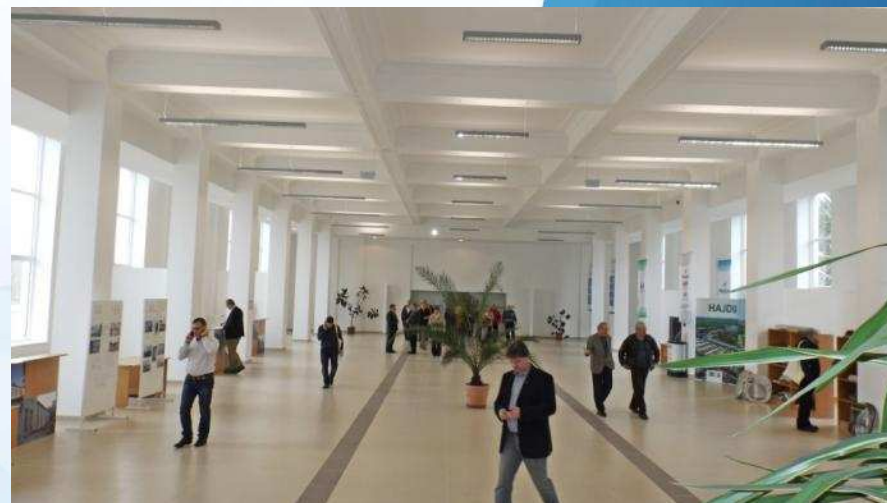


Egy megvalósult szolár hűtés a HAJDU Ipari Parkban



Misinkó Sándor
megújuló energia üzletágvezető
HAJDU Hajdúsági Ipari Zrt.



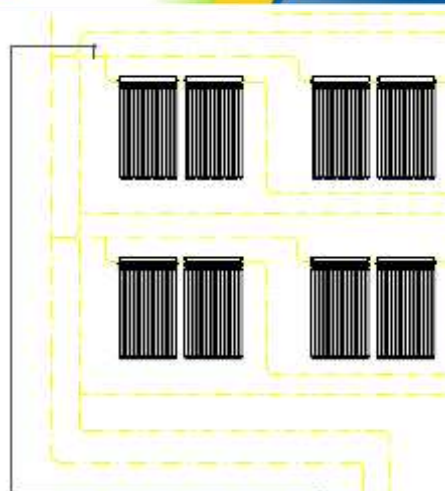




Napkollektorok 17 kW

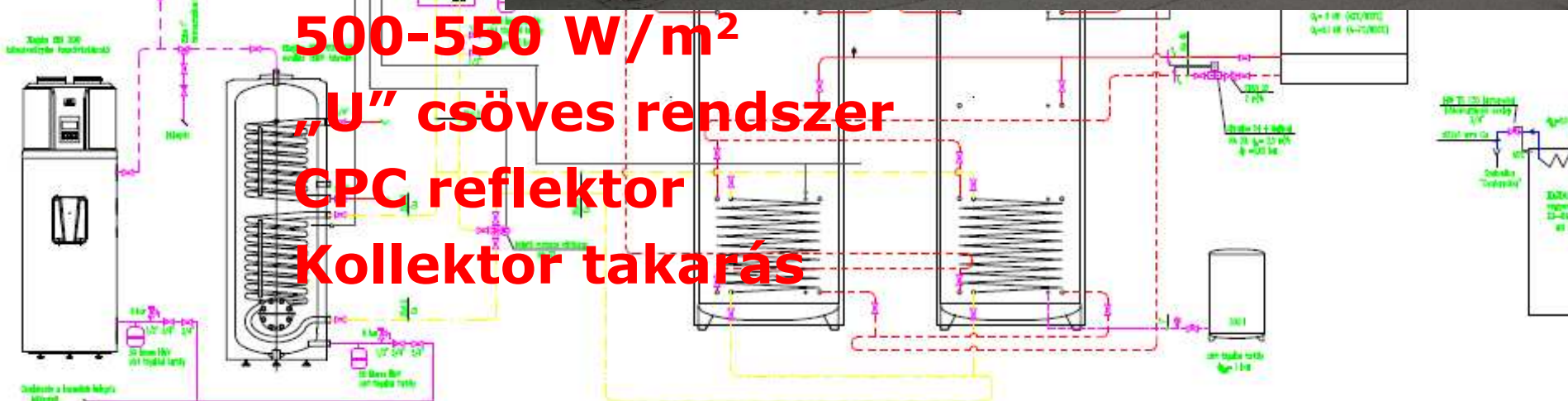
Napelemek 750 W





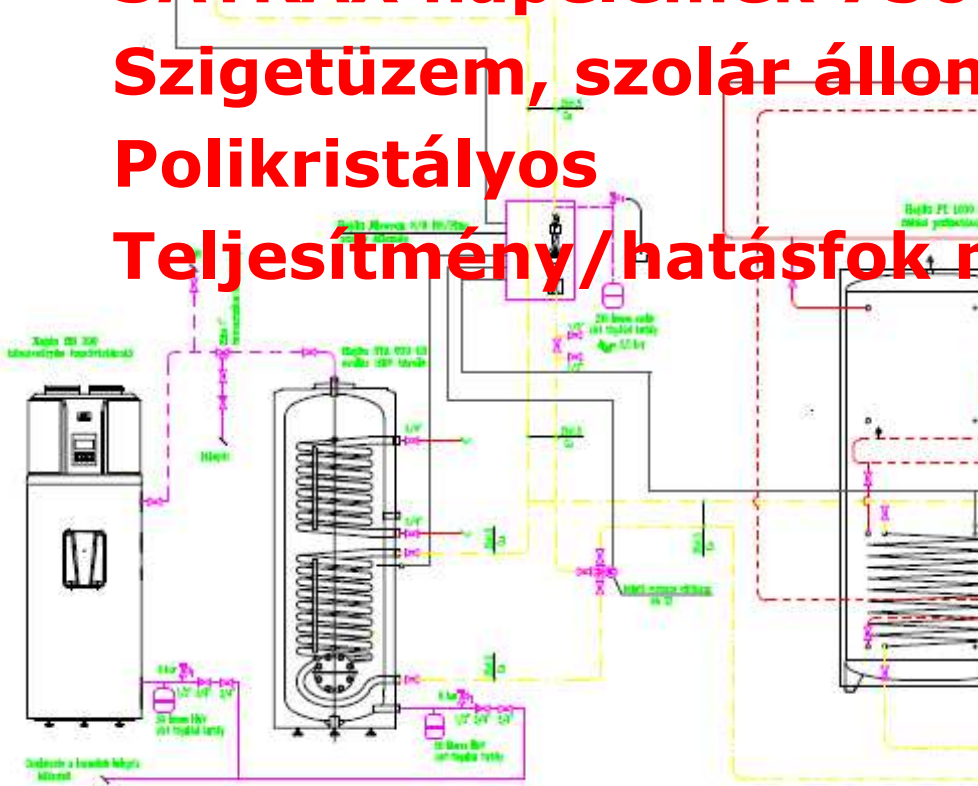
HAJDU 16VTN 12 db
2,6 m²/db hasznos felület
500-550 W/m²

„U” csöves rendszer
CPC reflektor
Kollektor takarás

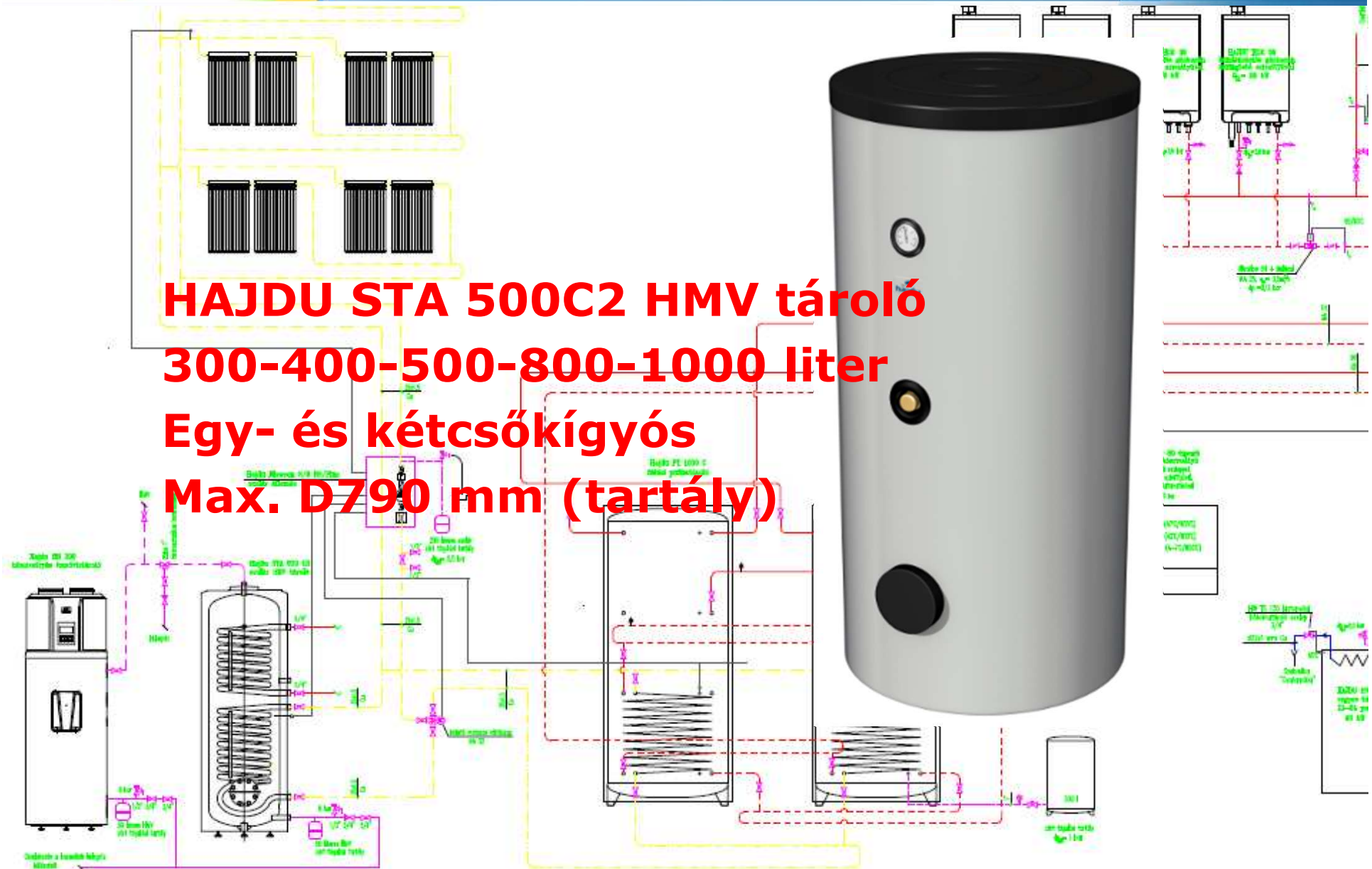




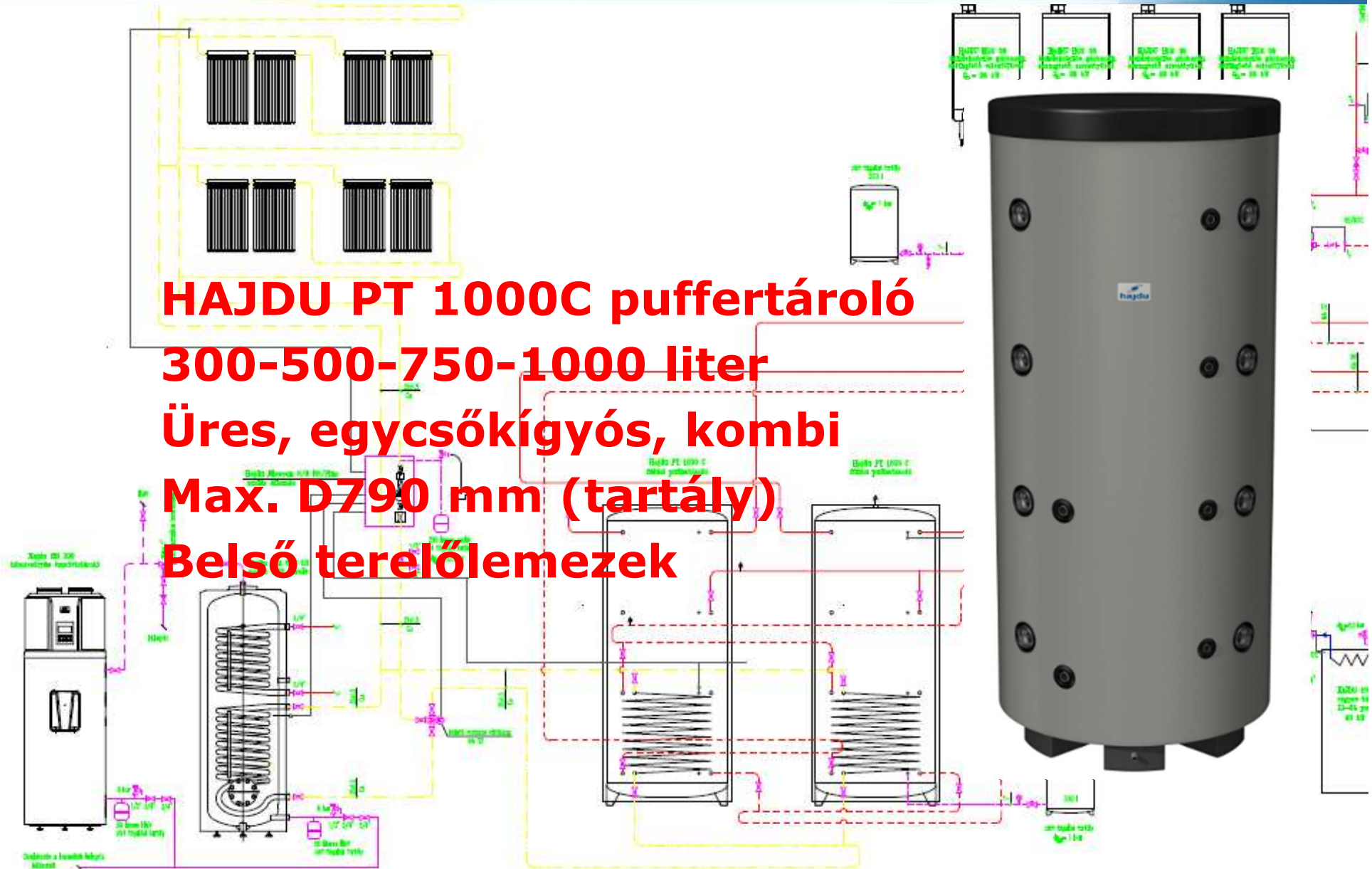
SATRAX napelemek 750 W
Szigetüzem, szolár állomás ellátása
Polikristályos
Teljesítmény/hatásfok mérés



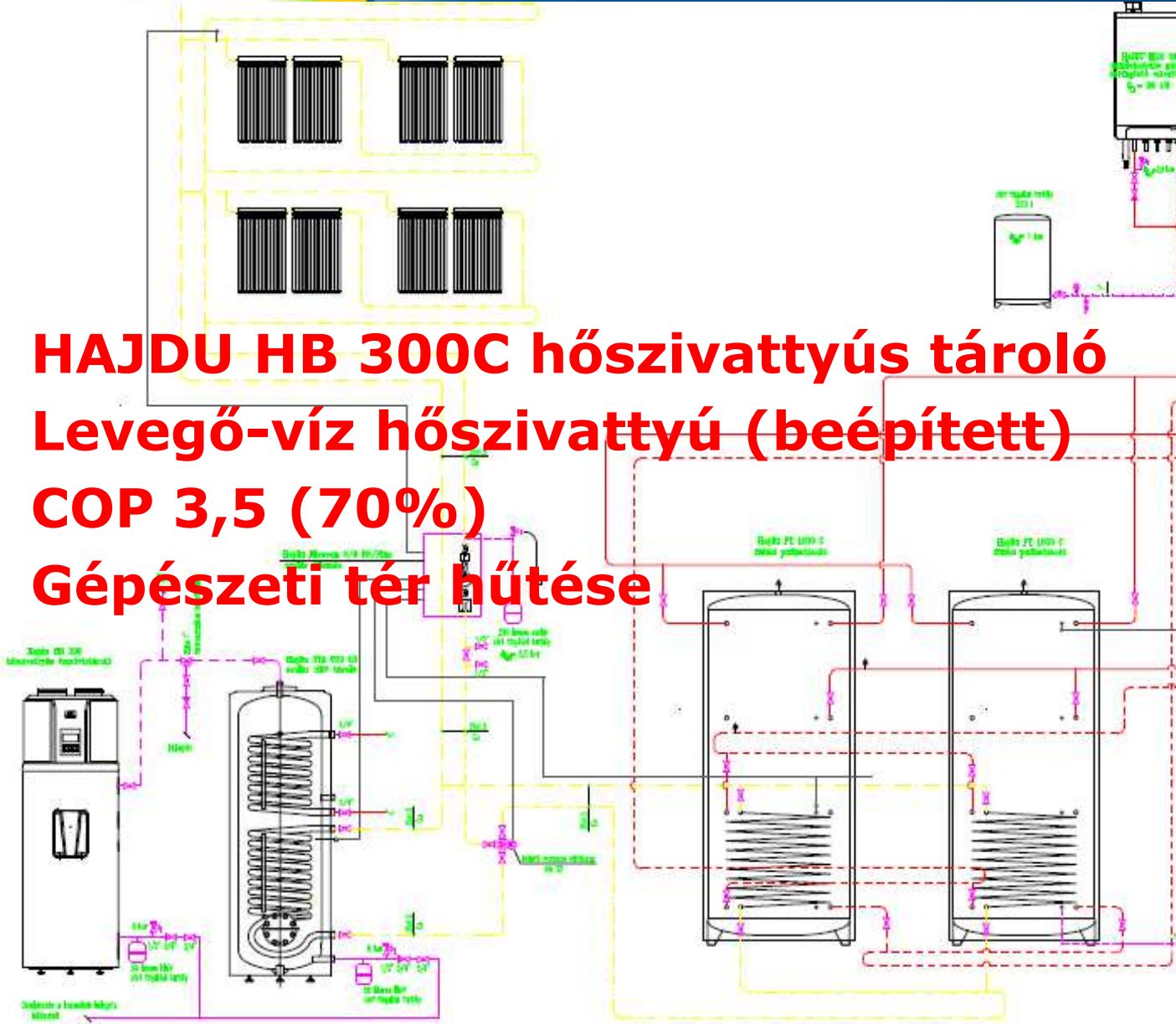
HAJDU STA 500C2 HMV tároló
300-400-500-800-1000 liter
Egy- és kétcsőkiágós
Max. D790 mm (tartály)



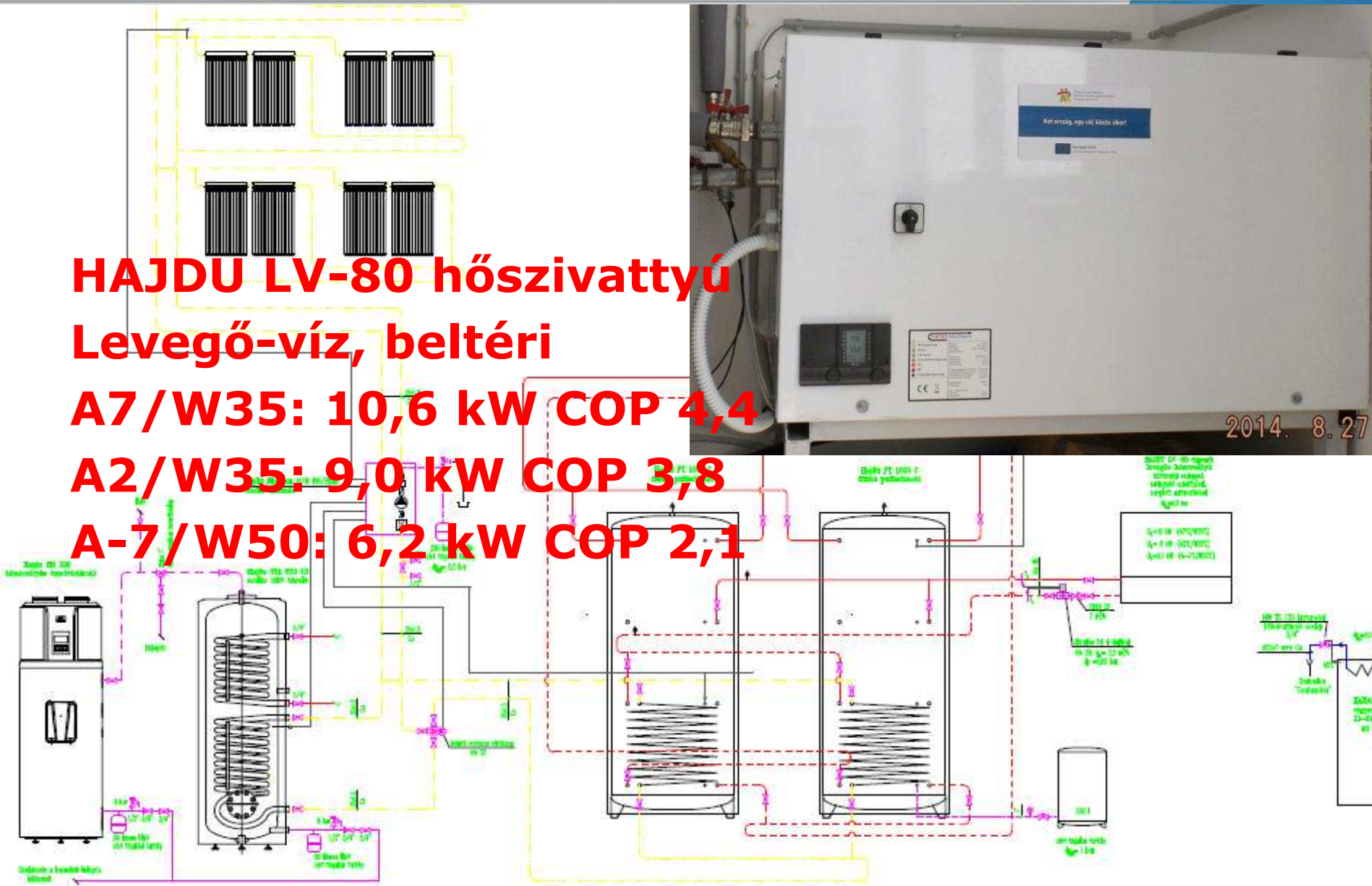
HAJDU PT 1000C puffertároló
300-500-750-1000 liter
Üres, egycsőkiágós, kombi
Max. D790 mm (tartály)
Belső terelőlemezek



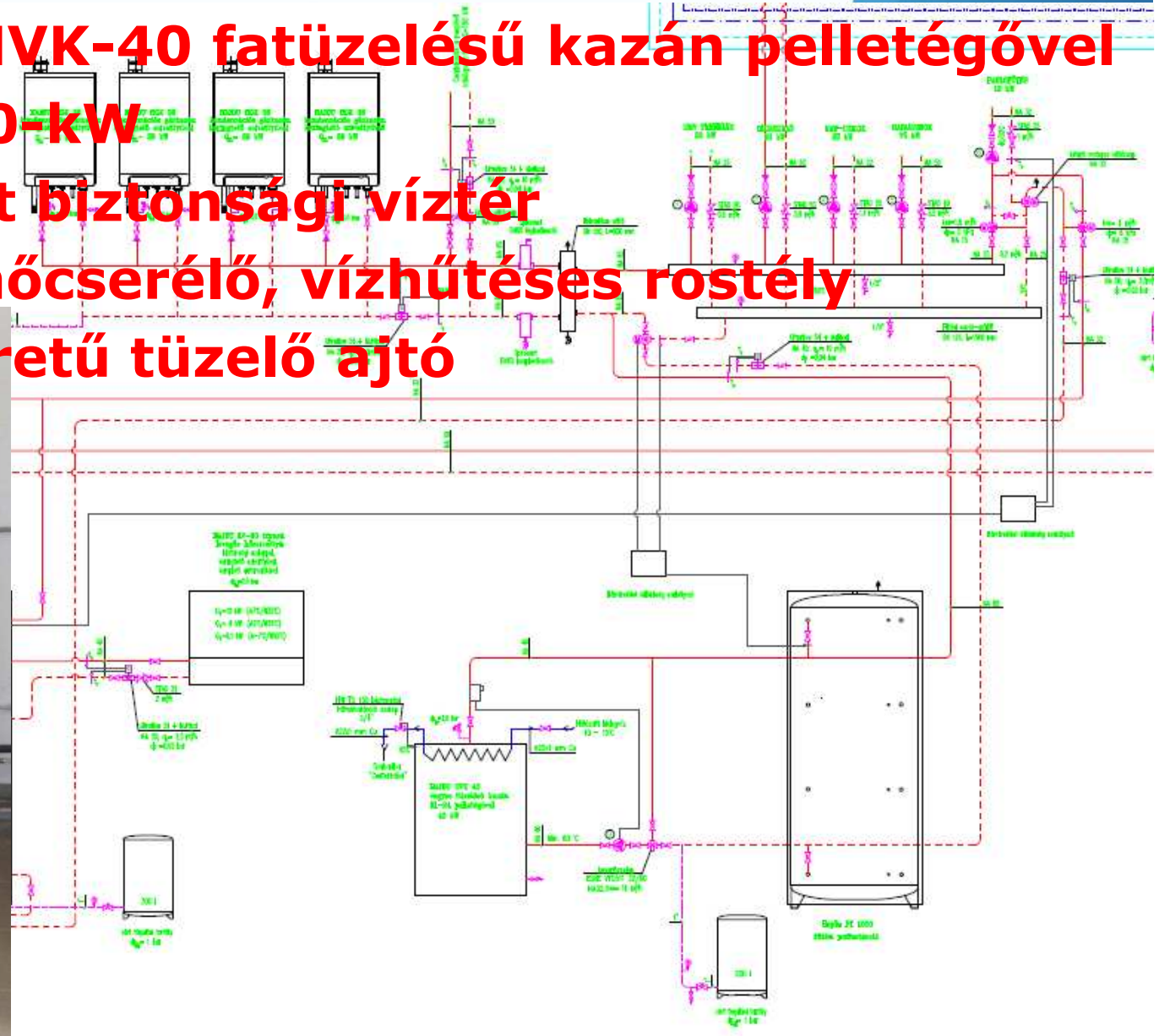
HAJDU HB 300C hőszivattyús tároló
Levegő-víz hőszivattyú (beépített)
COP 3,5 (70%)
Gépészeti tér hűtése



HAJDU LV-80 hőszivattyú
Levegő-víz, beltéri
A7/W35: 10,6 kW COP 4,4
A2/W35: 9,0 kW COP 3,8
A-7/W50: 6,2 kW COP 2,1



HAJDU HVK-40 fatüzelésű kazán pelletgéssel
20-30-40-kW
Beépített biztonsági víztér
Csöves hőcserélő, vízhűtéses rostély
Nagyméretű tüzelő ajtó



HAJDU HGK-36 kondenzációs gázkazán

Kaszád 4 db 7,2-109,2 kW

93% szezonális helyiségfűtési hatásfok

„A” kat. fűtésben és vízmelegítésben

Kettős kondenzációs

Réz-alumínium hőcserélő



Invensor LTC-10 plus adszorpciós hűtőgép/hőszivattyú

4-12 kW hűtőteljesítmény

27 kW fűtőteljesítmény

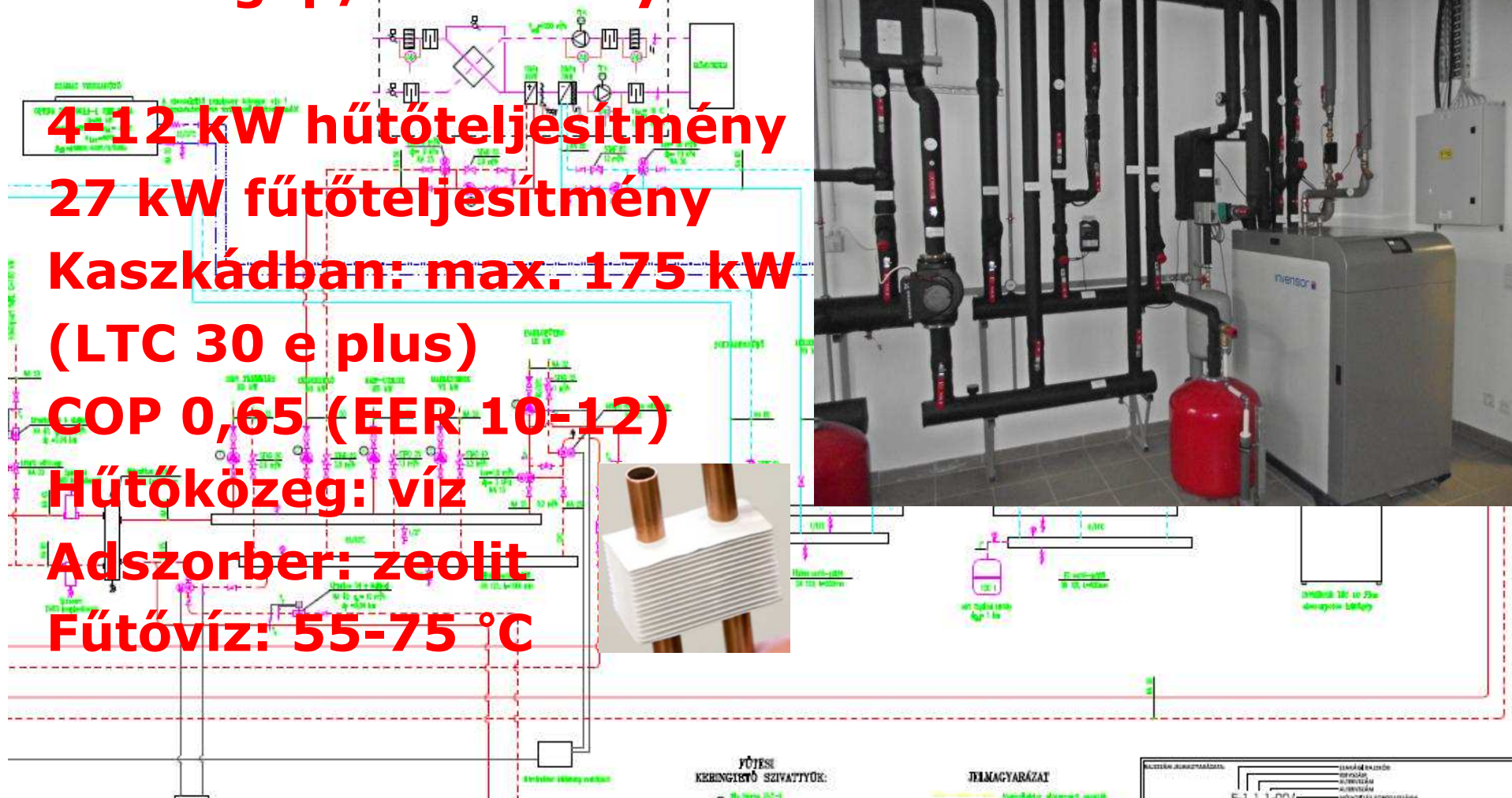
Kaszkádban: max. 175 kW
(LTC 30 e plus)

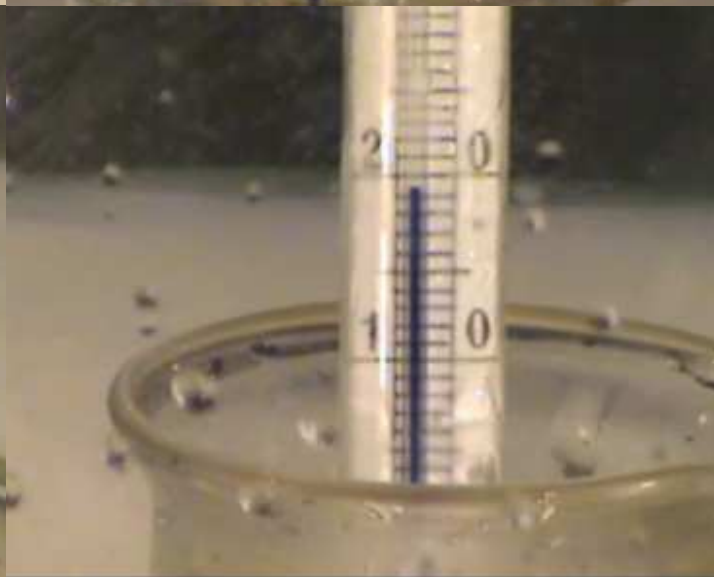
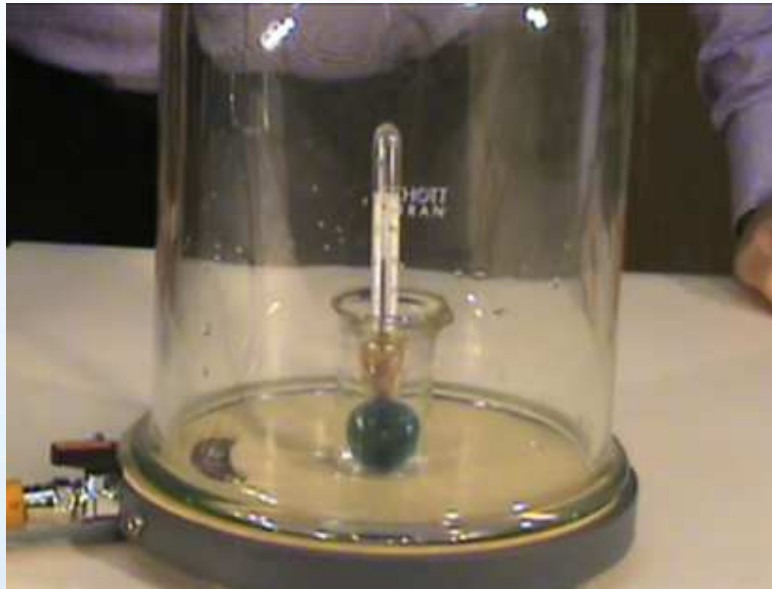
COP 0,65 (EER 10-12)

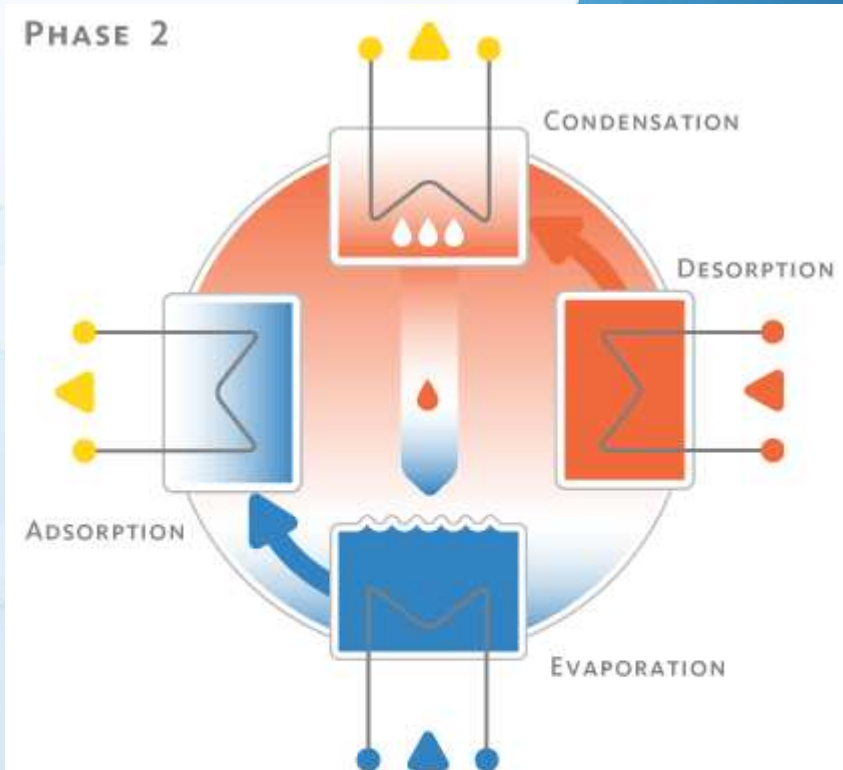
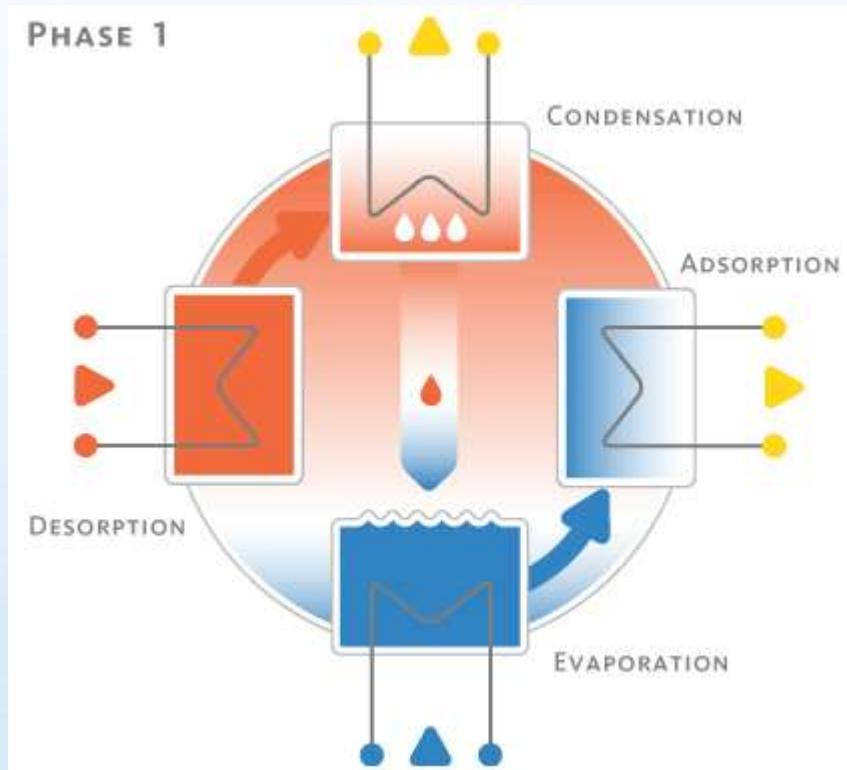
Hűtőközeg: víz




Adszorber: zeolit

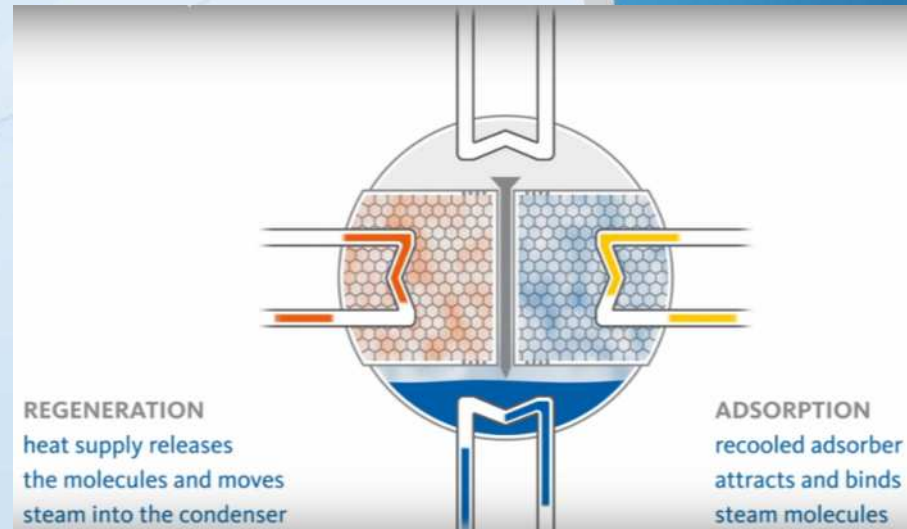
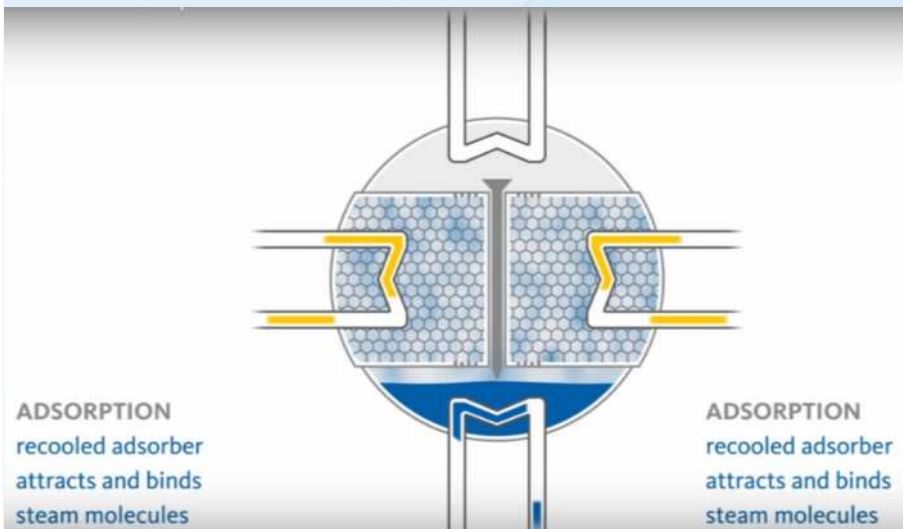
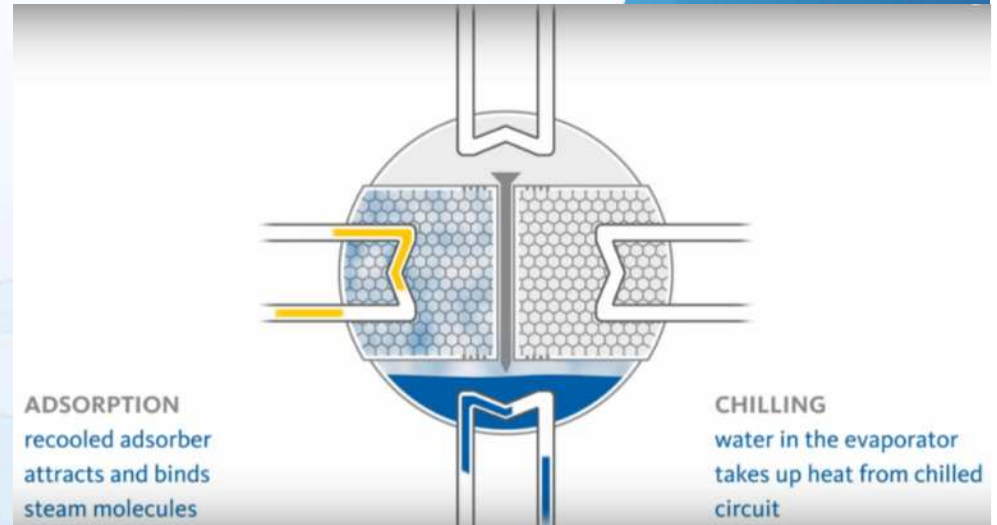
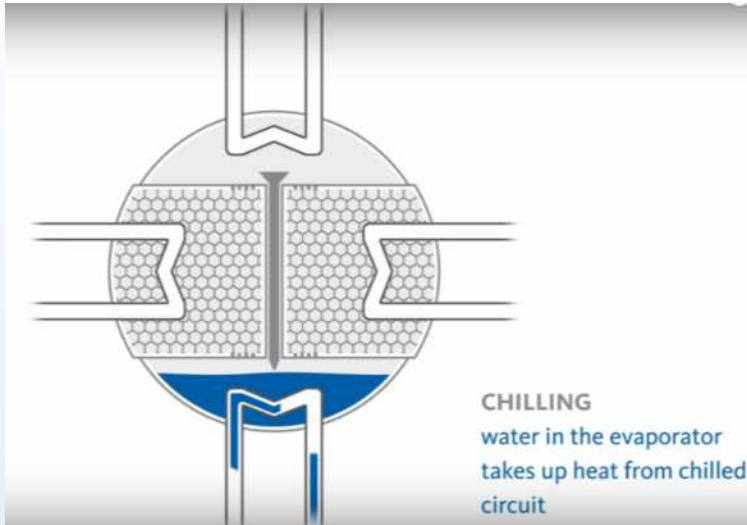
Fűtővíz: 55-75 °C



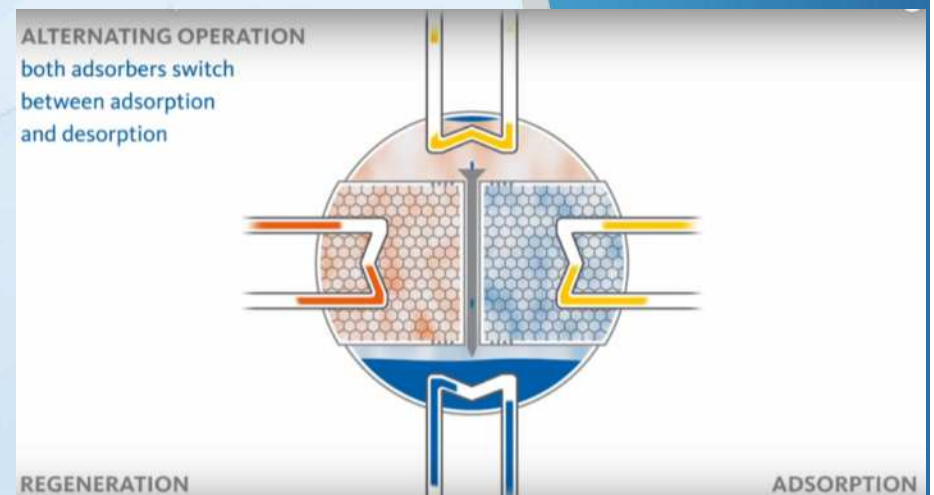
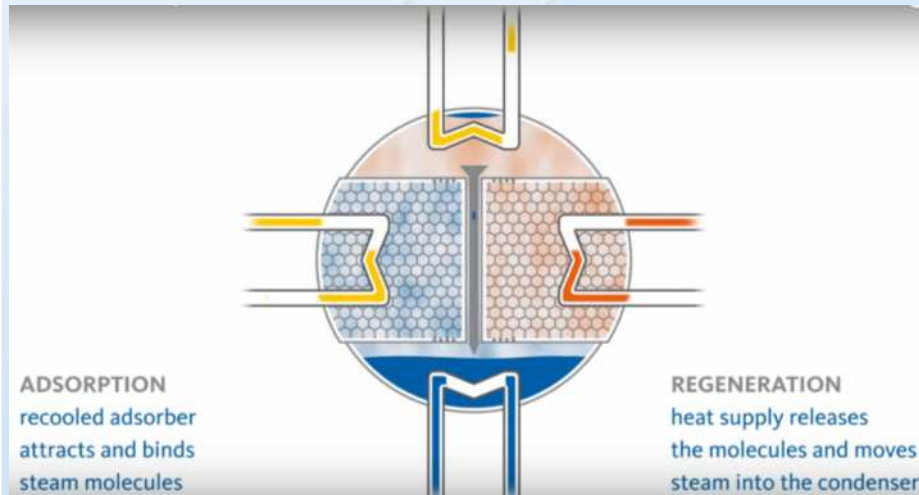
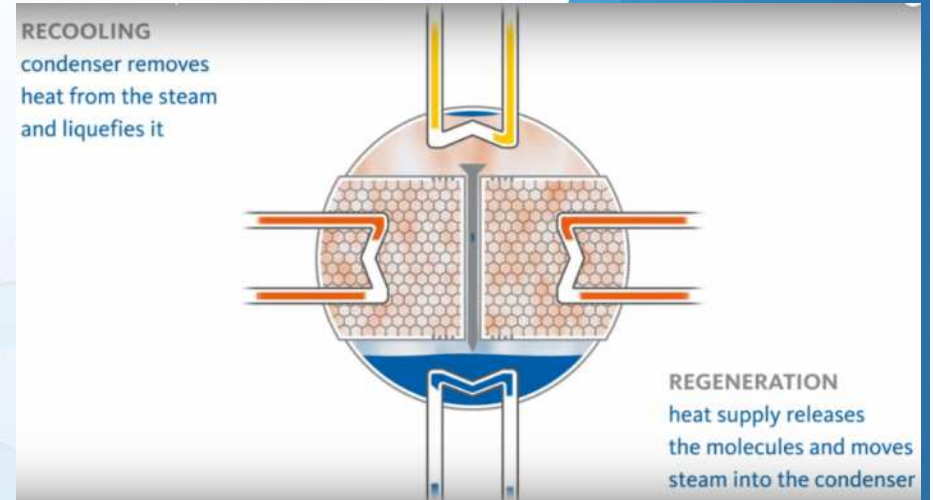
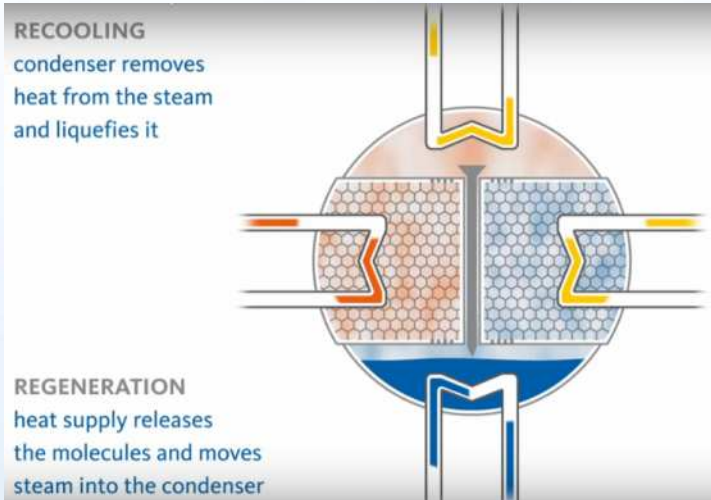


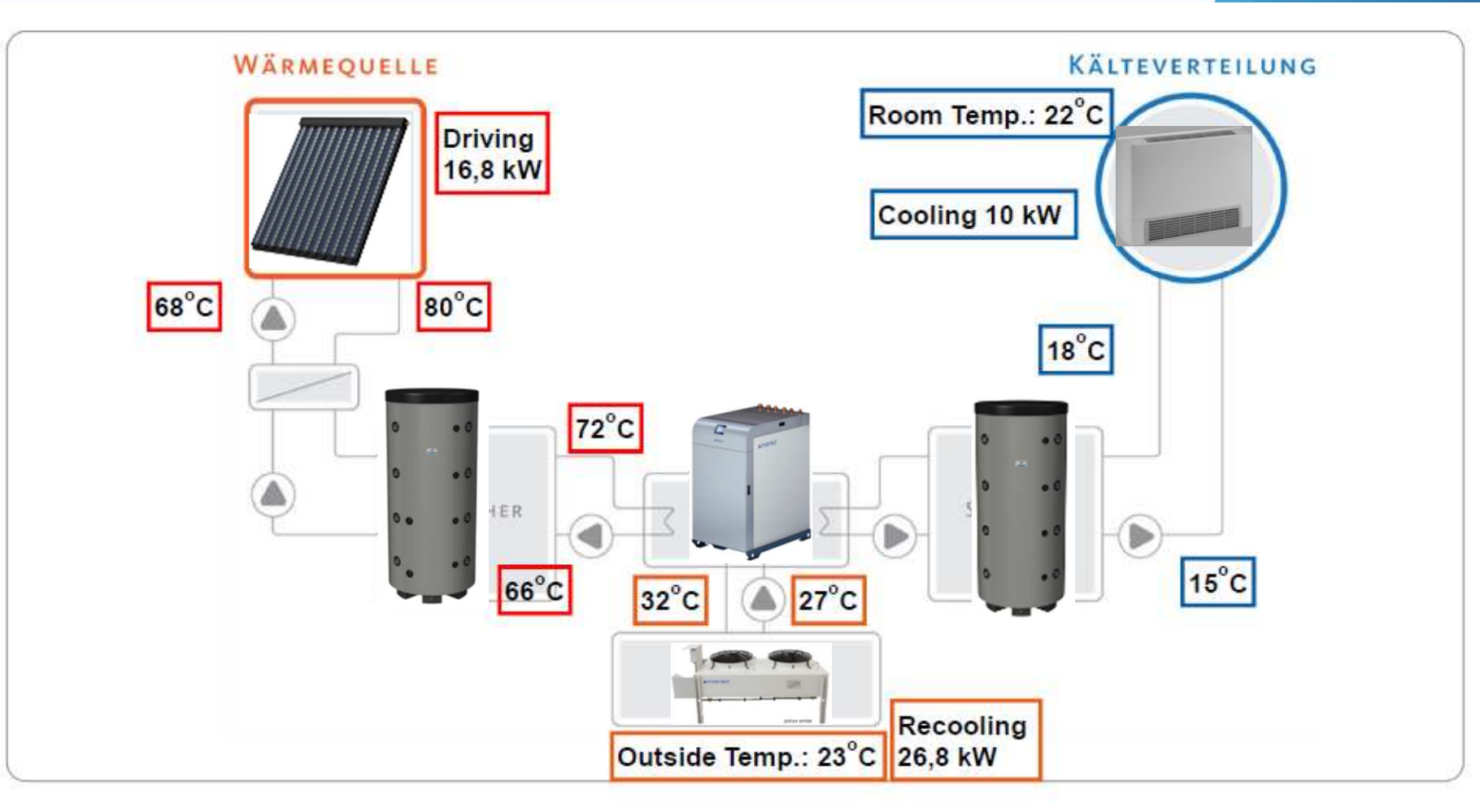


-  COOLING = UPTAKE OF ENERGY FOR EVAPORATION
-  THERMAL DRIVE = BAKING THE ADSORBERS
-  RE-COOLING = EVACUATING HEAT FROM THE SYSTEM

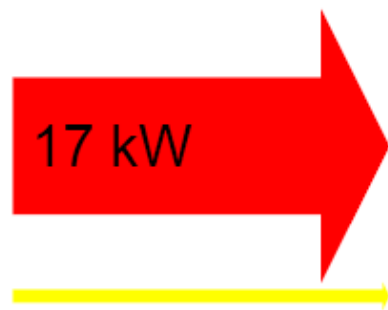


ADSORPTION
re-cooled adsorber
attracts and binds
steam molecules





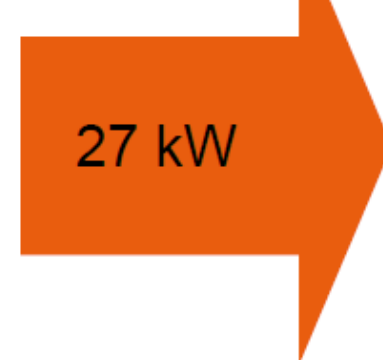
Driving Energy



Electricity approx. 900 W



Recooling

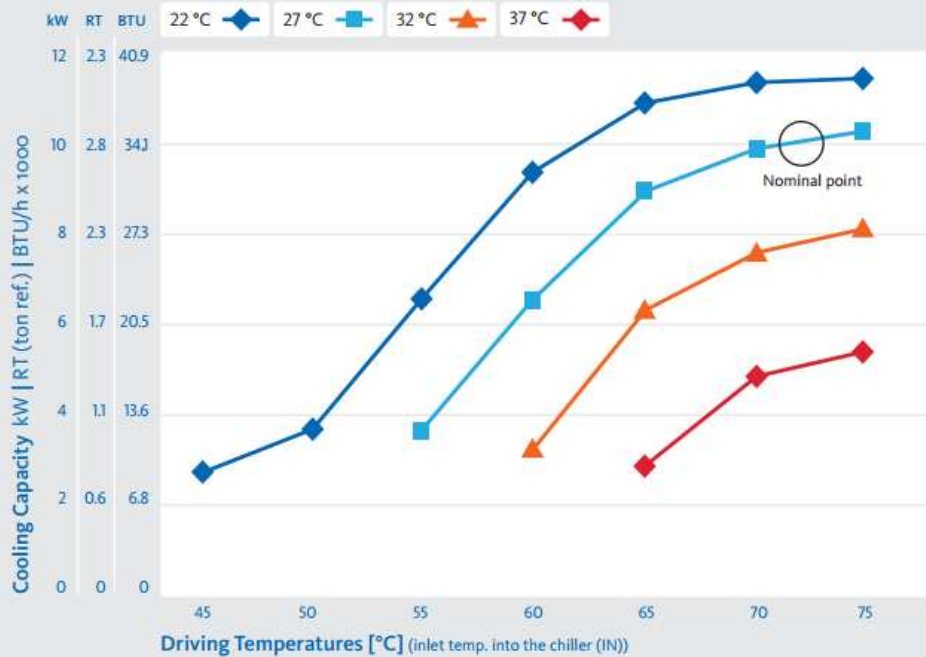


Cooling Capacity

INVENSOR LTC 10 – COOLING CAPACITY

Chilled Water Inlet (IN): 18 °C
Outlet at nom. point (OUT): 15 °C

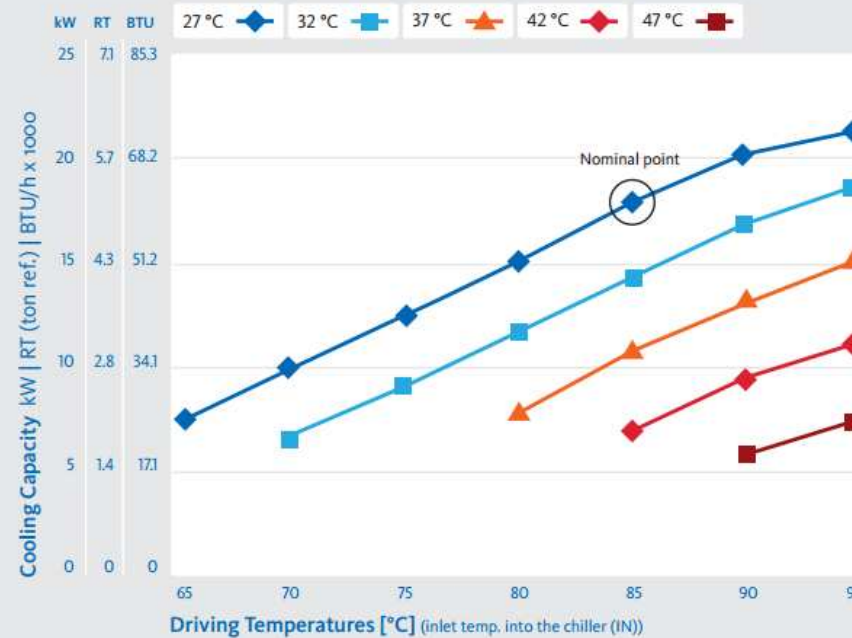
Recooling Temperatures [°C] (inlet temp. into the chiller (IN))

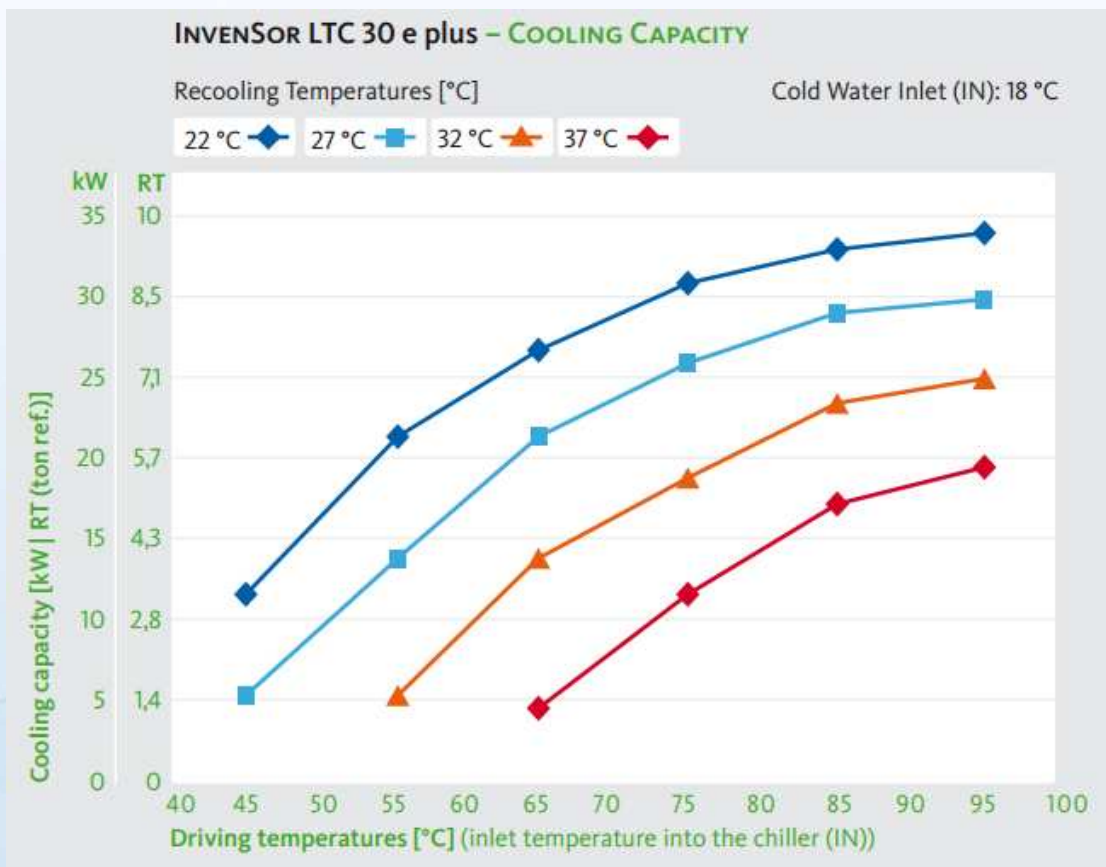


INVENSOR HTC 18 – COOLING CAPACITY

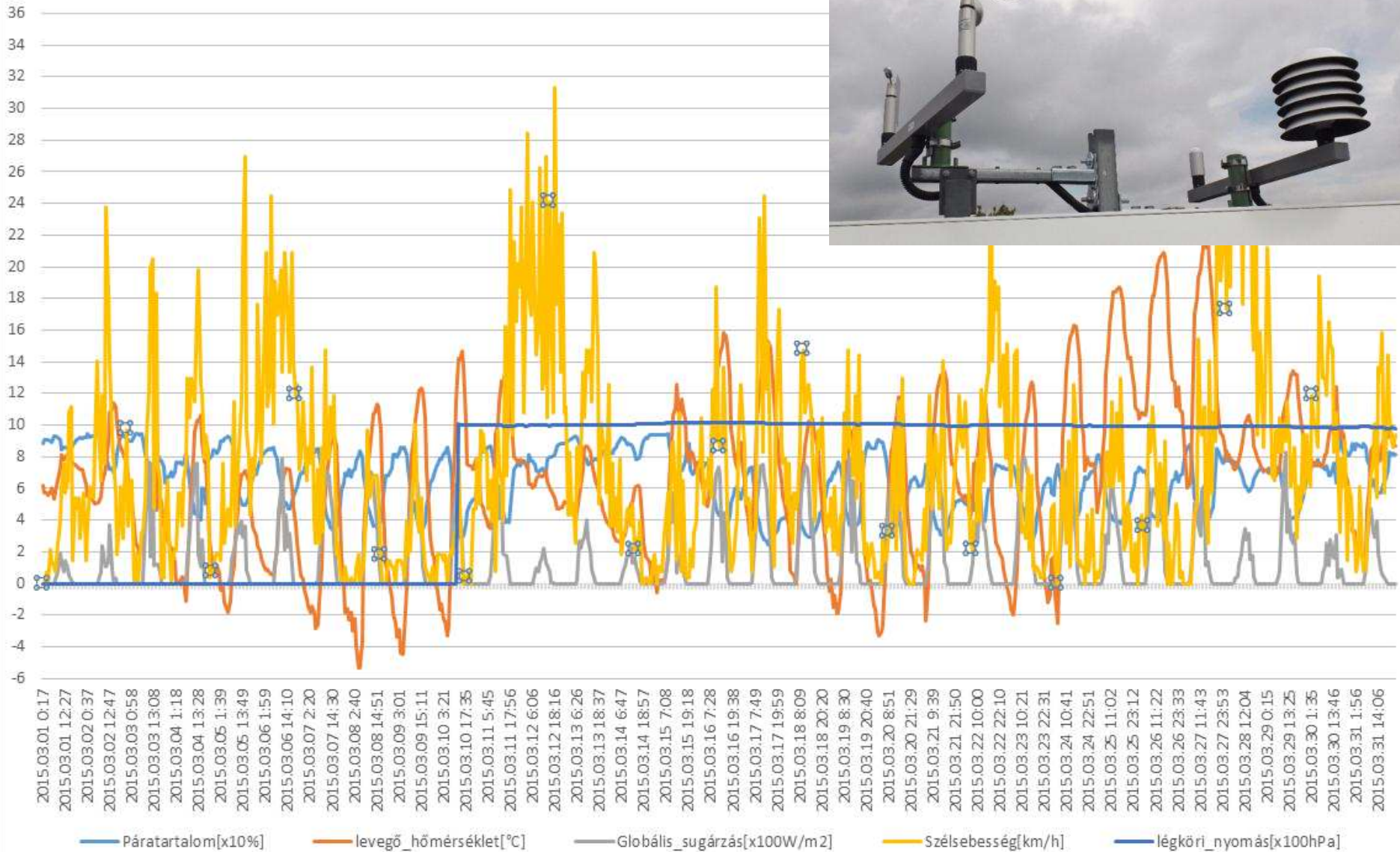
Chilled Water Inlet (IN): 18 °C
Outlet at nom. point (OUT): 14 °C

Recooling Temperatures [°C] (inlet temp. into the chiller (IN))





Meteorológiai adatok



Köszönöm a figyelmet!

www.hajdurt.hu

misinko.sandor@hajdurt.hu