



HELIOTHERM HEAT PUMPS

TECHNICAL DATA SHEETS

Ground Source Heat Pump with CO₂ Probe
WEB CONTROL Series



TECHNICAL DATA SHEET HP05E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	6,03 kW	5,44 kW
Cooling capacity	4,86 kW	3,81 kW
Input	1,17 kW	1,63 kW
COP	5,14	3,33

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	5,91 kW	5,37 kW
Cooling capacity	4,69 kW	3,67 kW
Input	1,22 kW	1,70 kW
COP	4,84	3,16

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	1,9 kW
Stall current	26 A
Oil amount	1,1 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	4
Single length	100 m
Probe quantity	1
Heat exchanger quantity	4
Tested pressure	45 bar

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	1,2 m ³ /h
Pressure loss	0,8 mWs
Temperature difference	5 K
Content	1,9 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	3,1 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 10 A
Max. compressor operating current	5 A
Starting current	26 A
Starting current with soft starter	17 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/18	mm
Height x Width x Depth	1.380x460x520	mm
Weight	145	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

W = Heating water temperature in °C

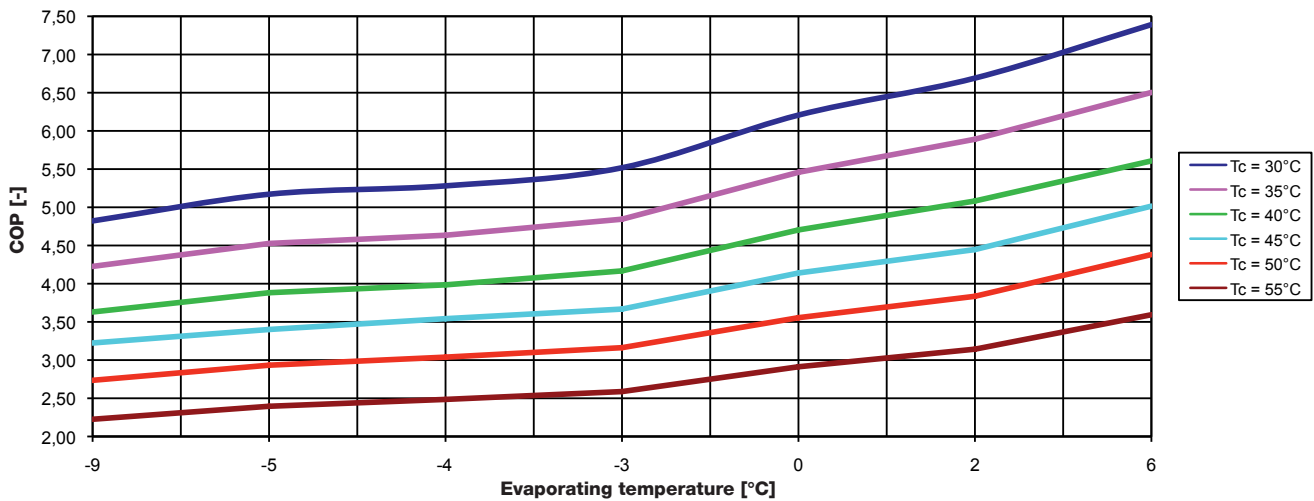
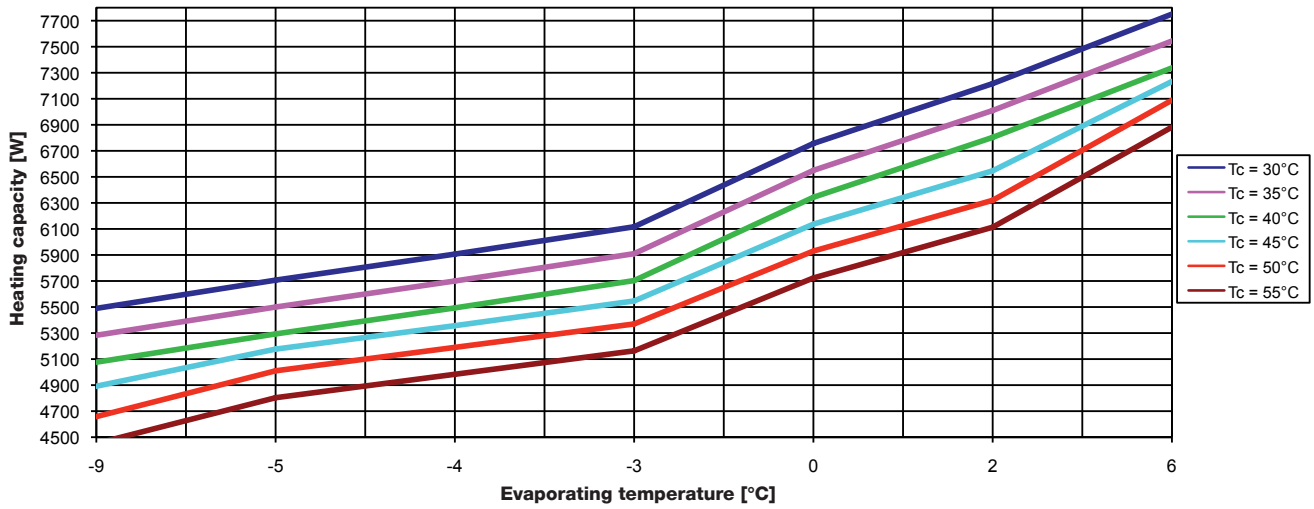
V = Evaporating temperature in °C

0,25 kW/person are to be calculated to the heating load for DHW preparation.

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP05E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP07E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	7,15 kW	6,36 kW
Cooling capacity	5,77 kW	4,48 kW
Input	1,38 kW	1,88 kW
COP	5,20	3,38

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	7,00 kW	6,28 kW
Cooling capacity	5,57 kW	4,32 kW
Input	1,43 kW	1,96 kW
COP	4,90	3,21

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	1,9 kW
Stall current	32 A
Oil amount	1,1 l

Evaporator (CO ₂ Probe) / Energy Source		
Type	CO ₂ -Copper heat exchanger	
Material	Cu with PE coating Ø 18 mm	
Tube / Probe	4	3
Single length	120 m	60 m
Probe quantity	1	2
Heat exchanger quantity	4	6
Tested pressure	45 bar	

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	1,4 m ³ /h
Pressure loss	0,8 mWs
Temperature difference	5 K
Content	1,9 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	3,1 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 10 A
Max. compressor operating current	5,5 A
Starting current	32 A
Starting current with soft starter	21,3 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/18	mm
Height x Width x Depth	1.380x460x520	mm
Weight	145	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

W = Heating water temperature in °C

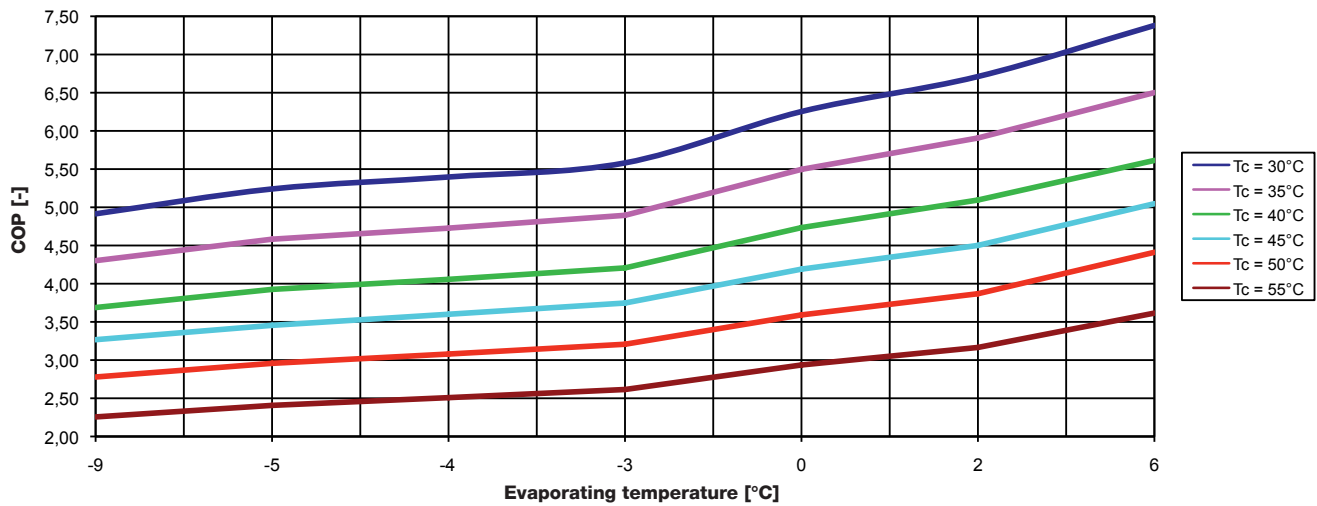
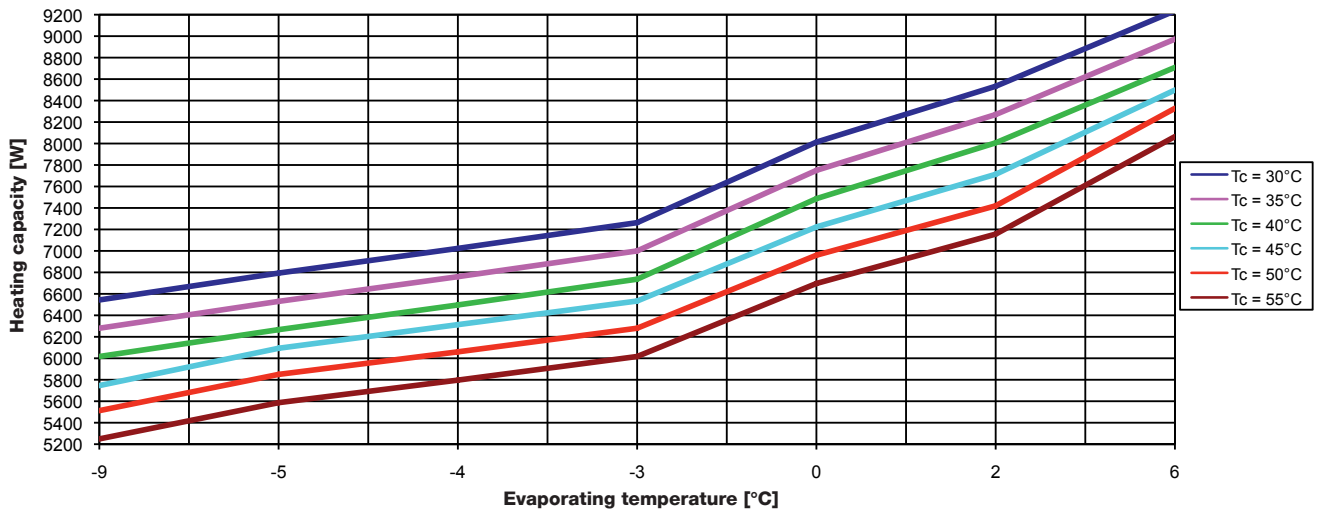
V = Evaporating temperature in °C

0,25 kW/person are to be calculated to the heating load for DHW preparation.

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP07E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP08E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	8,76 kW	7,86 kW
Cooling capacity	7,11 kW	5,61 kW
Input	1,65 kW	2,25 kW
COP	5,32	3,49

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	8,58 kW	7,76 kW
Cooling capacity	6,87 kW	5,41 kW
Input	1,71 kW	2,34 kW
COP	5,01	3,31

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	2,4 kW
Stall current	35 A
Oil amount	1,3 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	3
Single length	80 m
Probe quantity	2
Heat exchanger quantity	6
Tested pressure	45 bar

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	1,6 m ³ /h
Pressure loss	0,8 mWs
Temperature difference	5 K
Content	1,9 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	3,3 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 16 A
Max. compressor operating current	6 A
Starting current	35 A
Starting current with soft starter	23,3 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/18	mm
Height x Width x Depth	1.380x460x520	mm
Weight	155	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

W = Heating water temperature in °C

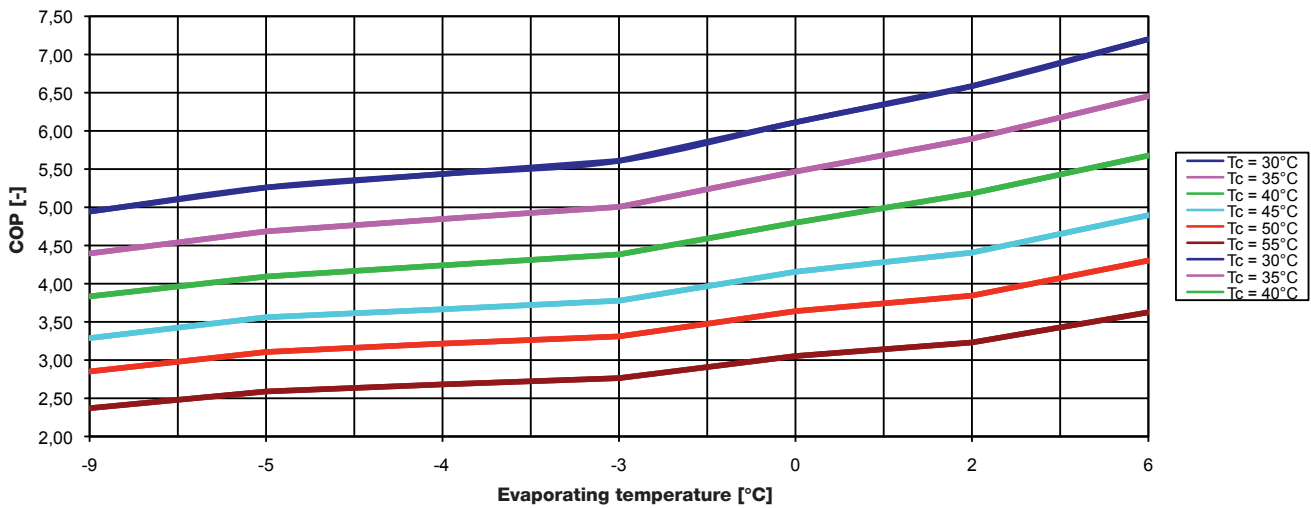
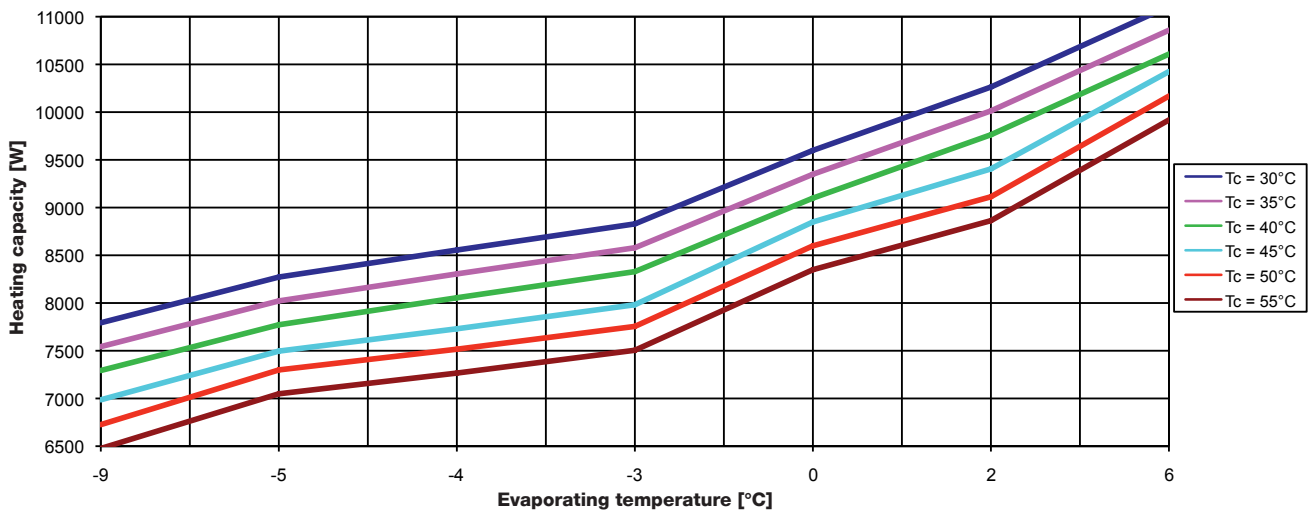
V = Evaporating temperature in °C

0,25 kW/person are to be calculated to the heating load for DHW preparation.

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP08E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP10E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	11,56 kW	10,40 kW
Cooling capacity	9,41 kW	7,48 kW
Input	2,15 kW	2,92 kW
COP	5,37	3,56

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	11,31 kW	10,26 kW
Cooling capacity	9,08 kW	7,22 kW
Input	2,24 kW	3,04 kW
COP	5,06	3,38

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	3,1 kW
Stall current	48 A
Oil amount	1,3 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	3
Single length	100 m
Probe quantity	2
Heat exchanger quantity	6
Tested pressure	45 bar

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	2,0 m ³ /h
Pressure loss	1,0 mWs
Temperature difference	5 K
Content	2,5 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	3,6 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 16 A
Max. compressor operating current	8 A
Starting current	48 A
Starting current with soft starter	32 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/22	mm
Height x Width x Depth	1.380x460x520	mm
Weight	155	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

W = Heating water temperature in °C

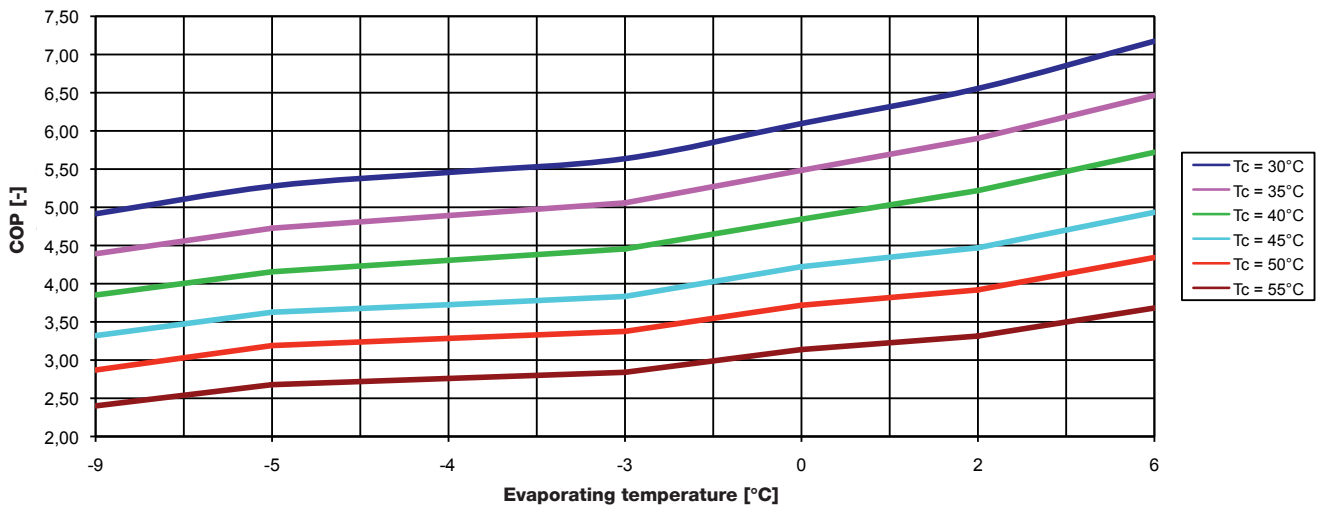
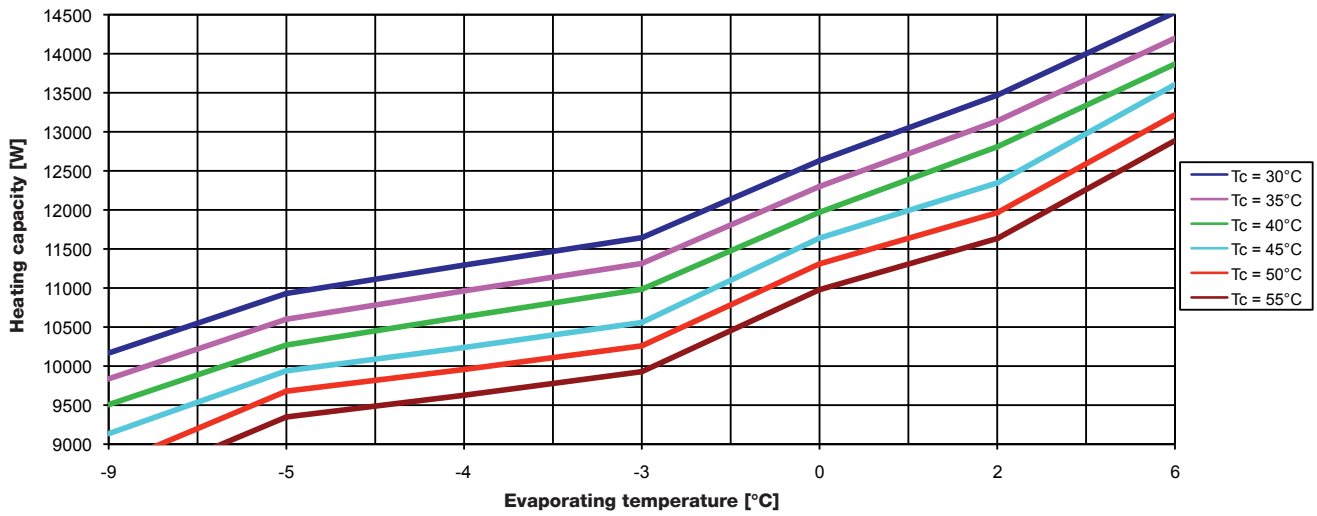
V = Evaporating temperature in °C

0,25 kW/person are to be calculated to the heating load for DHW preparation.

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP10E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP12E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	14,72 kW	13,25 kW
Cooling capacity	11,96 kW	9,60 kW
Input	2,76 kW	3,65 kW
COP	5,34	3,63

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	14,41 kW	13,06 kW
Cooling capacity	11,54 kW	9,26 kW
Input	2,87 kW	3,80 kW
COP	5,03	3,44

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	4,0 kW
Stall current	64 A
Oil amount	1,7 l

Evaporator (CO ₂ Probe) / Energy Source		
Type	CO ₂ -Copper heat exchanger	
Material	Cu with PE coating Ø 18 mm	
Tube / Probe	3	3
Single length	120 m	80 m
Probe quantity	2	3
Heat exchanger quantity	6	9
Tested pressure	45 bar	

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	2,3 m ³ /h
Pressure loss	1,5 mWs
Temperature difference	5 K
Content	2,5 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	3,9 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 16 A
Max. compressor operating current	10 A
Starting current	64 A
Starting current with soft starter	42,6 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/22	mm
Height x Width x Depth	1.380x460x520	mm
Weight	155	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

W = Heating water temperature in °C

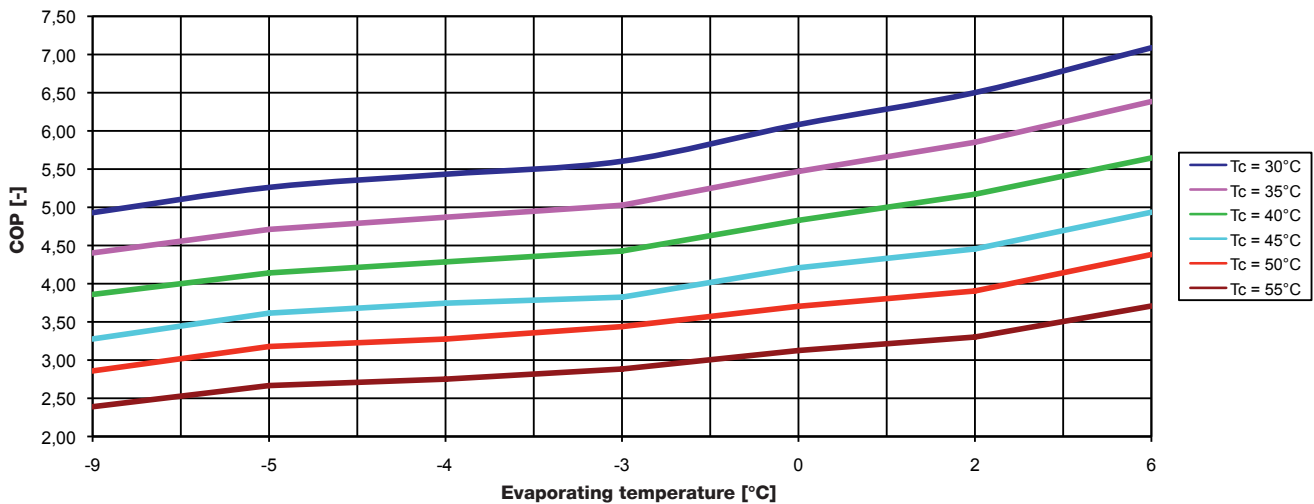
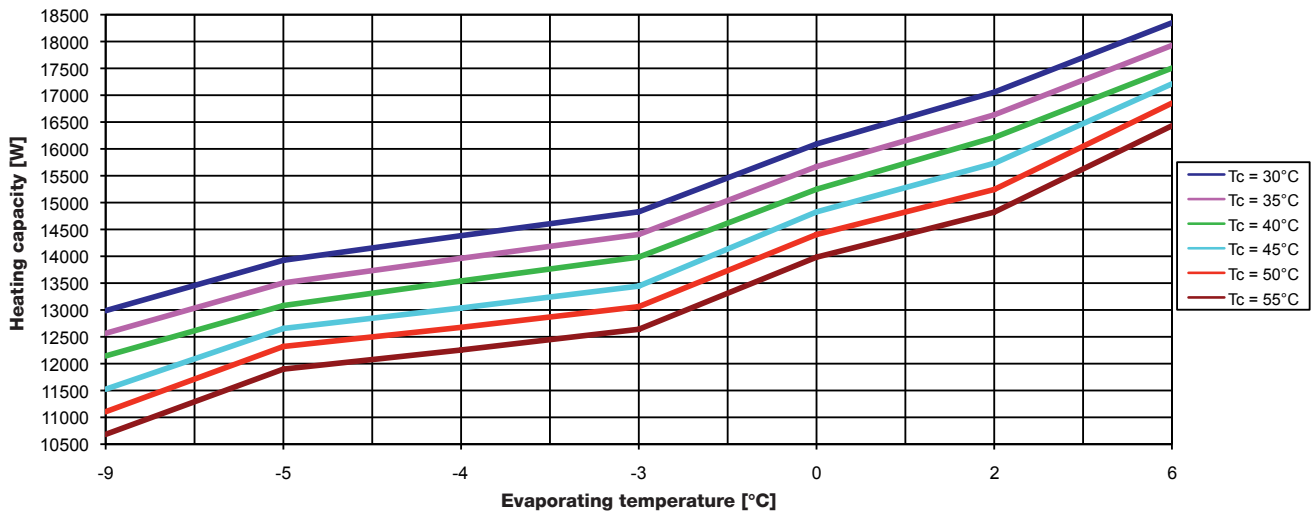
V = Evaporating temperature in °C

0,25 kW/person are to be calculated to the heating load for DHW preparation.

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP12E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP16E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	18,24 kW	16,29 kW
Cooling capacity	14,80 kW	11,74 kW
Input	3,43 kW	4,56 kW
COP	5,31	3,58

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	17,86 kW	16,07 kW
Cooling capacity	14,28 kW	11,33 kW
Input	3,57 kW	4,74 kW
COP	5,00	3,39

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	5,1 kW
Stall current	74 A
Oil amount	1,7 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	3
Single length	100 m
Probe quantity	3
Heat exchanger quantity	9
Tested pressure	45 bar

Condenser & Subcooler / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	2,9 m ³ /h
Pressure loss	1,6 mWs
Temperature difference	5 K
Content	2,5 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	5,3 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 16 A
Max. compressor operating current	12,2 A
Starting current	74 A
Starting current with soft starter	49,3 A

Acoustic Pressure Level	
1 m distance	48 dB(A)

Connections, Dimensions		
Heating outlet and inlet	5/4"	ET
Pressure line / Suction line	10/22	mm
Height x Width x Depth	1.380x460x520	mm
Weight	155	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

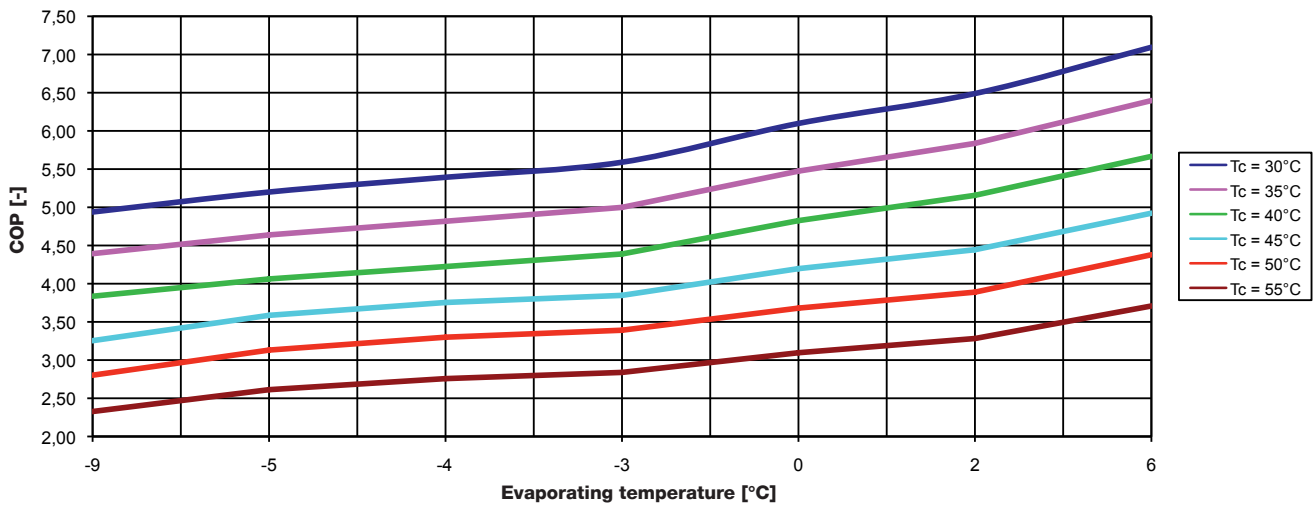
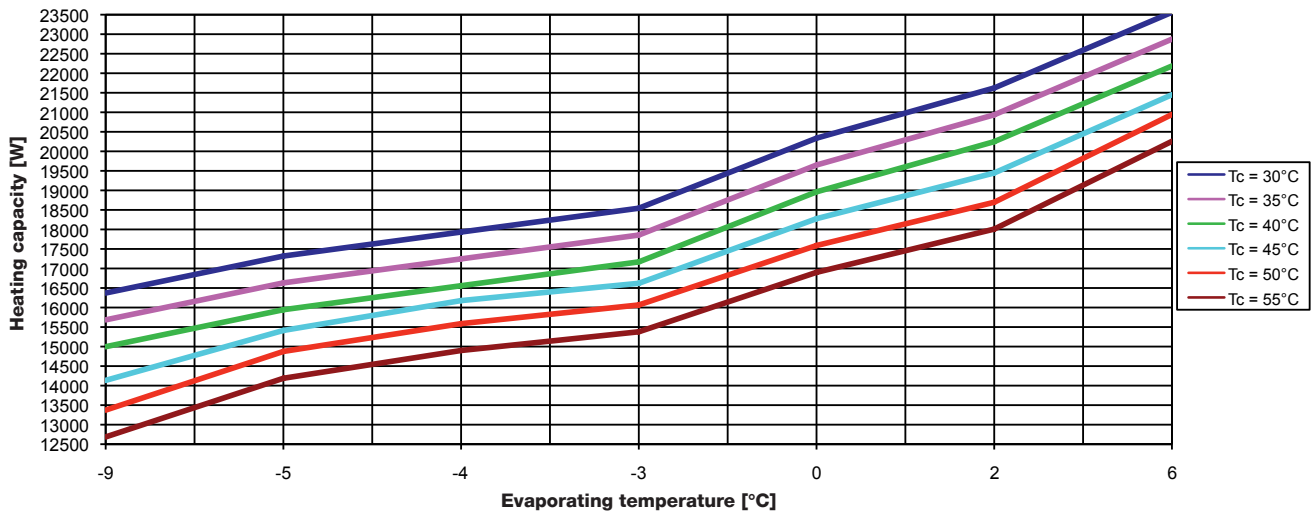
W = Heating water temperature in °C

V = Evaporating temperature in °C

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP16E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP20E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	23,25 kW	21,35 kW
Cooling capacity	18,76 kW	15,18 kW
Input	4,49 kW	6,17 kW
COP	5,18	3,46

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	22,77 kW	21,07 kW
Cooling capacity	18,10 kW	14,65 kW
Input	4,67 kW	6,42 kW
COP	4,88	3,28

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	6,8 kW
Stall current	95 A
Oil amount	2,5 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	3
Single length	100 m
Probe quantity	4
Heat exchanger quantity	12
Tested pressure	45 bar

Condenser / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	3,9 m ³ /h
Pressure loss	2,1 mWs
Temperature difference	5 K
Content	3,0 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	8,4 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 20 A
Max. compressor operating current	16 A
Starting current	95 A
Starting current with soft starter	63,3 A

Acoustic Pressure Level	
1 m distance	56 dB(A)

Connections, Dimensions		
Heating outlet and inlet	2"	ET
Pressure line / Suction line	16/28	mm
Height x Width x Depth	1.380x550x620	mm
Weight	175	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

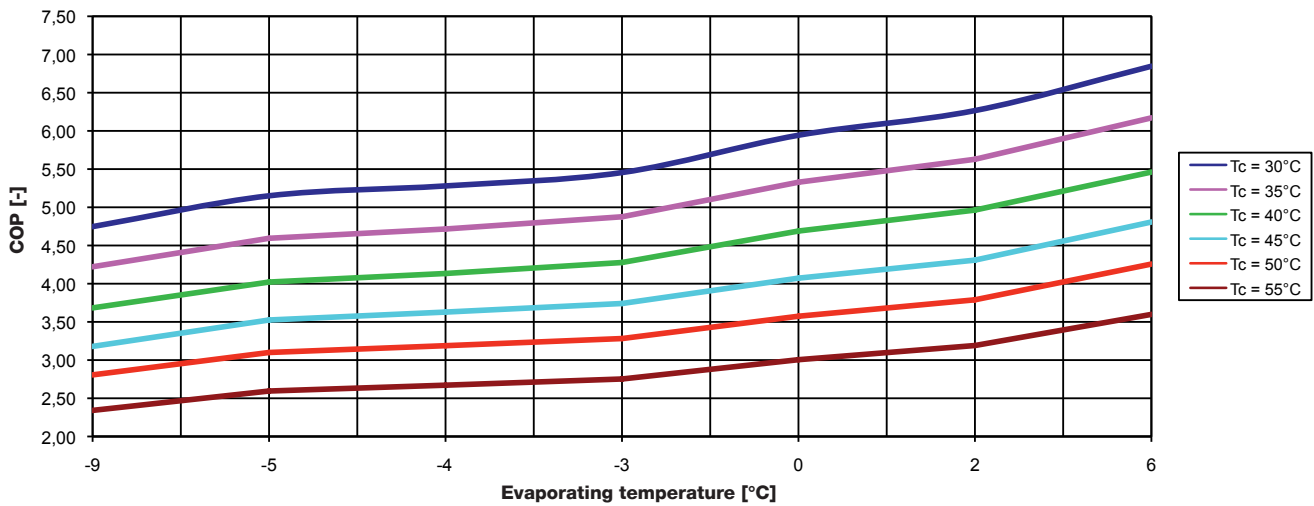
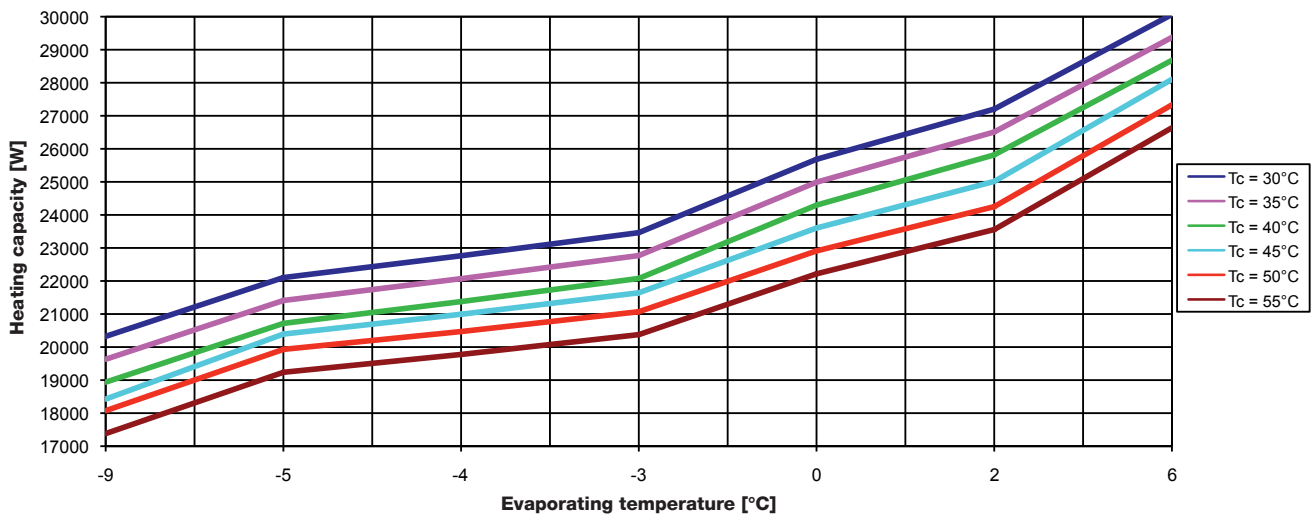
W = Heating water temperature in °C

V = Evaporating temperature in °C

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP20E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
 All performance data is according to EN 14511.

TECHNICAL DATA SHEET HP28E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series

Performance Data ¹⁾ EN255 Δ 10 K		
	V-3W35	V-3W50
Heating capacity	31,31 kW	28,35 kW
Cooling capacity	25,21 kW	19,95 kW
Input	6,10 kW	8,40 kW
COP	5,14	3,38

Performance Data ¹⁾ EN14511 Δ 5 K		
	V-3W35	V-3W50
Heating capacity	30,67 kW	27,99 kW
Cooling capacity	24,33 kW	19,25 kW
Input	6,34 kW	8,74 kW
COP	4,84	3,20

Compressor	
Type	Scroll
Speed RPM	2900 min ⁻¹
Max. input power	9,0 kW
Stall current	118 A
Oil amount	3,3 l

Evaporator (CO ₂ Probe) / Energy Source	
Type	CO ₂ -Copper heat exchanger
Material	Cu with PE coating Ø 18 mm
Tube / Probe	3
Single length	100 m
Probe quantity	6
Heat exchanger quantity	18
Tested pressure	45 bar

Condenser / Heating	
Type	Plate heat exchanger
Material	Stainless steel / Cu soldered
Flow amount	5,1 m ³ /h
Pressure loss	1,8 mWs
Temperature difference	5 K
Content	4,5 l
Tested pressure	45 bar

Refrigerant Cycle	
Working fluid	R410a
Fill amount with 10 m split line	10,4 kg

Electric	
Voltage	400 V
Frequency	50 Hz
Time lag fuse	3 x 25 A
Max. compressor operating current	22 A
Starting current	118 A
Starting current with soft starter	78,6 A

Acoustic Pressure Level	
1 m distance	58 dB(A)

Connections, Dimensions		
Heating outlet and inlet	2"	ET
Pressure line / Suction line	16/35	mm
Height x Width x Depth	1.380x550x620	mm
Weight	185	kg

Operating Limit Values		
Max. operating water pressure	10	bar
Max. operating refrigerant pressure	40	bar
Max. heat outlet temperature	62	°C

¹⁾ Performance specifications

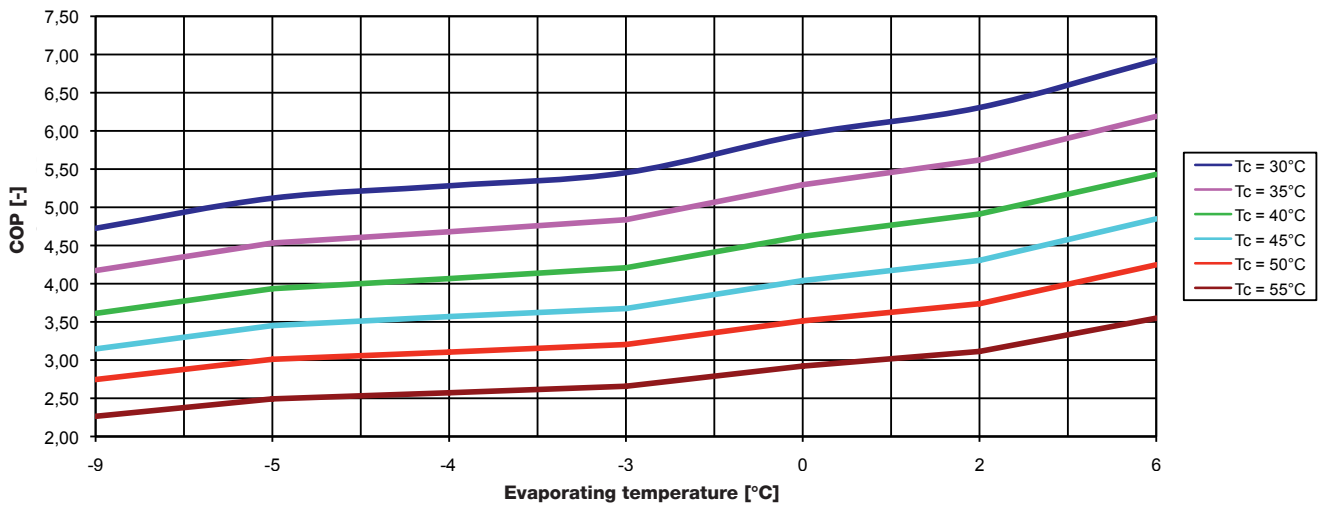
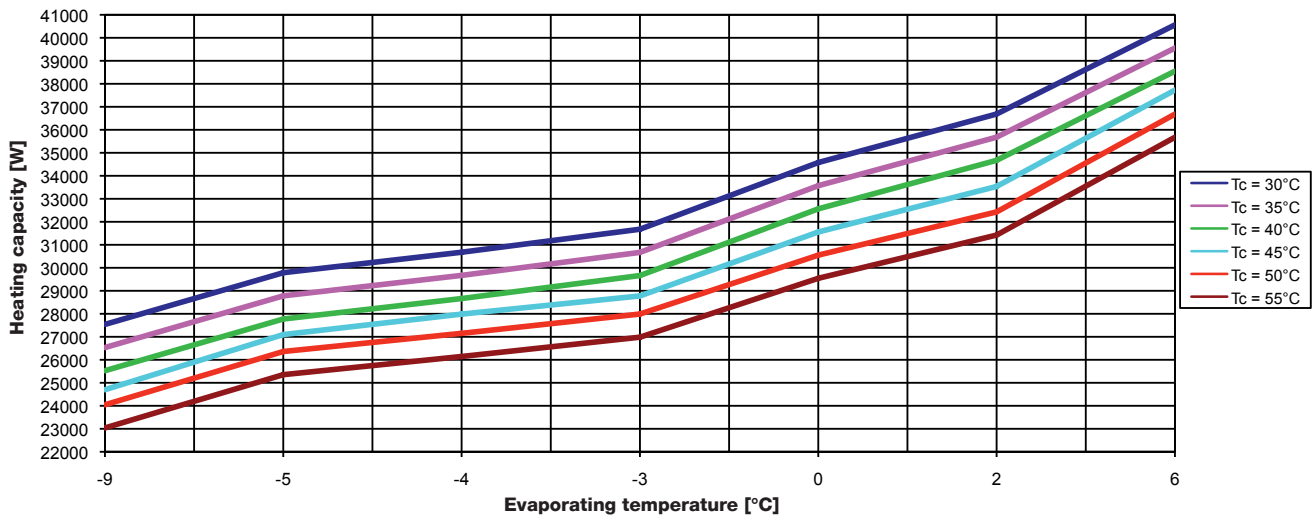
W = Heating water temperature in °C

V = Evaporating temperature in °C

Tolerance results of EN 12900 are valid for the above mentioned performance data.

TECHNICAL DATA SHEET HP28E-WEB

Ground Source Heat Pump with CO₂ Probe | WEB CONTROL Series



EN 12900 tolerance results are valid for the above mentioned performance data.
All performance data is according to EN 14511.