Designed for you.

HEWING

AC PRESS System

Multilayer pipes and press fitting system for Air Conditioning

New!

NEW: AC PRESS System

1. Easy and fast installation
2. ICC approved system
3. Reduced chance of leakage
4. Reduces transmission of vibration/noise

AC PRESS System

AC PRESS System is the new system to facilitate the installation of AC systems.

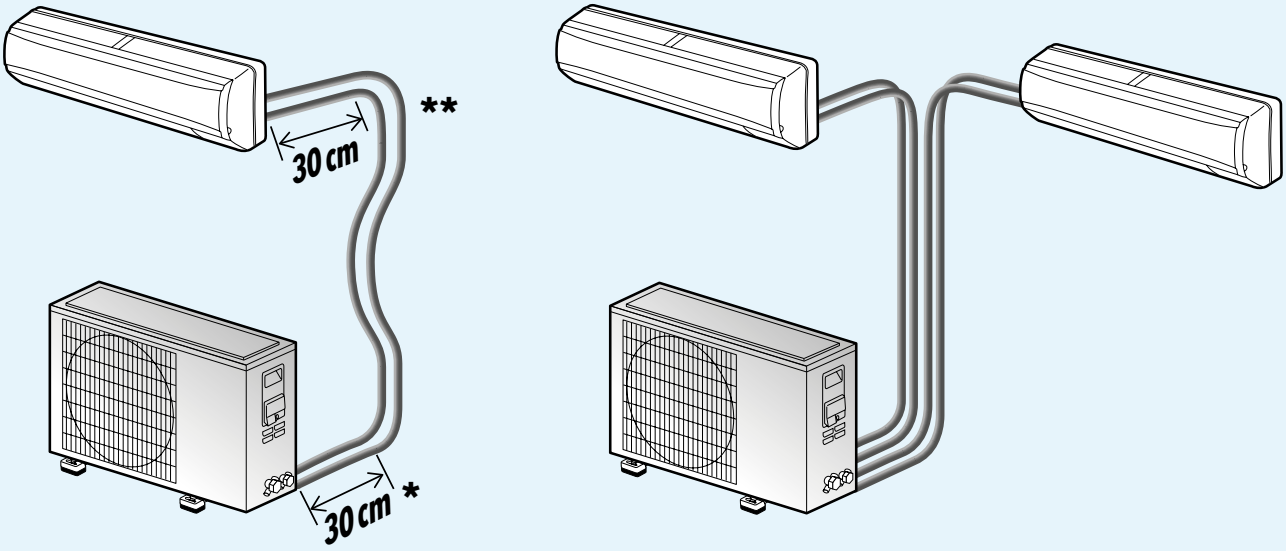
The system consist of a full range of PERT/AL/PERT multilayer pipes, supplied in coils of 50 m and press fitting flare fittings with female threads according SAE J513.

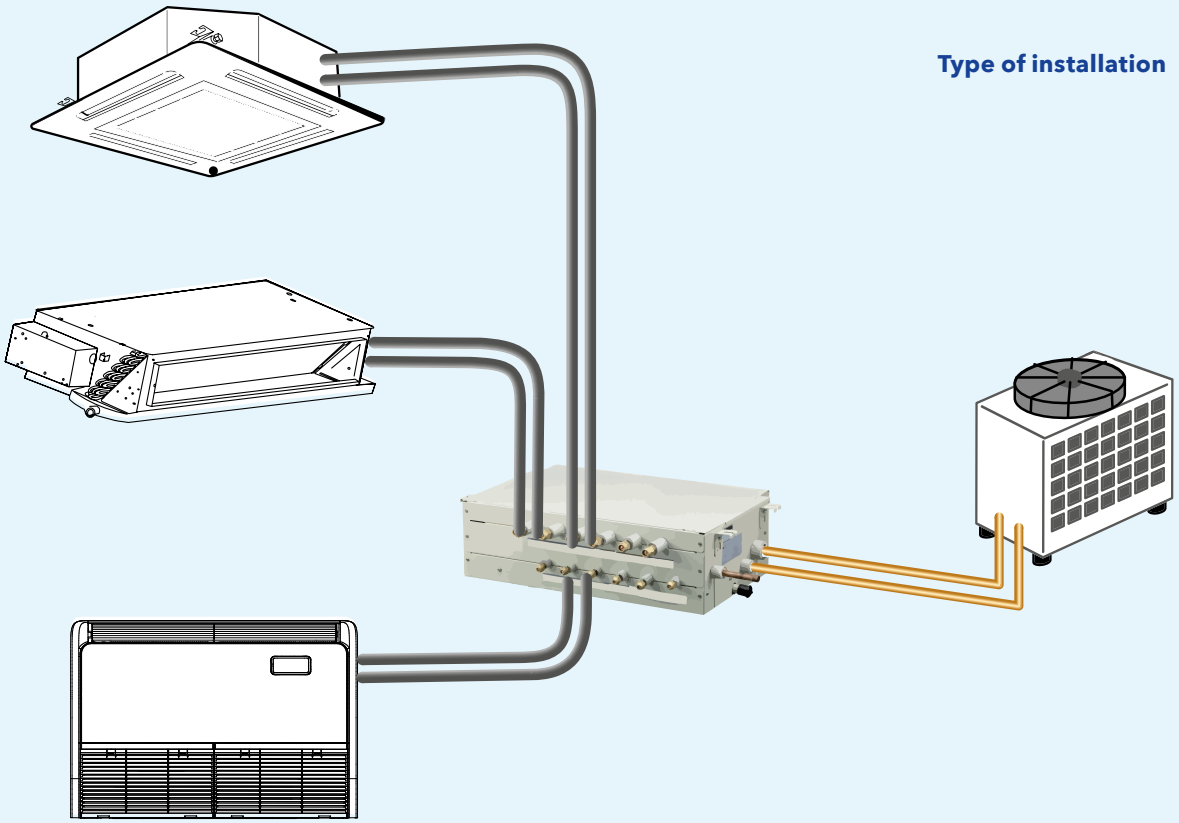
This system thanks to the pipes and fittings is designed to withstand the temperature (-40 °C to 95 °C) and high pressure (max. 45 bar) related to air conditioning and offers excellent flexibility, long life, more efficiency and reliability.

Advantages of the system

Using the AC PRESS System, you will have numerous advantagesw, for example:

- Easy and fast installation
- Reduced brazing and joints reduces chance of leakage
- Reduced transmission of vibration which decreased noise
- Avoid electrical voltage thanks to the characteristics of the multilayer pipe and the plastic of the fitting. This ensures that no direct current flow can be generated and avoids induced electrical voltage across the pipe system.





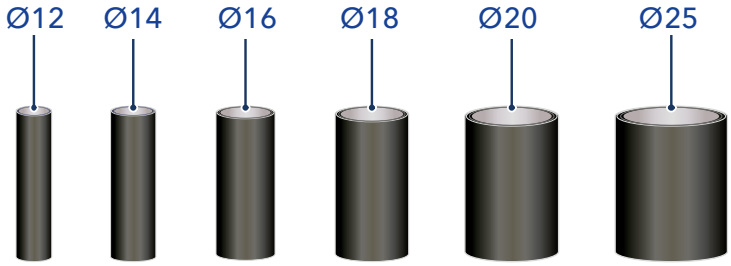
Type of installation

Instruction for correct use

(*) The recommended distance from the fitting to the first pipe bend is 30 cm to avoid kinking of the pipes and creating flow restrictions.

(**) For proper and long-lasting installation, it is recommended to allow enough clearance for the pipe to expand and contract, as it can vary in length below the high pressure peak and should not be bent near the fitting.

AC PRESS System
Multilayer sheet



AC PIPE

A multilayer pipe for AC supply installations, made from a composite material by means of a technologically advanced process by which a PERT is combined with an aluminium core which is butt welded and covered externally with a layer in PERT.

Construction

1 Inner tube in PE-RT
2 Connection layer that joins the inner tube to the aluminum tube
3 Butt welded aluminum tube
4 Connection layer that joins the inner tube to the aluminum tube
5 Outer tube in PE-RT

Pipe range

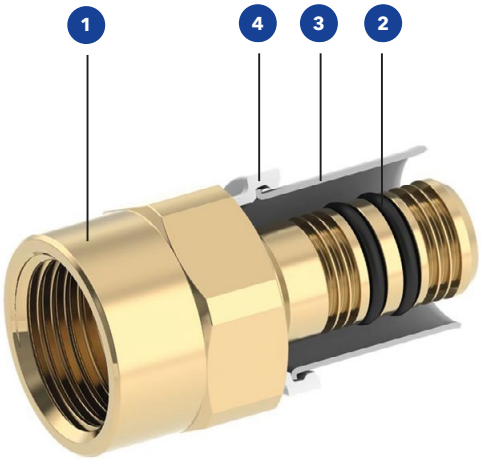
AIRPERT AC is available in sizes from 12 to 25 mm in coils.

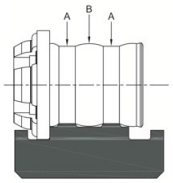
Technical date

Pipe approved: ASTM F3346-19
Working Pressure: 40 bar - Maximum pressure 45 bar
Working Temperature*: -40 °C to 95 °C
Oxygen-Permeability: Zero
Bend Radius: 5xD (D=outside diameter)
Coefficient of Thermal Expansion: 0,026 mm/mK
Thermal conducibility: 0,45 W/mK
Refrigerant compatibility: R410A, R407C, R32, R22, R134a

AC PRESS System pipe range			
Size [copper]	Multilayer pipe [mm]	External pipe size [mm]	Internal pipe size [mm]
1/4"	12x2.5	12	7
3/8"	14 x 2.5	14	9
1/2"	16 x 2.5	16	11
5/8"	18 x 2.75	18	12.5
3/4"	20 x 2.75	20	14.5
7/8"	25 x 3.25	25	18.5

AC PRESS System | Press fittings





Pipe dim	A max	B max
14	14.80	16.00
16	16.80	18.00
18	18.80	19.80
20	20.80	21.80

AC PRESS FITTINGS

Flare fittings with female threads according SAE J513 are designed to be installed using the radial compression technique.
This type of joint has seen increasing success in the field of AC installations and due to its simplicity and rapid assembly, together with its guaranteed increased level of safety.
The jaws with TH profile presses a stainless steel sleeve which locks the pipe onto the core of the fitting.
This results is a joint featuring excellent stability and durability. Tightness is ensured by the special profile of the coupling and by the double O-ring.

Compliance

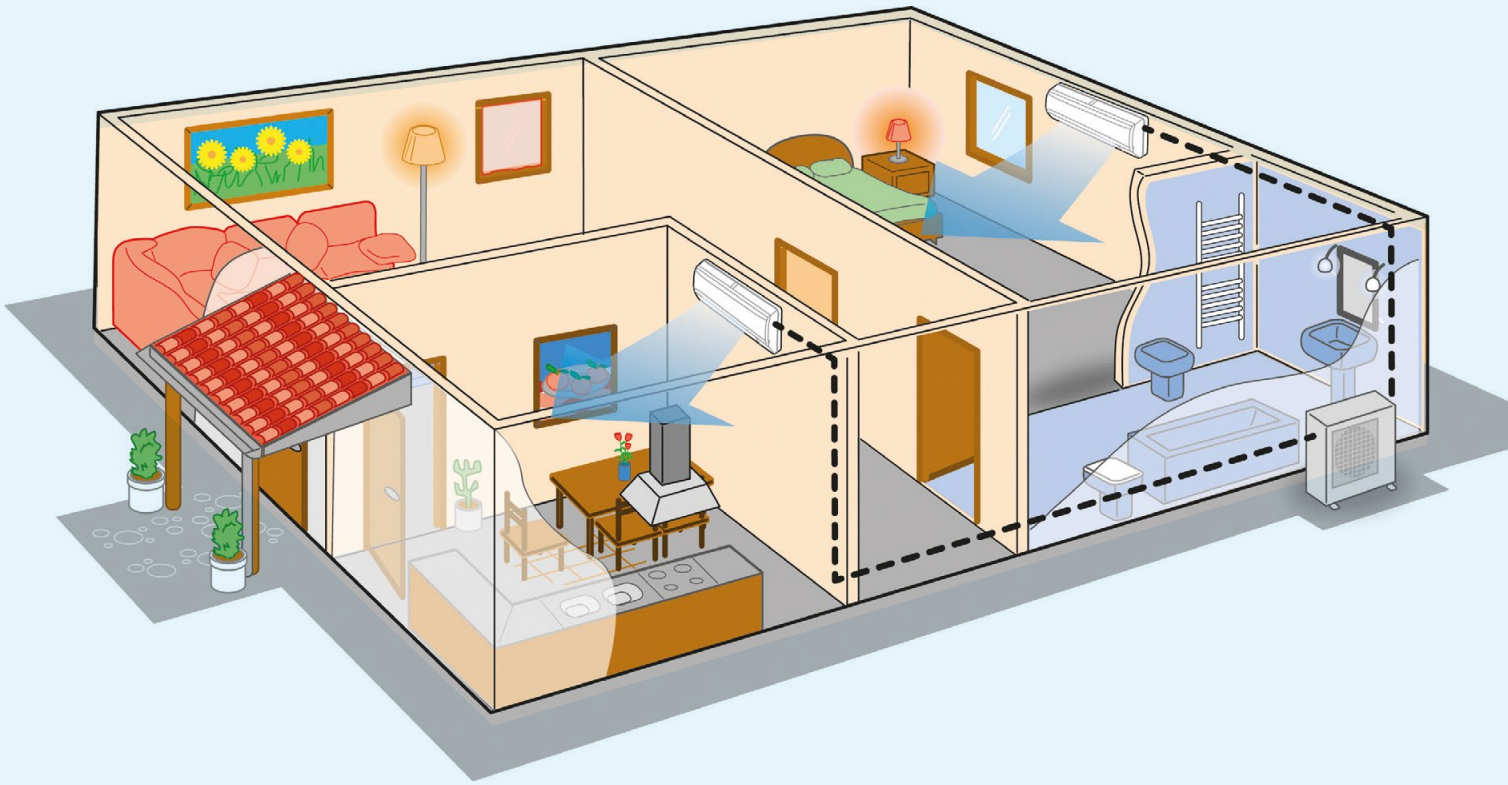
AC PRESS System it is under testing for ICC-ES listening according ASTM F3346-119.

Construction

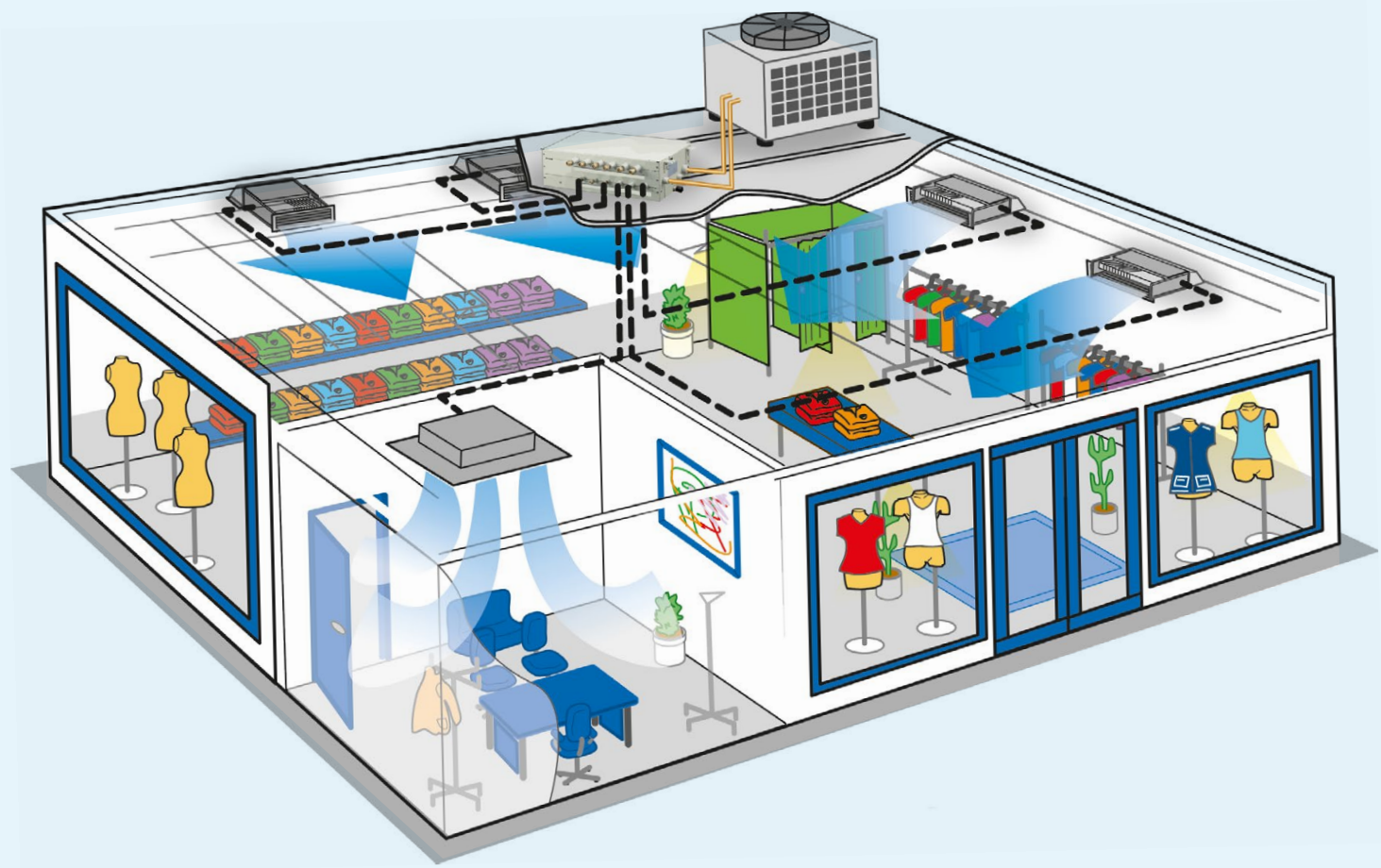
1 Body: brass CW617N EN 12164
2 O-ring: HNBR
3 Sleeve: stainless steel 304
4 Plastic fixation ring: PA

Air Condition Press units pipelines - Característics							
Performance in Btu/h	Performance in kW	Pressure side fluid	Flare Fitting SAE J513	Screw Thread UNF	Intake side Gas form	Flare Fitting SAE J513	Screw Thread UNF
4500 -11000	1,3 - 3,2	14 x 2,5	¼" SAE 45°	7/16" - 20	16 x 2,5	3/8" SAE 45°	5/8" -18
11000 - 20000	3,2 – 5,8	14 x 2,5	¼" SAE 45°	7/16" - 20	18 x 2,75	½" SAE 45°	¾" - 16
20000 - 24000	5,8 – 7,0	14 x 2,5	¼" SAE 45°	7/16" - 20	20 x 2,75	5/8"SAE 45°	7/8" - 14
24000 - 36000	7,0 – 10,5	16 x 2,5	3/8" SAE 45°	5/8" -18	20 x 2,75	5/8"SAE 45°	7/8" - 14

Example of installation in a residential environment



Example of installation in a Commercial environment



AC PRESS System

Instructions for correct installation

Fig. 1

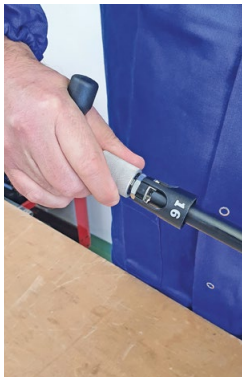


Fig. 2

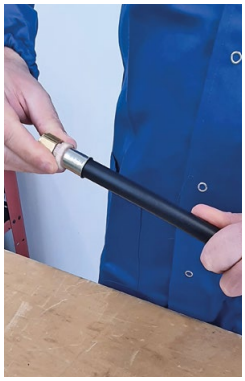


Fig. 3

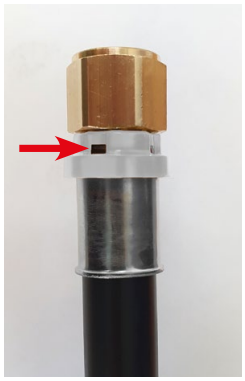


Fig. 4

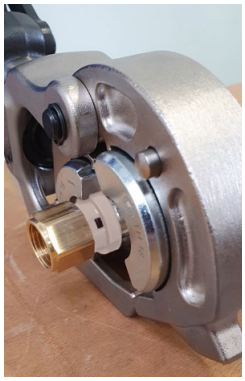


Fig. 5

Fig. 6

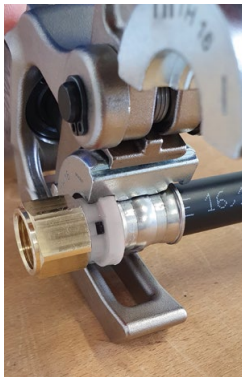


Fig. 7

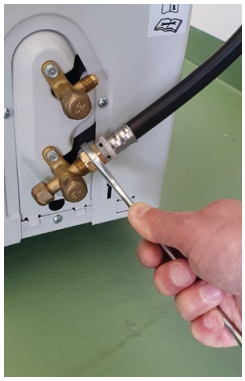


Fig. 8

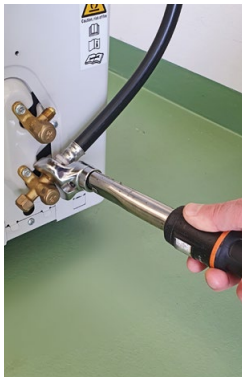


Fig. 9

Cutting
Cut the multilayer pipe with a pipe cutter or shears, verifying that the cut is perpendicular to the pipe axis **(Fig. 1)**.

Calibration - Flaring
Calibrate the cut end using the relevant calibrator, which calibrates and flares the cut end of the pipe **(Fig. 2)**.
The operation is essential, as it determines the correct internal diameter of the pipe and creates the rounded end that eases introduction of the fitting.

Insertion the fitting
insert the fitting into the pipe up to the stop, checking the correct position through the openings on the plastic ring **(Fig. 3 and 4)**.

Pressing
Place the jaws around the sleeve **(Fig. 5)** by aligning the collar of the plastic ring with the groove of the jaws **(Fig. 6)**.
Complete the pressing operation until the jaws are completely closed **(Fig. 7)**, then re-open the jaws.

Screwing
Start screwing the fitting to the unit valve with a wrench or spanner **(Fig. 8)**, completing the closure with a torque wrench **(Fig. 9)**, with the torque values indicated in the unit installation manual.

Approval bodies

A	Austrian Standards
D	DVGW
D	SKZ
D	DIN GOST
D	DIN CERTCO
DK	ETA
F	CSTB
GB	WRAS
DK	Trafik-, Bygge og Boligstyrelsen
NL	Kiwa Watermark
SE	Swedcert
IR	iab
NO	SINTEF
NL	KIWA/KOMO
USA	ICC

Testing Laboraties

A	TGM Vienna
D	DBI
D	HLK Stuttgart
D	Hygieneinstitut Gelsenkirchen
D	IMA Dresden
D	MPA Darmstadt
D	SKZ
D	TZW
DK	DTI
E	Ceis
F	CSTB
GB	NSF international
NI	KIWA
NI	KIWA Water Research
SE	Exova

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