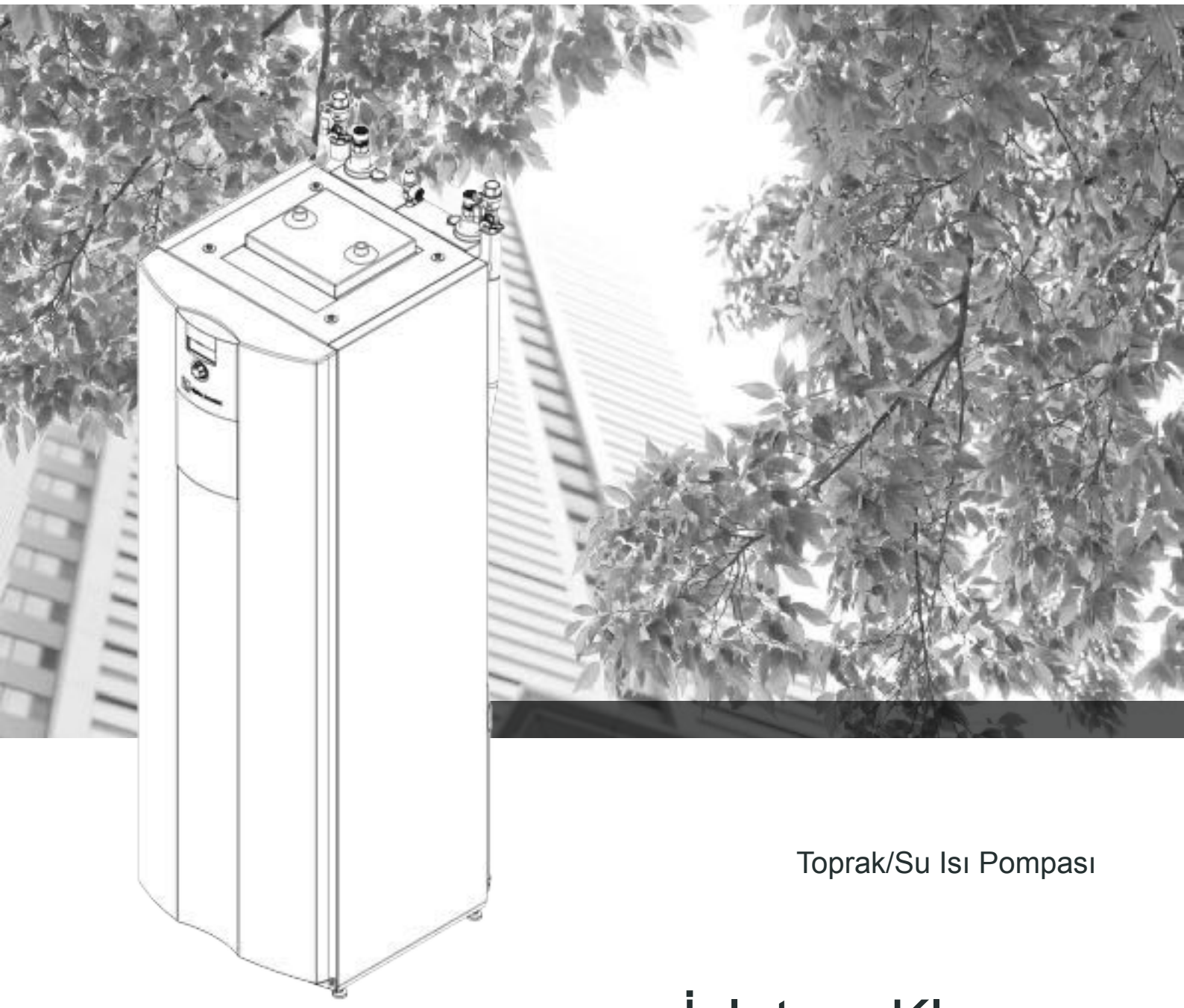
the better way to heat

alpha innotec



Toprak/Su Isı Pompası

İşletme Klavuzu

WZS serisi

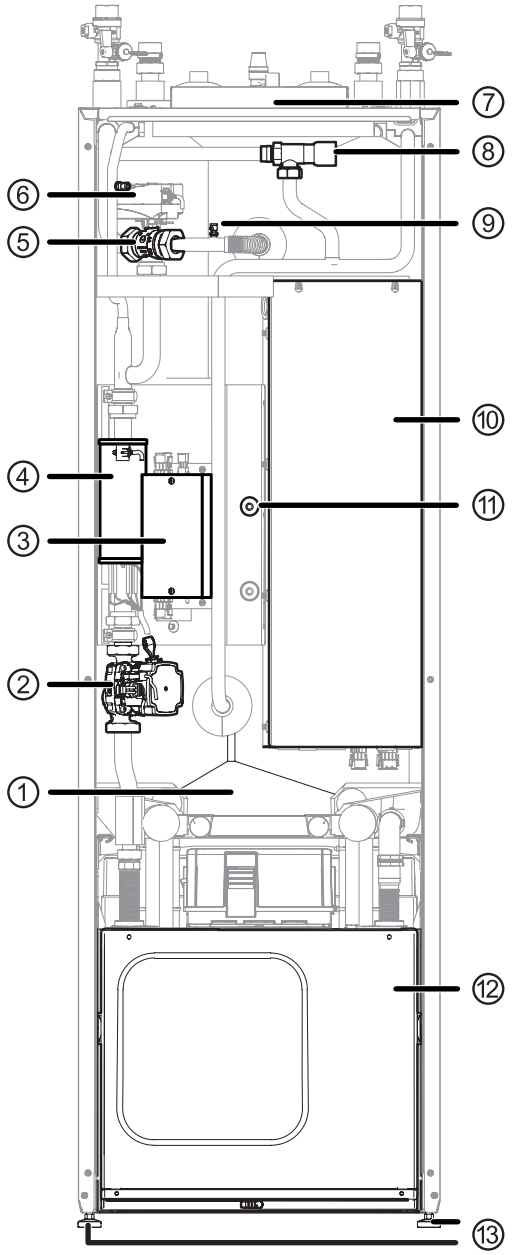
TR

Bilgiler

Yerleşim

NOT
Bu bölüm, temel olarak bu kullanım kılavuzunda açıklanan görevleri yerine getirmekle ilgili bileşenleri adlandırmaktadır.

Ünite bileşenlerine sahip muhafaza



1 Kullanma sıcak suyu boyleri
2 Isıtma devresi/sıcak su sirkülasyon pompası
3 Manuel çıkış kontrollü ısıtma elemanı (MLRH), aksesuarlar
4 Elektrikli ısıtıcı
5 3-yollu değiştirme valfi, ısıtma devresi / kullanma sıcak suyu devresi
6 Valf motoru
7 Tip plakasının konumu
8 Taşma valfi
9 Hava tahliyesi
10 Elektriksel bağlantı kabini
11 Kullanma sıcak suyu boyleri sensörü
12 Modul kutusu
13 Yüksekliği ayarlanabilir ayaklar (4x)

NOT
Şekilde soğutması olmayan H Versiyon cihaz gösterilmetedir.

Bilgi plakası

Derecelendirme plakaları ünite üzerinde aşağıdaki yerlere yapıştırılmıştır:

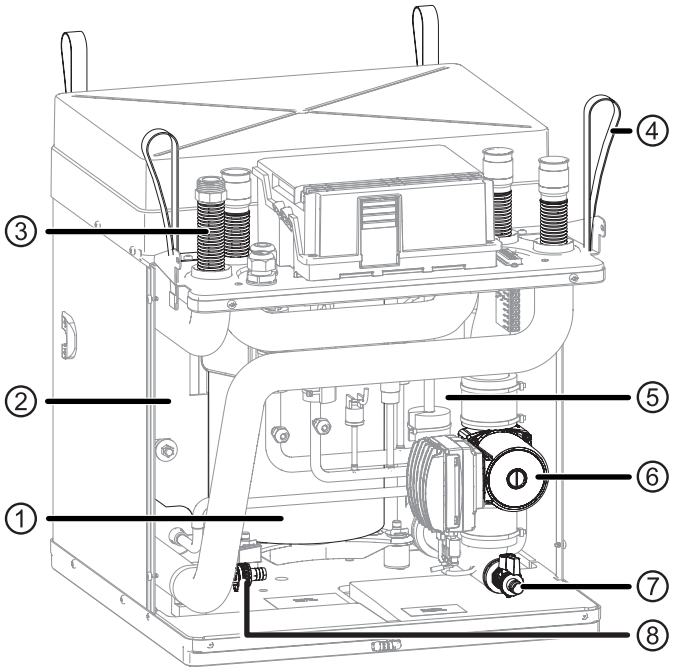
- ısıtma istasyonunun üstünde
- sol taraf, modül kutusunda

Tip etiketi üstte aşağıdaki bilgileri içerir:

- Cihaz tipi, ürün numarası
- Seri numarası, cihaz indeksi

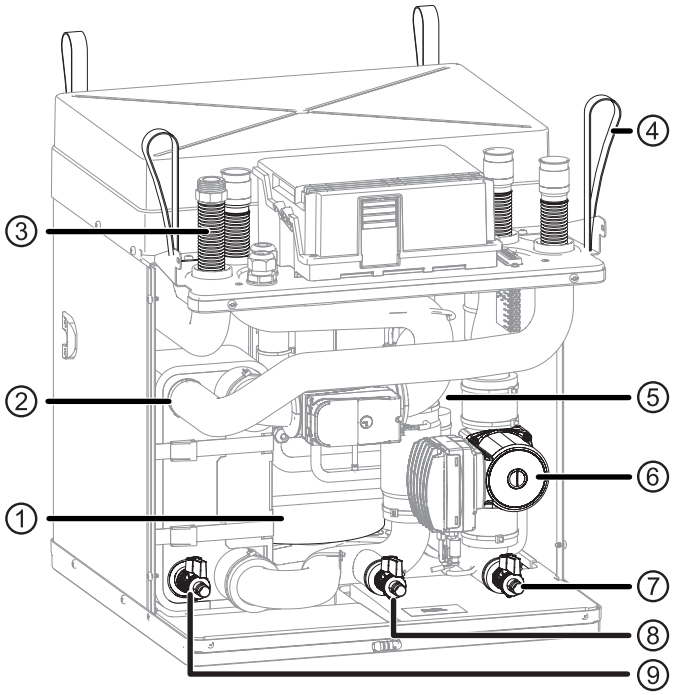
Bilgi plakası ayrıca en önemli teknik verilere genel bir bakış içerir.

Modul kutusu – soğutmasız versiyon



1 Kompresör
2 Kondenser
3 Titreşim önleyici (4x)
4 Taşıma kulpu (4x)
5 Evaporatör
6 Isı kaynağı sirkülasyon pompası
7 Isı kaynağı doldurma ve boşaltma valfi
8 Isıtma devresi doldurma ve boşaltma valfi

Modul kutusu – soğutmalı versiyon



1 Kompresör
2 Kondenser
3 Titreşim önleyici (4x)
4 Taşıma kulpu (4x)
5 Evaporatör
6 Isı kaynağı sirkülasyon pompası
7 Isı kaynağı doldurma ve boşaltma valfi
8 Isı kaynağı doldurma ve boşaltma valfi
9 Isıtma devresi doldurma ve boşaltma valfi

NOT
Hortum konektörleri, tüm KFE küresel vanalarıyla teslimat kapsamının bir parçası değildir.

Teknik bilgiler / Teslimat içeriği

Performans Bilgileri: Isıtma Gücü / COP			**WZS 42(H)(K)3M**	**WZS 82(H)(K)3M**
Heating capacity ı COP	at B0/W35 operating point to EN14511	kW ı COP	4,70 ı 4,70	7,70 ı 4,90
	at B0/W45 operating point to EN14511	kW ı COP	4,42 ı 3,42	6,84 ı 3,61
	at B0/W55 operating point to EN14511	kW ı COP	4,16 ı 2,58	6,49 ı 2,91
	at B7/W35 flows analogous to B0/W35	kW ı COP	5,83 ı 5,70	9,20 ı 5,96
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	4,3	7
Kullanım Limitleri				
Heating circuit return min. I Heating circuit flow max.	Isıtma Devresi Min.Dönüş/Maks.Gidiş	°C	20 ı 60	20 ı 60
Heat source return	Isı Kaynağı Dönüş Sıcaklığı min. I max.	°C	-5 – 25	-5 – 25
additional operating points		...	B0W65	B0W65
Ses				
Sound pressure level at 1m distance from edge of unit		dB(A)	31	31
Sound power level to EN12102		dB(A)	43	43
Isı Kaynağı				
Flow rate: minimum I **nominal analogous to B0/W35** I maximum	Debi: min./nom./maks.	l/h	700 ı **1050** ı 1575	1200 ı **1750** ı 2600
Max. free heat pump pressure Δp (with cooling ΔpK) ***) ı Flow rate		bar (bar) ı l/h	0,74 (0,72) ı 1050	0,76 (0,7) ı 1750
Approved anti-freeze	Monoethylene glycol I Propylene glycol I Methanol I Ethanol		• I • I • I •	• I • I • I •
Anti-freeze concentration: Minimum frost protection down to	Antifriz Konsantrasyonu	°C	-13	-13
max. allowable operating pressure	Maks.İzin Verilen Çalışma Basıncı	bar	3	3
Isıtma Devresi				
Flow rate: minimum I **nominal analogous to B0/W35** I maximum	Debi: min./nom./maks.	l/h	450 ı **850** ı 1300	650 ı **1300** ı 1600
Max. free heat pump pressure Δp (with cooling ΔpK) ı Volume flow		bar (bar) ı l/h	0,72 (0,70) ı 850	0,55 (0,52) ı 1300
Pressure losses, heat pump Δp ı Volume flow		bar ı l/h	— (—) ı —	— (—) ı —
max. allowable operating pressure	Maks.İzin Verilen Çalışma Basıncı	bar	3	3
Genel Cihaz Bilgileri				
Total weight (with cooling)	Toplam Ağırlık (soğutmalı)	kg (kg)	250 (258)	270 (278)
Box weight (with cooling) ı Tower weight (with cooling)	Kutu Ağırlığı/Kule Ağırlığı	kg (kg) ı kg (kg)	90 (98) ı 160 (160)	110 (118) ı 160 (160)
Refrigerant type ı Refrigerant capacity	Soğutucu Gaz Tipi / Miktarı	... ı kg	R410A ı 1,05	R410A ı 1,72
Kullanma Sıcak Su Boyleri				
Net volume	Net Hacim	l	178	178
Impressed current anode	Elektrikli Harici Akım Anodu	integrated: • yes — no	•	•
Domestic hot water temperature, heating pump mode I Electric heating element		up to °C ı up to °C	58 I 65	56 I 65
Mixed water quantity according to ErP: 2009/125/EC (at 40°C, draw-off of 10 l/min)		l	280	280
Standing loss according to ErP: 2009/125/EC (at 65°C)	Bekleme Kaybı	W	54	54
Maximum pressure	Maksimum Basınç	bar	10	10
Elektrik				
Voltage code ı all-pole heat pump fusing *)**)		... ı A	3~PE/400V/50Hz ı C10	3~PE/400V/50Hz ı C10
Voltage code ı Control voltage fusing **)		... ı A	1~/N/PE/230V/50Hz ı B10	1~N/PE/230V/50Hz ı B10
Voltage code ı Electric heating element fusing **)		... ı A	3~/N/PE/400V/50Hz ı B16	3~N/PE/400V/50Hz ı B16
Voltage code ı all-pole fusing for connection via a joint supply cable*)**)		... ı A	— ı —	— ı —
WP*): effect. Power input at B0/W35 to EN14511 I Current input I cosϕ		kW ı A ı ...	1,00 ı 2,44 ı 0,59	1,57 ı 3,02 ı 0,75
WP*): Max. machine current I Max. power input within the limits of use		A ı kW	4,8 ı 2,3	6,01 ı 3,10
Starting current: direct ı with soft starter	Devreye Girme Akımı	A ı A	22,0 ı —	30,0 ı —
Degree of protection	Elektrik Koruma Sınıfı	IP	20	20
Electric heating element output	Elektrikli Isıtıcı Kapasitesi	kW	9 ı 6 ı 3	9 ı 6 ı 3
Circulation pump power consumption, heating circuit I heat source		min. — max. W ı W	2 – 60 ı 5 – 87	2 – 60 ı 3 – 140
Cihazla İlgili Diğer Bilgiler				
Safety valve, heating circuit I Heat source		included in scope of supply: • yes — no	— I —	— I —
Expansion valve, heating circuit I Heat source		included in scope of supply: • yes — no	— I —	— I —
Overflow valve I Changeover valve, heating -Domestic hot water		integrated: • yes — no	• I •	• I •
Vibration isolators, heating circuit I Heat source	Titreşim Önleyici	integrated: • yes — no	• I •	• I •

*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol 813460a 813462a

*) Sadece kompresör. **) Yerel düzenlemelere uygun, ***) %25 mono etilen glikol için değer

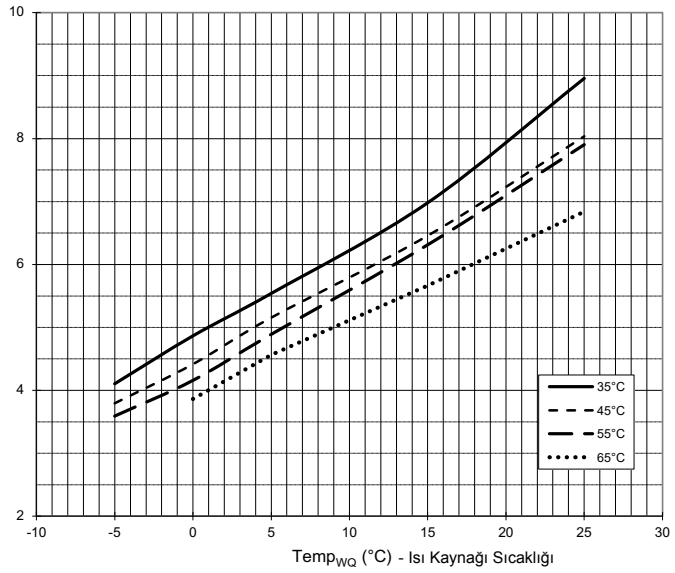
Teknik bilgiler / Teslimat içeriği

Performance data: Heating output / COP			**WZS 102(H)(K)3M**	**WZS 122(H)(K)3M**
Heating capacity ı COP	at B0/W35 operating point to EN14511	kW ı COP	9,34 ı 5,05	12,18 ı 5,00
	at B0/W45 operating point to EN14511	kW ı COP	8,84 ı 3,80	11,24 ı 3,76
	at B0/W55 operating point to EN14511	kW ı COP	8,30 ı 2,82	10,63 ı 2,97
	at B7/W35 flows analogous to B0/W35	kW ı COP	11,19 ı 6,30	14,55 ı 6,06
Cooling capacity at max. flow rate (B15/W25), units with passive cooling: Identifier K		kW	8,6	10,8
Limits of use				
Heating circuit return min. ı Heating circuit flow max.		°C	20 ı 60	20 ı 60
Heat source return	min. ı max.	°C	-5 – 25	-5 – 25
additional operating points		...	B0W65	B0W65
Sound				
Sound pressure level at 1m distance from edge of unit		dB(A)	32	31
Sound power level to EN12102		dB(A)	44	43
Heat source				
Flow rate: minimum ı **nominal analogous to B0/W35** ı maximum		l/h	1500 ı **2200** ı 3300	1900 ı **2800** ı 4200
Max. free heat pump pressure Δp (with cooling ΔpK) ***) ı Flow rate		bar (bar) ı l/h	0,93 (0,87) ı 2200	0,75 (0,63) ı 2800
Approved anti-freeze	Monoethylene glycol ı Propylene glycol ı Methanol ı Ethanol		• ı • ı • ı •	• ı • ı • ı •
Anti-freeze concentration: Minimum frost protection down to		°C	-13	-13
max. allowable operating pressure		bar	3	3
Heating circuit				
Flow rate: minimum ı **nominal analogous to B0/W35** ı maximum		l/h	800 ı **1600** ı 2000	1050 ı **2050** ı 2600
Max. free heat pump pressure Δp (with cooling ΔpK) ı Volume flow		bar (bar) ı l/h	0,52 (0,48) ı 1600	0,38 (0,30) ı 2050
Pressure losses, heat pump Δp ı Volume flow		bar ı l/h	— (—) ı —	— (—) ı —
max. allowable operating pressure		bar	3	3
General unit data				
Total weight (with cooling)		kg (kg)	275 (283)	280 (288)
Box weight (with cooling) ı Tower weight (with cooling)		kg (kg) ı kg (kg)	115 (123) ı 160 (160)	120 (128) ı 160 (160)
Refrigerant type ı Refrigerant capacity		... ı kg	R410A ı 1,98	R410A ı 2,25
Domestic hot water tank				
Net volume		l	178	178
Impressed current anode	integrated: • yes — no		•	•
Domestic hot water temperature, heating pump mode l Electric heating element	up to °C ı up to °C		56 ı 65	55 ı 65
Mixed water quantity according to ErP: 2009/125/EC (at 40°C, draw-off of 10 l/min)		l	260	260
Standing loss according to ErP: 2009/125/EC (at 65°C)		W	54	54
Maximum pressure		bar	10	10
Electrics				
Voltage code ı all-pole heat pump fusing *)**)		... ı A	3~PE/400V/50Hz ı C10	3~PE/400V/50Hz ı C10
Voltage code ı Control voltage fusing **)		... ı A	1~N/PE/230V/50Hz ı B10	1~N/PE/230V/50Hz ı B10
Voltage code ı Electric heating element fusing **)		... ı A	3~N/PE/400V/50Hz ı B16	3~N/PE/400V/50Hz ı B16
Voltage code ı all-pole fusing for connection via a joint supply cable*)**)		... ı A	— ı —	— ı —
WP*): effect. Power input at B0/W35 to EN14511 l Current input l cosϕ		kW ı A ı ...	1,87 ı 3,73 ı 0,72	2,44 ı 4,70 ı 0,75
WP*): Max. machine current l Max. power input within the limits of use		A ı kW	7,63 ı 4,00	9,44 ı 4,80
Starting current: direct ı with soft starter		A ı A	— ı 22,0	— ı 26,0
Degree of protection		IP	20	20
Electric heating element output		kW	9 ı 6 ı 3	9 ı 6 ı 3
Circulation pump power consumption, heating circuit l heat source	min. — max. W ı W		2 – 60 ı 2 – 180	2 – 60 ı 2 – 180
Other unit information				
Safety valve, heating circuit l Heat source	included in scope of supply: • yes — no		— ı —	— ı —
Expansion valve, heating circuit l Heat source	included in scope of supply: • yes — no		— ı —	— ı —
Overflow valve l Changeover valve, heating -Domestic hot water	integrated: • yes — no		• ı •	• ı •
Vibration isolators, heating circuit l Heat source	integrated: • yes — no		• ı •	• ı •
*) Only compressor, **) Follow local regulations, ***) Figures for 25% mono-ethylene glycol			813463a	813464a

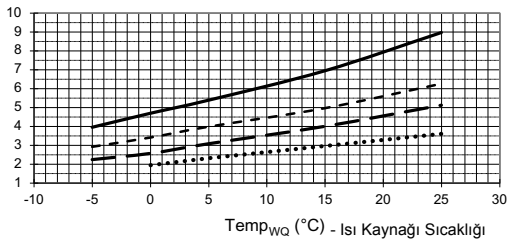
WZS 42(H)(K)3M

Performans Eğrileri

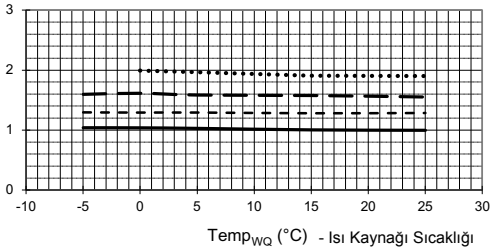
Qh (kW) - Isıtma Kapasitesi



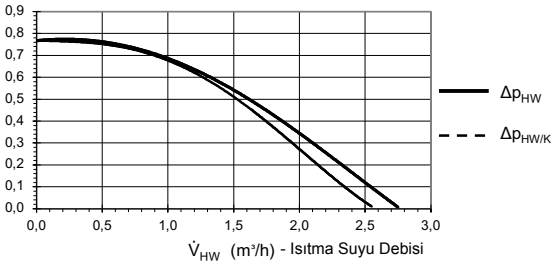
COP



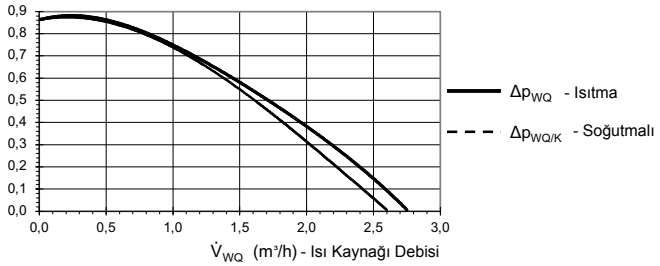
Pe (kW) - Besleme Gücü



Δp_{HW} (bar) - Isıtma Devresi Net Basma Yüksekliği



Δp_{WQ} (bar) - Isı Kaynağı Net Basma Yüksekliği



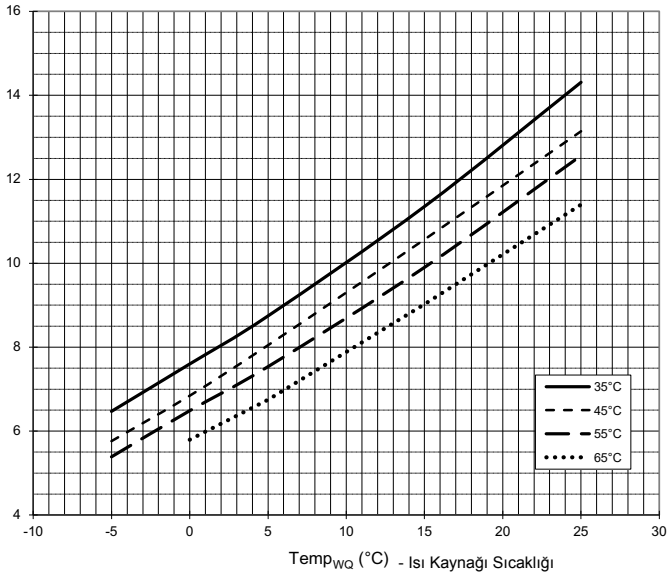
823234

Keys:	UK823000L/170408
$\dot{V}_{HW}$	Isıtma suyu debisi
$\dot{V}_{WQ}$	Isı kaynağı debisi
$Temp_{WQ}$	Isı kaynağı sıcaklığı
Qh	Isıtma kapasitesi
Pe	Besleme gücü
COP	Performans katsayısı
Δp_{HW} / $\Delta p_{HW/K}$	Isıtma devresi net basma yüksekliği / Isıtme devresi (soğutmalı) net basma yüksekliği
Δp_{WQ} / $\Delta p_{WQ/K}$	Isı kaynağı net basma yüksekliği / Isı kaynağı (soğutmalı) net basma yüksekliği

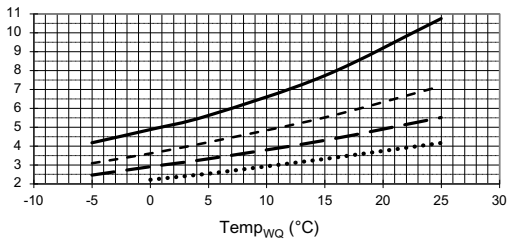
Performans Eğrileri

WZS 82(H)(K)3M

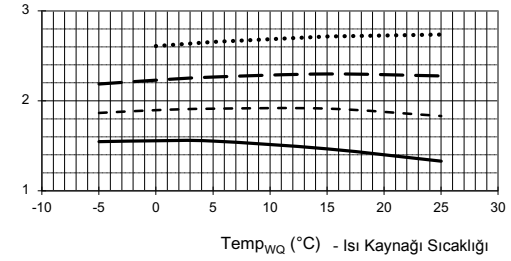
Qh (kW) - Isıtma Kapasitesi



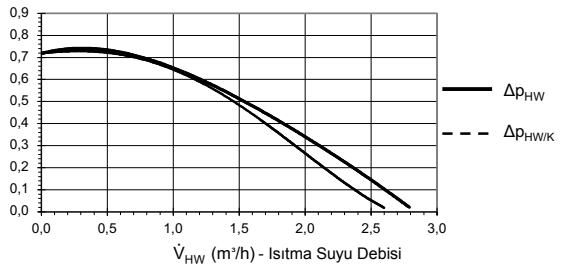
COP



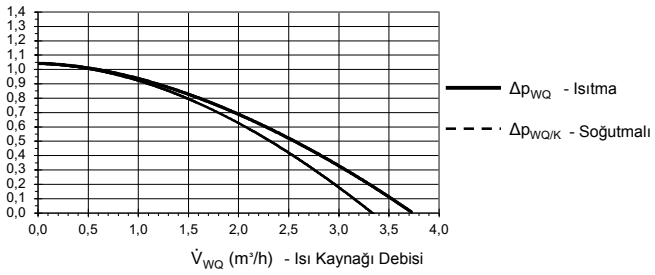
Pe (kW) - Besleme Gücü



Δp_{HW} (bar) - Isıtma Devresi Net Basma Yüksekliği



Δp_{WQ} (bar) - Isı Kaynağı Net Basma Yüksekliği



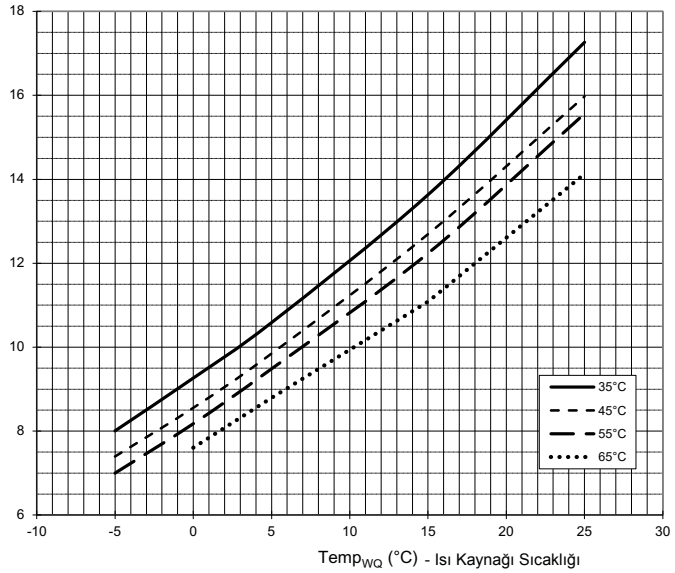
823236

Keys:	UK823000L/170408
$\dot{V}_{HW}$	Heating water volume flow rate
$\dot{V}_{WQ}$	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
Δp_{HW} / $\Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
Δp_{WQ} / $\Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure

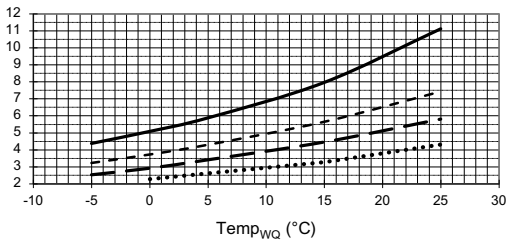
WZS 102(H)(K)3M

Performans Eğrileri

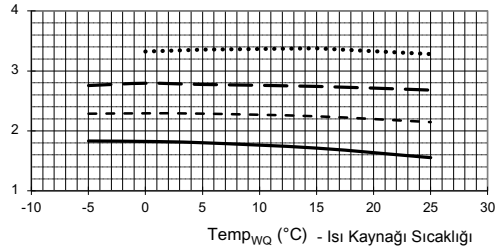
Qh (kW) - Isıtma Kapasitesi



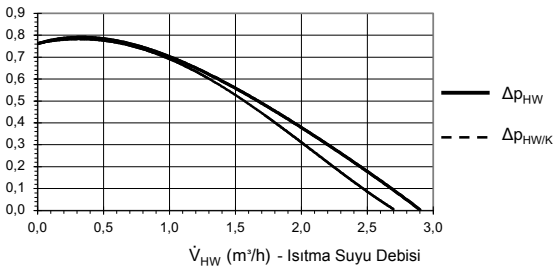
COP



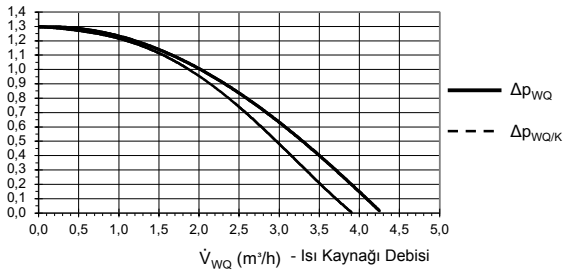
Pe (kW) - Besleme Gücü



Δp_{HW} (bar) - Isıtma Devresi Net Basma Yüksekliği



Δp_{WQ} (bar) - Isı Kaynağı Devresi Net Basma Yüksekliği

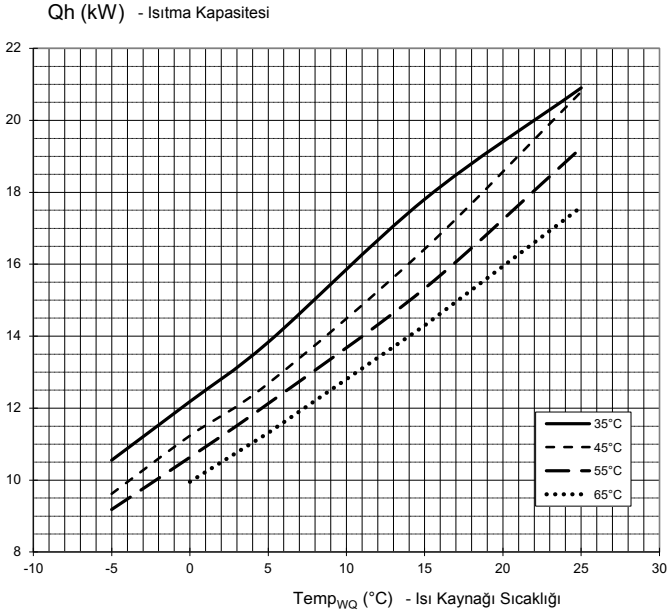


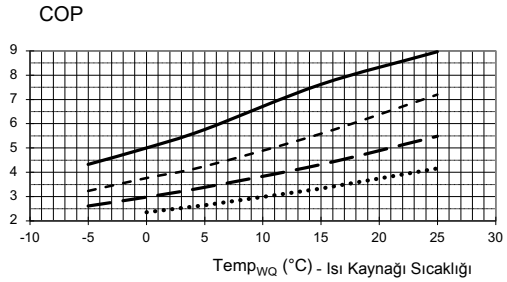
823327

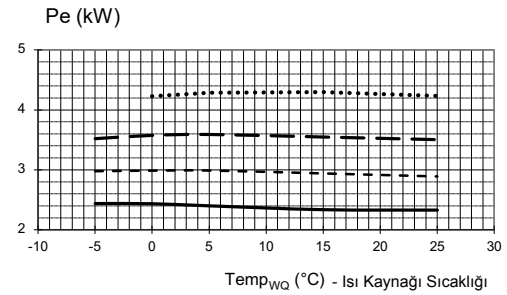
Keys:	UK823000L/170408
$\dot{V}_{HW}$	Heating water volume flow rate
$\dot{V}_{WQ}$	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
Δp_{HW} / $\Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
Δp_{WQ} / $\Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure

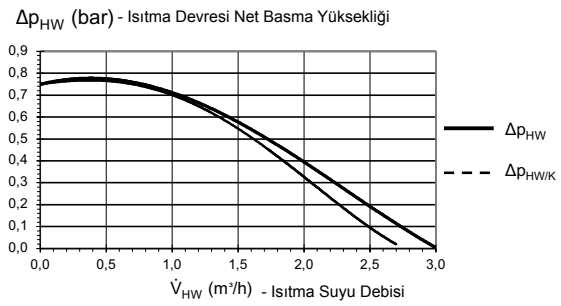
Performans Eğrileri

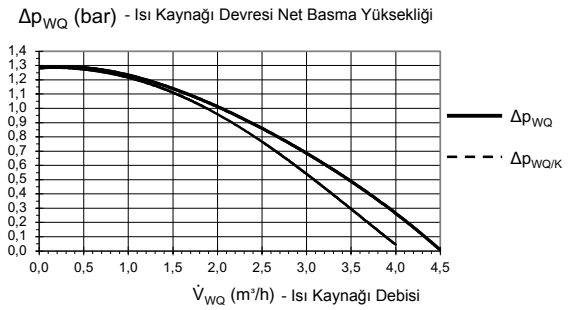
WZS 122(H)(K)3M











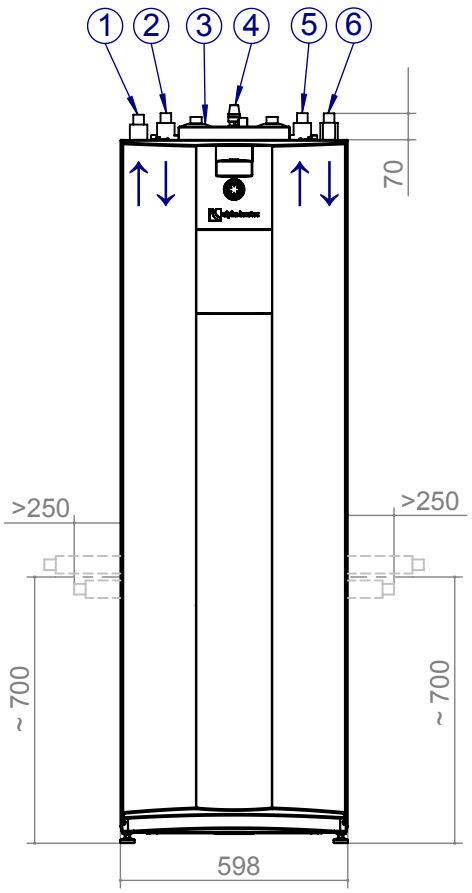
823238

Keys:	UK823000L/170408
$\dot{V}_{HW}$	Heating water volume flow rate
$\dot{V}_{WQ}$	Heat source volume flow rate
$Temp_{WQ}$	Heat source temperature
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance
Δp_{HW} / $\Delta p_{HW/K}$	Heating circuit free pressure / Heating circuit with cooling free pressure
Δp_{WQ} / $\Delta p_{WQ/K}$	Heat source free pressure / Heat source with cooling free pressure

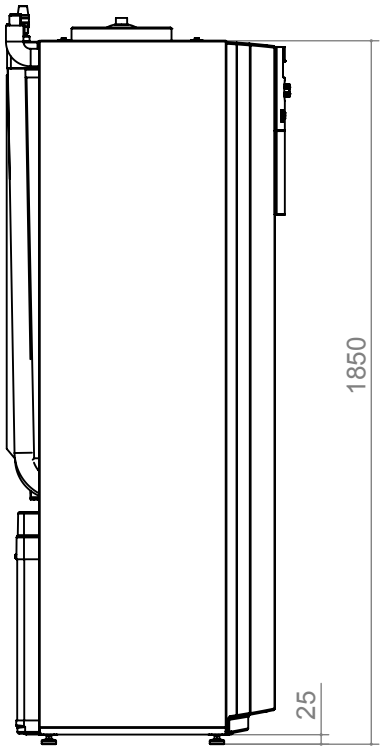
Boyutlar

WZS 42(H)(K)3M – WZS 122(H)(K)3M

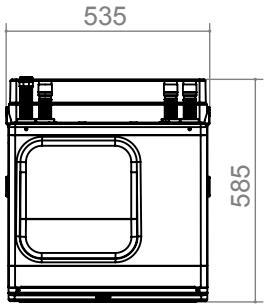
A



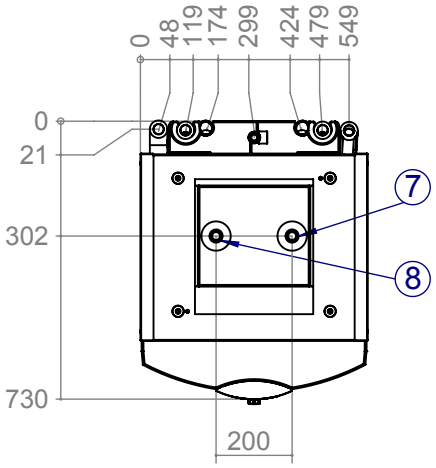
B



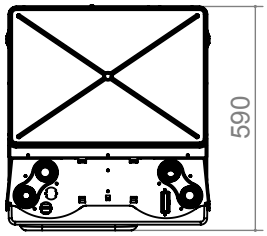
A1



C



C1



Keys: UK819447

All dimensions in mm..

A	Front view
B	Side view from left
C	Plan view
A1	Front view of module box
C1	Top view of module box

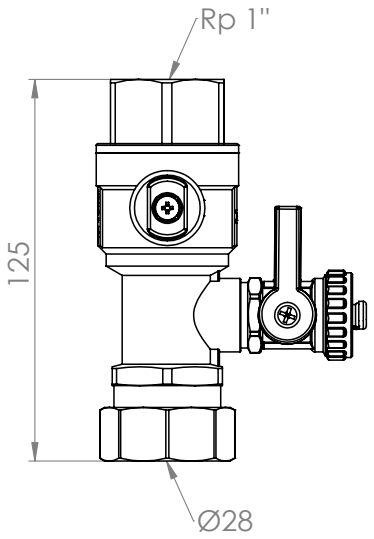
Pos.	Name	Dim.
1	Heating water outlet (flow) - Isıtma Devresi Gidişi	Ø 28 *)
2	Heat source inlet (in heat pump) optionally at the top, on the right or left	Ø 28 *)
3	Heating water inlet (return) - Isıtma Devresi Dönüşü	Ø 33 **)
4	Heating circuit safety valve (in the separate package) - Isıtma Devresi Emniyet Valfi	Rp ¾“ internal thread
5	Heat source outlet (from heat pump) optionally at top, right or left	Ø 28 *)
6	Domestic hot water charging circuit inlet (Return)	Ø 28 *)
7	Drinkwater warm - Sıcak Kullanma Suyu	R ¾“ external thread
8	Drinkwater cold - Soğuk Kullanma Suyu	R ¾“ external thread

*) outside diameter **) inside diameter

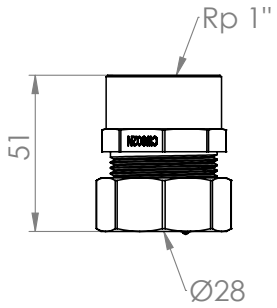
Bağlantılar

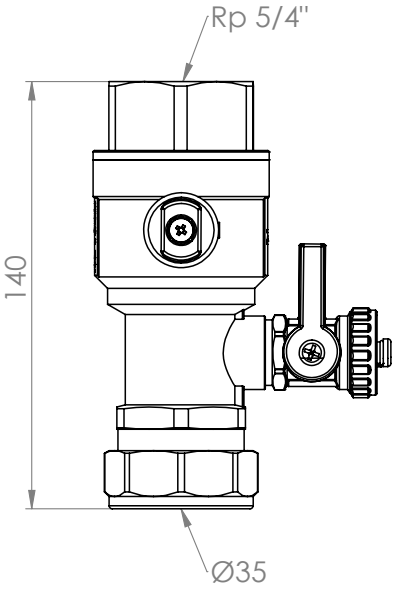
Isıtma Devresi

Boyutlar



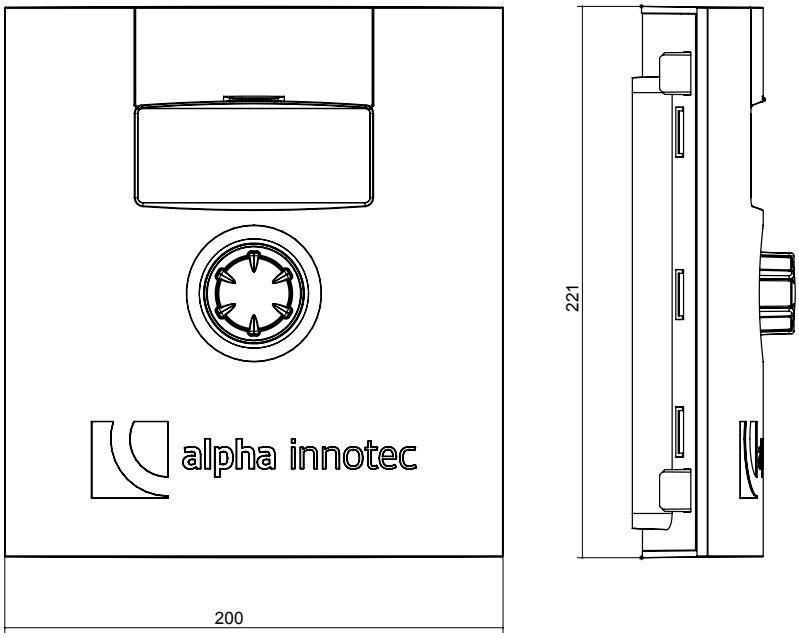
Isı Kaynağı Devresi





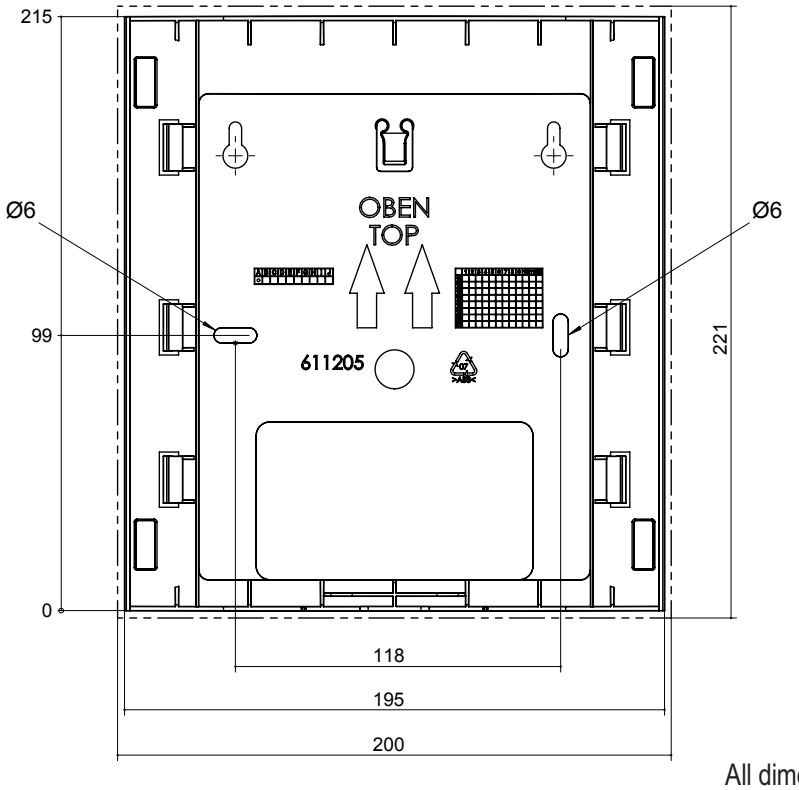
Boyutlar

Kontrol paneli



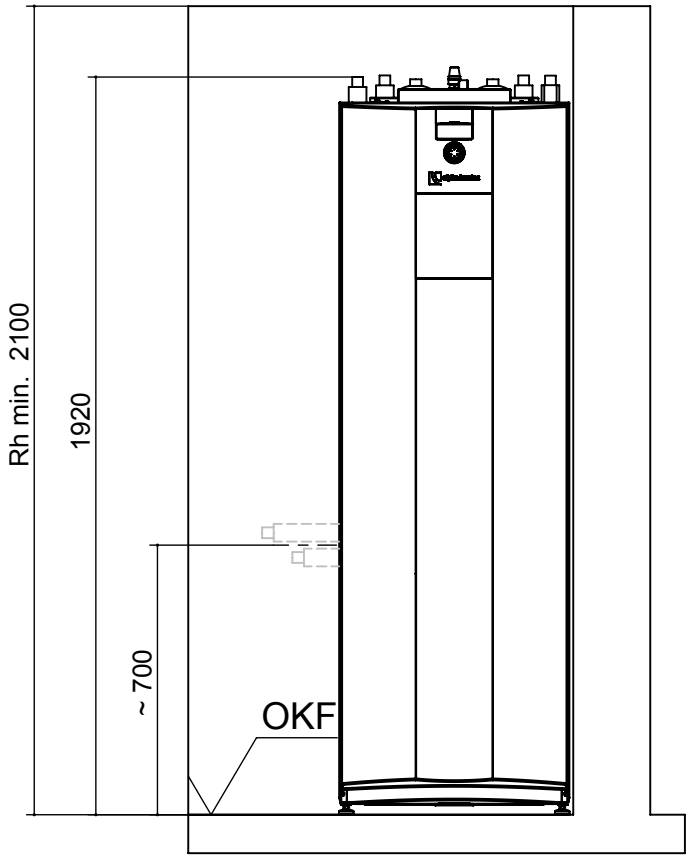
All dimensions in mm..

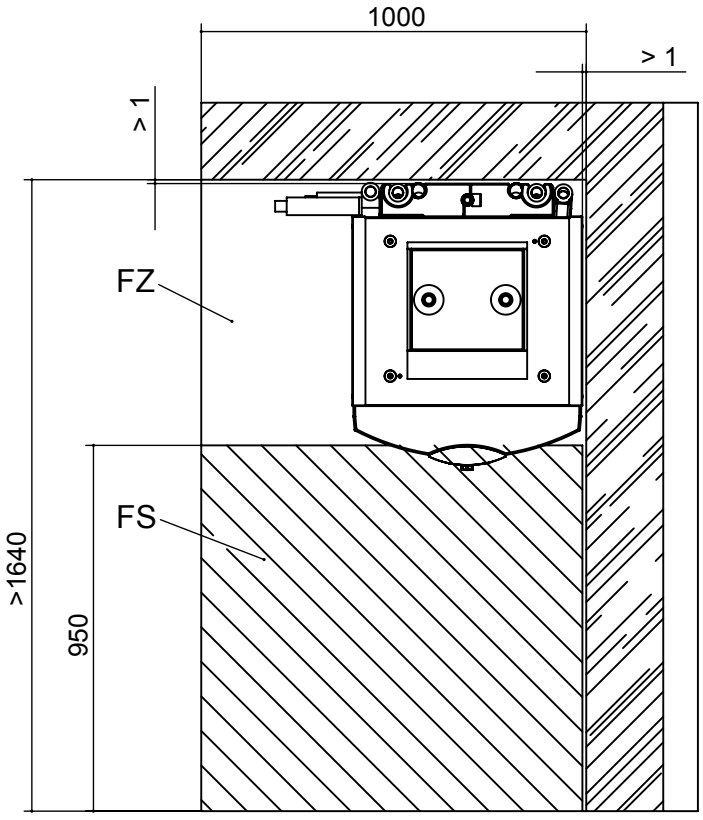
Duvar montaj braketi



All dimensions in mm..

V1





Keys: UK819448

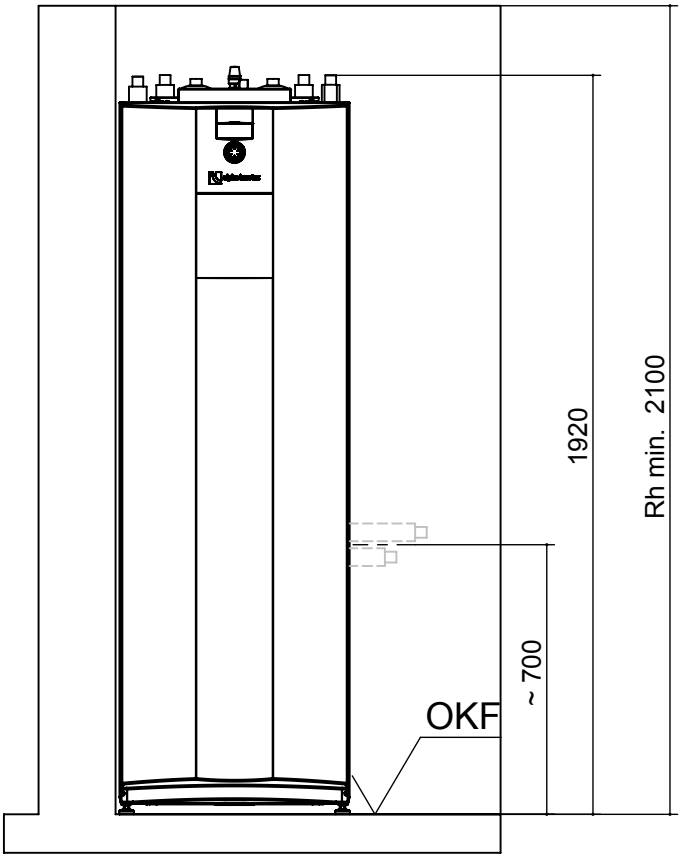
All dimensions in mm.

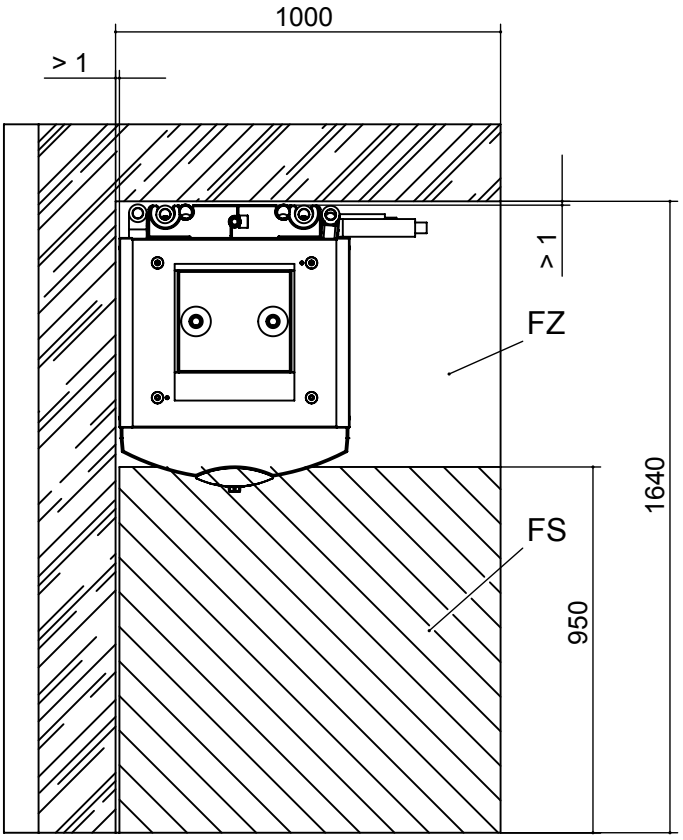
V1	Version 1
FS	Free space for service purposes
FZ	Free space for functionally necessary accessories
OKF	Finished floor level
Rh min.	minimum room height

Montaj Planı - 2

V2

WZS 42(H)(K)3M – WZS 122(H)(K)3M



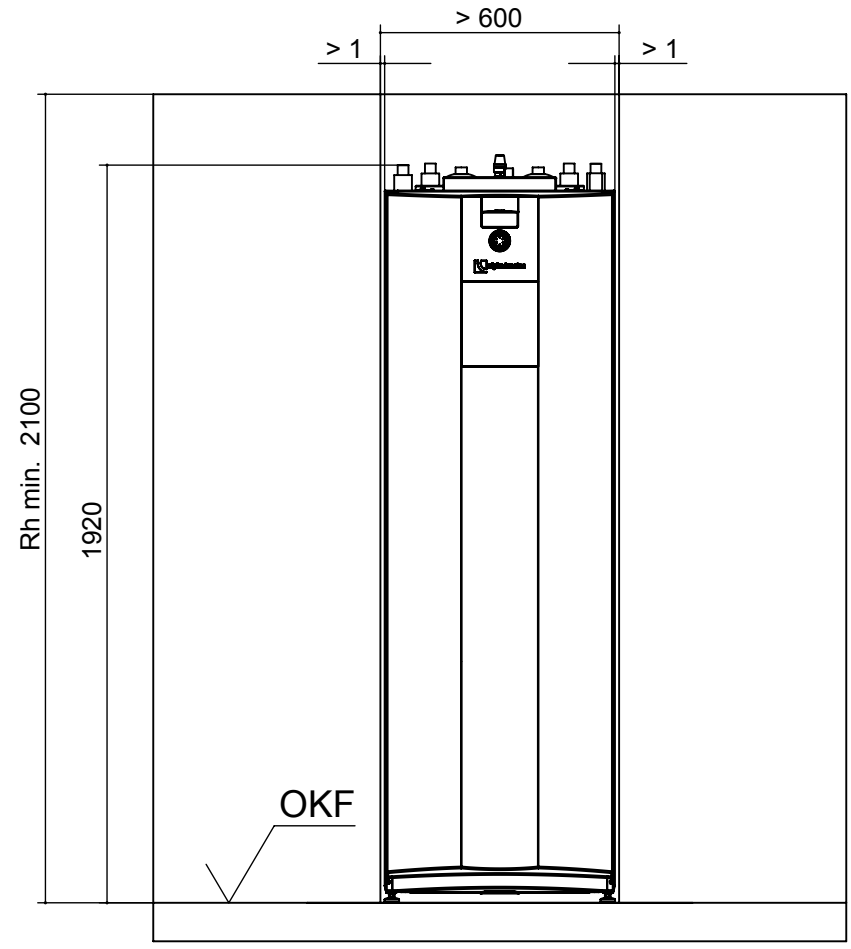


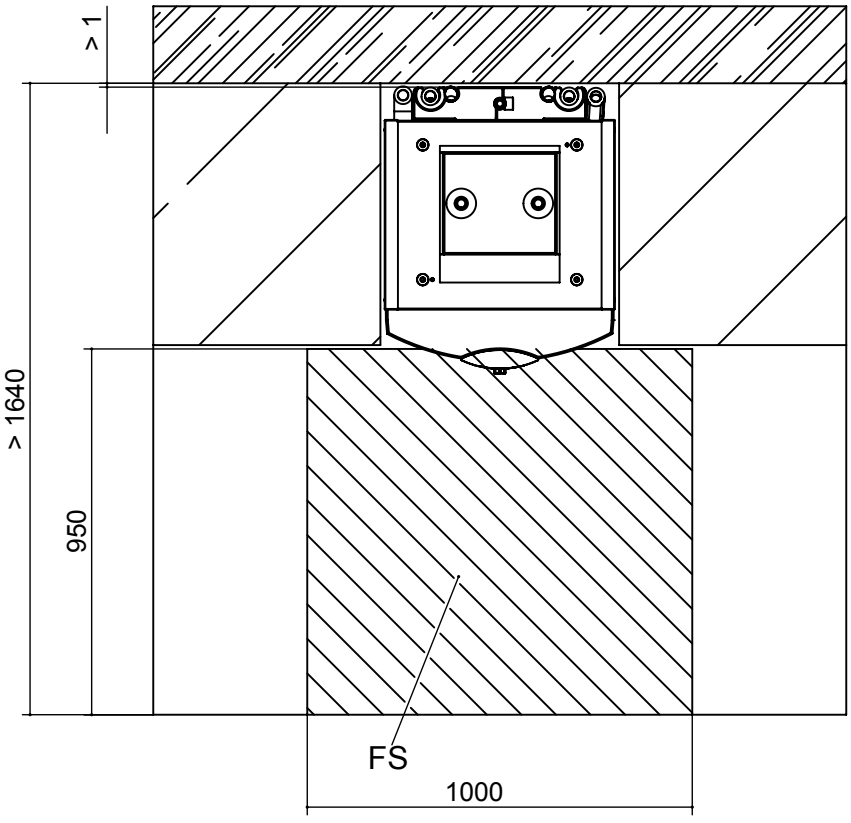
Keys: UK819448

All dimensions in mm.

V2	Version 2
FS	Free space for service purposes
FZ	Free space for functionally necessary accessories
OKF	Finished floor level
Rh min.	minimum room height

V3





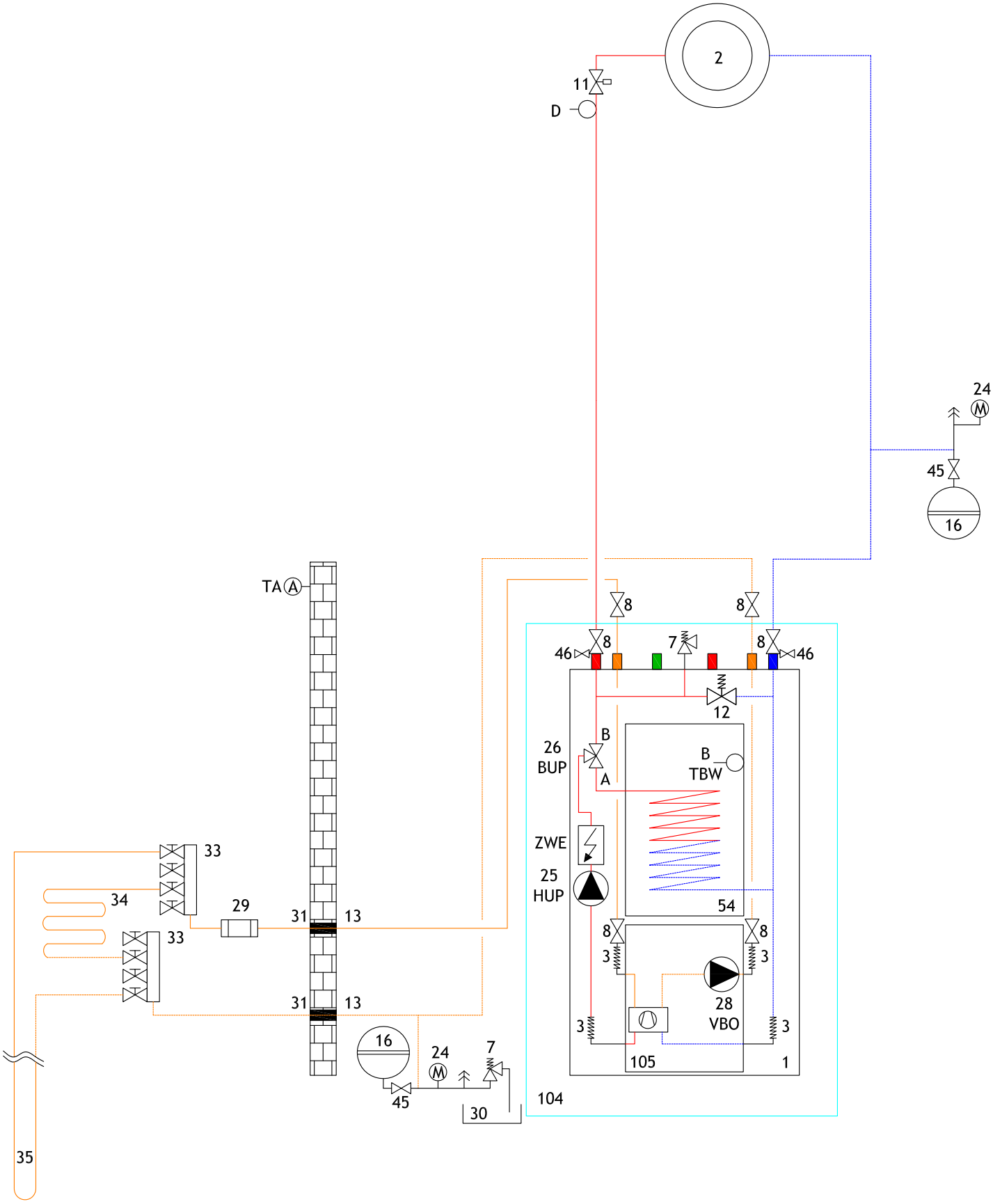
Keys: UK819448

All dimensions in mm.

V3	Version 3
FS	Free space for service purposes
OKF	Finished floor level
Rh min.	minimum room height

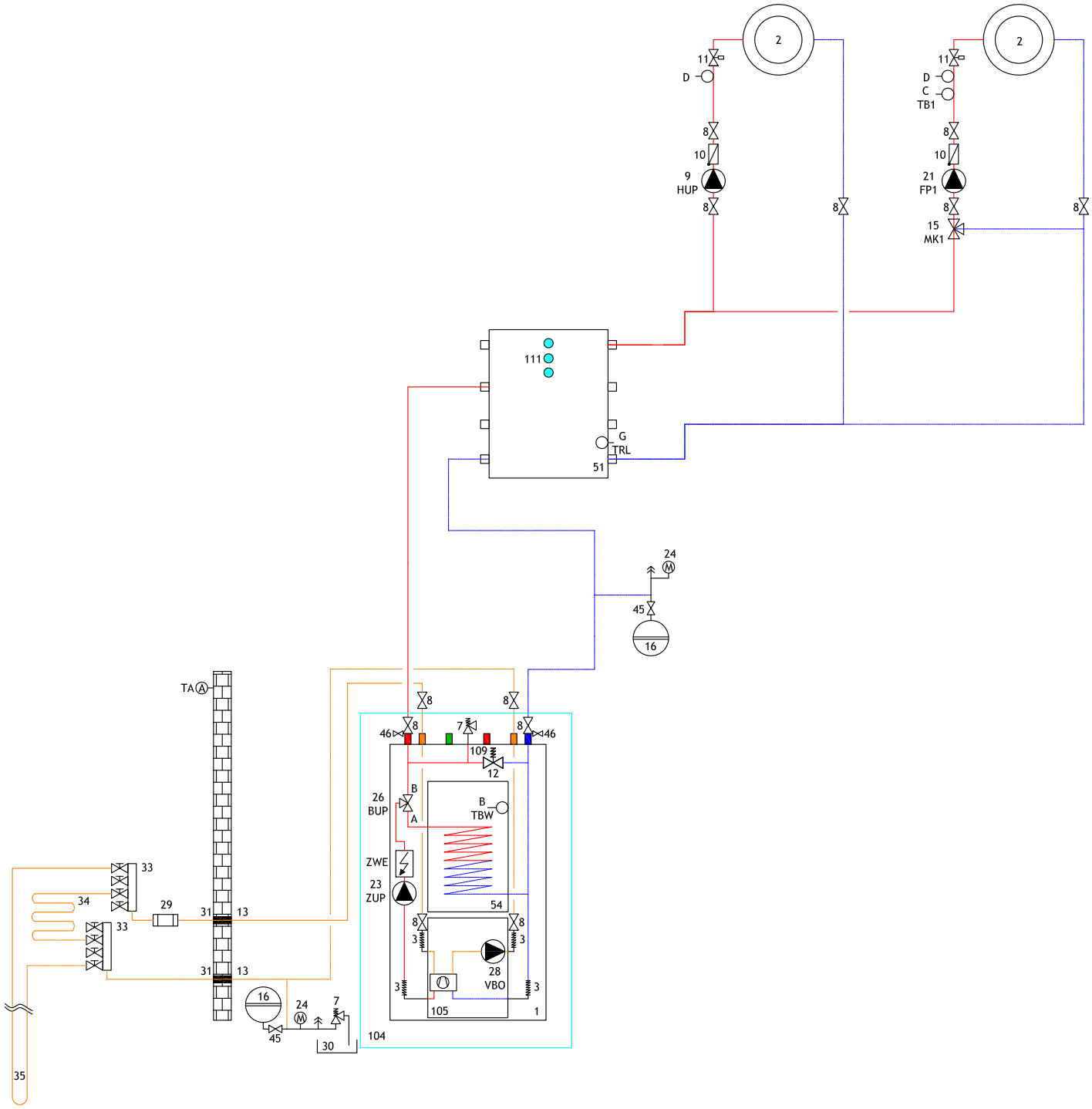
Hidrolik Entegrasyon (ısıtma)

Cihaz Versiyonu H



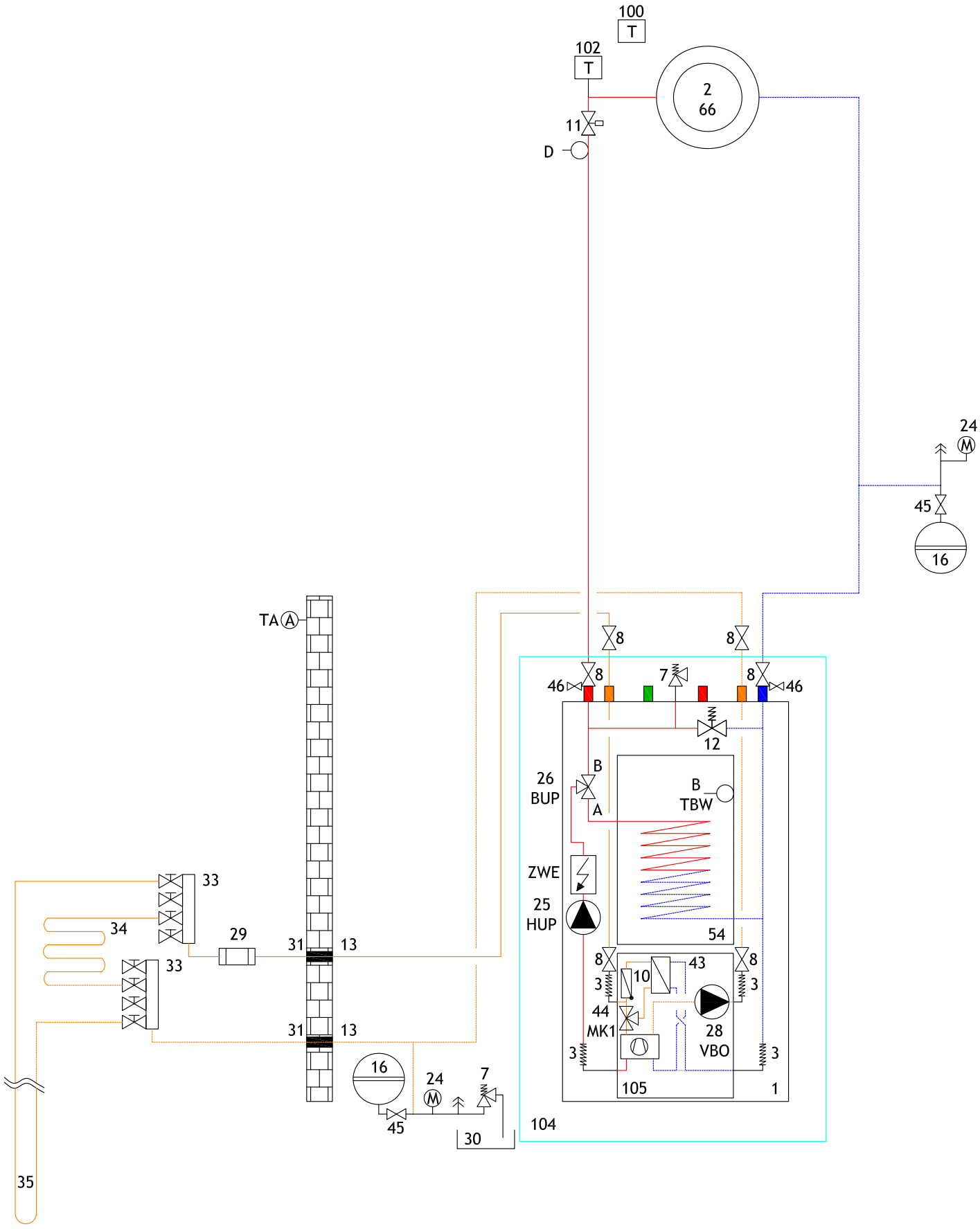
Cihaz Versiyonu H

Ayırıcı Akümülasyon Tankı ile



Hidrolik Entegrasyon (soğutma)

Cihaz Versiyonu K



EC Declaration of Conformity

The undersigned
confirms that the following designated device(s) as designed and marketed by us fulfill the standardized EC directives, the EC safety standards and the product-specific EC standards.
In the event of modification of the device(s) without our approval, this declaration shall become invalid.

Designation of the device(s)

Heat Pump alpha innotec

Unit model	Number	Unit model	Number
WZS 42H3M	10066041	WZSV 122H3M	10073641
WZS 62H3M	10066141	WZSV 122K3M	10073741
WZS 82H3M	10066241	WZSV 92H3M	10076341
WZS 102H3M	10066342	WZSV 92K3M	10076441
WZS 122H3M	10066442	WZSV 62H3M	10072441
WZS 42K3M	10066541	WZSV 162H3M	10072541
WZS 62K3M	10066641	WZSV 62K3M	10072641
WZS 82K3M	10066741	WZSV 162K3M	10072741
WZS 102K3M	10066842	WZSV 122H3M	10073841
WZS 122K3M	10066942	WZSV 122K3M	10073941
WZSV 62H3M	10072041	WZSV 92H3M	10076541
WZSV 162H3M	10072141	WZSV 92K3M	10076641
WZSV 62K3M	10072241		
WZSV 162K3M	10072341		

EC Directives
2014/35/EU 813/2013
2014/30/EU 814/2013
2011/65/EG
*2014/68/EU

EN
EN 378 EN 349
EN 60529 EN 60335-1/-2-40
EN ISO 12100-1/2 EN 55014-1/-2
EN ISO 13857 EN 61000-3-2/-3-3
EN 14825

*** Pressure equipment component**
Category II
Module A1
Designated position:
TÜV-SÜD
Industrie Service GmbH (Nr.:0036)

Company:
ait-deutschland GmbH
Industrie Str. 3
93359 Kasendorf
Germany

Place, date: Kasendorf, 08.05.2019

Signature:

Jesper Stannow
Head of Heating Development

UK818171e

3D Enerji İklimlendirme Teknolojileri

ısıtma • soğutma • sıcak su • arıtma