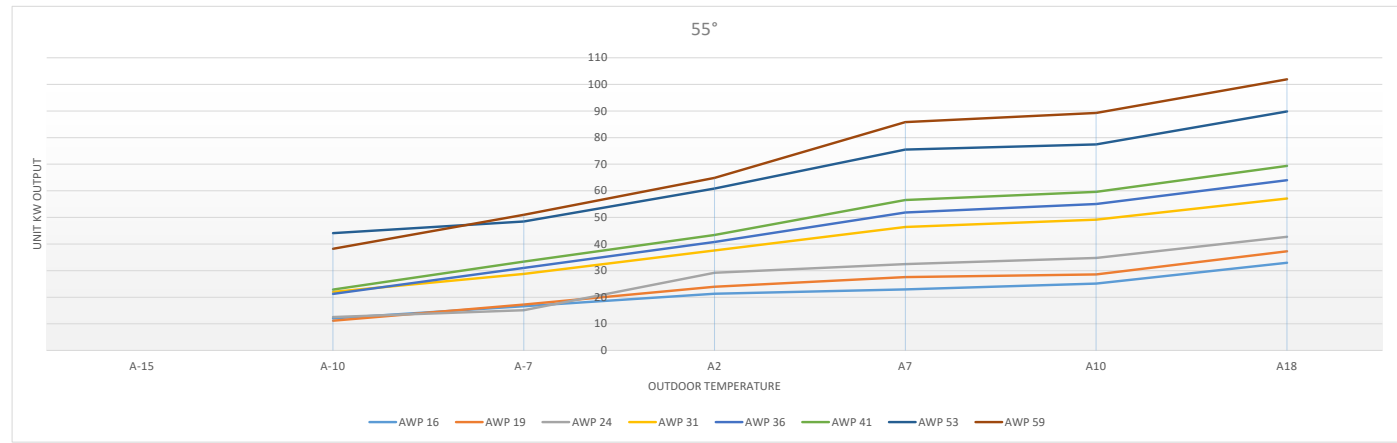
Compress 3000 AWP - @ W35



Compress 3000 AWP - @ W45



Compress 3000 AWP - @ W55



Useful numbers

Sales

Email: commercial.industrial@uk.bosch.com

Technical Helpline (Pre & Post Sales)

Email: technical-advice@uk.bosch.com

Tel: 0330 123 0165

Spare Parts

Email: spares.mailbox@uk.bosch.com

Tel: 0330 123 9779

Controls Helpline

Tel: 0330 123 3641

Training

Email: training@uk.bosch.com

Tel: 0330 123 0166

Project team service

Our team are available at every stage of your project.

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Email:

commercial.industrial@uk.bosch.com

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Book commissioning for a standalone or hybrid heat pump system: Simply scan the QR code, and complete the commissioning checklist.



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