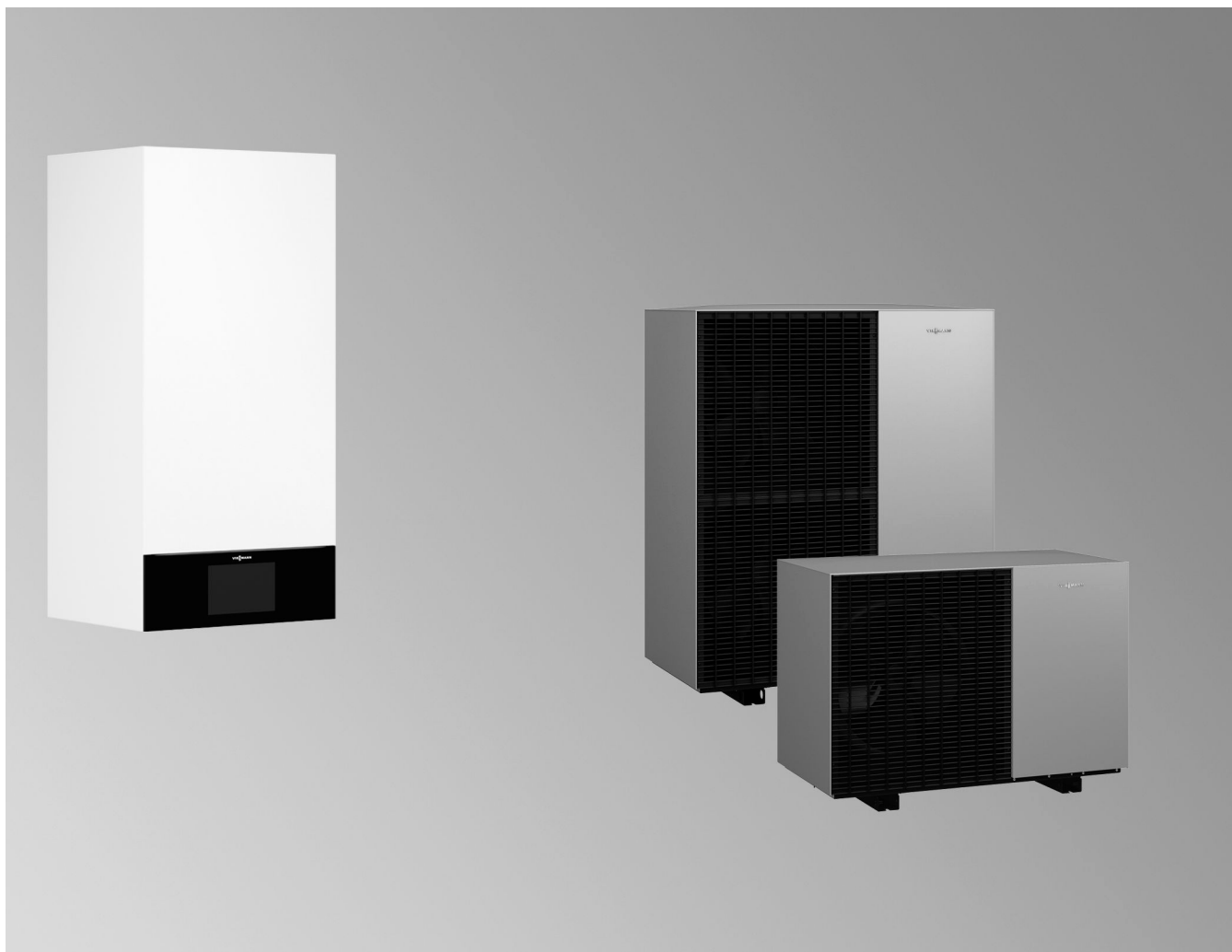


Datasheet

For part no. and prices: see pricelist



VITOCAL 150-A, VITO- CAL 150-A MODULAR

Air/water heat pump in monoblock design for heating and cooling operation

- For room heating, room cooling and DHW heating in heating systems

- **Vitocal 150-A**

Indoor unit with heat pump with control unit, instantaneous heating water heater, integral buffer cylinder, expansion vessel and safety assembly

- **Vitocal 150-A Modular**

Indoor unit with heat pump with control unit, instantaneous heating water heater, integral buffer cylinder and safety assembly

Product description

Product identification according to type plate

(A) (B) (C) (D) (E) (F) (G) (H) (K) (L) (M) (N) (O)

Indoor unit

IDU-A	A	W	M	I	W	·	A1	·	19	–	V052
IDU-A Modular	A	W	M	I	W	·	A1	·	19	–	V051

Outdoor unit

Vitocal 150-A	A	W	M	O	F	–	1	5	1	·	A1	·	10	–	230	–	V001
---------------	---	---	---	---	---	---	---	---	---	---	----	---	----	---	-----	---	------

Pos.	Value	Meaning
(A)	Name	
	IDU-A	InDoor Unit
	IDU-A Modular	InDoor Unit without expansion vessel (Modular design)
	Vitocal 150-A	Product name of the outdoor unit (ODU), product segment 100
(B)	Medium, primary circuit	
	A Air	
(C)	Medium, secondary circuit	
	W Water	
(D)	Refrigerant circuit design	
	M Monoblock design	
(E)	Siting	
	I Indoor installation	
	O Outdoor installation	
(F)	Type	
	F Floorstanding outdoor unit (Floorstanding)	
	W Wall mounted indoor unit	
(G)	Product segment	
	1 100	

Pos.	Value	Meaning
(H)	Flow temperature	
	5 High flow temperature	
(K)	Number of compressors in refrigerant circuit	
	1 1 compressor	
(L)	A1	Product generation
(M)	04 to 16	Heat pump size
(N)	Compressor power supply	
	230 1/N/PE 230 V~/50 Hz	
	400 3/N/PE 400 V~/50 Hz	
(O)	Product version	
	V001 to V049	Outdoor unit
	V050 to V099	Indoor unit
	V100 to V...	Heat pump: See following table.

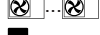
Heat pump product version

Heat pump			DEV	Buffer														
V100																		
– ...230-V001 + V051	1	1 ... 4	—	■	230 V~	230 V~/400 V~	—	230 V~	□	□	○							
– ...400-V001 + V051	1	1 ... 4	—	■	230 V~	230 V~/400 V~	—	400 V~	□	□	○							
V101																		
– ...230-V002 + V051	1	1 ... 4	—	■	230 V~	230 V~/400 V~	—	230 V~	■	■	○							
– ...400-V002 + V051	1	1 ... 4	—	■	230 V~	230 V~/400 V~	—	400 V~	■	■	○							
V102																		
– ...230-V001 + V051	1	1 ... 4	—	■	—	—	230 V~	230 V~	□	□	○							
– ...400-V001 + V051	1	1 ... 4	—	■	—	—	230 V~	400 V~	□	□	○							
V103																		
– ...230-V002 + V051	1	1 ... 4	—	■	—	—	230 V~	230 V~	■	■	○							
– ...400-V002 + V051	1	1 ... 4	—	■	—	—	230 V~	400 V~	■	■	○							
V104																		
– ...230-V001 + V052	1	1 ... 4	■	■	230 V~	230 V~/400 V~	—	230 V~	□	□	○							
– ...400-V001 + V052	1	1 ... 4	■	■	230 V~	230 V~/400 V~	—	400 V~	□	□	○							
V105																		
– ...230-V002 + V052	1	1 ... 4	■	■	230 V~	230 V~/400 V~	—	230 V~	■	■	○							
– ...400-V002 + V052	1	1 ... 4	■	■	230 V~	230 V~/400 V~	—	400 V~	■	■	○							
V106																		
– ...230-V001 + V052	1	1 ... 4	■	■	—	—	230 V~	230 V~	□	□	○							
– ...400-V001 + V052	1	1 ... 4	■	■	—	—	230 V~	400 V~	□	□	○							

Product description (cont.)

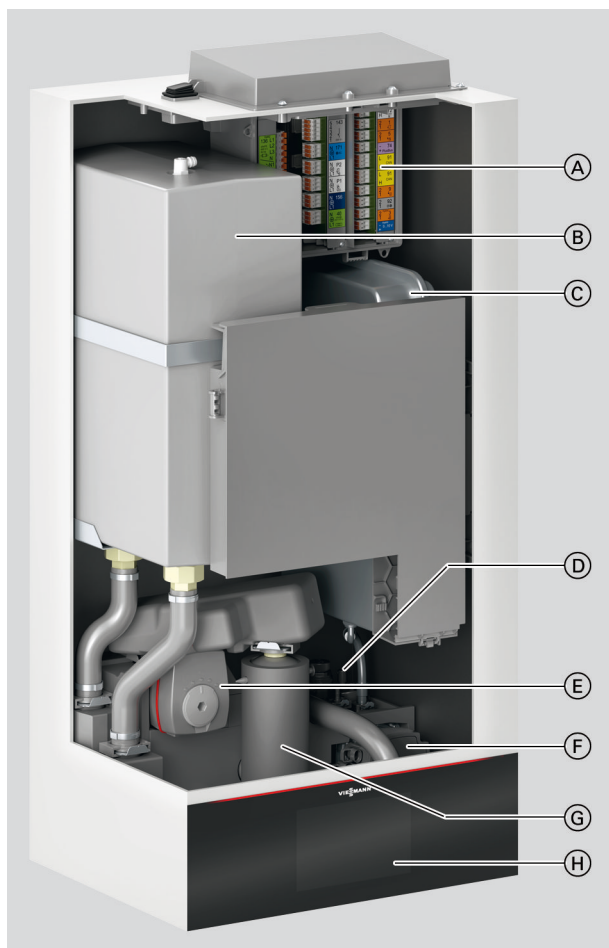
Heat pump			DEV	Buffer							
V107											
– ...230-V002 + V052	1	1 ... 4	■	■	—	—	230 V~	230 V~	■	■	○
– ...400-V002 + V052	1	1 ... 4	■	■	—	—	230 V~	400 V~	■	■	○

 Integral heating/cooling circuits
 Heating/cooling circuits via external buffer cylinder
 DEV Expansion vessel 12 l
 Buffer Buffer cylinder 16 l
 Rated voltage, control unit/PCB, indoor unit
 Rated voltage, instantaneous heating water heater
 Central mains connection, indoor unit (accessories in standard delivery)

 Rated voltage, outdoor unit
 Electric ribbon heater for condensate pan
 Fan ring heater
 Heat pump cascade
 ■ Integrated
 □ Accessories
 ○ Possible

Benefits

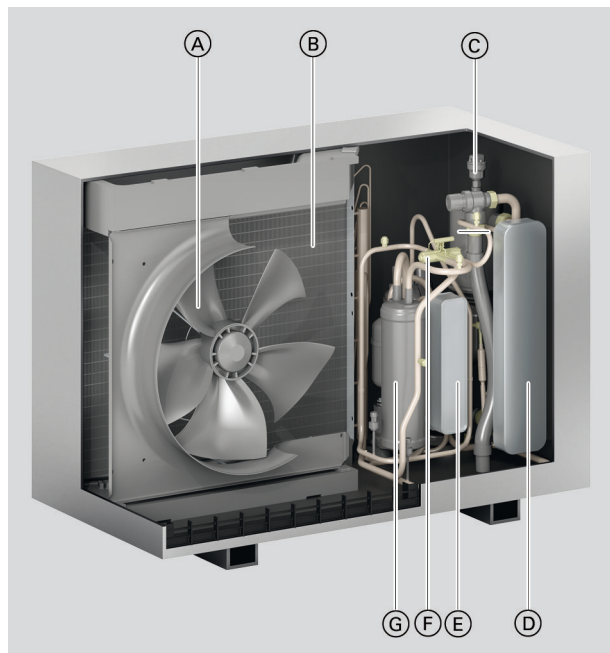
Indoor unit IDU-A, type ...-V052 and IDU-A Modular, type ...-V051



- (A) Junction box
- (B) Integral buffer cylinder
- (C) Indoor unit IDU-A, type ...-V052:
Expansion vessel
- (D) Safety valve
- (E) 4/3-way valve
- (F) Secondary pump (high efficiency circulation pump)
- (G) Instantaneous heating water heater
- (H) Heat pump control unit

Benefits (cont.)

Outdoor unit ODU 150-A, 230 V~, sizes 04 to 08



- Ⓐ Power saving variable speed EC fan
- Ⓑ Coated evaporator with corrugated fins for higher efficiency
- Ⓒ Safety valve
- Ⓓ Condenser
- Ⓔ Suction gas cooler inverter
- Ⓕ 4-way diverter valve
- Ⓖ Hermetically sealed twin rotary compressor with output-dependent control

Outdoor unit ODU 150-A, 230 V~, sizes 10 to 16



- Ⓐ Power saving variable speed EC fan
- Ⓑ Coated evaporator with corrugated fins for higher efficiency
- Ⓒ Safety valve
- Ⓓ Condenser
- Ⓔ Inverter
- Ⓕ Suction gas cooler inverter
- Ⓖ 4-way diverter valve
- Ⓗ Hermetically sealed twin rotary compressor with output-dependent control

Benefits (cont.)

Outdoor unit ODU 150-A, 400 V~, sizes 10 to 16



- Ⓐ Power saving variable speed EC fan
- Ⓑ Coated evaporator with corrugated fins for higher efficiency
- Ⓒ Hermetically sealed twin rotary compressor with output-dependent control
- Ⓓ 4-way diverter valve
- Ⓔ Safety valve
- Ⓕ Condenser
- Ⓖ Internal heat exchanger
- Ⓗ Accumulator (refrigerant receiver)

Benefits

- Low running costs thanks to high COP (coefficient of performance) to EN 14511: Up to 5.2 at A7/W35
- Output control and DC inverter for high efficiency in partial load operation
- A maximum flow temperature of up to 70 °C at an outside temperature of –10 °C enables use in both new build and modernisation projects.
- Indoor unit IDU-A, type ...-V052: Self-optimising control of the flow rate via Viessmann Hydro Auto-Control
- Environmentally responsible, natural refrigerant R290 with a particularly low GWP of 0.02 (GWP = Global Warming Potential)
- Convenient reversible design for heating and cooling
- Quiet operation thanks to Advanced Acoustic Design (AAD)
- Internet-enabled thanks to integrated WiFi
- Operation, optimisation, maintenance and service via ViCare app and ViGuide
- Guided commissioning
- Individual room control with components from ViCare Smart Climate
- Hybrid function for room heating and DHW heating with direct control via CAN bus in a system network with the following external heat generators:
 - Vitodens 200-W, type B2HH
And
Vitodens 300-W, type B3HH
 - With hybrid extension set (Vitodens accessories):
Vitodens 200-W, types B2HE and B2HF
And
Vitodens 300-W, types B3HF and B3HG
- Indoor unit IDU-A Modular, type ...-V051: Cascade function for room heating, room cooling and DHW heating for up to 5 heat pumps

Delivered condition

Indoor unit IDU-A, IDU-A Modular

- Integral 4/3-way valve for room heating/DHW heating/bypass
- Integral high efficiency circulation pump for the secondary circuit or heating/cooling circuit 1
- Integral instantaneous heating water heater
- Integral 16 l buffer cylinder
- Integral safety valve and digital pressure gauge
- Weather-compensated heat pump control unit with outside temperature sensor
- Flow rate capturing
- Wall mounting bracket
- Indoor unit IDU-A, type ...-V052: 12 l diaphragm expansion vessel
- Heat pump types ...-V102, ...-V103, ...-V106, ...-V107: Central 230 V~ mains connection with line protection

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Benefits (cont.)

Required accessories (must be added to the order):

- Basic installation aid
or
- Comfort installation aid

Outdoor unit ODU 150-A

- Inverter-controlled compressor, 4-way diverter valve, electronic expansion valve, evaporator, condenser, EC fan
- Factory-filled with refrigerant R290

- Heating water filter upstream of condenser
- Transport aid
- Outdoor unit, type ...-V002:
With integral fan ring heater and electric ribbon heater for the condensate pan

Specification

Specification

Heat pumps with 230 V~ outdoor unit

Types:

- Indoor unit type:
AWMIW.A1.19-V051
and
AWMIW.A1.19-V052
- Outdoor unit type:
AWMOF-151.A1.04-230-V001/V002
to
AWMOF-151.A1.16-230-V001/V002

Note

The highlighted number is the size of the heat pump. The size of the heat pump is determined by the size of the outdoor unit.

Size		04	06	08	10	13	16
Heating performance data to EN 14511 (A2/W35)							
Rated heating output	kW	2.5	3.1	4.0	5.8	6.7	7.6
Fan speed	rpm	376	401	447			
Power consumption	kW	0.66	0.82	1.08	1.41	1.76	2.00
Coefficient of performance ϵ in heating mode (COP)		3.8	3.8	3.7	4.1	3.8	3.8
Output control	kW	1.8 to 4.5	1.8 to 6.0	1.8 to 6.8	2.2 to 11.0	2.6 to 12.3	3.0 to 13.7
Heating performance data to EN 14511 (A7/W35, 5 K spread)							
Rated heating output	kW	4.0	4.8	5.6	7.3	8.1	9.1
Fan speed	rpm	412	443	482	430	440	450
Air flow rate	m³/h	1813	1954	2125	4045	4188	4331
Power consumption	kW	0.80	0.98	1.19	1.46	1.62	1.86
Coefficient of performance ϵ in heating mode (COP)		5.0	4.9	4.7	5.0	5.0	4.9
Output control	kW	2.1 to 4.0	2.1 to 6.0	2.1 to 8.0	2.6 to 12.0	3.0 to 13.4	3.3 to 14.9
Heating performance data to EN 14511 (A-7/W35)							
Rated heating output	kW	3.8	5.6	6.5	10.0	11.1	12.4
Power consumption	kW	1.27	2.00	2.41	3.23	3.87	4.39
Coefficient of performance ϵ in heating mode (COP)		3.0	2.8	2.7	3.0	2.87	2.82
Heating performance data to EN 14511 (A-7/W55)							
Rated heating output	kW	3.5	5.2	6.2	9.2	10.6	11.8
Power consumption	kW	1.63	2.46	3.06	4.79	5.12	5.28
Coefficient of performance ϵ in heating mode (COP)		2.2	2.1	2.0	1.9	2.1	2.2
Heating performance data to Commission Regulation (EU) No 813/2013 (average climatic conditions)							
Low temperature application (W35)							
– Energy efficiency η_s	%	176	180	175	190	178	178
– Rated heating output P_{rated}	kW	4.0	5.5	6.5	9.8	12.4	13.67
– Seasonal coefficient of performance (SCOP)		4.5	4.6	4.4	4.825	4.52	4.525
Medium temperature application (W55)							
– Energy efficiency η_s	%	127	141	137	145	141	141
– Rated heating output P_{rated}	kW	3.8	5.1	6.2	9.37	12.1	13.37
– Seasonal coefficient of performance (SCOP)		3.3	3.6	3.5	3.7	3.6	3.6
Energy efficiency class to Commission Regulation (EU) No 813/2013 Heating, average climatic conditions							
– Low temperature application (W35) (D→A+++)		A+++	A+++	A+++	A+++	A+++	A+++
– Medium temperature application (W55) (D→A+++)		A++	A++	A++	A++	A++	A++

Specification (cont.)

Size		04	06	08	10	13	16
Cooling performance data to EN 14511 (A35/W7)							
Rated cooling capacity	kW	2.6	3.0	3.4	3.9	5.6	6.3
Fan speed	rpm				550	550	550
Power consumption	kW	0.90	1.03	1.17	1.18	1.65	1.85
Coefficient of performance in cooling mode (EER)		2.9	2.9	2.9	3.3	3.4	3.4
Output control	kW	1.8 to 4.0	1.8 to 4.8	1.8 to 5.0	3.9 to 7.2	4.2 to 8.0	4.5 to 8.7
Cooling performance data, average climatic conditions (A35/W7)							
Rated cooling capacity P_{rated}	kW	3.0	3.6	4.4	6.9	8.11	8.93
Seasonal cooling energy efficiency ratio (SEER)		3.8	3.9	4.0	3.6	3.8	4.1
Cooling performance data to EN 14511 (A35/W18)							
Rated cooling capacity	kW	4.0	5.0	6.0	9.6	11.0	13.2
Fan speed	rpm	—	—	—	550	550	550
Power consumption	kW	0.85	1.14	1.54	2.18	2.75	3.62
Coefficient of performance in cooling mode (EER)		4.7	4.4	3.9	4.4	4.0	3.7
Output control	kW	3.2 to 4.0	3.2 to 5.5	3.2 to 6.7	6.3 to 14.4	6.6 to 15.7	6.9 to 17.0
Cooling performance data, average climatic conditions (A35/W18)							
Rated cooling capacity P_{rated}	kW	4.6	5.6	6.9	9.81	11.51	13.32
Seasonal cooling energy efficiency ratio (SEER)		4.5	4.7	4.9	7.2	6.7	6.3
Air inlet temperature							
Cooling mode							
– Min.	°C	15	15	15	15	15	15
– Max.	°C	45	45	45	45	45	45
Heating mode							
– Min.	°C	–20	–20	–20	–20	–20	–20
– Max.	°C	40	40	40	40	40	40
Heating water (secondary circuit)							
Capacity excl. expansion vessel	l	18	18	18	18	18	18
Heat pump circuit minimum flow rate (defrosting)	l/h	1000	1000	1000	1000	1000	1000
Max. flow temperature	°C	70	70	70	70	70	70
Outdoor unit electrical values							
Rated voltage		1/N/PE 230 V~ /50 Hz					
Max. operating current	A	15	15.5	16	20	23	25
Cos φ		0.99	0.99	0.99	0.99	0.99	0.99
Compressor starting current, inverter controlled	A	< 10	< 10	< 10	< 10	< 10	< 10
Compressor starting current with stalled armature	A	< 10	< 10	< 10	< 10	< 10	< 10
Fuse protection		B16A	B16A	B16A	B25A	B25A	B25A
IP rating		IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Indoor unit electrical values							
PCB		1/N/PE 230 V~ /50 Hz					
– Rated voltage		1 x B16A					
– Power supply fuse protection		6.3 A H (slow)/250 V~					
– Internal fuse protection							
Instantaneous heating water heater							
– Heating output							
Max.	kW	8					
Stage 1	kW	2.4					
Stage 2	kW	2.4					
Stage 3	kW	3.2					
– 400 V~ power supply fuse protection		1 x B16A, 3-pole					
– Power supply fuse protection							3 x B16A



Specification (cont.)

Size		04	06	08	10	13	16
Electrical values for indoor unit with central mains connection							
PCB	kW						
– Rated voltage		1/N/PE 230 V~/50 Hz					
– Internal fuse protection		6.3 A H (slow)/250 V~					
Instantaneous heating water heater							
– Heating output		5					
Power supply							
– Rated voltage		1/N/PE 230 V~/50 Hz					
– Fuse protection		1 x B32A, 1-pole					
Max. power consumption							
Outdoor unit							
– Fan	W	140	140	140	2 x 140	2 x 140	2 x 140
– Total	kW	2.3	3.6	3.7	4.55	5.4	5.4
Indoor unit							
– Integral secondary pump/heating circuit pump, heating/cooling circuit 1 (PWM)	W	63	63	63	63	63	63
– Energy efficiency index EEI of the circulation pumps		≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.2
– Control unit/PCB	W	5	5	5	5	5	5
– Max. connected load, 230 V~ function components	W	1000	1000	1000	1000	1000	1000
Mobile data transfer							
WiFi	MHz dBm						
– Transmission standard		IEEE 802.11 b/g/n					
– Frequency band		2400 to 2483.5					
– Max. transmission power		+15					
Low power radio	MHz dBm						
– Transmission standard		IEEE 802.15.4					
– Frequency band		2400 to 2483.5					
– Max. transmission power		+6					
Refrigerant circuit							
Refrigerant	kg	R290	R290	R290	R290	R290	R290
– Safety group		A3	A3	A3	A3	A3	A3
– Charge weight		1.2	1.2	1.2	2	2	2
– Global warming potential (GWP)* ¹		0.02	0.02	0.02	0.02	0.02	0.02
– CO ₂ equivalent	t	0.000024	0.000024	0.000024	0.00004	0.00004	0.00004
Compressor (hermetically sealed)	Type	Twin rotary					
– Oil in compressor	Type	HAF68	HAF68	HAF68	HAF68	HAF68	HAF68
– Oil volume in compressor	l	0.840	0.840	0.840	1.150	1.150	1.150
		±0.020	±0.020	±0.020	±0.020	±0.020	±0.020
Permissible operating pressure							
– High pressure side	bar	30.3	30.3	30.3	30.3	30.3	30.3
	MPa	3.03	3.03	3.03	3.03	3.03	3.03
– Low pressure side	bar	30.3	30.3	30.3	30.3	30.3	30.3
	MPa	3.03	3.03	3.03	3.03	3.03	3.03
Outdoor unit dimensions							
Total length	mm	600	600	600	600	600	600
Total width	mm	1144	1144	1144	1144	1144	1144
Total height	mm	841	841	841	1382	1382	1382
Indoor unit dimensions							
Total length	mm	360	360	360	360	360	360
Total width	mm	450	450	450	450	450	450
Total height	mm	920	920	920	920	920	920
Total weight							
Indoor unit							
– Empty	kg	47	47	47	47	47	47
– Filled (max.)	kg	75	75	75	75	75	75
Outdoor unit	kg	162	162	162	191	191	191
Permissible operating pressure on the secondary side							
	bar	3	3	3	3	3	3
	MPa	0.3	0.3	0.3	0.3	0.3	0.3
Connections to indoor unit without installation aid							
Heating water flow/return, heating/cooling circuits or external buffer cylinder	mm	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0
Heating water flow/return, DHW cylinder	mm	Cu 22 x 1.0	Cu 22 x 1.0	Cu 22 x 1.0	Cu 22 x 1.0	Cu 22 x 1.0	Cu 22 x 1.0
Heating water flow/return, outdoor unit	mm	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0

*¹ Based on the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

Specification (cont.)

Size		04	06	08	10	13	16
Length of connection line, indoor — outdoor unit (e.g. Quattro connection line)	m	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20	5 to 20
Sound power at rated heating output Total sound power level measurement with reference to DIN EN 12102-1:2023 and DIN EN ISO 3744:2011 in ErP point C to DIN EN 14825 with operating conditions A7/W55							
Indoor unit							
– ErP	dB(A)	40	40	40	40	40	40
Outdoor unit							
– ErP	dB(A)	51	51	51	53	54	55
– Max.	dB(A)	56	58	59	61	61	66
– Low-noise mode, stage 2	dB(A)	52	52	52	54	54	59

Heat pumps with 400 V~ outdoor unit

Types:

- Indoor unit type:
AWMIW.A1.19-V051
and
AWMIW.A1.19-V052
- Outdoor unit type:
AWMOF-151.A1.**10**-400-V001/V002
to
AWMOF-151.A1.**16**-400-V001/V002

Note

The highlighted number is the size of the heat pump. The size of the heat pump is determined by the size of the outdoor unit.

Heat pump size		10	13	16
Heating performance data to EN 14511 (A2/W35)				
Rated heating output	kW	5.8	6.7	7.6
Power consumption	kW	1.41	1.76	2.00
Coefficient of performance ϵ in heating mode (COP)		4.1	3.8	3.8
Output control	kW	2.2 to 11.0	2.6 to 12.3	3.0 to 13.7
Heating performance data to EN 14511 (A7/W35, 5 K spread)				
Rated heating output	kW	7.4	8.1	9.1
Fan speed	rpm	430	440	567
Air flow rate	m ³ /h	4045	4188	5393
Power consumption	kW	1.42	1.59	1.82
Coefficient of performance ϵ in heating mode (COP)		5.2	5.1	5.0
Output control	kW	2.6 to 12.0	3.0 to 13.4	3.3 to 14.9
Heating performance data to EN 14511 (A–7/W35)				
Rated heating output	kW	10.0	11.1	12.4
Power consumption	kW	3.23	3.96	4.4
Coefficient of performance ϵ in heating mode (COP)		3.0	2.8	2.8
Heating performance data to EN 14511 (A–7/W55)				
Rated heating output	kW	9.2	10.6	11.8
Power consumption	kW	4.79	5.12	5.28
Coefficient of performance ϵ in heating mode (COP)		1.9	2.1	2.2
Heating performance data to Commission Regulation (EU) No 813/2013 (average climatic conditions)				
Low temperature application (W35)				
– Energy efficiency η_s	%	199	194	188
– Rated heating output P_{rated}	kW	9.8	12.4	13.67
– Seasonal coefficient of performance (SCOP)		5.06	4.93	4.78
Medium temperature application (W55)				
– Energy efficiency η_s	%	156	155	150
– Rated heating output P_{rated}	kW	9.37	12.1	13.37
– Seasonal coefficient of performance (SCOP)		3.97	3.95	3.82
Energy efficiency class to Commission Regulation (EU) No 813/2013				
Heating, average climatic conditions				
– Low temperature application (W35) (D→A+++)		A+++	A+++	A+++
– Medium temperature application (W55) (D→A+++)		A+++	A+++	A+++

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Specification (cont.)

Heat pump size		10	13	16
Cooling performance data to EN 14511 (A35/W7)				
Rated cooling capacity	kW	3.90	5.15	6.3
Fan speed	rpm	550	550	550
Power consumption	kW	1.18	1.29	1.85
Coefficient of performance in cooling mode (EER)		3.30	4.00	3.40
Output control	kW	3.9 to 7.2	4.2 to 8.0	4.5 to 8.7
Cooling performance data, average climatic conditions (A35/W7)				
Rated cooling capacity P_{rated}	kW	6.90	8.11	8.93
Seasonal cooling energy efficiency ratio (SEER)		3.60	4.71	4.10
Cooling performance data to EN 14511 (A35/W18)				
Rated cooling capacity	kW	9.50	11.20	13.30
Power consumption	kW	2.10	2.70	3.60
Coefficient of performance in cooling mode (EER)		4.50	4.10	3.70
Output control	kW	6.5 to 13.4	6.8 to 14.7	7.1 to 16.0
Cooling performance data, average climatic conditions (A35/W18)				
Rated cooling capacity P_{rated}	kW	9.81	11.51	13.32
Seasonal cooling energy efficiency ratio (SEER)		7.20	6.70	6.30
Air inlet temperature				
Cooling mode				
– Min.	°C	15	15	15
– Max.	°C	45	45	45
Heating mode				
– Min.	°C	–20	–20	–20
– Max.	°C	40	40	40
Heating water (secondary circuit)				
Capacity excl. expansion vessel	l	18	18	18
Heat pump circuit minimum flow rate (defrosting)	l/h	1000	1000	1000
Max. flow temperature	°C	70	70	70
Outdoor unit electrical values				
Rated voltage		3/N/PE 400 V~/50 Hz		
Max. operating current	A	12	12	12
Cos ϕ		0.96	0.96	0.96
Compressor starting current, inverter controlled	A	< 10	< 10	< 10
Compressor starting current with stalled armature	A	< 10	< 10	< 10
Fuse protection		B16A	B16A	B16A
IP rating		IPX4	IPX4	IPX4
Indoor unit electrical values				
PCB				
– Rated voltage		1/N/PE 230 V~/50 Hz		
– Power supply fuse protection		1 x B16A	1 x B16A	1 x B16A
– Internal fuse protection		6.3 A H (slow)/250 V~		
Instantaneous heating water heater				
– Rated voltage		3/N/PE 400 V~/50 Hz		
– Heating output				
Max.	kW	8	8	8
Stage 1	kW	2.4	2.4	2.4
Stage 2	kW	2.4	2.4	2.4
Stage 3	kW	3.2	3.2	3.2
– Power supply fuse protection		3 x B16A	3 x B16A	3 x B16A
Max. power consumption				
Outdoor unit				
– Fan	W	2 x 140	2 x 140	2 x 140
– Total	kW	4.8	5.4	5.4
Indoor unit				
– Integral secondary pump/heating circuit pump, heating/cooling circuit 1 (PWM)	W	60	60	60
– Energy efficiency index EEI of the circulation pumps		≤ 0.2	≤ 0.2	≤ 0.2
– Control unit/PCB	W	5	5	5
– Max. connected load, function components 230 V~	W	1000	1000	1000

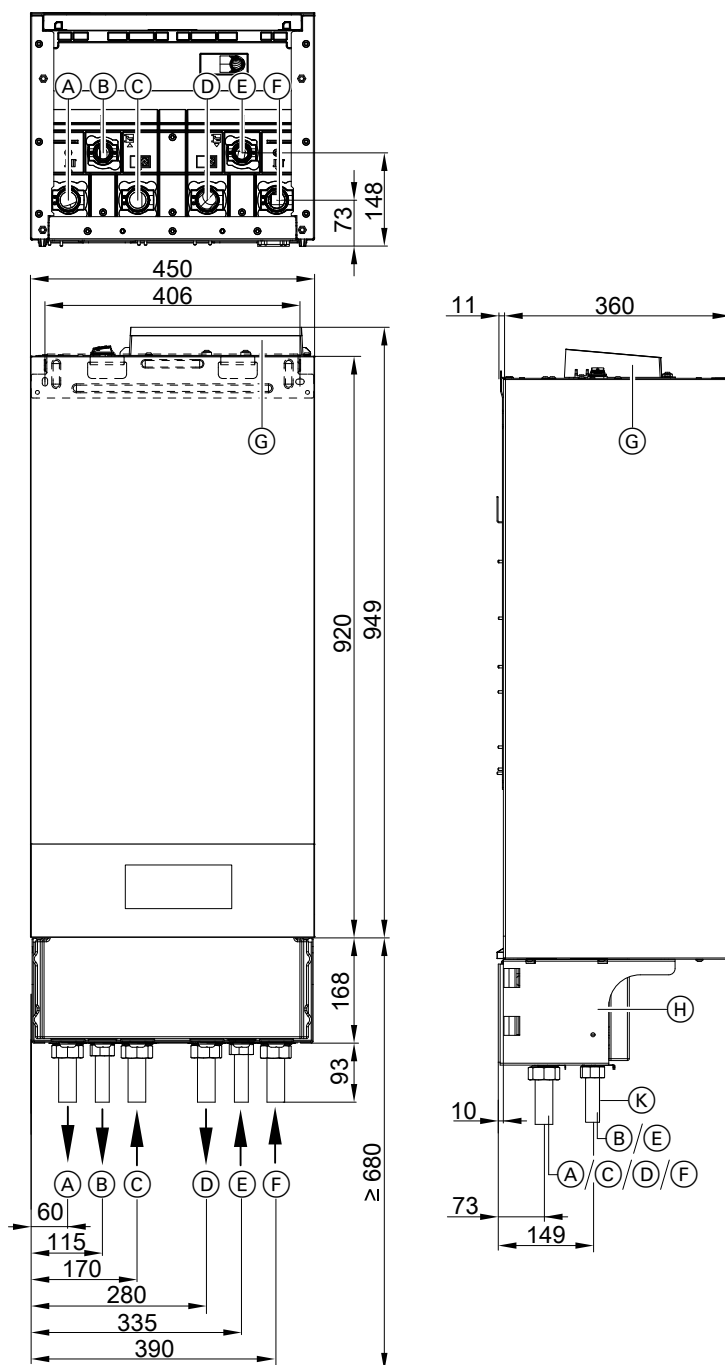
Specification (cont.)

Heat pump size		10	13	16
Mobile data transfer				
WiFi				
– Transmission standard		IEEE 802.11 b/g/n	IEEE 802.11 b/g/n	IEEE 802.11 b/g/n
– Frequency band	MHz	2400 to 2483.5	2400 to 2483.5	2400 to 2483.5
– Max. transmission power	dBm	+15	+15	+15
Low power radio				
– Transmission standard		IEEE 802.15.4	IEEE 802.15.4	IEEE 802.15.4
– Frequency band	MHz	2400 to 2483.5	2400 to 2483.5	2400 to 2483.5
– Max. transmission power	dBm	+6	+6	+6
Refrigerant circuit				
Refrigerant		R290	R290	R290
– Safety group		A3	A3	A3
– Charge weight	kg	2	2	2
– Global warming potential (GWP)* ²		0.02	0.02	0.02
– CO ₂ equivalent	t	0.00004	0.00004	0.00004
Compressor (hermetically sealed)	Type	Twin rotary	Twin rotary	Twin rotary
– Oil in compressor	Type	HAF68	HAF68	HAF68
– Oil volume in compressor	l	1.150 ±0.020	1.150 ±0.020	1.150 ±0.020
Permissible operating pressure				
– High pressure side	bar	30.3	30.3	30.3
	MPa	3.03	3.03	3.03
– Low pressure side	bar	30.3	30.3	30.3
	MPa	3.03	3.03	3.03
Outdoor unit dimensions				
Total length	mm	600	600	600
Total width	mm	1144	1144	1144
Total height	mm	1382	1382	1382
Indoor unit dimensions				
Total length	mm	360	360	360
Total width	mm	450	450	450
Total height	mm	920	920	920
Total weight				
Indoor unit				
– Empty	kg	47	47	47
– Filled (max.)	kg	74	74	74
Outdoor unit	kg	197	197	197
Permissible operating pressure on the secondary side				
	bar	3	3	3
	MPa	0.3	0.3	0.3
Connections to indoor unit without installation aid				
Heating water flow/return, heating/cooling circuit or external buffer cylinder	mm	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0
Heating water flow/return, DHW cylinder	mm	Cu 22 x 1.0	Cu 22 x 1.0	Cu 22 x 1.0
Heating water flow/return, outdoor unit	mm	Cu 28 x 1.0	Cu 28 x 1.0	Cu 28 x 1.0
Length of connection line, indoor — outdoor unit (e.g. Quattro connection line)				
	m	5 to 20	5 to 20	5 to 20
Sound power at rated heating output				
Total sound power level measurement with reference to DIN EN 12102-1:2023 and DIN EN ISO 3744:2011 in ErP point C to DIN EN 14825 with operating conditions A7/W55				
Indoor unit				
– ErP	dB(A)	40	40	40
Outdoor unit				
– ErP	dB(A)	53	54	55
– Max.	dB(A)	61	61	66
– Low-noise mode, stage 2	dB(A)	54	54	59

*² Based on the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

Specification (cont.)

Dimensions of indoor unit IDU-A, IDU-A Modular



Example with Comfort installation aid

- | | |
|---|---|
| (A) Secondary circuit flow (heating/cooling circuit 1/external buffer cylinder) | (F) Secondary circuit return (heating/cooling circuit 1/external buffer cylinder) |
| (B) DHW cylinder flow (heating water side) | (G) Junction box |
| (C) Heating water from outdoor unit | (H) Comfort installation aid |
| (D) Heating water to outdoor unit | (K) Adaptors from Comfort installation aid to copper pipe |
| (E) DHW cylinder return (heating water side) | Ø 28/22 mm (accessories) |

Specification (cont.)

Note

The dimensions of the flow and return connections depend on the installation aid used (required accessory):

■ Cu 22 x 1.0 mm/Cu 28 x 1.0 mm

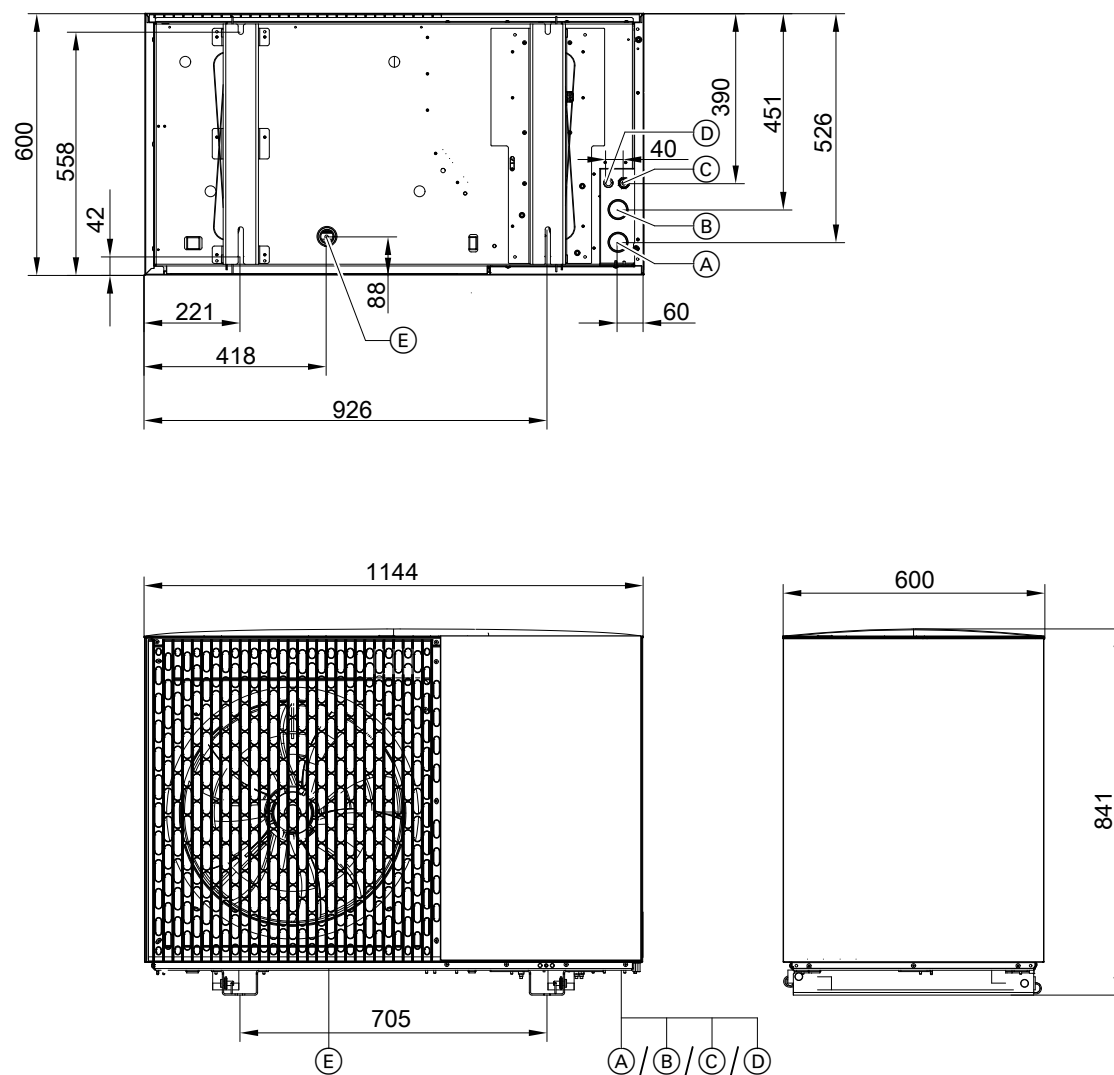
or

■ G 1/2" G 1 1/4"



Separate installation instructions

Dimensions of outdoor unit ODU 150-A, sizes 04 to 08

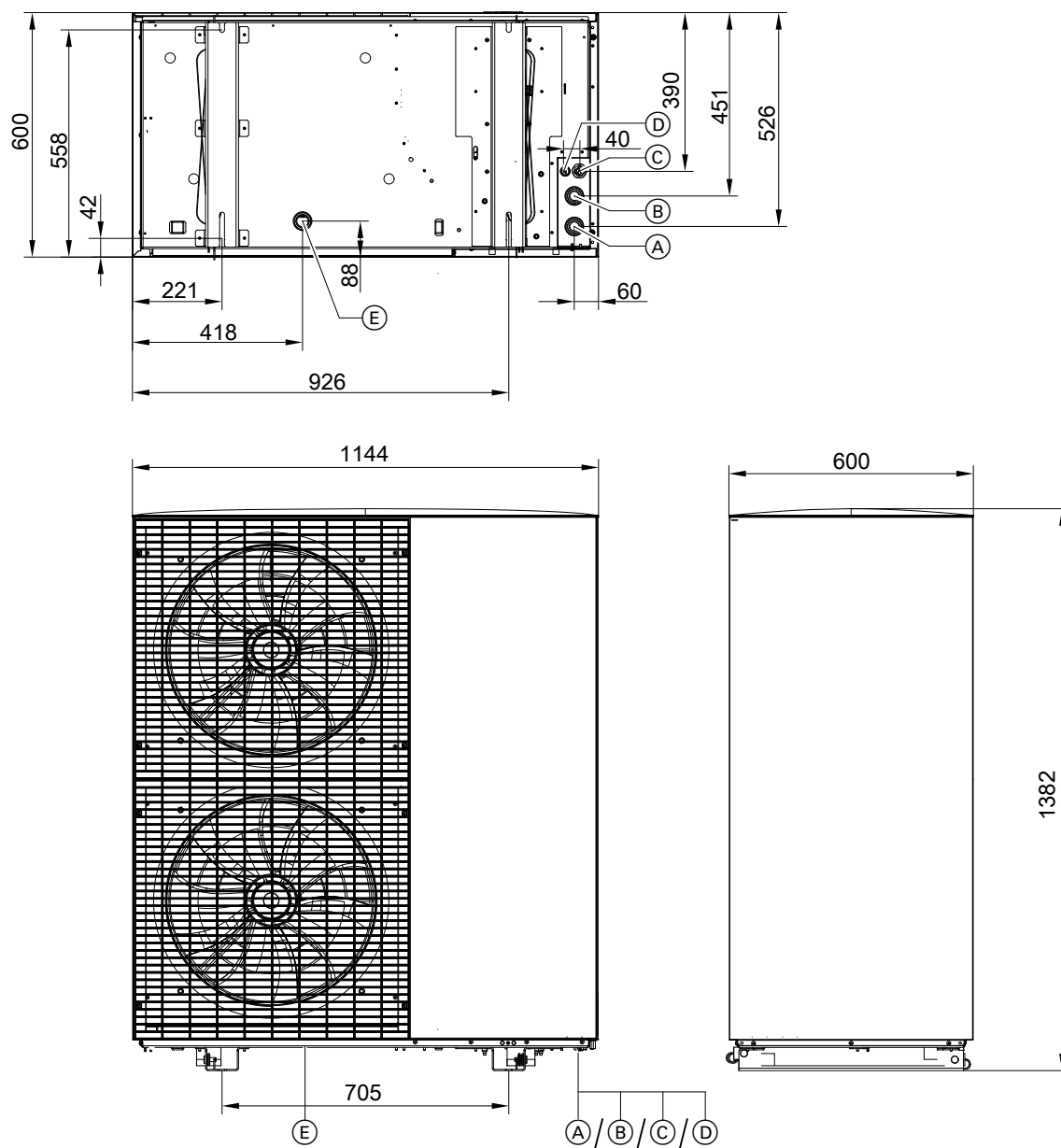


- (A) Heating water **to** indoor unit (heating water outlet): Plug-in connection for Cu 28 x 1.0 mm
- (B) Heating water **from** indoor unit (heating water inlet): Plug-in connection for Cu 28 x 1.0 mm

- (C) Power cable
- (D) CAN bus communication cable (accessories)
- (E) Condensate drain

Specification (cont.)

Dimensions of outdoor unit ODU 150-A, sizes 10 to 16



- | | |
|--|---|
| (A) Heating water to indoor unit (heating water outlet): Plug-in connection for Cu 28 x 1.0 mm | (C) Power cable |
| (B) Heating water from indoor unit (heating water inlet): Plug-in connection for Cu 28 x 1.0 mm | (D) CAN bus communication cable (accessories) |
| | (E) Condensate drain |

Subject to technical modifications.

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