EVODENS AMC

WALL-HUNG GAS CONDENSING BOILERS

AMC...
AMC 25/28 MI

AMC... BIC

AMC/BS 60

AMC/BS 130

- **AMC...**
from 3.4 to 35.6 kW, for heating only
- **AMC... BIC**
from 5.6 to 25.5 kW, for heating and domestic hot water production by integrated DHW tank from 40 litre with output of 29.1 or 38.5 kW in DHW mode

AMC.../BS 60 and AMC.../BS 130
from 3.4 to 35.6 kW, for heating and domestic hot water preparation by associated DHW tank associated from 60 or 130 litre
- **AMC 25/28 MI**
from 5.6 to 25.5 kW, for heating and domestic hot water micro-accumulated with output of 27.8 kW in DHW mode

AMC...: heating only

AMC... BIC, AMC.../BS... or AMC 25/28 MI: heating and domestic hot water by integrated, independent calorifier or micro-accumulated

Condensing

GAS P — All natural gases
Propane

VE — Equiped version
(boiler with expansion vessel, heating pump, safety valve)

Mounting frame delivered
(prefitted with water/gas valves)

SMART TC° — Compatible room thermostat SMART TC°

A+ WITH ROOM SENSOR — Outdoor sensor delivred with all models

CONDITIONS OF USE

boiler:

Max. operating pressure: 3 bar
Max. operating temperature: 90°C
Safety thermostat: 110°C
Power supply: 230 V/50 Hz
Protection index: IP X5D

domestic hot water:

Max. operating pressure: 10 bar

classification

B_{23} - B_{23P} - B_{33} - $C_{13(x)}$ - $C_{33(x)}$ - $C_{93(x)}$ - $C_{53(x)}$ - $C_{63(x)}$ - C_{43P} - $C_{10(3)x}$ - $C_{(12)3x}$

All of these boilers are factory fitted with:
- modulating heating circulator,,
- mounting frame with prefitted water and gas valves,
- DIEMATIC Evolution control panel with new ergonomics to control and regulate up to 3 circuits + 1 DHW circuit, depending on optional equipment connected, according to the outside temperature. It can also be used to optimise management of combined control systems and control cascades of 2 to 8 boilers.

Various air/flue gas connection configurations are possible:
we offer solutions for connection by horizontal or vertical forced flue, to a chimney, in bi-flow or to a collective 3CEP flue pipe.

CE identification N°:
0063CR3604

De Dietrich
SUSTAINABLE COMFORT®

PRESENTATION OF THE RANGE

AMC…, AMC… BIC, AMC 25/28 MI boilers are delivered fully assembled and factory tested.
They come ready to operate on natural gas H; operation on propane is possible.
AMC 15/25/35 boilers are factory fitted with a heating/DHW reversal valve for connection to an independent hot water calorifier: 2 types of optional DHW calorifiers are available:
• 60 litres, BS 60: equipped with "Titan Active System®" (wear-free anode), calorifier to be juxtaposed to the right or left of the boiler: version AMC…/BS 60,
• 130 litres, SRB 130: equipped with magnesium anode calorifier to be placed on the floor under the boiler: version AMC…/BS 130.
The boiler/DHW tank connection pipes and the DHW sensor are included in delivery with the AMC…/BS 60 and AMC…/BS models.
The AMC… BIC boiler is fitted with a DHW tank comprising 3 interconnected fully insulated stainless steel stratification tanks, combined with a plate exchanger and a load pump, with a total capacity of 40 litres, integrated in the boiler.
The AMC 25/28 MI boiler is mixed boiler and produce large quantities of domestic hot water (*** classification according to the standard EN 13203) thanks to an oversized stainless steel plate exchanger and very reactive electronics.

HIGH LEVELS OF PERFORMANCE

• High annual operating efficiency
• Very low pollutant emissions: NOx < 41 mg/kWh
• NOx classification: 6 according to pr EN 15502-1-A1
• Low noise level, in compliance with NRA

STRONG POINTS

• Particularly compact, light boilers.
• Perfect adaptation of boiler output to actual needs thanks to the stainless steel gas burner with complete premixing, modulating from 22 to 100% output, fitted with a silencer on the air intake.
• **Compact and ultra-responsive exchanger in cast Aluminium/Silicium alloy.**
• Electronic ignition and ionisation flame check.
• Delivered with hydrobloc made of brass, mounting frame with prefitted water and gas valves (including the disconnector) **allowing an automatic filling thanks to the "Active Refill Technology"**, 12 litre expansion tank (except AMC 35), automatic air vent.
• Modulating pump with energy efficiency index EEI < 0.23 for greater energy savings and lower noise levels.
• DHW expansion vessel and safety valve integrated in the boiler for AMC… BIC
• **DIEMATIC Evolution** control panel in which the control system is open to all installation configurations, including the most complex. As delivered, it can be used to control and regulate one or two direct circuits. With the addition of one or two sensors, it can be used to regulate up to 2 circuits with mixing valve; with the addition of a PCB + sensor, it can control a third circuit with mixing valve. Installation of a DHW sensors enables regulation with priority to a DHW circuit. It is specifically designed to enable **the optimization of management of combined systems**.
• Fan fitted with a non return valve operated by air intake to run with pressurised flue gas evacuation systems..

Different air/flue gas connections are possible, see page 15.

MODELS AVAILABLE

BOILER ADVANCE — A+ * WITH ROOM SENSOR

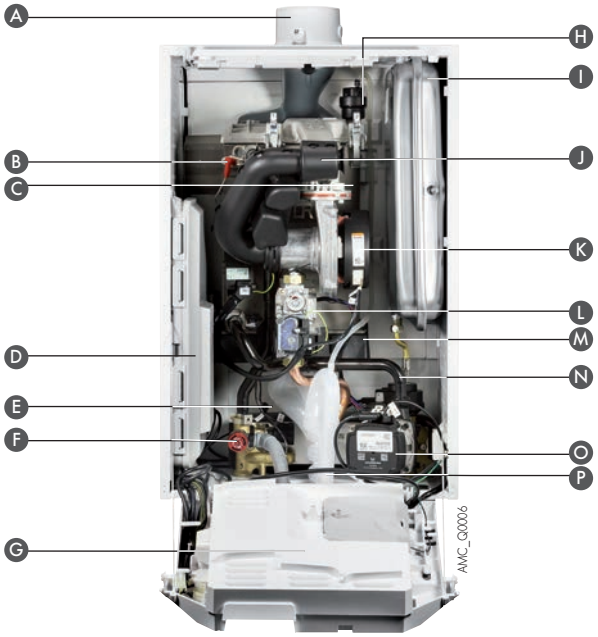
		MODEL	USEFUL OUTPUT heating mode at 50/30°C (kW)	USEFUL OUTPUT DHW mode at 80/60°C (kW)	ENERGY EFFICIENCY CLASS
 AMC_Q0002	For heating only	AMC 15	3.4 - 15.8	–	A
		AMC 25	5.6 - 25.5	–	A
		AMC 35	7.9 - 35.6	–	A
 AMC_Q0003	For heating and domestic hot water by integrated calorifier with a total capacity of 40 litres	AMC 25/28 BIC	5.6 - 25.5	5.0 - 29.1	A / B
		AMC 25/39 BIC	7.9 - 24.5	7.0 - 38.5	A / B
 AMC_Q0004	For heating and domestic hot water by 60 litre calorifier to be placed at right or at left of the boiler	AMC 15/BS 60	3.4 - 15.8	3.0 - 14.9	A / A
		AMC 25/BS 60	5.6 - 25.5	5.0 - 24.8	A / A
		AMC 35/BS 60	7.9 - 35.6	6.3 - 34.8	A / A
 AMC_Q0005	For heating and domestic hot water by 130 litre calorifier to be placed under the boiler	AMC 15/BS 130	3.4 - 15.8	3.0 - 14.9	A / A
		AMC 25/BS 130	5.6 - 25.5	5.0 - 24.8	A / A
		AMC 35/BS 130	7.9 - 35.6	6.3 - 34.80	A / A
 AMC_Q0002	For heating and instant domestic hot water production	AMC 25/28 MI	5.6 - 25.5	5.0 - 27.8	A / A

* Outdoor sensor delivred with all models

TECHNICAL SPECIFICATIONS

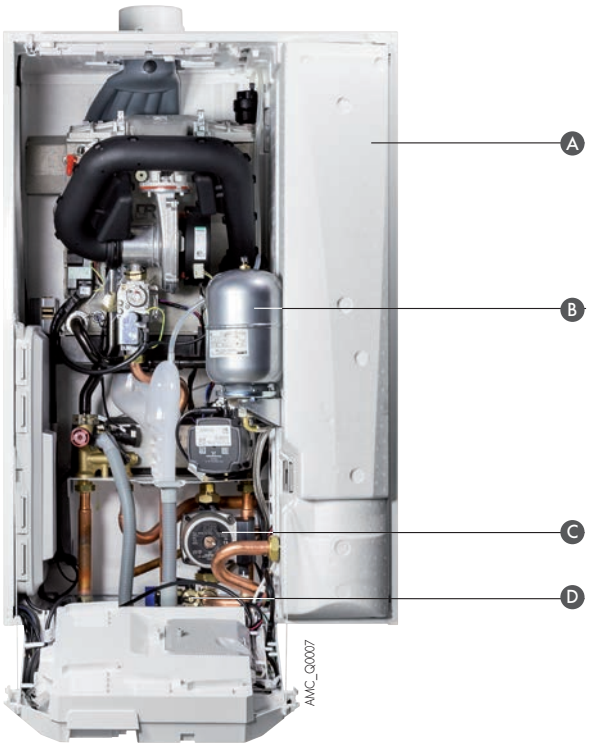
DESCRIPTION

AMC 15, AMC 25, AMC 35
AMC 25/28 MI



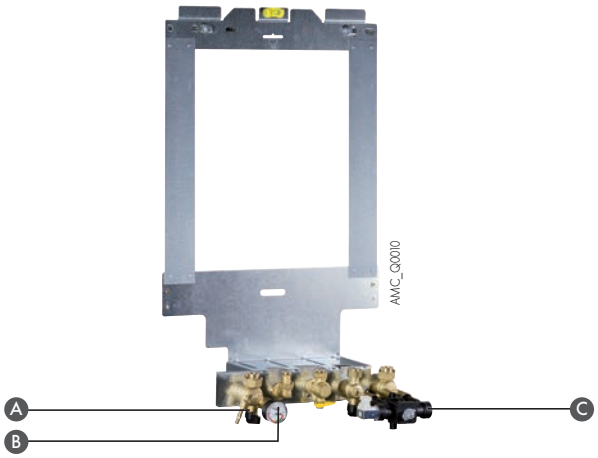
A Air/flue gas connection Ø 60/100 mm with measuring point
B Ignition and ionisation electrodes
C Exchanger in cast aluminium/silicium alloy with complete premixing stainless steel burner, modulating from 22 to 100% output
D DIEMATIC Evolution box containing the control
E Plate exchanger with large exchange surface for the production of micro-storage DHW (AMC 25/28 MI only)
F 3-bar heating safety valve
G Control panel see page 6
H Automatic air vent
I Expansion tank 12 l, initial pressure: 1 bar (except AMC 35)
J Air intake silencer
K Fan
L Gas safety unit
M Condensate receiver tank
N Heating/DHW reversal valve
O Modulating heating circulator with energy efficiency index EEI < 0.23
P Siphon

AMC... BIC



A DHW calorifier comprising 3 interconnected fully insulated stainless steel stratification tanks
B DHW expansion vessel
C DHW load pump
D DHW safety valve 7 bar

MOUNTING FRAME DELIVERED WITH THE BOILER AMC...



A Disconnector runoff to be connected to the flow collector (hose provided)
B Mechanical manometer
C Prefitted water and gas valves including the disconnector allowing an automatic filling thanks to the "Active Refill Technology"

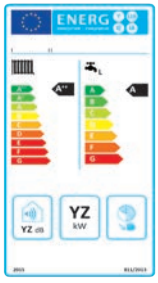
ACTIVE REFILL

EXCHANGER/BURNER

ECO SOLUTIONS
Eco-conception by De Dietrich

De Dietrich ECO-SOLUTIONS give you the latest generation of multi-energy products and systems: simpler, more efficient and more economical to guarantee your comfort and protect the environment.

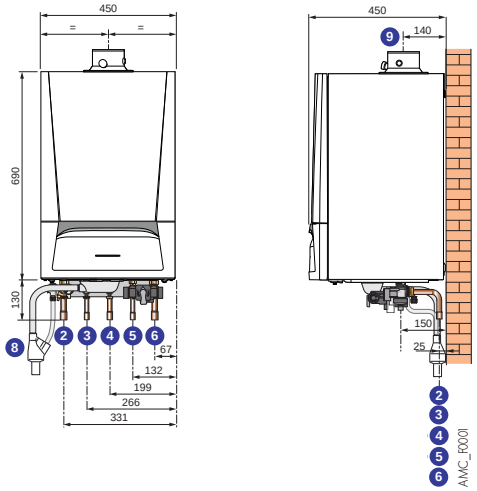
The energy label associated with the ECO-SOLUTIONS label indicates the product performance.



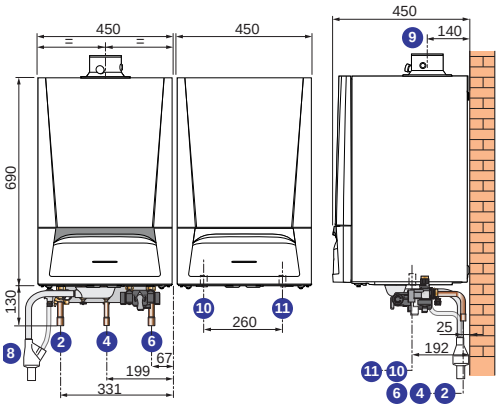
TECHNICAL SPECIFICATIONS

MAIN DIMENSIONS (mm AND INCHES)

AMC 15, AMC 25, AMC 35, AMC 25/28 MI

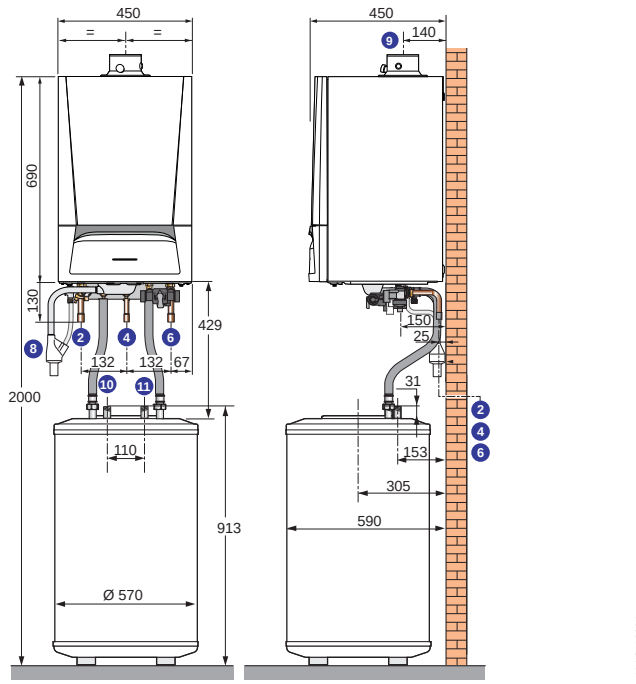


AMC 15/BS 60, AMC 25/BS 60, AMC 35/BS 60

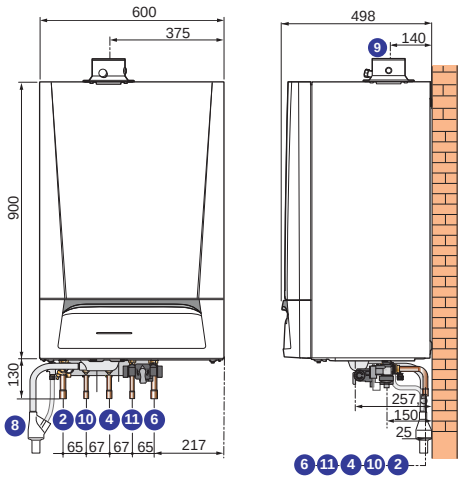


NOTA: the boiler/tank connecting kit is provided, but is not represented

AMC 15/BS 130, AMC 25/BS 130, AMC 35/BS 130



AMC 25/28 BIC, AMC 25/39 BIC



KEY

② Heating flow Cu Ø 22 mm
③ • AMC 15, AMC 25, AMC 35:
Primary calorifier outlet, interior Ø 16 mm (1)
• AMC 25/28 MI:
Domestic hot water outlet, interior Ø 16 mm
④ Gas inlet interior Ø 18 mm
⑤ • AMC 15, AMC 25, AMC 35:
Primary calorifier return, interior Ø 16 mm (1)
• AMC 25/28 MI:
Domestic cold water inlet, interior Ø 16 mm
⑥ Heating return interior Ø 22 mm
⑧ Condensates drain (flow collector delivered) PVC Ø 32 mm to be sticked
⑨ Evacuation of combustion products and air inlet pipe Ø 60/100 mm
⑩ Domestic hot water outlet:
• AMC…/BS: R 3/4"
• AMC… BIC: interior Ø 16 mm
⑪ Domestic cold water inlet:
• AMC…/BS: R 3/4"
• AMC… BIC: interior Ø 16 mm

(1) If connecting a independent DHW calorifier.
R: Threading

ENERGY LABEL

Each boiler comes with its energy label, which incorporates various items of information: energy efficiency, annual energy consumption, manufacturer's name, noise level…

If you combine your boiler, for instance, with a solar system, a DHW storage tank, a control device or another generator, you can improve your system's performance and generate the corresponding «system» label: **go to our website « www.ecodesign.dedietrich-heating.com »**

TECHNICAL SPECIFICATIONS

A+ WITH ROOM SENSOR *

* Outdoor sensor delivred with all models

TECHNICAL SPECIFICATIONS

SPECIFICATIONS BOILER

Boiler type: condensing
Burner: modulating with complete premixing
Energy used: natural gas or propane

Combustion evacuation: chimney or sealed
Protection index: IP X5D
Ref. CE certificate: 0063CR3604

Min. flow temperature: 15°C
Min. return temperature: none

MODEL		AMC	15	25	35	25/28 BIC	25/39 BIC	15/BS 60 15/BS 130	25/BS 60 25/BS 130	35/BS 60 35/BS 130	25/28 MI
Useful output at 50/30°C (heating mode)		kW	3.4-15.8	5.6-25.5	7.9-35.6	5.6-25.5	7.9-25.5	3.4-15.8	5.6-25.5	7.9-35.6	5.6-25.5
Useful output at 80/60°C min/max		kW	3.0-14.9	5.0-24.8	7.0-34.5	5.0-24.8	7.0-24.8	3.0-14.9	5.0-24.8	7.0-34.5	5.0-24.8
Nominal output at 80/60°C (DHW mode)		kW	-	-	-	29.1	38.5	14.9	24.8	34.8	27.8
Efficiency at …% output and ….°C water temp.	• 100 % et average temp. 70°C	%	99.3	99.2	99.1	99.2	97.5	99.3	99.2	99.1	99.2
	• 30 % at return temp. 30°C	%	110.2	110.1	110.6	110.1	107.9	110.2	110.1	110.6	110.1
Seasonal space heating energy efficiency (without contribution of regulation)		%	94	94	95	94	92	94	94	95	94
Seasonal space heating energy efficiency AMC (with outdoor sensor)		%	96	96	97	96	94	96	96	97	96
Nominal water flow at Pn, ΔT = 20 K		m^3/h	0.64	1.07	1.48	1.07	1.48	0.64	1.07	1.48	1.07
Manometric height available heating circuit		mbar	585	355	231	355	231	585	355	231	355
Water capacity		l	1.7	1.7	2.3	1.8	2.4	1.7	1.7	2.3	1.7
Stand-by losses at ΔT 30 K		W	78	78	54	71	71	78	78	54	78
Gas flow at Pn	• gas natural H	m^3/h	1.59	2.65	3.71	3.10	4.11	1.59	2.65	3.71	2.96
(15°C, 1 013 mbar)	• propane	m^3/h	0.61	1.02	1.44	1.20	1.59	0.61	1.02	1.44	1.15
Max flue gas temperature		°C	59	74	79	81	84	59	74	79	81
Max flue gas mass flow rate		kg/h	25.2	42.1	57.3	49.3	64	25.2	42.1	57.3	47.1
NOx emissions according to EN15502-1-A		mg/kWh	27	25	41	25	41	27	25	41	25
Pressure available at the boiler outlet		Pa	80	120	140	130	160	80	120	140	130
Acoustic power level		dB	45	51	53	52	46	45	51	53	51
Net weight		kg	45	45	41	70	58	86/101	86/101	88/103	44

SPECIFICATIONS DOMESTIC HOT WATER

Max. operating pressure DHW: 10 bar

MODEL	AMC	25/28 BIC	25/39 BIC	15/BS 60	15/BS 130	25/BS 60	25/BS 130	35/BS 60	35/BS 130	25/28 MI
DHW calorifier capacity	l	40.5	40.5	57.3	125	57.3	125	57.3	125	-
Exchanged power	kW	28.6	39.7	14.9	14.9	22	24	25	25	28.6
Flow over 10 min at ΔT = 30 K	l/10 min	200	240	125	200	145	200	150	200	-
Flow per hour at ΔT = 35 K	l/h	746	1236	355	355	540	590	615	615	-
Spec. flow at ΔT = 30 K (compliance with EN 13203-1)	l/min	20.0	24.0	12.5	20.0	14.5	20.0	15.0	20.0	14
Min. pressure for a flow of 11 l/min	bar	-	-	-	-	-	-	-	-	1.3
Coefficient of heat losses	W/K	1.36	1.36	1.03	1.28	1.03	1.28	1.03	1.28	-

Domestic performance at room temp. 20°C, cold water temp. 10°C, primary hot water temp. 85°C

CONTROL PANEL
DIEMATIC EVOLUTION

CONTROL PANEL DIEMATIC EVOLUTION

The DIEMATIC Evolution control panel is a very advanced control panel, with new control ergonomics which includes electronic programmable regulation as standard to modulate the boiler temperature by activating the **modulating burner** according to the outside temperature and the room temperature if a room thermostat or a remote control is connected (optional).
As standard, DIEMATIC Evolution is capable of automatically operating a central heating installation with 1 or 2 direct circuits without mixing valve and 1 or 2 circuits with mixing valve (the 2 flow sensors - package AD199 - must be ordered separately, however).
By connecting another "PCB + sensor for 1 valve circuit" option (package AD249), it is therefore possible to control up to 3 circuits in total and each of these circuits can be fitted with a room thermostat or a remote control (optional).
Connection of a domestic hot water sensor makes it possible to programme and regulate a DHW circuit (AD212 - optional).
This control system has been specifically developed to enable **optimum management of systems combining various heating generators** (boiler + heat pump or + solar system…). It allows the installer to set the parameters for the entire heating installation regardless of its degree of complexity.
In the context of larger installations, it is also possible to connect 2 and as many as 8 boilers in cascade.

CHOICE OF OPTIONS ACCORDING TO THE CONNECTED CIRCUITS

Circuit type		DHW	1 or 2 x direct	valve	direct + 1 valve	2 x valve	direct + 2 x valve	3 x valve
Control panel DIEMATIC Evolution (1)(2)	AMC 15, 25, 35	1 x AD212	as standard	1 x AD199	1 x AD199	2 x AD199	1 x AD199 + 1 x AD249	2 x AD199 + 1 x AD249
	AMC../BS.., AMC 25/28 MI, AMC 25/28 BIC, AMC 25/39 BIC	as standard	as standard	1 x AD199	1 x AD199	2 x AD199	1 x AD199 + 1 x AD249	2 x AD199 + 1 x AD249

(1) Each of the circuits "**heating**" can be completed in choice by a remote control.
(2) Cascade up to 8 boilers possible.

DIEMATIC EVOLUTION CONTROL PANEL OPTIONS

DOMESTIC HOT WATER SENSOR (LENGTH 5 m) - PACKAGE AD212

This is used for regulating the DHW temperature as a priority and programming of domestic hot water production with an independent calorifier.

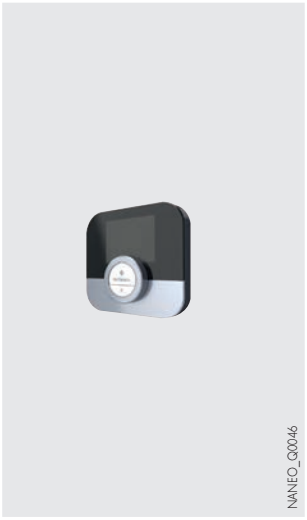
SENSOR FOR MIXING VALVE (LENGTH 2.5 m) - PACKAGE AD199

This sensor is required to connect the first and the second circuit with mixing valve to a boiler fitted with a DIEMATIC Evolution control panel.

PCB + SENSOR FOR 1 MIXING VALVE (LENGTH 2.5 m) - PACKAGE AD249

This is used to control a mixing valve with an electromechanical or electrothermal motor. The PCB is inserted into the DIEMATIC Evolution panel connected by pin connections. DIEMATIC Evolution can receive 1 "PCB + sensor" option, enabling it to control 1 additional mixing valve.

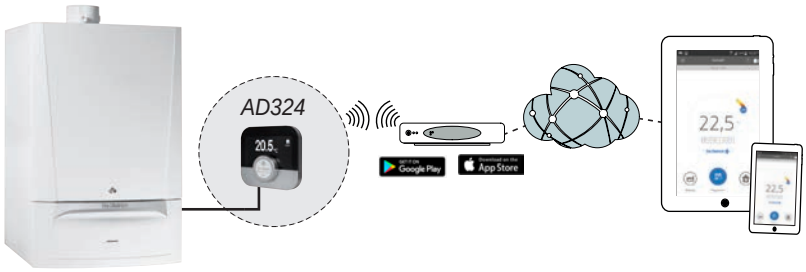
DIEMATIC EVOLUTION CONTROL PANEL OPTIONS



SMART TC° CONNECTED ROOM THERMOSTAT (WIRED) - PACKAGE AD324

SMART TC° enables remote control of the heating and domestic hot water via a free to download application easy for the user to learn, with the option of providing a professional with access to their installation.
It enables a precise remote temperature and modulation control, integrates several timer programs with programming help, gives access to the installation parameters including energy consumption indicators with data saving.
If the SMART TC° can operate as a classic remote control, without Wifi or application, it is recommended to connect it to the internet to benefit from the latest updates.

principle of installation



PROGRAMMABLE ROOM THERMOSTAT (WIRE) - PACKAGE AD137
PROGRAMMABLE ROOM THERMOSTAT (WIRELESS) - PACKAGE AD200
NON-PROGRAMMABLE ROOM THERMOSTAT - PACKAGE AD140

These thermostats handle the regulation and weekly programming of the heating by activating the burner and in accordance with the following 3 modes of operation:
- AUTOMATIC: according (4 programs to choose from) automatically commutes the installation into «comfort» or «low» mode. The comfort and low temperatures can be adjusted between 5 and 30°C.
- PERMANENT: maintains the set temperature all the time (between 5 and 30°C).
- VACATION: intended for absences of long duration, maintains the desired temperature (between 5 and 30°C) for a predetermined duration (1 to 99 days).

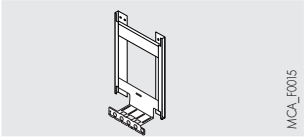
SENSOR FOR STORAGE TANK (LENGTH 5 m) - PACKAGE AD250

Includes 1 sensor for managing a storage tank with a boiler fitted with a DIEMATIC Evolution control panel.
Can be used as a cascade flow sensor.

S-BUS CABLE WITH PLUGS, 1.5 m - PACKAGE AD308
S-BUS CABLE WITH PLUGS, 12 m - PACKAGE AD309
S-BUS CABLE WITH PLUGS, 20 m - PACKAGE AD310
S-BUS PLUG - PACKAGE AD321

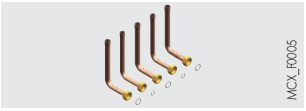
The BUS cable enables two boilers equipped with the DIEMATIC EVOLUTION panel to be connected as part of a cascade installation.

BOILERS OPTIONS



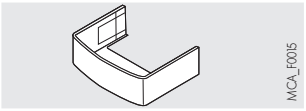
STAND-OFF FRAME (ALL MODELS EXCEPT AMC... BIC) - PACKAGE EH888
STAND-OFF FRAME FOR AMC... BIC - PACKAGE EH889

This frame replaces the mounting frame delivered as standard with AMC boilers in order to make it possible to pass the water and gas connection pipes behind the boiler (upwards). The plumbing fixtures are taken from the original frame and fitted to the stand-off frame.



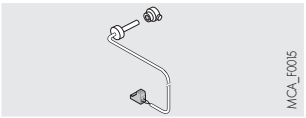
CONNECTING PIPE KIT FOR STAND-OFF FRAME - PACKAGE HR40

This kit comprises the 5 water and gas connecting pipes to be connected to the plumbing fixtures on the AMC mounting frames to be passed behind the top rear section of the boiler through the stand-off frame (option above).



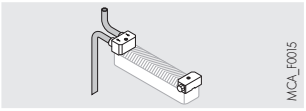
PIPE COVER (ALL MODELS EXCEPT AMC... BIC) - PACKAGE HR42
PIPE COVER FOR AMC... BIC - PACKAGE HR52

Provides a neat finish underneath the boiler.



FLUE GAS THERMOSTAT (ALL MODELS EXCEPT AMC... BIC) - PACKAGE HR43
FLUE GAS THERMOSTAT FOR AMC... BIC - PACKAGE HR53

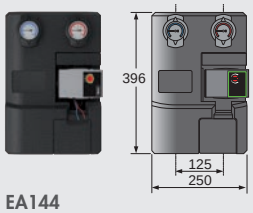
This thermostat cut the boiler when the flue gas temperature exceeds 110°C.



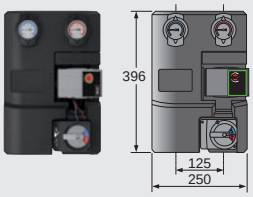
CLEANING TOOL PLATE EXCHANGER - PACKAGE HR44

(for AMC 25/28 MI only)

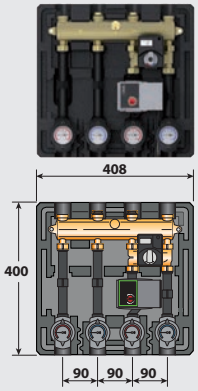
EA143



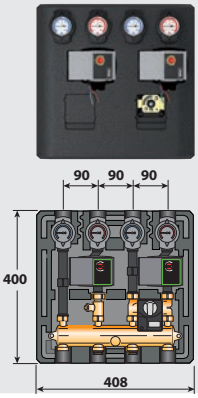
EA144



EA145



MT12



8575F204/8575Q064/8575F204/8575Q068A/8575Q062/8575F200/8575Q063/8575F200

HYDRAULIC MODULE FOR 1 DIRECT CIRCUIT - PACKAGE EA143

Fully assembled, insulated and tested; fitted with an electronic pump, thermometers built into the gate valves, and a non return valve built into the return valve.

HYDRAULIC MODULE FOR 1 CIRCUIT WITH VALVE - PACKAGE EA144

Fully assembled, insulated and tested, fitted with an electronic pump, a motorized 3-way mixing valve, thermometers built into the gate valves and a non-return valve built into the return valve.

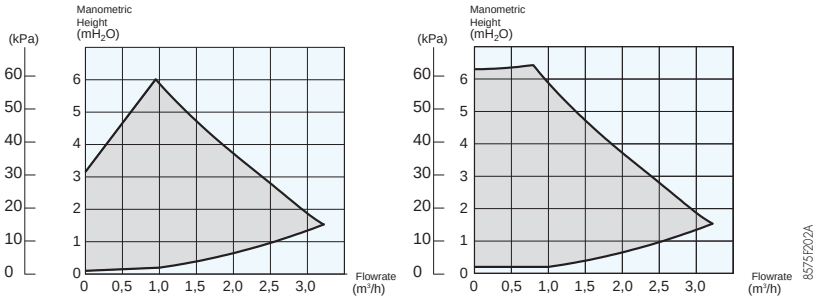
COMPACT HYDRAULIC MODULE FOR 2 CIRCUITS (WITH 1 PUMP WITH ENERGY EFFICIENCY INDEX EEI ‹ 0.23) - PACKAGE EA145

This module is fitted with the heating pump and the motorized 3-way valve for the circuit with mixing valve, with thermometers built into the gate valves from the 2 circuits. The module is delivered assembled, insulated and tested.

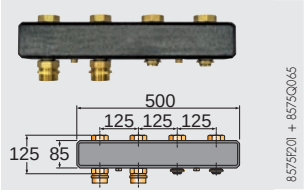
COMPACT HYDRAULIC MODULE FOR 2 CIRCUITS (WITH 2 PUMPS WITH ENERGY EFFICIENCY INDEX EEI ‹ 0.23 FOR A DIRECT CIRCUIT AND A CIRCUIT WITH MIXING VALVE) - PACKAGE MT12

This module is fitted with the heating pump for the direct circuit, the pump and the motorized 3-way valve for the circuit with mixing valve, with thermometers built into the gate valves from the 2 circuits. The module is delivered assembled, insulated and tested.

specifications heating circulating pump (WILO-YONOS PARA RS 25/6 fitted to the module EA143 and EA144 or RS 15/6 fitted to the hydraulic module EA145 and MT12)



BOILERS OPTIONS



INSULATED COLLECTOR FOR 2 OR 3 MODULES - PACKAGE EA140

With an installation with 2 or 3 circuits with modules EA143/144.

INSULATED COLLECTOR FOR 1 HYDRAULIC MODULE - PACKAGE EA142

This console allows secure one hydraulic module for one direct circuit or circuit with mixing valve on the wall.
Is used only when one of the two hydraulic modules is mounted. It includes two brass male / female connectors.

SET OF 2 WALLS CONSOLES FOR COLLECTOR - PACKAGE EA141

These consoles are used to fix the collector to the wall.

SET CONNECTION G IN R (1" AND 3/4") - PACKAGE BH84

This kit includes 2 x G 1"-R 1" fittings and 1 x G 3/4"-R 3/4" fitting with gaskets and can be used to switch from flat gasket fittings to conical fittings (water tightness in the threading).

DISCONNECTING CYLINDER 60/60-1" - PACKAGE GV45

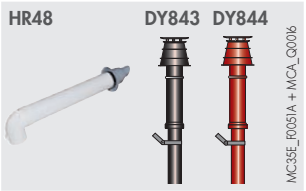
For all installations with several circuits (1 direct circuit + 1 valve circuit) or for installations in cascade up to 70 kW, the use of a disconnecting cylinder is highly recommended.
The 60/60-1" cylinder is delivered with 1 manual air vent and 1 drainage valve.
It is delivered insulated and fitted with a bracket to secure it to the wall.

CONDENSATE NEUTRALISATION TANK - PACKAGE SA1
WALL BRACKET FOR NEUTRALISATION TANK - PACKAGE SA2
GRANULE REFILL FOR NEUTRALISATION TANK - REF. 94225601 (10 KG)

The materials used for the condensates flow pipes must be appropriate; otherwise the condensates must be neutralised. An annual check of the neutralisation system and particularly the effectiveness of the granules by measuring the pH is necessary. If need be, the granules must be replaced.

PRINCIPLE
The acidic condensates flow through a tank filled with granules before being discharged into the waste water network.

AIR/GAS FLUE ACCESSORIES SPECIFIC TO EVODENS AMC BOILERS



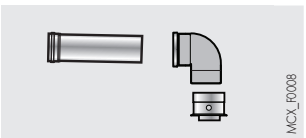
PPS/ALUMINIUM WALL TERMINAL Ø 60/100 mm - PACKAGE HR48
VERTICAL TERMINAL PPS/ALUMINIUM Ø 80/125 mm (BLACK) - PACKAGE DY843
VERTICAL TERMINAL PPS/ALUMINIUM Ø 80/125 mm (RED) - PACKAGE DY844

ADAPTER Ø 80/125 mm - PACKAGE HR38

Is fitted instead and in the place of the Ø 60/100 mm fitting delivered mounted on the boiler. It enables the **direct** connection of a vertical forced flue Ø 80/125 mm or a boiler connection kit if connected to the 3 CEp duct, see diagram on next page.

ADAPTER BI-FLOW Ø 60/100 mm TO 2 X Ø 80 mm - PACKAGE DY868

For connection with separate air and flue gas pipes.



CONNECTING KIT Ø 80/125 mm ON COLLECTIVE OVER PRESSURE FLUE SYSTEMS DUCT - PACKAGE DY887

If connected to a 3 CEp duct, the adapter Ø 60/100 mm delivered with the boiler should be removed and replaced by package DY887 presented opposite, which incorporates the adapter Ø 80/125 mm as standard. To determine the position of the connection to the 3 CEp duct, see diagram on next page.

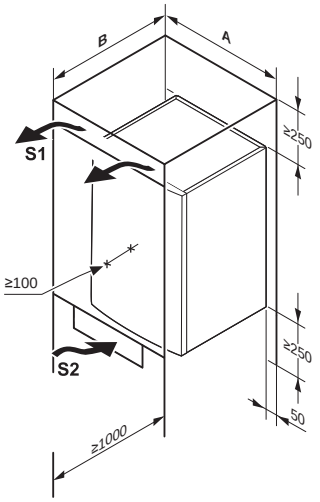
INFORMATIONS REQUIRED
FOR INSTALLATION

STATUTORY GUIDELINES FOR INSTALLATION AND MAINTENANCE

The installation and maintenance of the appliance in both residential buildings and establishments open to the public must be carried out by a qualified professional in compliance with the statutory texts of the codes of practice in force.

POSITIONING RULES

AMC… condensing boilers must be installed in premises protected from frost, which can also be ventilate, they must in no event be installed above a heat source or a cooking appliance.
The IP X5D protection index enables them to be installed in kitchens and bathrooms, excluding protection volumes 1 and 2, however. The wall to which the boiler is secured must be capable of bearing the weight of the boiler when full of water.
In order to ensure adequate accessibility around the boiler, particularly if the boiler is installed in a closed casing we recommend that you respect the minimum dimensions given opposite.

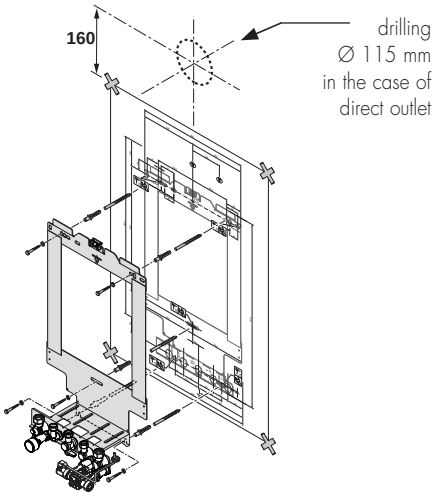


AMC_F0009

S1 + S2 = • 600 cm² (B_{23P})
• 150 cm² (C_{13x}, C_{33x}, C_{93x}, C_{53})

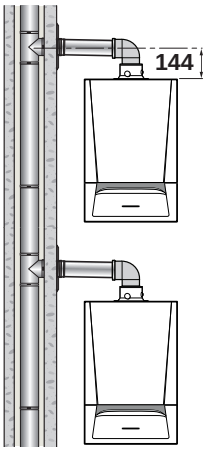
	AMC 15,25, 35 AMC 25/28 MI	AMC 25/28 BIC AMC 25/39 BIC
A	⩾ 550	⩾ 700
B	⩾ 550	⩾ 600

Horizontal forced flue



AMC_F0012

connection to collective over pressure flue systems duct with kit DY887



AMC_F0012

In order to avoid damage to boilers, it is necessary to prevent the contamination of combustion air by chloride and/or fluoride compounds, which are particularly corrosive.
These compounds are present, for example, in aerosol spray cans, paints, solvents, cleaning products, washing powders/liquids, detergents, glues, snow clearing salts, etc.
It is therefore necessary:
- To avoid sucking in air discharged from premises using such products: hairdressers, dry cleaners, industrial premises (solvents), premises containing refrigeration systems (risk of leaking refrigeration fluid), etc.
- To avoid the storage of such products close to boilers.

Please note that, if the boiler and/or its peripherals become corroded by chloride and/or fluoride compounds, our contractual warranty cannot be invoked.

VENTILATION

This must comply with prevailing regulations.

GAS CONNECTION

Comply with prevailing national or even local instructions and regulations. In all cases, a sectional valve is fitted as close as possible to the boiler. This valve is delivered prefitted to the hydraulic connection plate delivered with AMC boilers. A gas filter must be fitted to the boiler inlet.

INFORMATIONS REQUIRED
FOR INSTALLATION

ELECTRICAL CONNECTION

This must comply with the prevailing standard.
The boiler must be powered by an electrical circuit comprising a omnipole switch with an opening distance > 3 mm. Protect the connection to the mains with a 6A fuse.

NOTES:
- The sensor cables must be separated from the 230 V circuits by at least 10 cm
- In order to protect the pump antifreeze and cleaning functions, we recommend not switching off the boiler at the mains switch.

HYDRAULIC CONNECTION

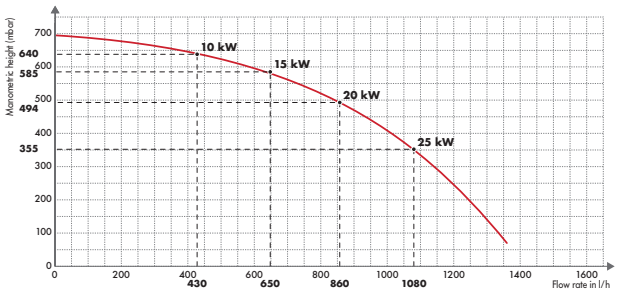
IMPORTANT: The principle of a condensing boiler is to recycle the energy contained in the water vapour in the combustion gases (latent vaporisation heat). Consequently, to achieve an annual operating efficiency in the order of 109%, it is necessary to size the heating surfaces in such a way as to obtain low return temperatures, below the dew point (e.g. underfloor heating, low temperature radiators, etc.) during the entire heating period.

CONNECTION TO THE HEATING CIRCUIT

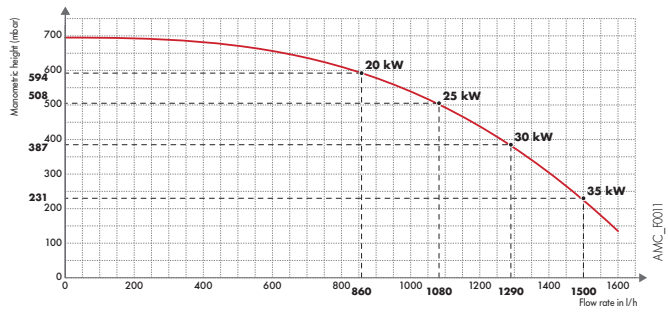
AMC… boilers must only be used in closed circuit heating installations. The central heating systems must be cleaned to eliminate the debris (copper, strands, brazing flux) linked to the installation of the system and deposits that can cause malfunctions (noise in the system, chemical reaction between metals). More particularly, if fitting a boiler to an existing installation, it is strongly recommended that you clear sludge out of the system before installing the new boiler.
Furthermore, it is important to protect central heating installations against the risk of corrosion, scaling and microbiological growth by using a corrosion inhibitor adapted to all types of systems (steel, cast iron radiators, heated floor, PER).
The water treatment products used must comply with regulations.

MANOMETRIC HEIGHT AVAILABLE FOR HEATING CIRCUIT

· AMC 15, AMC 25,
AMC 25/28 MI, AMC 25/28 BIC



· AMC 35
AMC 25/39 BIC



CONDENSATES DISCHARGE

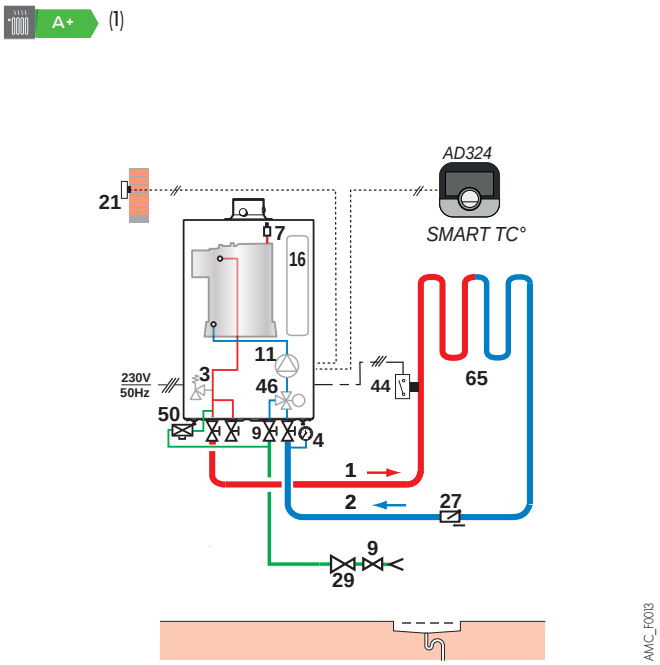
The siphon provided must be connected to the waste water discharge system. The connection must be removable and the flow of condensates visible. The connections and pipes must be in corrosion-resistant material. An optional condensates neutralisation system is available (package SA1 see page 91).

INSTALLATION EXAMPLES

The examples presented below cannot cover the full range of installation scenarios which may be encountered.
Their purpose is to draw the attention to the basic rules to be followed. A certain number of control and safety devices (some of which are already integrated as standard in AMC… boilers) are represented but it is ultimately up to installers, experts, consultant engineers and design departments to take the final decision on the safety and control devices to be used in the boiler room according to its specificities. In all cases, it is necessary to abide by the codes of practice and prevailing regulations.

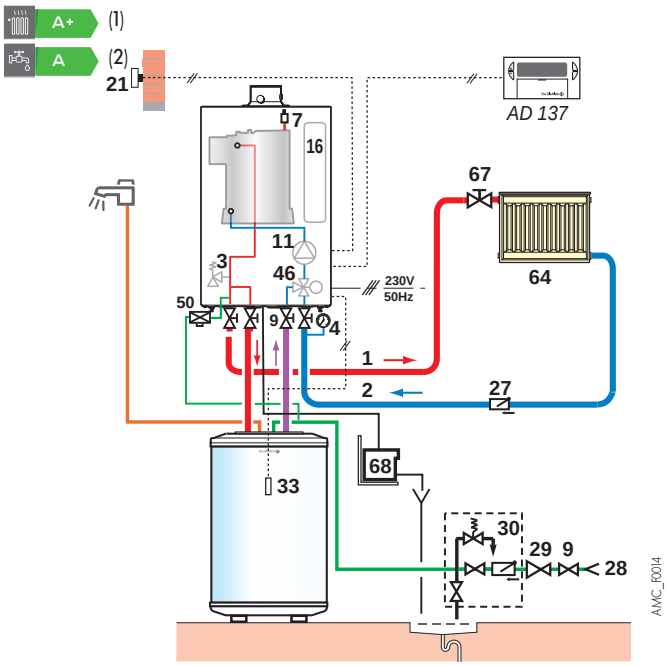
ATTENTION: for the connection of domestic hot water, a sleeve made of steel, cast iron or any other insulating material must be interposed between the hot water outlet and these pipes to prevent any corrosion to the connections, if the distribution pipes are made of copper.

INSTALLATION OF A AMC 15, AMC 25 OR AMC 35
with 1 direct underfloor heating circuit



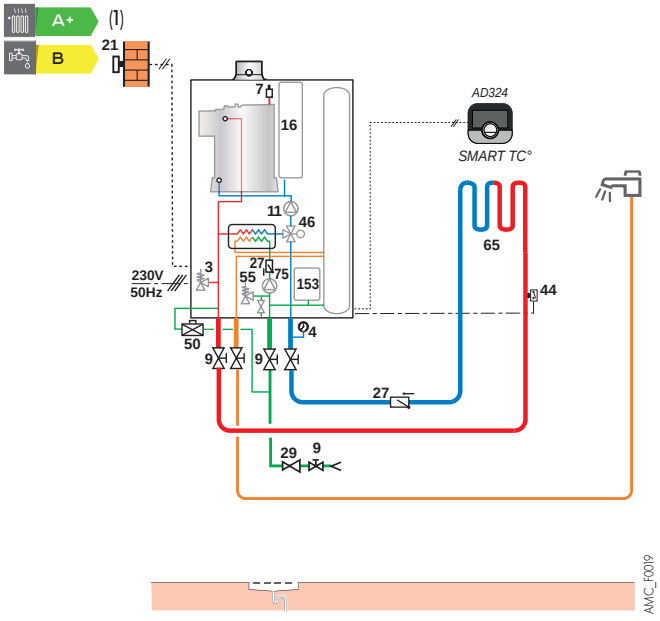
(1) AMC 15 to 35 completed with a room sensor (outdoor sensor delivered)

INSTALLATION OF A AMC…/BS130
with 1 radiator circuit



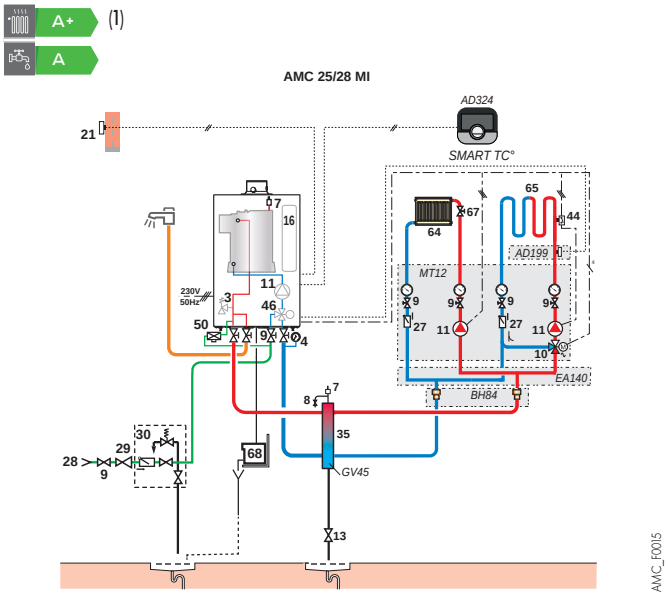
(1) AMC 15 to 35 completed with a room sensor (outdoor sensor delivered)
(2) With AMC 25 and AMC 35

INSTALLATION OF A AMC… BIC
with 1 direct underfloor heating circuit



(1) AMC 25/28 BIC completed with a room sensor (outdoor sensor delivered)

INSTALLATION OF A AMC 25/28 MI
with 1 direct circuit + 1 underfloor heating circuit with mixing valve



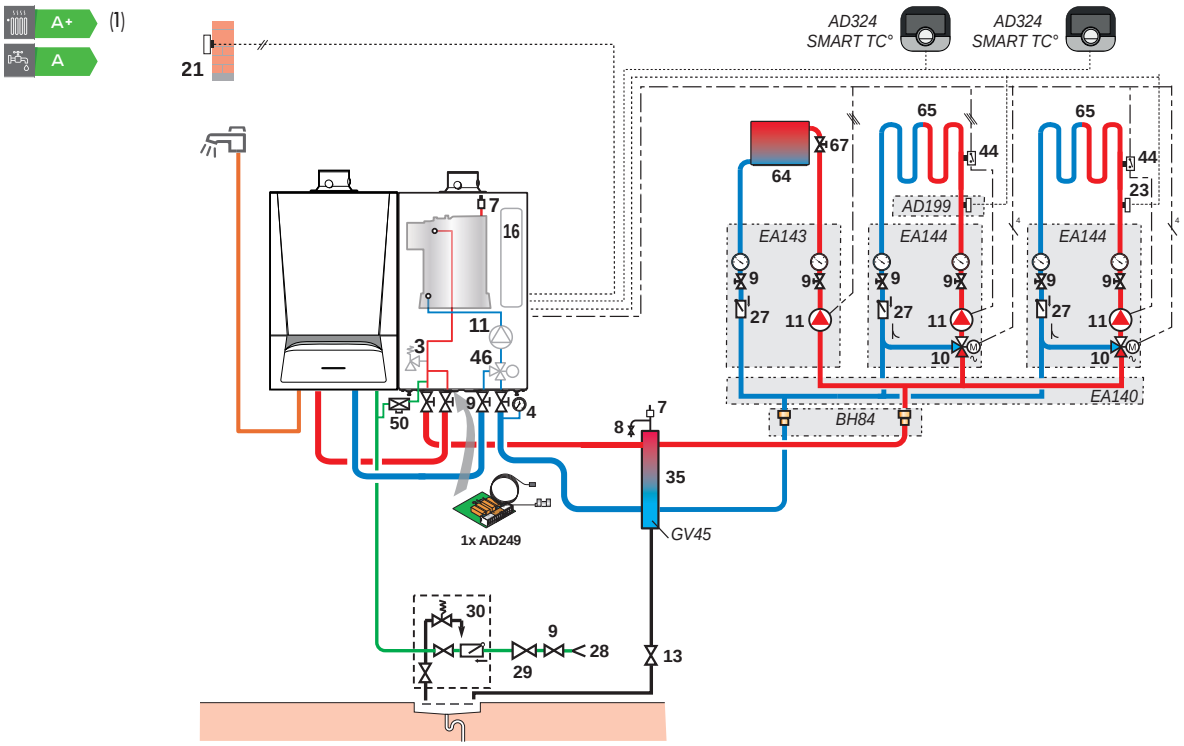
(1) AMC 25/28 MI completed with a room sensor (outdoor sensor delivered)

Key: voir page 14

INSTALLATION EXAMPLES

INSTALLATION OF A AMC.../BS 60

with 1 direct circuit + 2 circuits with mixing valve, all behind a disconnecting cylinder



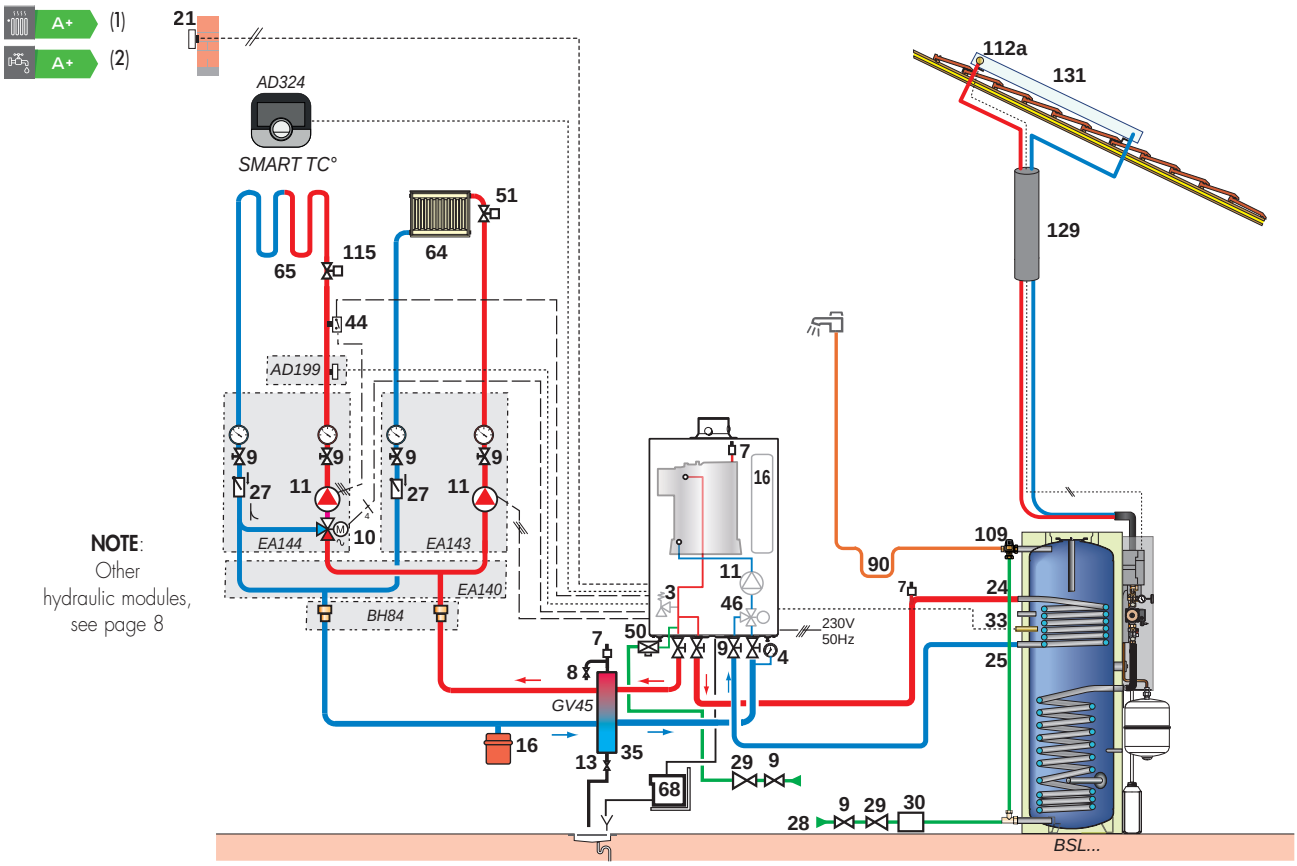
NOTE: Other hydraulic modules, see page 8

AMC_F0116

(1) AMC 15, 25, 35 completed with a room sensor (outdoor sensor delivered)

INSTALLATION OF A AMC 15, 25 OR 35

with 1 radiator circuit + 1 circuit with mixing valve, behind a disconnecting cylinder + 1 solar system INISOL UNO for DHW production



NOTE: Other hydraulic modules, see page 8

AMC_F0117

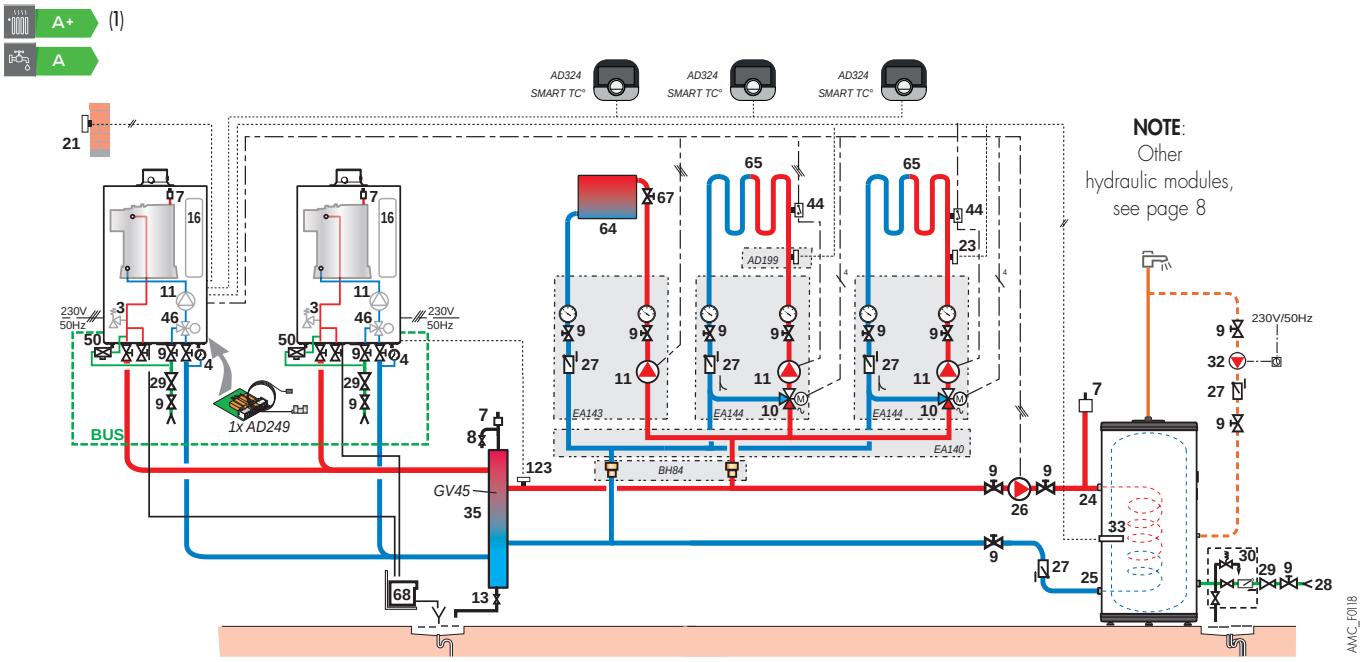
(1) AMC 15, 25, 35 completed with a room sensor (outdoor sensor delivered)
(2) With 3 solar collector DIETRISOL PRO D230

Key: voir page 14

INSTALLATION EXAMPLES

INSTALLATION OF 2 AMC... BOILERS IN CASCADE

with 1 direct circuit, 2 circuits with mixing valve and 1 DHW production circuit, all 4 behind a disconnecting cylinder



(1) AMC 15, 25, 35 completed with a room sensor (outdoor sensor delivered)

KEY

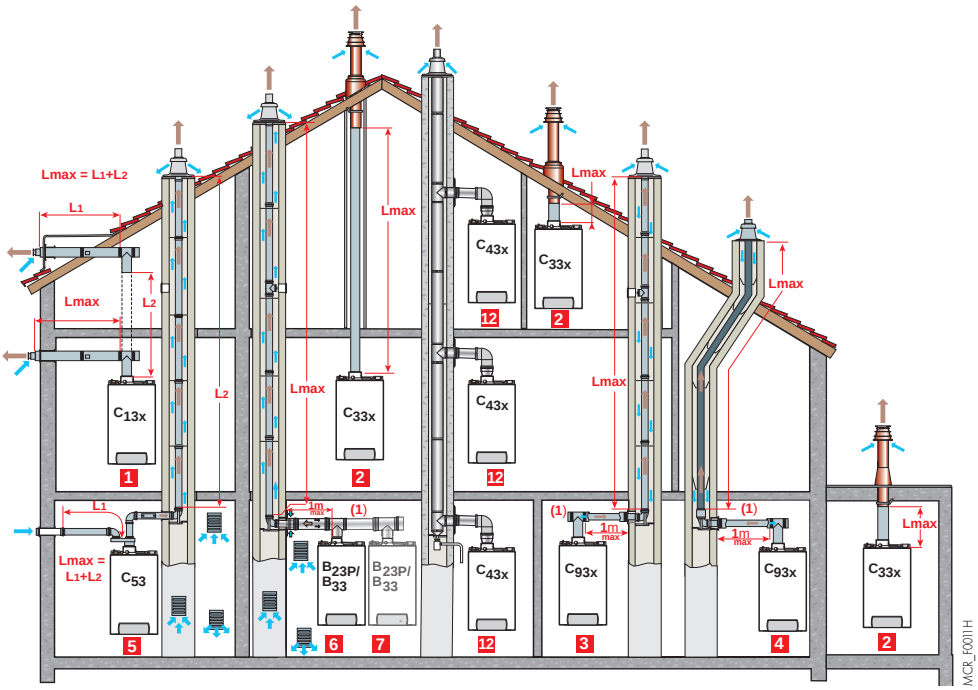
1 Heating outlet
2 Heating return
3 Safety valve 3 bar
4 Pressure gauge
7 Automatic air vent
8 Manual air vent
9 Isolation valve
10 3-way mixing valve
11 Electronic heating pump
13 Flush valve
16 Expansion tank (except AMC 35)
18 Heat circuit filling
21 Outside sensor
23 Outlet temperature sensor after mixing valve
24 Primary inlet on the DHW tank exchanger
25 Primary outlet on the DHW tank exchanger
26 Domestic water load pump
27 Non-return valve
28 Domestic cold water inlet
29 Pressure reducer
30 Sealed safety device calibrated to 7 bars (1)
32 (Optional) DHW loop pump
33 DHW temperature sensor
35 Disconnecting cylinder (available as an option - see page 9)
37 Compensating valve
44 65°C limiter thermostat with manual reset for underfloor heating
46 3 way-directional valve with motor reversing
50 Disconnector
51 Thermostat valve
55 Sealed DHW safety valve calibrated to 7 bars
61 Thermometer
64 Radiator circuit (gentle heat radiators, for example)
65 Low temperature circuit (underfloor heating, for example)
67 Manual valve
68 Condensates neutralisation system
72 Hydraulic bypass
75 Pump for sanitary use
79 Primary outlet of the solar exchanger
80 Primary inlet of solar exchanger
81 Electrical resistance
84 Stop valve with releasnon return valve
85 Solar circuit pump
86 Flow control
87 Safety valve sealed and calibrated to 6 bars
88 Solar expansion tank
89 Recipient for heat transfer fluid
90 Antithermosiphon loop (≈10 x Ø tube)
109 Thermostatic mixing valve for domestic hot water
112a Collector sensor
112b Solar tank sensor
114 Solar circuit drainage valve (note: propyleneglycol)
115 Thermostatic distribution valve per zone
123 Cascade flow sensor (to connect to the slave boiler)
126 Solar regulator
129 DUO tube
130 Degasser with manual purge (Airstop)
153 DHW expansion vessel

(1) Mandatory, in compliance with safety directives

AIR/FLUE GAS CONNECTION

For the use of the air/flue gas connection pipes and the rules on installation, see details of the various configurations in the current product catalogue.

CLASSIFICATION



(1) For each additional metre of horizontal pipe, remove 1.2 m from the vertical length Lmax shown in the table below.

1 **CONFIGURATION C_{13x}:** Air/flue gas connection by means of concentric pipes to a horizontal terminal (so-called forced flue)
2 **CONFIGURATION C_{93x} (anciennement C_{33x}):** Air/flue gas connection by means of concentric pipes to a vertical terminal (roof outlet)
3 **CONFIGURATION C_{93x}:** Air/flue gas connection using concentric pipes in the boiler room and single pipes in the chimney (combustive air with counter current in the chimney)
or
4 Air/flue gas connection using concentric pipes in the boiler room and single "flex" pipes in the chimney (combustive air with counter current in the chimney)
5 **CONFIGURATION C_{53}:** Separate air and flue gas connection using a bi-flow adapter and single pipes (combustive air taken from outside)
6 **CONFIGURATION B_{23P}/B_{33}:** Connection to a chimney (combustive air taken from the boiler room)
7 **CONFIGURATION B_{23P}/B_{33}:** For cascade installation
12 **CONFIGURATION C_{43x}:** Connection to a collective duct

TABLE OF MAXIMUM AIR/FLUE GAS PIPE LENGTHS ADMISSIBLE ACCORDING TO BOILER TYPE

TYPE OF AIR/FLUE GAS CONNECTION			LMAX: OF THE CONNECTING PIPES IN m — EVODENS AMC			
			15	25	35 25/39 BIC	25/28 MI 25/28 BIC
Concentric pipes connected to a horizontal terminal (PPs)	C_{13x}	Ø 60/100 mm	12	3,5	3,5	4,2
		Ø 80/125 mm	12,3	20	17,6	20
Concentric pipes connected to a vertical terminal (PPs)	C_{33x}	Ø 60/100 mm	13	4,9	–	5,5
		Ø 80/125 mm	10,7	20	19	20
Pipes • concentric in the boiler room, • single in the chimney (combustive air with counter current) (PPs)	C_{93x}	Ø 60/100 mm Ø 60 mm	15	8,1	2,8	9
		Ø 60/100 mm Ø 80 mm	9,9	20	18,0	20
		Ø 80/125 mm Ø 80 mm	–	–	20	–
Pipes • concentric in the boiler room, • "flex" in the chimney (combustive air with counter current) (PPs)	C_{93x}	Ø 80/125 mm Ø 80 mm	11,1	20	20	20
Bi-flow adapter and separate single air/flue gas pipes (combustive air taken from outside) (PPs)	C_{53}	Ø 60/100 mm sur 2 x 80 mm	40	40	32	40
In the chimney (rigid or flex) (combustive air taken from the premises) (PPs)	B_{23P} B_{33}	Ø 80 mm (rigid)	40	40	40	40
		Ø 80 mm (flex)	40 (1)	40 (1)	28 (1)	40 (1)
Collective 3 CEp conduit for sealed boiler	C_{43x}	To size such a system, contact the supplier of the 3 CEp duct				

(1) ⓘ: Max. height in the flue pipe (C_{93X}, B_{23P}/B_{33} configurations) dfrom the support elbow to the outlet mustn't exceed 25 m for flex PPs. In case of higher lengths, holding collars must be added by slices of 25m.

DESCRIPTION

EVODENS AMC...

WALL-HUNG GAS CONDENSING BOILER FOR CONNECTION TO A CHIMNEY OR A FORCED FLUE

Brand: De Dietrich
NOx classification: 6
Model:
- AMC...: for heating only
- AMC.../BS 60 or BS 130: for heating and domestic hot water preparation by associated DHW tank
- AMC 25/28 MI: for heating and instant domestic hot water production
- AMC... BIC: for heating and domestic hot water production by integrated DHW tank of 40 l

Homologation: B_{23} - B_{23P} - B_{33} - $C_{13(x)}$ - $C_{33(x)}$ - $C_{93(x)}$ - $C_{53\,(x)}$ - $C_{63(x)}$ - C_{43P} - $C_{10(3)x}$ - $C_{(12)3x}$
Protection index: IP X5D
Power supply: 230 V/50 Hz
Useful output in heating mode at 50/30°C: _____kW

Useful output in DHW mode at 80/60°C:
- AMC /BS...: _____kW
- AMC 25/28 MI: _____ kW
- AMC... BIC: _____ kW

Specific flow in DHW mode:
- AMC 25/28 MI: _____l/min
- AMC.../BS 60: _____l/min
- AMC.../BS 130: _____l/min
- AMC... BIC: _____l/min

Max. operating temperature: 90°C
Max. operating pressure: 3 bar
Safety thermostat: 110°C
Dimensions: ___ x ___ x ___ mm
Weight empty: _____kg

DESCRIPTION

Complies with the requirements of European Directives
Compact and ultra-responsive exchanger in cast Aluminium/Silicium alloy
Stainless steel gas burner with complete premixing, modulating from 22 to 100% output, fitted with a silencer on the air intake
The DIEMATIC Evolution control panel is a highly advanced control panel with new control ergonomics and incorporates a programmable electronic control system as standard. Suitable for managing 1 or 2 direct circuits + 1 or 2 valve circuits (optional flow sensors). Capable of managing 1 DHW circuit (sensor optional) and 1 additional valve circuit (PCB + sensor optional). New ergonomics and optimization of management of combined heating systems.
Boiler delivered with hydrobloc made of brass, a mounting frame with prefitted water and gas valves, modulating pump with energy efficiency index EEI<0.23, 3-bar safety valve, 12-litre expansion tank (except AMC 35), heating/DHW reversal valve for AMC 15/25/35, plate exchanger with large exchange surface for the production of DHW with flowrate detector for AMC 25/28 MI, or load pump for AMC... BIC, automatic air vent.
- **AMC.../BS...:** with enamelled 60 litre DHW calorifier placed to the right or to the left of the boiler, or 130 litre DHW calorifier placed under the boiler. Boiler/tank connecting pipes and DHW sensor included.
- **AMC... BIC:** with DHW calorifier comprising 3 interconnected fully insulated stainless steel stratification tanks, with a total capacity of 40 litres, integrated in the boiler.

Air/flue gas connection Ø 60/100 mm with measuring point

CONTROL PANEL OPTIONS

- Domestic hot water sensor
- Outlet sensor downstream of the valve
- PCB + sensor for 1 mixing valve
- On/Off room thermostat
- SMART TC° connected room thermostat
- Sensor for storage tank
- S-BUS cable
- S-BUS plug

BOILER OPTIONS

- Stand-off frame
- Connecting pipe kit for stand-off frame
- Pipe cover
- Flue gas thermostat
- Cleaning tool plate exchanger (AMC 25/28 MI)
- Disconnecting cylinder 60/60 - 1"
- Hydraulic module for 1 direct circuit
- Hydraulic module for 1 circuit with valve
- Compact module for 2 circuits
- Collector for 2 or 3 modules
- Wall consoles for collector modules
- Set connection G in R (1" and 3/4")
- Condensate neutralisation tank
- Wall bracket for neutralisation tank
- Granule refill for neutralisation tank

De Dietrich
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S.A.S. with corporate capital of 229 288 696 €
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