

Prezentare
pompa de
căldură

Monobloc inverter

model **HPI-M**

De Dietrich 
LE CONFORT DURABLE®

FORMATION 2.0 

Componente HPI-M

AWHP 6/8/11 MR and 11TR



SMART TC Termostat



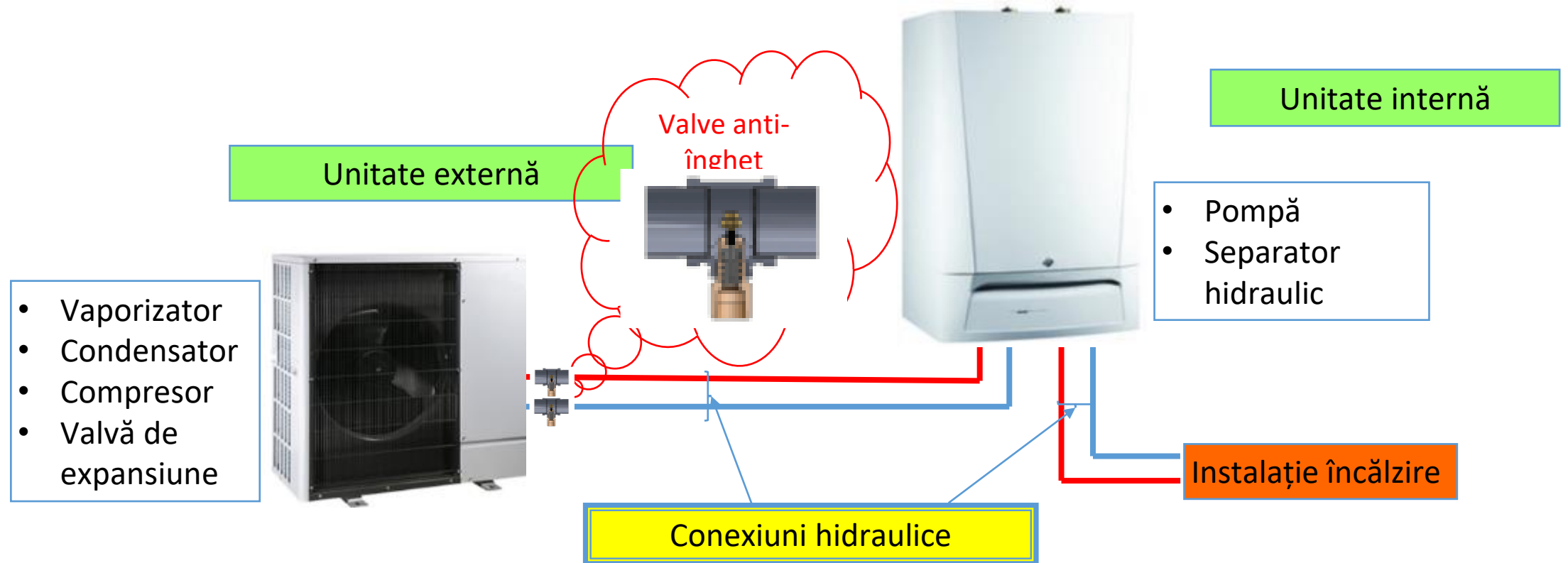
Panou de comandă și control
Diematic Evolution



Unitatea internă
MIT-/E ou /H

Principiul de funcționare monobloc

Fără manipulare de refrigerant:



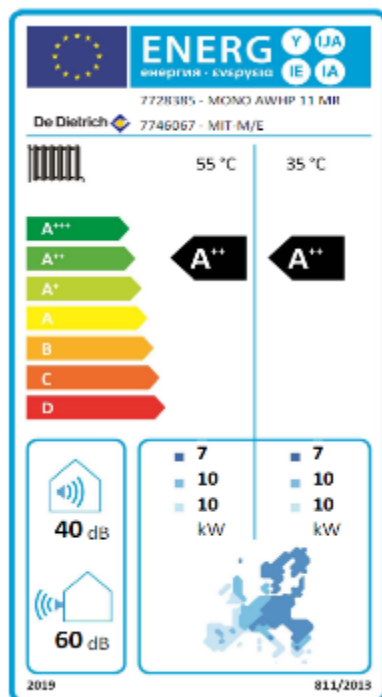
- **Nu utilizați glicol**, valve anti-îngheț pe ambele conducte sunt necesare

Pompă de căldură HPI-M



- 6, 8 și 11 KW monofazată (R410A)
- 11 KW trifazată
- Compresor INVERTER
- Baterie de egalizare presiune integrată - 40 litri
- Control pentru mai multe circuite DIEMATIC Evolution
- Temperatură maximă apă **60°**
- Ultra silențioasă de la **36 la 38 dbA** la 5 metri în câmp liber
- Filtru magnetic, vas de expansiune 10 litri integrate
- Certificare HP Keymark

Date tehnice HPI-M

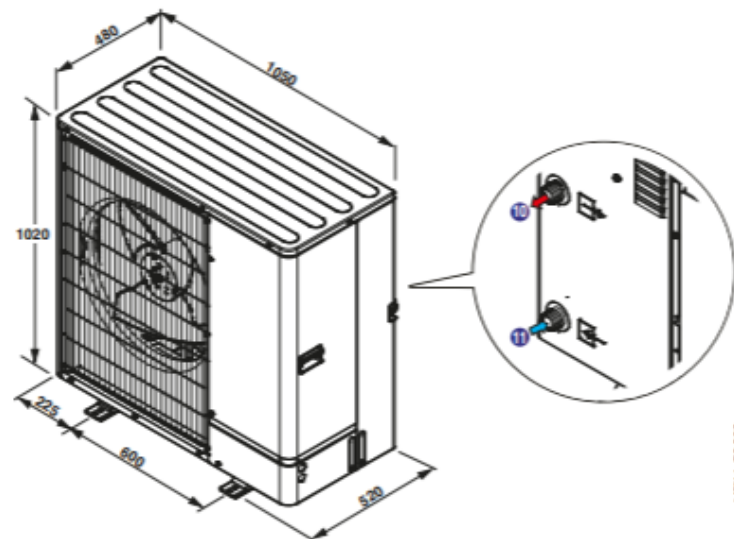


MODEL	HPI-M	6 MR	8 MR	11 MR
SEASONAL PERFORMANCES				
Energy class in heating ERP (35°C)		A+++	A++	A++
Energy class in heating ERP (55°C)		A++	A++	A++
SCOP (35°C/55°C)		4.67/3.30	4.35/3.50	4.34/3.40
Seasonal space heating energy efficiency under average temperature (35°C/55°C) *	%	184/129	171/137	170/133
Seasonal space heating energy efficiency under average temperature (35°C/55°C) (with outdoor sensor supplied as standard)	%	186/131	173/139	172/135
CERTIFIED THERMAL PERFORMANCE				
Heating output at +7°C/+35°C (I)	kW	6.00	9.00	11.20
Heating COP at +7°C/+35°C (I)		4.83	4.51	4.54
Heating output at -7°C/+35°C (I)	kW	6.00	7.50	9.00
Heating COP at -7°C/+35°C (I)		3.11	2.69	3.27
Outdoor module sound power (3)	dB[A]	58	58	60
TECHNICAL SPECIFICATIONS				
Outdoor module perceived sound level(4)	dB[A]	36	36	38
Indoor module perceived sound level(4)	dB[A]	35	43	43
Cooling output at +35°C/+18°C (5)	kW	6.00	7.50	10.00
Cooling COP at +35°C/+18°C (5)		4.26	4.42	4.74
Nominal water flow rate at $\Delta T = 5$ K	m ³ /h	1.03	1.55	1.93
Total pressure head at nominal flow rate at $\Delta T = 5$ K	mbar	750	650	500
Maximum hydraulic connection distance	m	20	20	20
Connection diameter	pouce	1"	1"	1"
Power supply voltage of the outdoor unit	V	230 V single-phase	230 V single-phase	230 V single-phase
Maximum electrical power	kW	5.06	5.06	6.44
Start-up amperage	A	9	9	12
Curved circuit breaker protection C outdoor unit*	A	16	25	32
Power regulation mode (compressor)		variable speed	variable speed	variable speed
Soft starter		No	No	No
Refrigerant fluid R410A	kg	2.4	2.4	3.3
CO ₂ equivalent	tonne	5.01	5.01	6.89
Weight of outdoor unit without charge	kg	97	97	118
Weight of indoor module without charge (tank) (version /H - Version /E)	kg	50 - 57	50 - 57	50 - 57

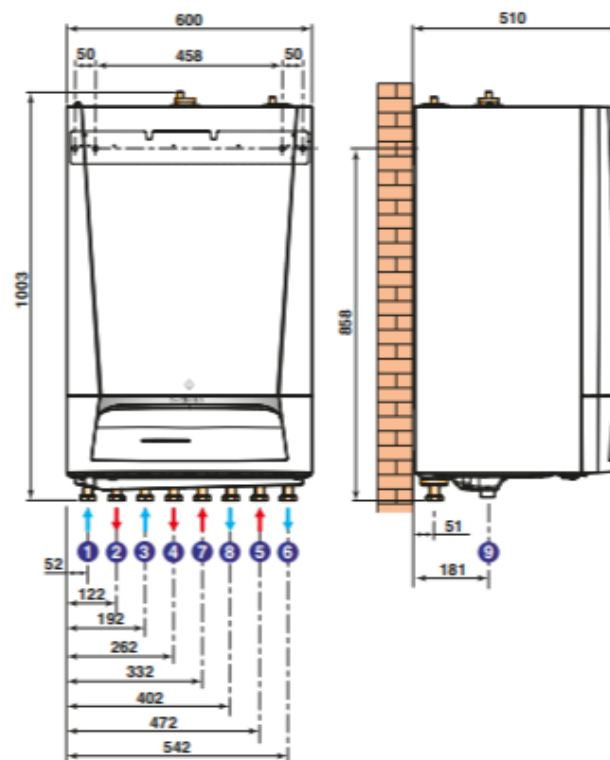


Dimensiunile HPI-M

MONO AWP 6/8/11 MR



MODULE INTÉRIEUR MIT-/E OU /H

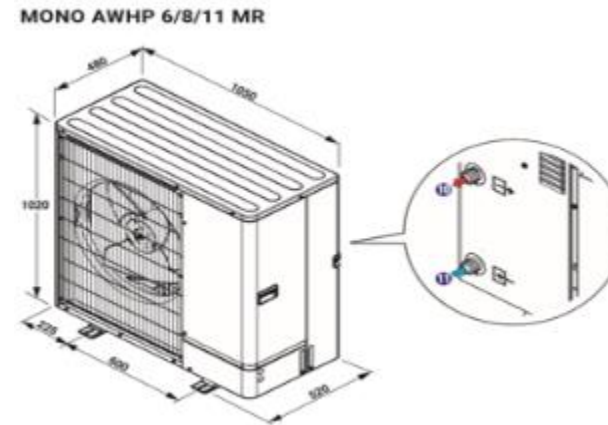


Legendă :

- ① ② Retour circuit avec vanne mélangeuse Ø G1 (option)
Avec colis HK21 : Kit tubulures internes avec vanne 3 voies ou
avec colis HK22 : Kit tubulures internes
- ③ Retour circuit direct Ø G1
- ④ Départ circuit direct Ø G1
- ⑤ Retour du groupe extérieur Ø G1
- ⑥ Départ du groupe extérieur Ø G1
- ⑦ Raccordement départ (chaud) chaudière Ø G1
- ⑧ Raccordement retour (froid) chaudière Ø G1
- ⑨ Orifice de vidange Ø 34 mm ext. (pour tube PVC Ø 40)
- ⑩ Sortie d'eau Ø G1
- ⑪ Entrée d'eau Ø G1

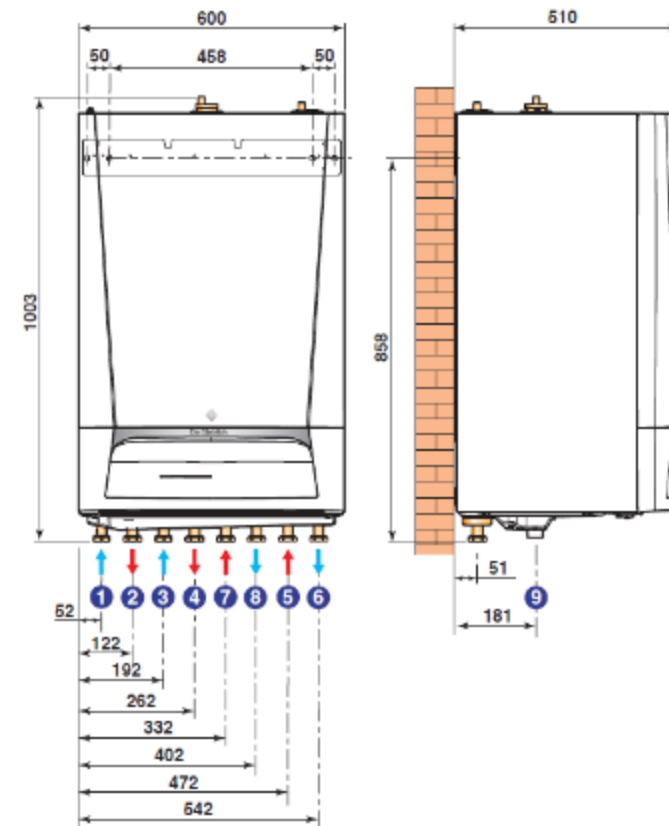
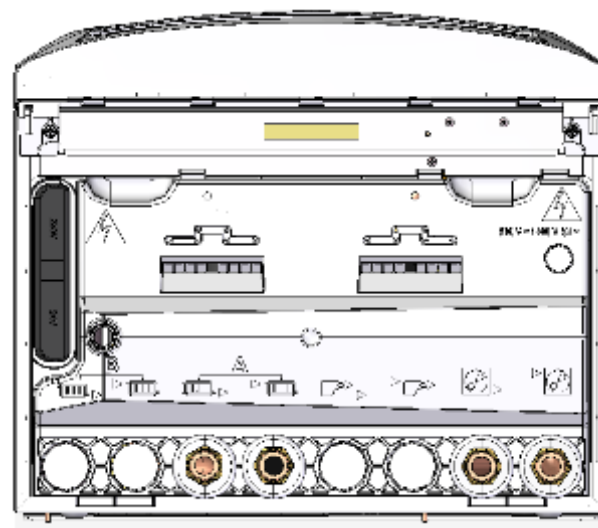
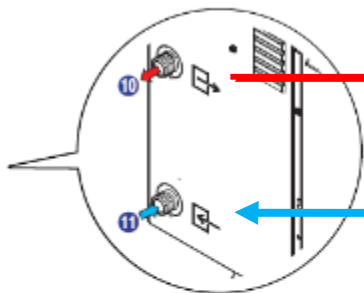
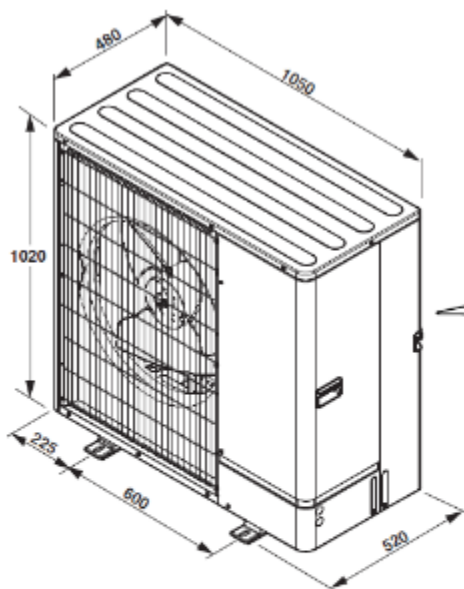
Unitatea externă HPI-M

- . O nouă configurație « silențioasă »
- . Compresor inverter – R410A
- . Conexiuni 1”
- . Distanță maximă garantată 20 m
- . Fără distanță minimă
- . Nu este necesar instalarea unui vas tampon între unități
- . Protecție sonoră pe compresor
- . Comunicare Bus S2/S3



Nota : Versiunea de 16 KW R32 nu va avea modul silențios

Circuitul primar HPI-M



Debit nominal:

6 MR : 1,03 m³/h

8 MR : 1,55 m³/h

11 MR : 1,93 m³/h

Legendă

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- ⑪ Entrée d'eau Ø G1

Controlul etanșeității unității exterioare

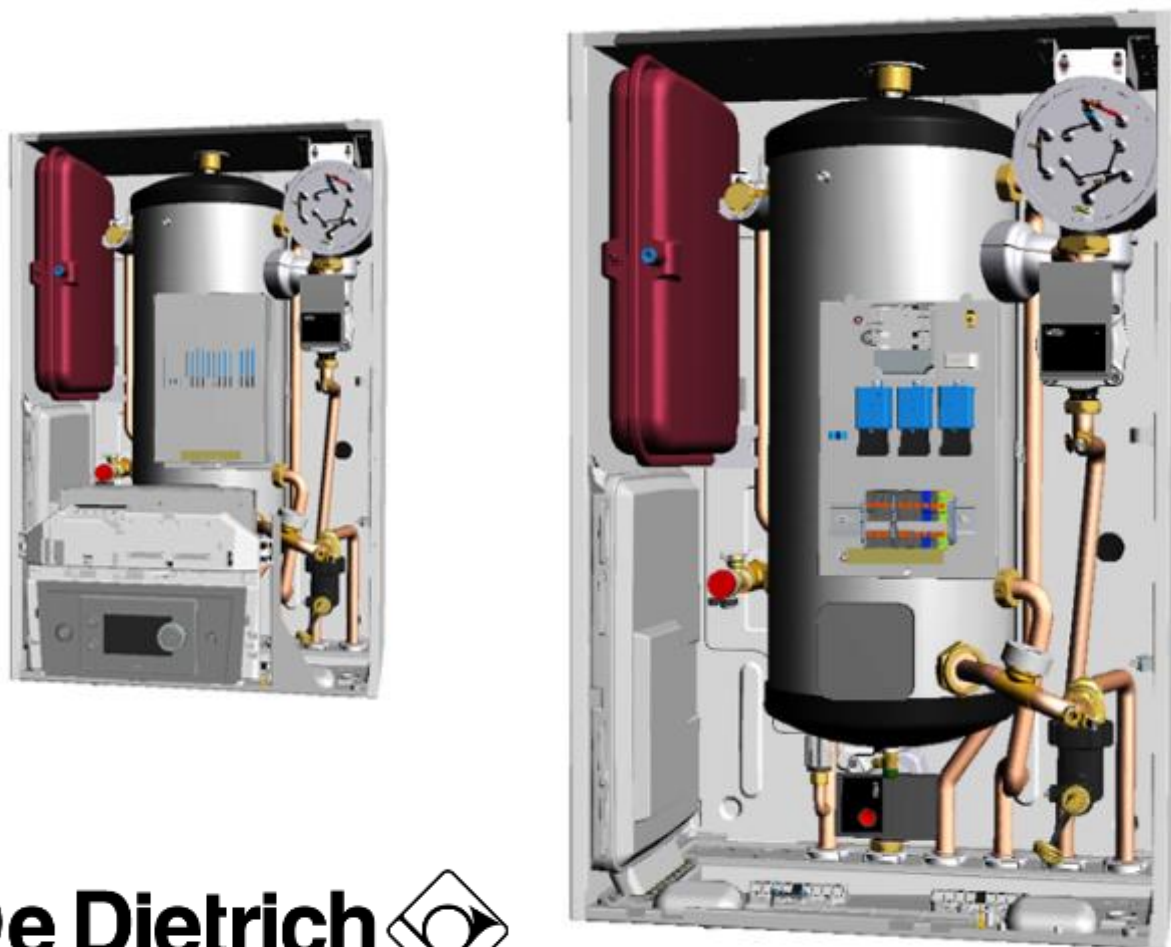
Extras din Regulamentul nr. 517/2014 (UE) al Parlamentului European din 16 aprilie 2014.

Când sistemul este închis ermetic, este obligatoriu să se verifice anual etanșeitarea sistemului atunci când acesta conține mai mult de 10 tone ep. CO₂.

Fiecare unitate are mai puțin de 10t CO₂, așa că verificarea anuală **nu este obligatorie**.

MODEL	MONO AWHP 8 MR (7728383)		
SERVICE REF.	MONO AWHP 8 MRR0.UK		
CURRENT (OUTDOOR ONLY)	22.0	A	
230 V ~/N	50 Hz	R410A	2.4 kg
97 kg	IP24	SERIAL No.	
HP PS 4.15MPa			0B00009
LP PS 2.3MPa	YEAR OF MANUFACTURE		02.2020
<input type="checkbox"/> Contains fluorinated greenhouse gases hermetically sealed			
R410A (GWP:2088)		<input type="checkbox"/> Weight	<input type="checkbox"/> CO ₂ equivalent
MANUFACTURER	: BDR THERMEA F, 57 rue de la Gare - BP30 F-67580 Mertzwiller France		
MADE IN UNITED KINGDOM			GG79B019G01

Unitatea internă HPI-M



Conceptul unității interne MIT-E/H

- Diematic évolution + EHC05 + SCB10
- Separator hidraulic 40 litri
- Filtru magnetic
- Elec. Back-up de la 2 la 6 kW (monofazat)
- Elec. Back-up de la 4 la 12 kW (trifazat)
- Aerisitor automat și supapă de siguranță
- Vas de expansiune 10 litri
- Debitmetru și senzor de presiune electronic
- Pompă primară și secundară
- Posibilitatea de a integra al doilea circuit
- Opțiune compatibilă: auto-umplerea
- Compatibil cu Smart TC

Unitatea internă HPI-M



Brevet separator hidraulic

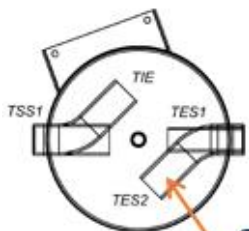
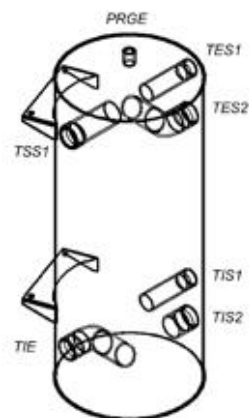
- Nu este necesar să se verifice pierderile hidraulice ale rețele existente
- Disponibili 40 de litri pentru a evita ciclurile scurte
- Crește durata de viața a instalației
- Energie disponibilă pentru degivrare
- Temperatură a apei constantă
- Posibilitatea de a conecta o centrală pentru back-up

Mai multe circuite, adaptabile la mai multe configurații (încălzire, ACM, piscină, cascadă...)

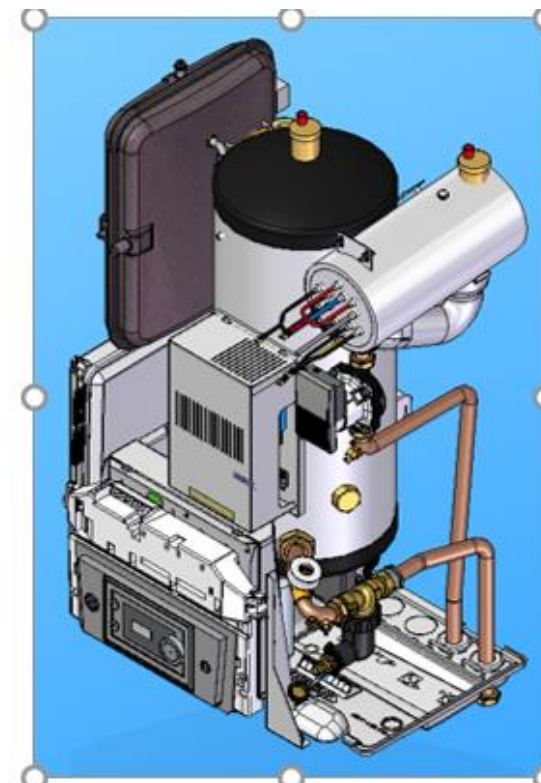
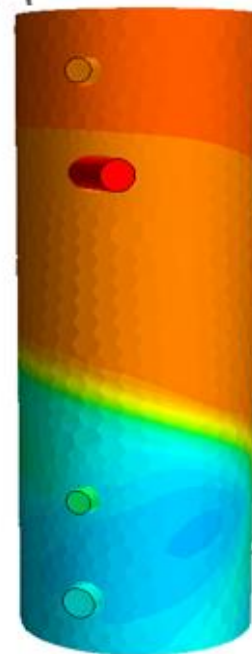
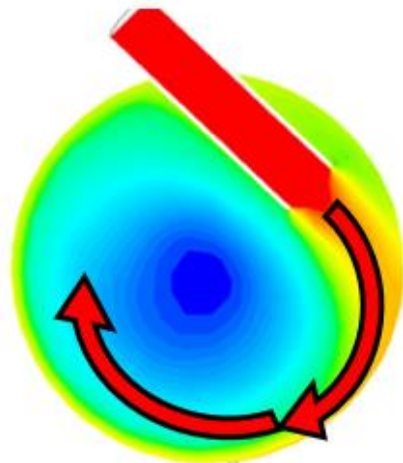
**Înlocuirea oricărei pompe de căldură vechi cu
posibilitatea de păstra conductele existente.**

Unitatea internă HPI-M

Tehnologie patentată cu efect vortex pentru obținerea stratificării și creșterea eficienței.

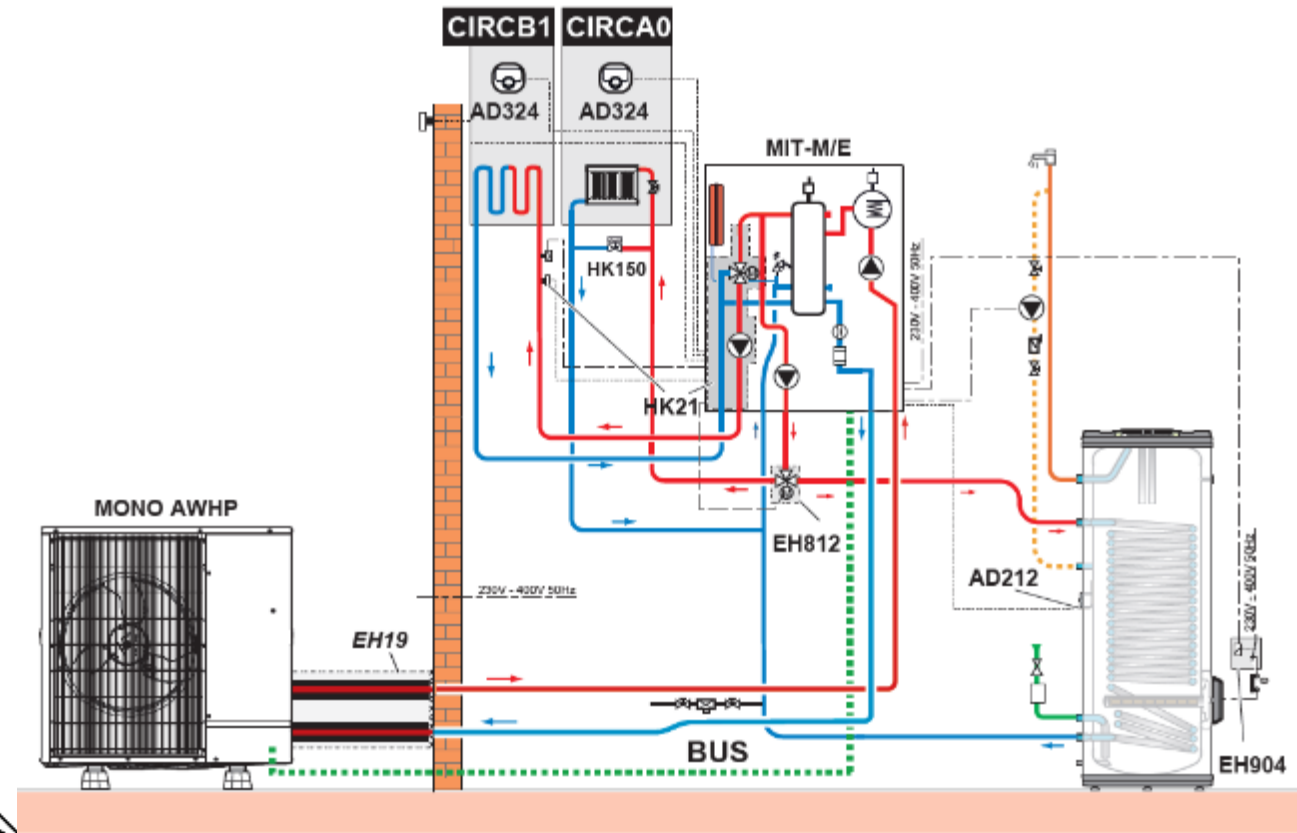


Canne brise-jet créant l'effet Vortex

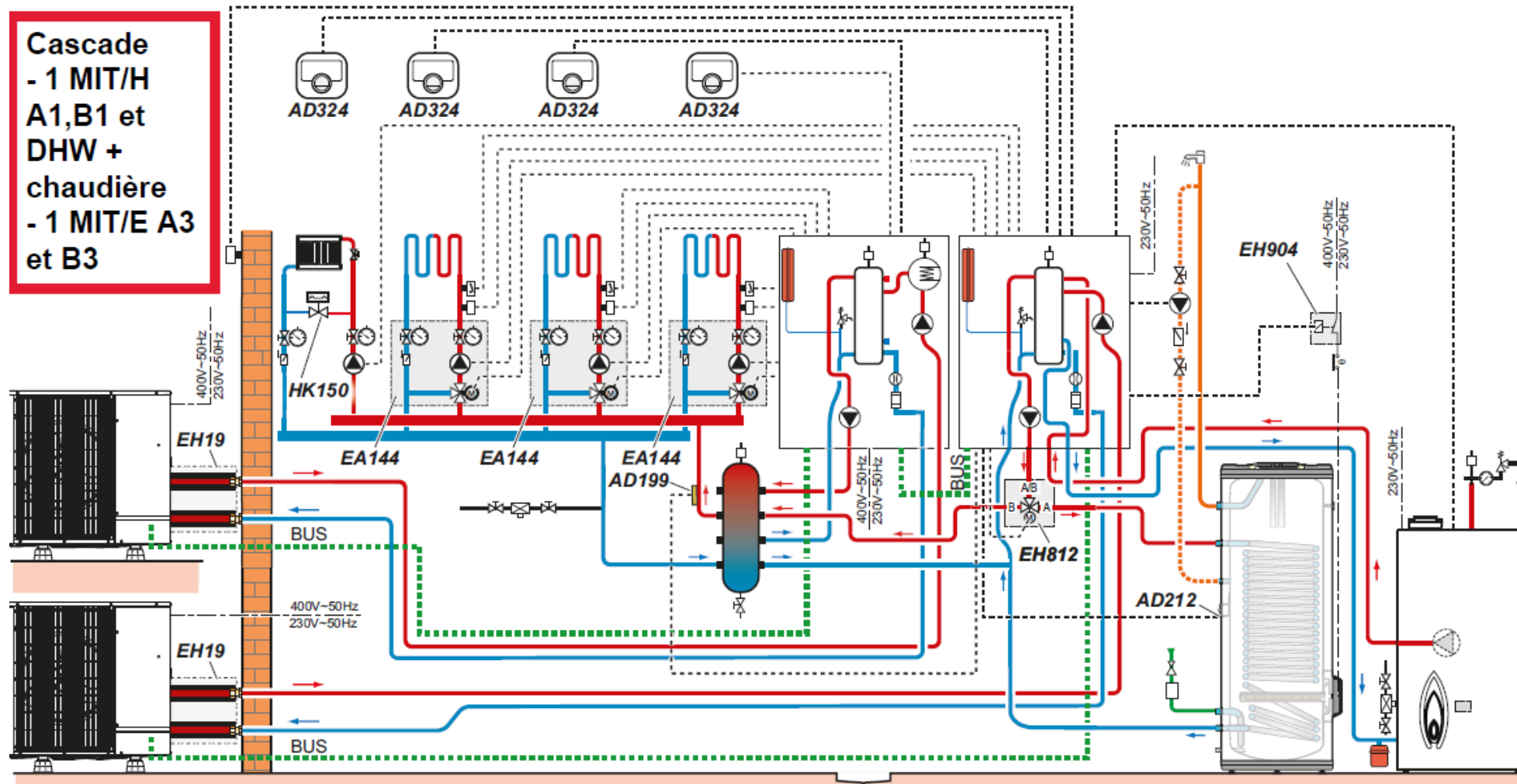


Uniatea internă HPI-M

- . Posibilitatea de gestiona 4 circute (1 direct + 3 amestec)
- . Gestionarea ACM

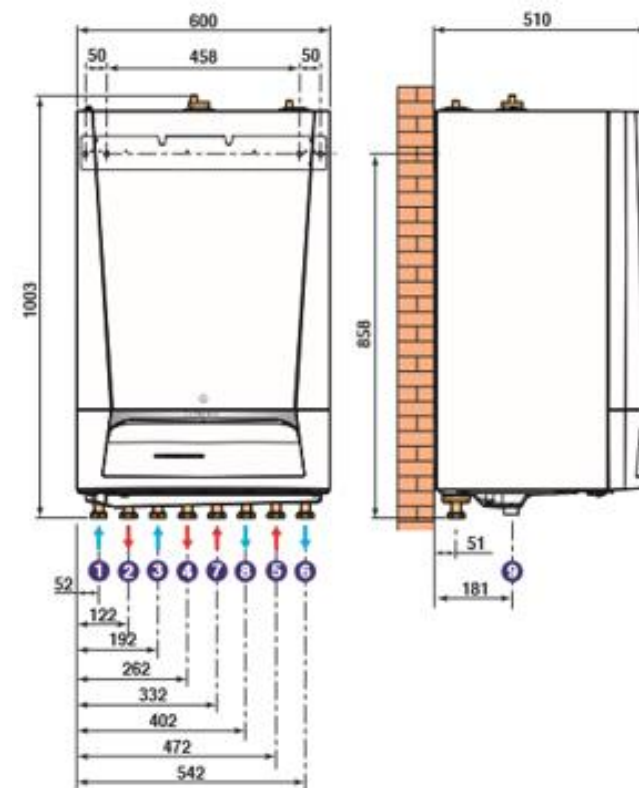
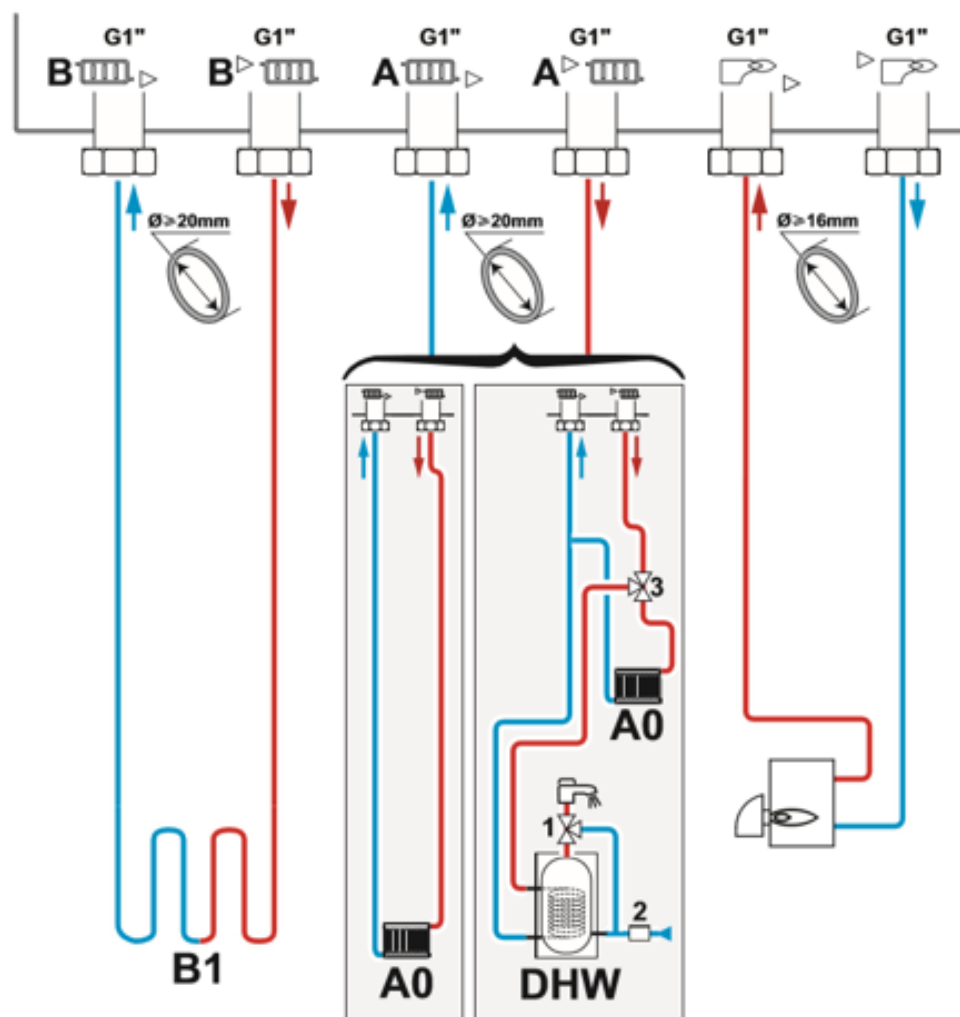


Exemplu de cascadă HPI-M



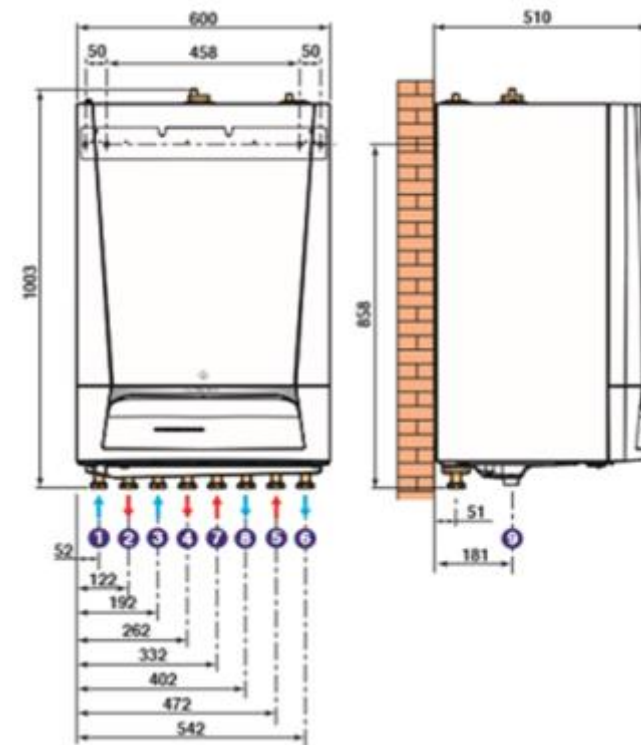
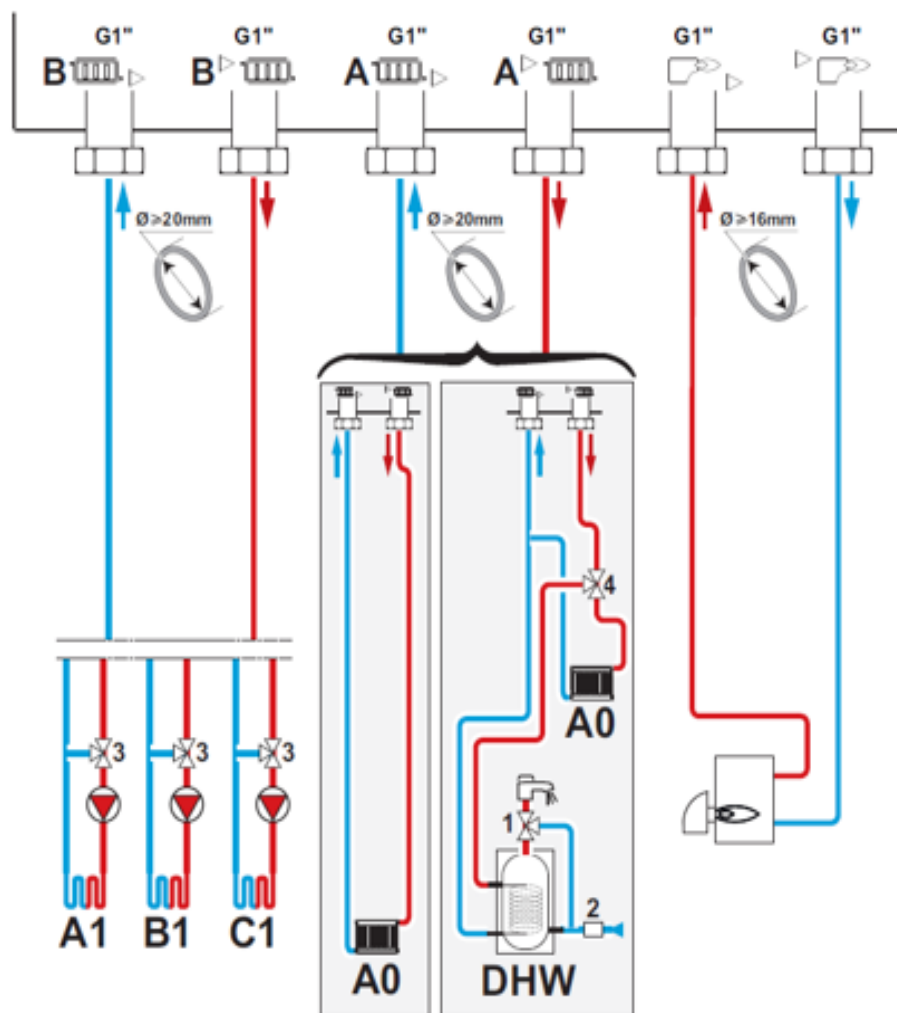
Unitate internă cu 1 sau 2 circuite

Conexiuni hidraulice :



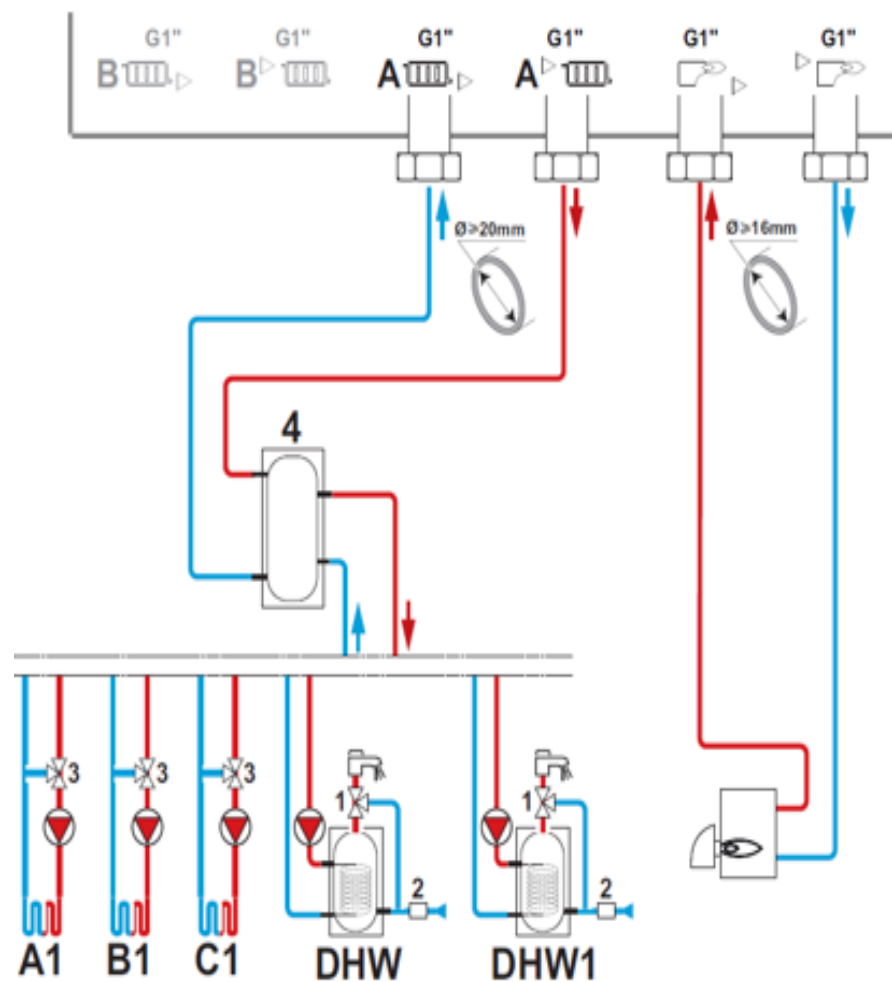
- ① Retour/Départ circuit avec vanne mélangeuse \varnothing G 1
(avec colis HK21 : Kit tubulures internes avec vanne 3 voies,
ou avec colis HK22 : Kit tubulures internes seules - options)
- ② Retour circuit direct \varnothing G 1
- ③ Départ circuit direct \varnothing G 1
- ④ Retour du groupe extérieur \varnothing G 1
- ⑤ Départ du groupe extérieur \varnothing G 1
- ⑥ Raccordement départ (chaud) chaudière \varnothing G1
- ⑦ Raccordement retour (froid) chaudière \varnothing G1
- ⑧ Orifice de vidange \varnothing 34 mm ext. (pour tube PVC \varnothing 40 mm)
- ⑨ Sortie d'eau \varnothing G1
- ⑩ Entrée d'eau \varnothing G1

HPI-M cu 4 circuite încălzire



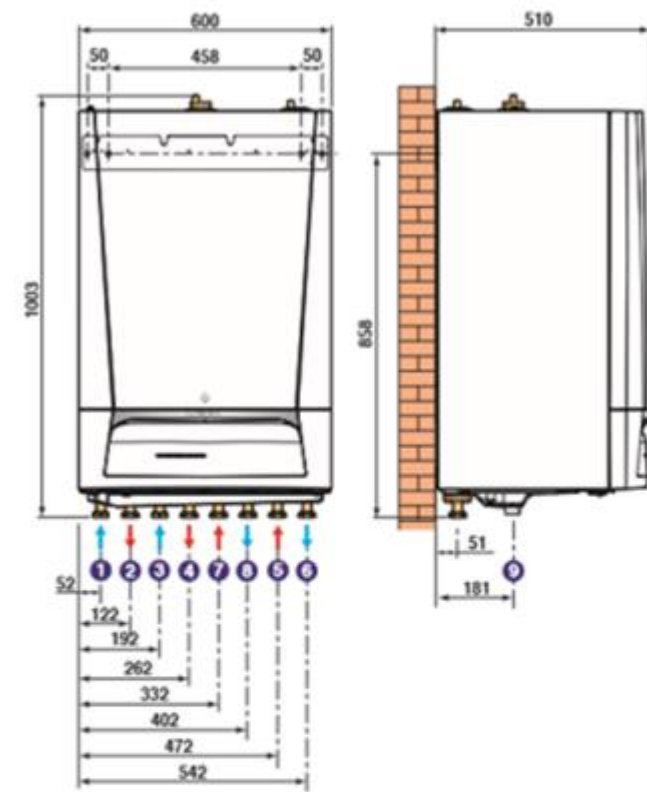
- ① ② Retour/Départ circuit avec vanne mélangeuse Ø G 1
(avec colis HK21 : Kit tubulures internes avec vanne 3 voies, ou avec colis HK22 : Kit tubulures internes seules - options)
- ③ Retour circuit direct Ø G 1
- ④ Départ circuit direct Ø G 1
- ⑤ Retour du groupe extérieur Ø G 1
- ⑥ Départ du groupe extérieur Ø G 1
- ⑦ Raccordement départ (chaud) chaudière Ø G1
- ⑧ Raccordement retour (froid) chaudière Ø G1
- ⑨ Orifice de vidange Ø 34 mm ext. (pour tube PVC Ø 40 mm)
- ⑩ Sortie d'eau Ø G1
- ⑪ Entrée d'eau Ø G1

Unitate internă cu vas tampon



1 Mitigeur thermostatique
2 Groupe de sécurité

3 Vanne mélangeuse
4 Ballon tampon



- ① ② Retour/Départ circuit avec vanne mélangeuse \varnothing G 1
(avec colis HK21 : Kit tubulures internes avec vanne 3 voies,
ou avec colis HK22 : Kit tubulures internes seules - options)
- ③ Retour circuit direct \varnothing G 1
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- ⑤ Retour du groupe extérieur \varnothing G 1
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- ⑩ Sortie d'eau \varnothing G 1
- ⑪ Entrée d'eau \varnothing G 1

HPI-M Controller

Diematic évolution

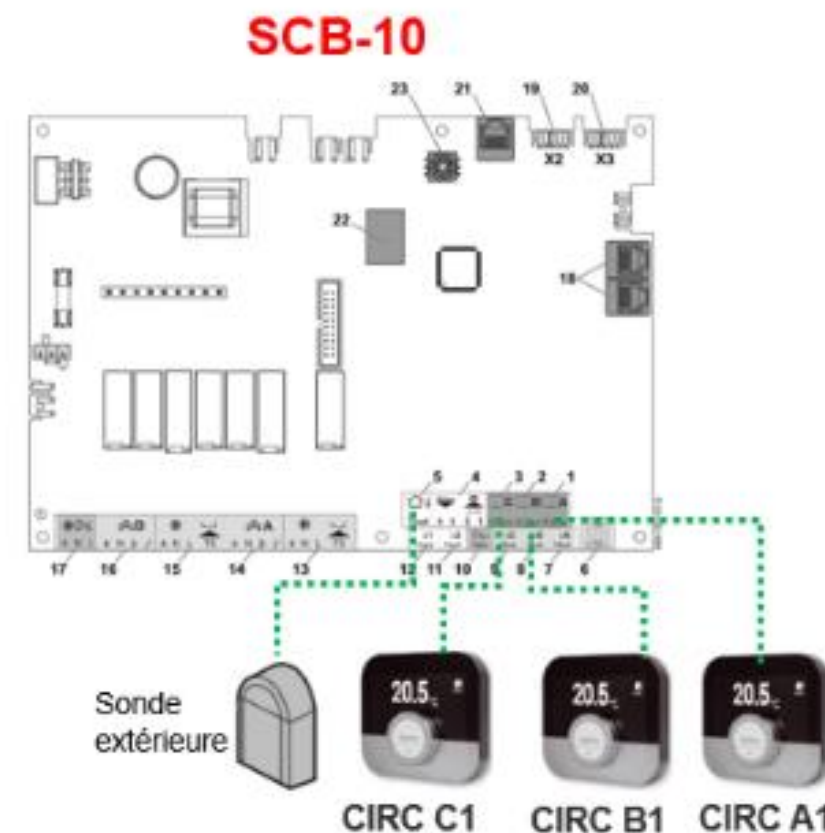
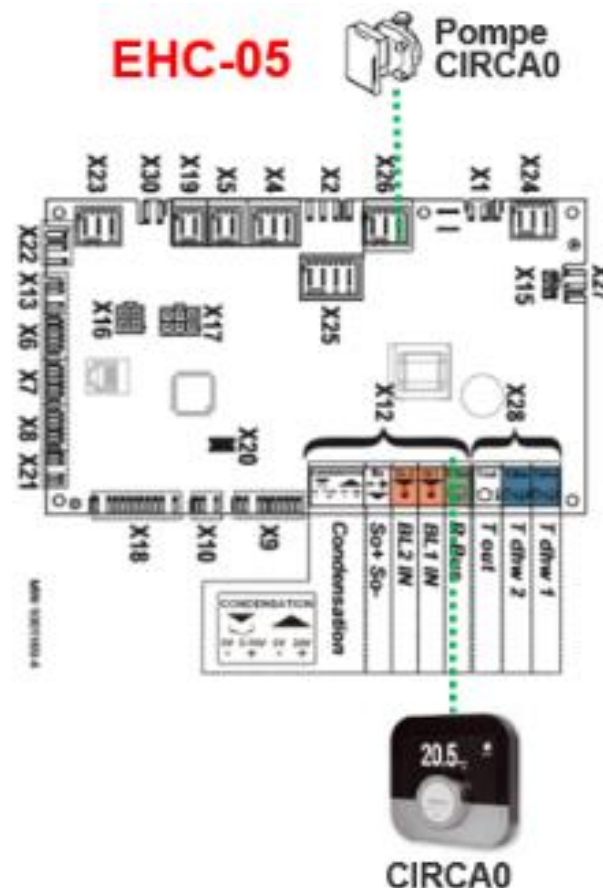
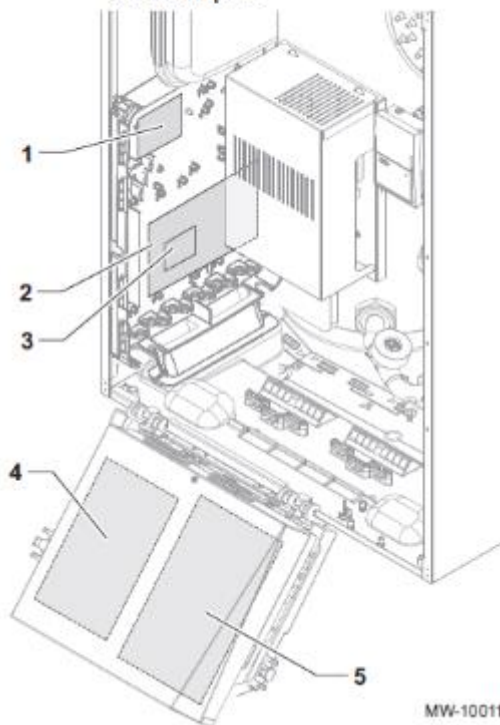
Puncte forte

- Afișaj color înaltă rezoluție
- Descriere full text
- **Nou control ergonomic**
-
- Posibilitatea de a gestiona 3 circuite (A/A1/B1)
- 1 circuit ACM cu senzor AD212
 - 2 circuite amestec cu 2 senzori AD199
 - Cu placa opțională AD249 & 2*AD199
 - 1 circuit direct + 3 circuite amestec
 - Circuit auxiliar
- Sistem de diagnoză și suport integrat



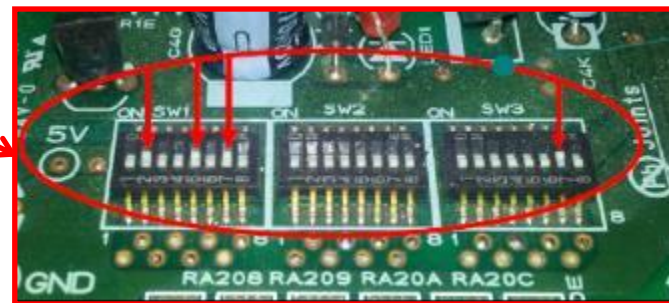
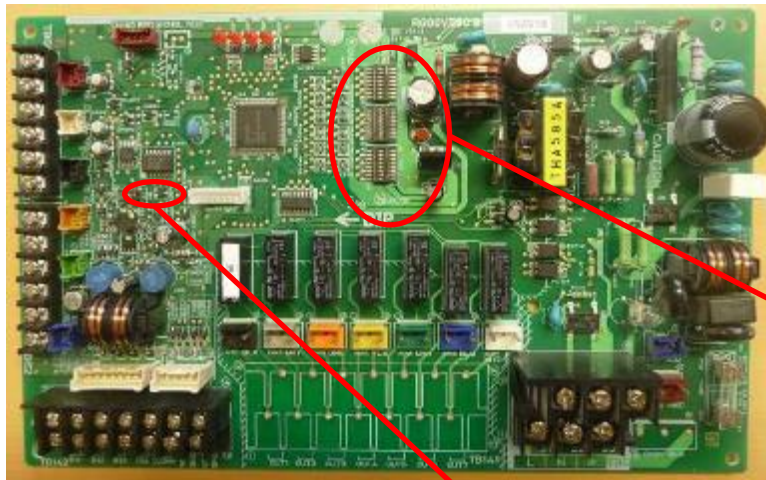
Control management HPI-M

Fig.10 Emplacement des cartes électroniques



- 1 CB04 PCB (option): automatic filling kit
- 2 SCB-10 control system PCB: management of circuits A1, B1 and domestic hot water circuit DHW1
- 3 AD249 PCB (option): management of heat circuit C1 and auxiliary circuit AUX1
- 4 EHC-05 central unit PCB: control system for the heat pump, heating circuit A0 and domestic hot water circuit DHW
- 5 PAC-IF-020-E PCB: PCB for interface with the outdoor unit

Placă interfață cu unitatea externă



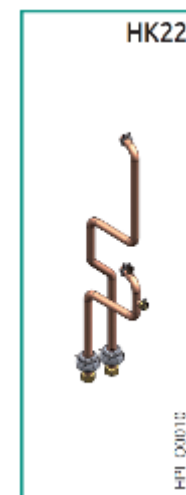
Split (before using the communication board HPC-01)	Monobloc
SW1.2 = ON	SW1.2 = ON
	SW1.5 = ON
SW1.7 = ON	SW1.7 = ON
SW3.7 = ON	SW3.7 = ON
SW6.2 = ON	SW6.2 = ON
All other switches = OFF	All other switches = OFF

Accessorii pentru gestionarea circuitelor cu HPI-M

Opțiuni funcție de circuite:

		Type de circuit					
		ecs	direct	direct + 1 vanne		direct + 2 x vanne	direct + 3 x vanne
Tableau de commande DIEMATIC Evolution (1)	HPI-M	1 x AD212	d'origine	-	1 x AD199	2 x AD199	3 x AD199 + 1 x AD249
		EH812	d'origine	HK21	HK22	HK22 EA141 - EA140 2 x EA144 + 2 x EA142	HK22 EA141 - EA140 3 x EA144 + 3 x EA142

(1) Chacun des circuits chauffage peut être complété au choix par un thermostat d'ambiance AD324, AD200, AD140 ou AD137 (2) Cascade de 10 pompes à chaleur possible



Opțiuni HPI-M

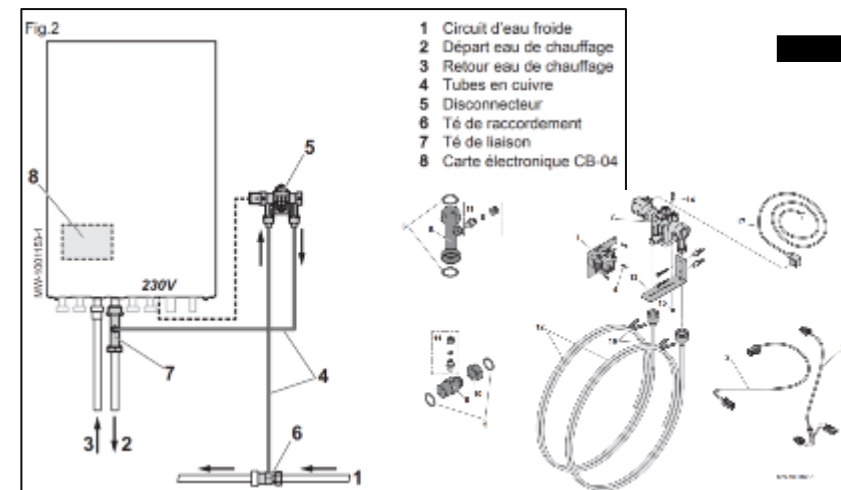
Noi opțiuni specifice HPI-M

Setare pentru auto-umplere

Set izolare răcire

Valvă diferențială

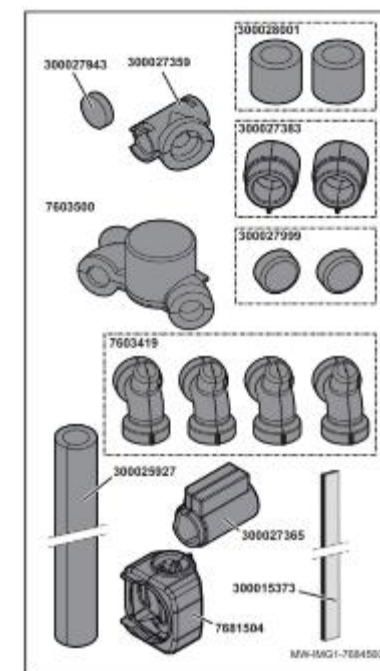
(când în echipamentul de încălzire sunt prezente valve Termostactice)



EH726

EH811

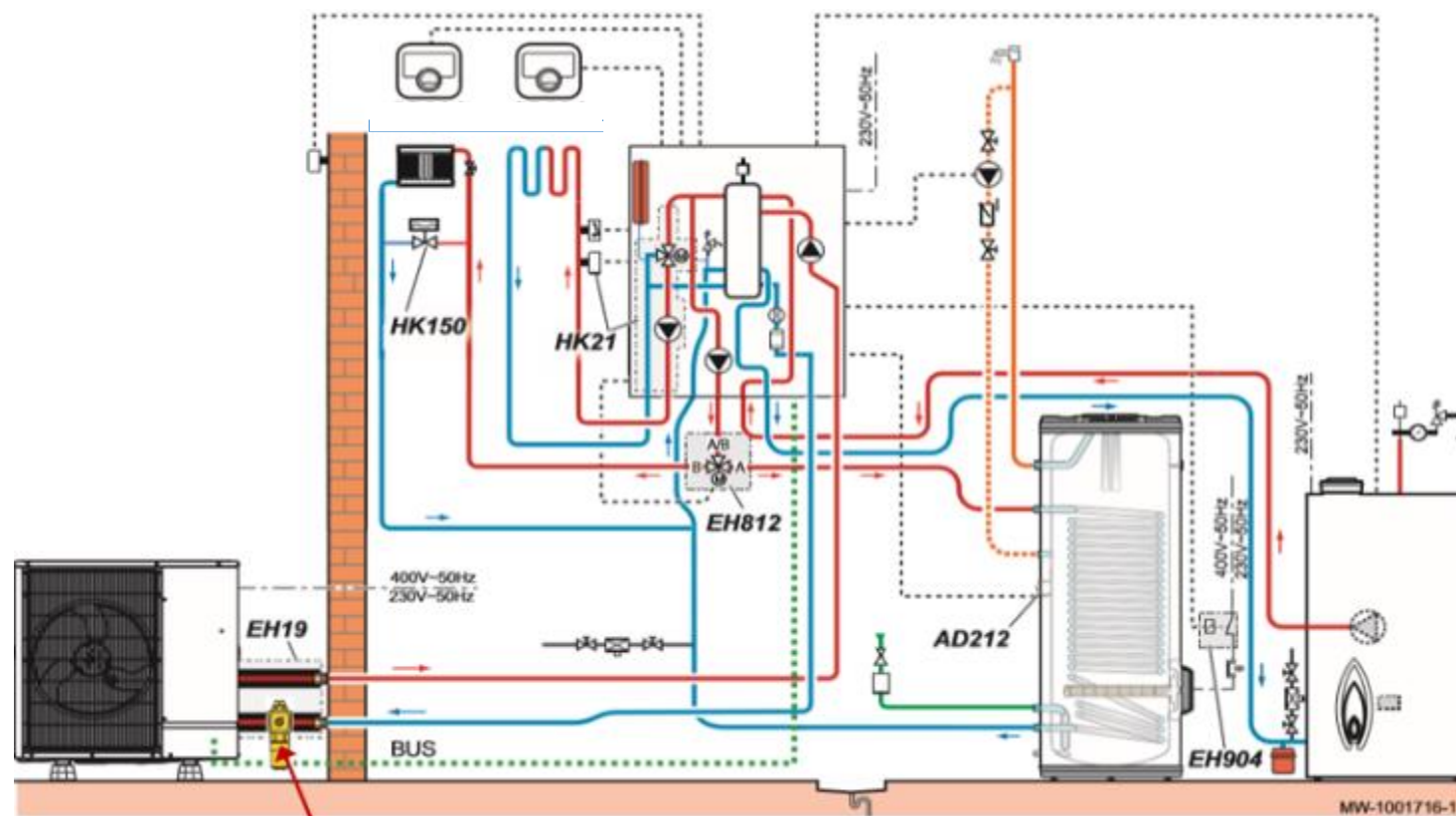
HK150



FORMATION 2.0



Exemplu de schemă hidraulică HPI-M

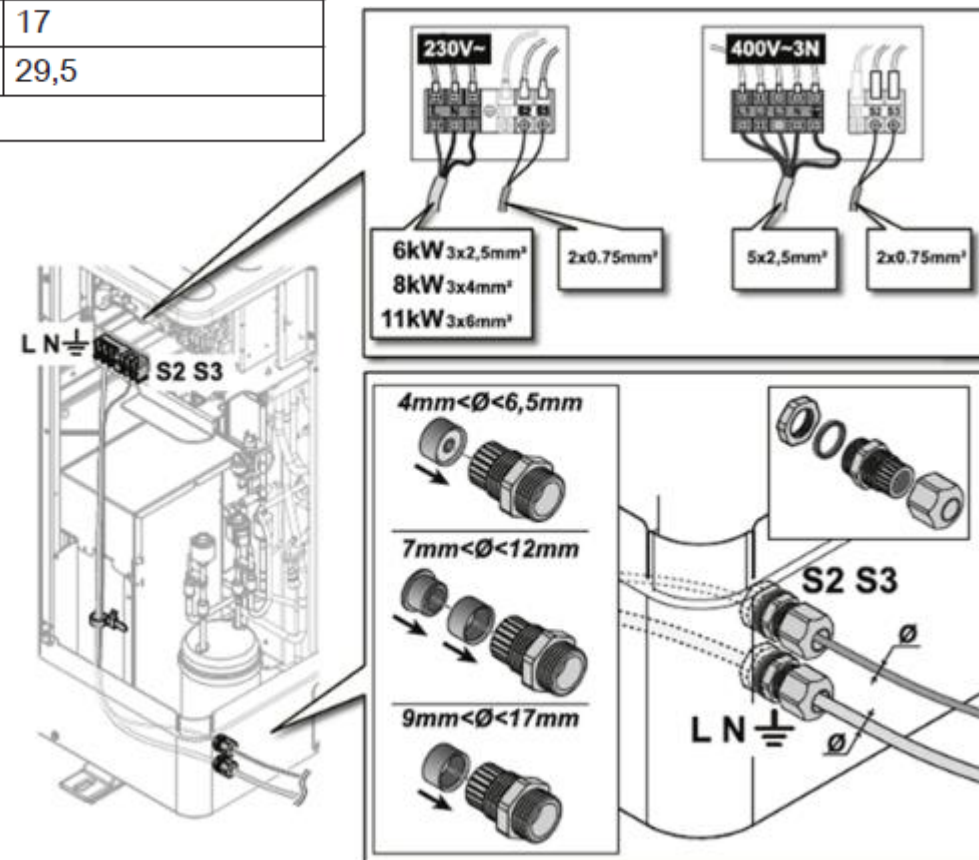


Ne pas oublier la soupape anti-gel

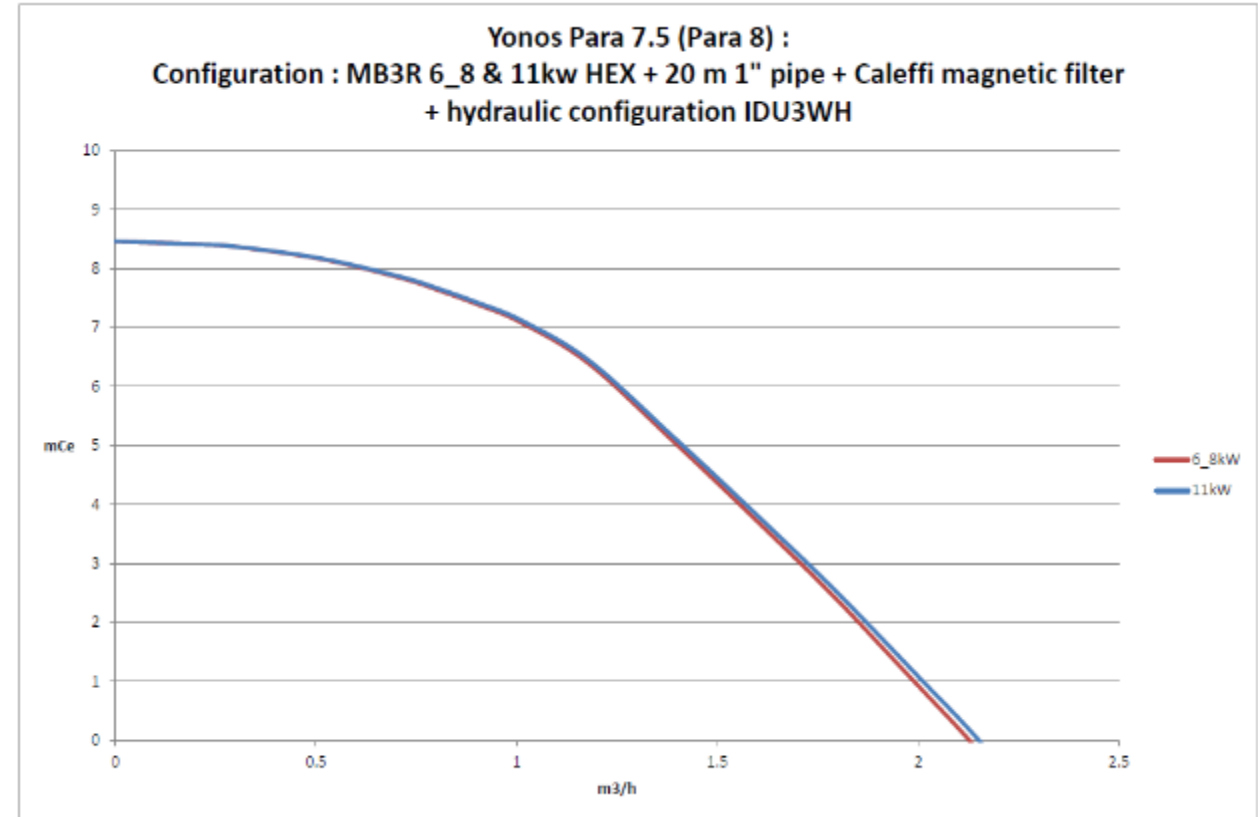
Conexiuni electrice HPI-M

Appareil	Type d'alimentation	Section de câble (mm ²)	Disjoncteur courbe C (A)	Intensité maximale (A)
Module intérieur	Monophasé	Câble fourni (3 x 1,5)	10	-
Appoint électrique	Monophasé	3 x 6	32	-
Appoint électrique	Triphasé	5 x 2,5	16	-
Câble BUS ⁽¹⁾	-	2 x 0,75	-	-
MONO AWHP 6 MR	Monophasé	3 x 2,5	16	13
MONO AWHP 8 MR	Monophasé	3 x 4	25	17
MONO AWHP 11 MR	Monophasé	3 x 6	32	29,5

(1) Câble de liaison reliant le groupe extérieur au module intérieur

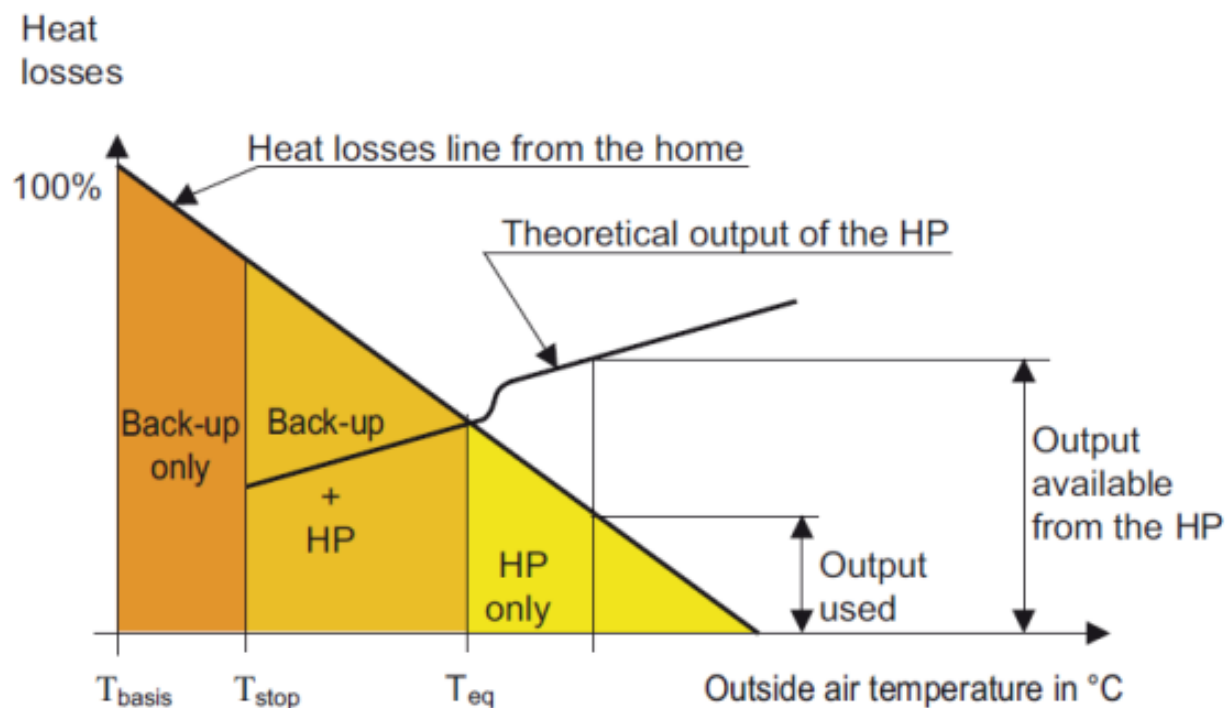


Pompa primară



Nu este necesar volum minim de apă datorită separatorului hidraulic.

Dimensionarea HPI-M



T_{basis} = basis outside temperature,
 T_{eq} = balance point temperature,
 T_{stop} = shutdown temperature

80% pierderi < Putere termică PC < 100% pierderi funcție de temp. exterioară

Putere PC la temperatură calculată + putere back up = 120% pierderi

Rezervor ACM adaptat pentru HPI-M

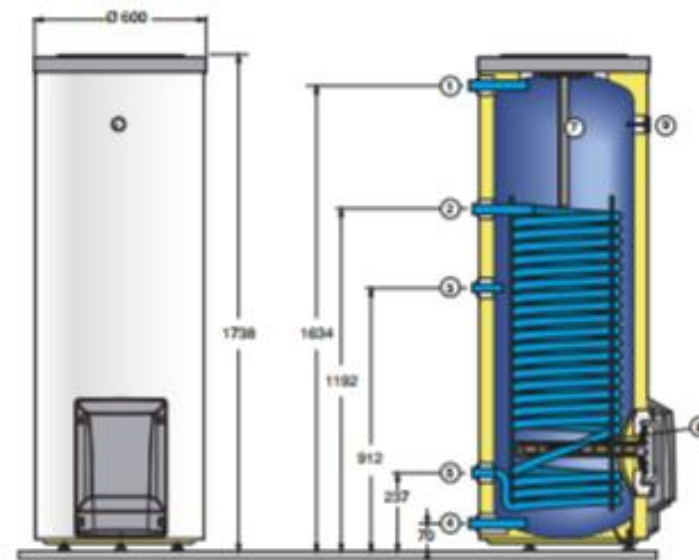
	CAPACITÉ (L)	SURFACE D'ÉCHANGE SERPENTIN (m ²)	qpr (kwh/24 h)	6 MR	HPI-M 8 MR	11 MR
BPB 150	150	0,84	1,1	●	●	●
BPB 200	200	1,20	1,3	●	●	●
BPB 300	300	1,70	1,6	○	○	●
BEPC 300	300	2,5	2,2	●	●	●

● Combinaison conseillée ○ Combinaison déconseillée

Remarque : autres caractéristiques des préparateurs BPB voir chapitre 11 ou BEPC voir pages suivantes

Rezervor ACM BEPC 300 litri

- Serpentină supradimensionată
- Termometru
- Rezistență cu steatită integrată
- Capacitate 300 litri



Instalarea unității externe

Demontați rama care asigură compresorul în timpul transportului.

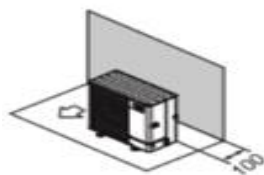


Fig. 2-5

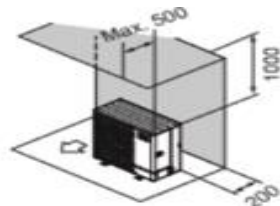


Fig. 2-6

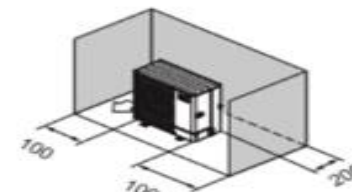


Fig. 2-7

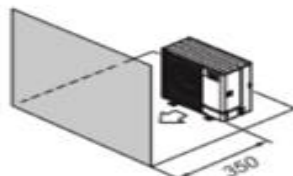


Fig. 2-8

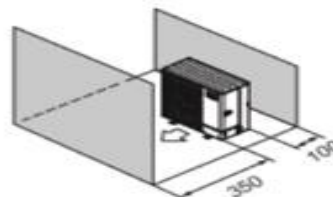


Fig. 2-9

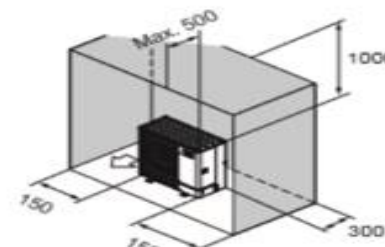


Fig. 2-10

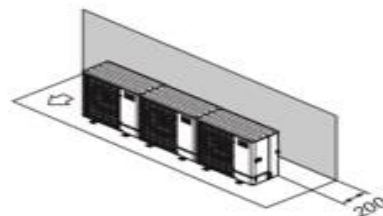


Fig. 2-11

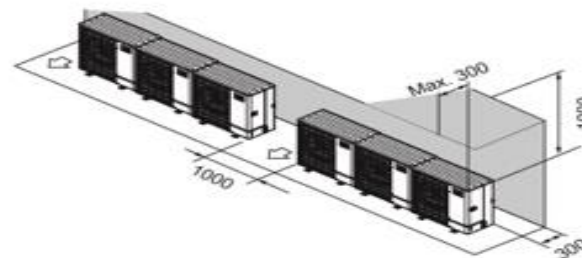


Fig. 2-12

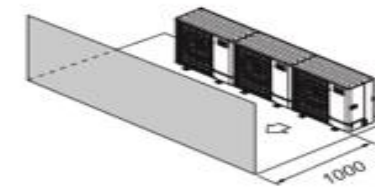


Fig. 2-13

HPI-M

Puncte forte

- Distanță de 20 m între unitatea internă și externă
- Funcționare fără glicol, dar instalați valve anti-îngeț
- Protecție anti-îngheț în software (la 8°C pompa pornește iar la 6°C pornește back-upul)
- Foarte silențioasă
- Ieșire maximă apă 60°C
- Gestionarea a 4 circuite amestec + ACM

Vă mulțumim pentru
atenție!

