

FLOOR-STANDING GAS CONDENSING BOILERS FROM 5.6 TO 25.5kW

- EGC 25: for heating only.
- EGC 25/V 100 SL: for heating and domestic hot water by 100 litre enamelled calorifier with coil placed under the boiler.

- EGC 25/V 200 SSL: for heating and domestic hot water by 200 litre enamelled solar calorifier placed under the boiler.
- EGC 25/VE 200 SHL: for heating and domestic hot water by high performance 200 litre enamelled solar calorifier placed under the boiler.



EGC 25



EGC 25/V 100 SL



EGC 25/V 200 SSL



EGC 25/VE 200 SHL



EGC 25:
For heating only



EGC 25/V... and /B...:
Heating and
domestic hot water



Condensing



All natural gases
Propane



Solar energy:
EGC 25/V 200 SSL
EGC 25/VE 200 SHL



CE identification No:
0085CM0178

The TWINEO boiler range includes one model for heating only and models comprising boilers combined with 100- or 200-litre calorifiers for DHW production. TWINEO boilers are fully equipped as standard with:

- A eating circulating pump with energy efficiency index EEI < 0.23;
- A 12-litre expansion vessel, an automatic air vent, a draining valve, the heating safety valve, a heating/DHW reversal valve;
- An iniControl control panel with new ergonomics for controlling and regulating a direct circuit and a traditional or solar DHW circuit.

The EGC 25/VE 200 SHL is a high performance optimized model.

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 flue system.

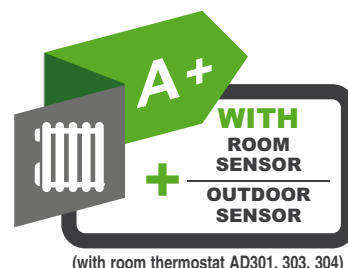
CONDITIONS OF USE

Boiler:

Max. operating temperature: 90°C
Max. operating pressure: 3bar
Power supply: 230V/50Hz
Protection index: IP 21

Calorifiers:

Max. operating pressure: 10bar
Max. operating temperature: 95°C
Solar max. operating pressure: 6bar (200 SSL)



(with room thermostat AD301, 303, 304)

HOMOLOGATION

B_{23P}, B₃₃, C_{13x}, C_{33x}, C_{93x}, C₅₃, C_{43x}, C_{83x}*

GAZ CATEGORY

Fitted and preset to operate on natural gases. Propane operating with conversion kit (option).

*to be adapted according to the country for which the boilers are intended

PRESENTATION

The EGC boilers in the TWINEO range are factory-tested and delivered fully assembled. They are pre-fitted to run on type H natural gas but can also be converted to run on propane (using the conversion kit available as an option).

The EGC 25 boiler is fitted as standard with a 3-speed heating pump, a 12-litre expansion vessel, an automatic air vent, a draining valve, a heating safety valve, a hydroblock, a heating/DHW reversal valve.

The EGC 25/V 100 SL model comprises the EGC 25 boiler combined with the 100-litre 100 SL (Standard Load) calorifier and a connecting kit under the boiler to form a uniform «column». The calorifier is equipped with a magnesium anode to protect the tank, boiler/calorifier connecting pipes, a DHW sensor, adjustable feet. The 100 SL calorifier is an enamelled coil calorifier. It is insulated with high density injected CFC-free polyurethane foam.

The EGC 25/V 200 SSL and EGC 25/VE 200 SHL models comprises the EGC 25 boiler combined with the 200-litre 200 SSL

(Solar Standard Load) calorifier or a 200-litre 200 SHL (Solar High Load) calorifier. The latter is positioned under the boiler to form a uniform «column» or to the right or the left of the boiler. The solar calorifier is equipped with a DHW safety valve, a magnesium anode to protect the tank, boiler/calorifier connecting pipes, a DHW sensor, adjustable feet.

It is also equipped with a complete solar unit: pump, expansion vessel (delivered separately – Package ER227), safety unit, air vent, glycol tank, solar control system.

The 200 SSL solar calorifier is an enamelled twin coil calorifier. It is insulated with high density injected CFC-free polyurethane foam.

The E 200 SHL is an «High Load» enamelled stratification calorifier equipped with a plate exchanger combined with a load pump and a coil for connection to a solar system. Its insulation is made from high density injected polyurethane foam with 0% of CFCs

HIGH LEVELS OF PERFORMANCES

- Annual operating efficiency up to 109%,
- NOx classification: 5 according to EN 15502,
- Low noise level,

STRONG POINTS

- Compact boilers of modular design with the same aesthetic as the DHW calorifiers with which they can be combined;
- New compact and ultra-responsive exchanger in cast aluminium/silicium alloy.
- 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.

- Low pollutant emissions:

TWINEO EGC	NOx* (mg/kWh)	CO* (mg/kWh)
EGC 17/29...	34	20
EGC 25...	38	36

* according to EN 15502

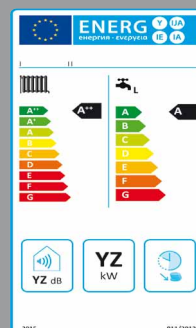
- Electronic ignition and ionisation flame check.
- Fan fitted with a non-return valve on the air intake to run with pressurised evacuation systems (3 CEp).
- **IniControl** control panel used for controlling and regulating a direct circuit, a DHW circuit and the 200 SSL or 200 SHL solar tank. The position of the control module is adjustable for ease of use regardless of height.



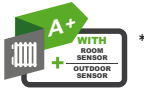




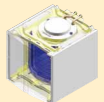



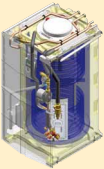







Created by De Dietrich, the **ECO-SOLUTIONS** label guarantees you a range of products compliant with the European Eco-design and Energy Labelling directives. These directives apply from 26 September 2015 to heating and domestic hot water appliances.

With De Dietrich **ECO-SOLUTIONS**, you can benefit from the latest generation of multi-energy systems, easier to use, with better performance and energy savings, designed to give you greater comfort while caring for the environment. **ECO-SOLUTIONS** also mean expertise, advice and a wide range of services from the De Dietrich professional network.

The energy label, together with the **ECO-SOLUTIONS**, shows you the performance of your chosen product. More info at www.ecodesign.dedietrich-heating.com



MODELS AVAILABLE

Boiler		Boiler	Calorifier	Calorifier connecting-set	Solar expansion vessel	Useful output (kW)	
						Heating mode at 50/30°C	DHW mode at 80/60°C
 EGC_Q0001	EGC 25 For heating only	 JA5	-	-	-	5.6 - 25.5	28
 EGC_Q0002	EGC 25/V 100 SL For heating and domestic hot water by 100 litre calorifier to be placed under the boiler	 JA5	 JA226	 JA8	-	5.6 - 25.5	28
 EGC_Q0003	EGC 25/V 200 SSL For heating and domestic hot water by 200 litre solar calorifier to be placed under the boiler	 JA5	 ER221	 JA8	 ER229	5.6 - 25.5	28
 EGC_Q0003	EGC 25/VE 200 SHL For heating and domestic hot water by a 200 litre high performance solar calorifier to be placed under the boiler	 JA5	 ER770	 JA9	 ER229	5.6 - 25.5	28

* With room thermostat AD301, 303, 304

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

DESCRIPTION EGC 25/V 100 SL

Control panel
in service position



Control panel iniControl

Sealed chamber
(see below)

3bar heating
safety valve

Heating/DHW
reversal valve

Heating circulator
with energy efficiency
index EEI<0.23

Calorifier 100 litres

Injected CFC-free
polyurethane foam insulation

EGC_Q0006

Exchanger/burner



MCA_Q0014

Heating body (section view)



AGC_Q0027

Sealed chamber

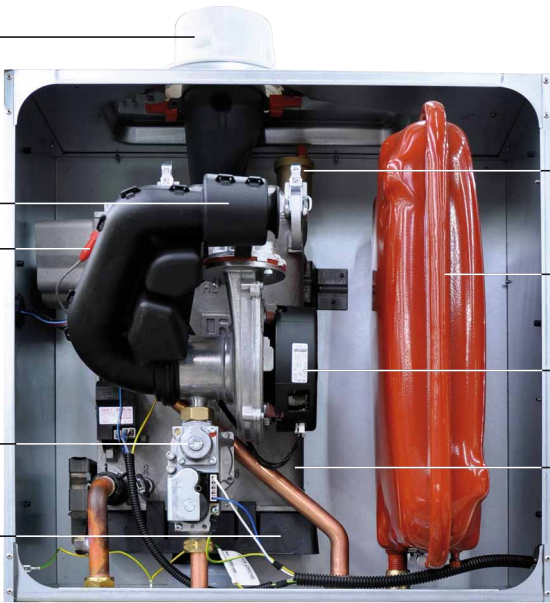
Air/flue gas connection
Ø 60/100mm with
measuring point

Air intake silencer

Ignition and ionisation
electrodes

Gas safety unit

Condensates collector



Automatic air vent

Expansion vessel 12 litres

Fan

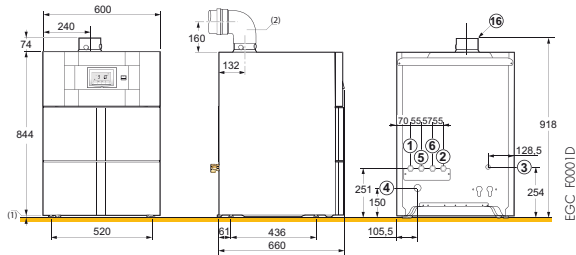
Exchanger in cast
aluminium/silicium alloy with
stainless steel gas burner
with complete premixing

AGC_Q0028

TECHNICAL SPECIFICATIONS

MAIN DIMENSIONS (IN MM AND INCHES)

EGC 25

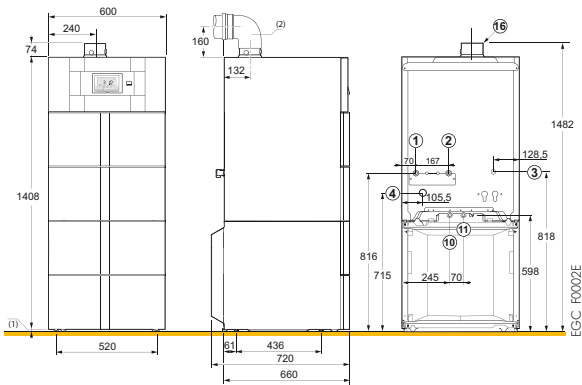


- ① ② Heating flow/return direct circuit G 3/4"
- ③ Gas inlet Ø G 1/2"
- ④ Condensate drain, siphon provided, PVC pipe Ø 24 x 19mm
- ⑤ ⑥ Primary return/inlet from independent calorifier (with package JA10 - option) G 3/4"
- ⑩ Domestic cold water inlet G 3/4"
- ⑪ Domestic hot water outlet G 3/4"
- ⑬ DHW drain valve (on the front of the DHW tank) Ø 14 mm ext.
- ⑭ Primary inlet from solar coil Cu 18mm
- ⑮ Primary outlet from solar coil Cu 18mm
- ⑯ Evacuation of combustion products and air inlet pipe Ø 60/100mm

(1) Feet adjustable from 0 to 20mm

(2) Elbow delivered with the DY871 horizontal forced flue (optional). The optional reduced JA43 elbow is used to bring down the height from 160mm to 100mm.
G: cylindrical external thread (water tightness by flat gasket)

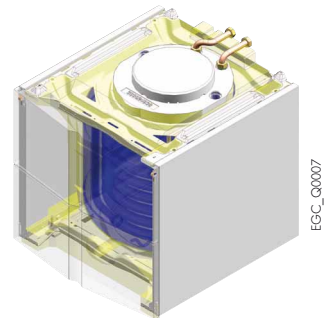
EGC 25/V 100 SL



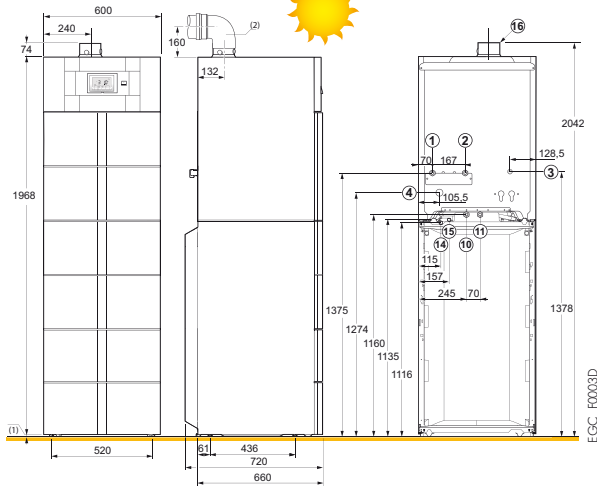
Calorifier 100 SL

Calorifier with coil exchanger equipped with:

- a magnesium anode to protect the enamelled tank
- a domestic hot water sensor



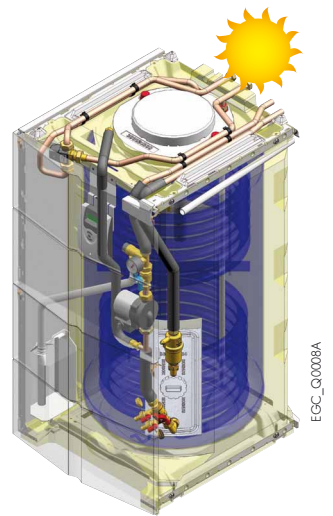
EGC 25/V 200 SSL



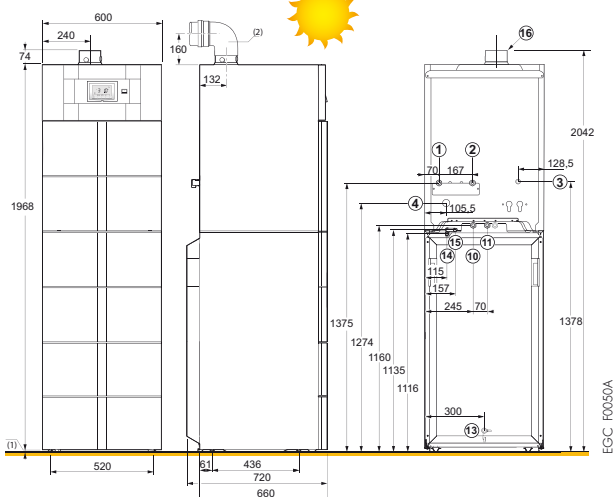
Calorifier 200 SSL

Twin coil solar DHW calorifier equipped with:

- a magnesium anode to protect the enamelled tank
- a domestic hot water sensor
- a solar unit (pump, expansion vessel to be ordered - Package ER229 - , safety unit, air vent, glycol tank, solar control system)



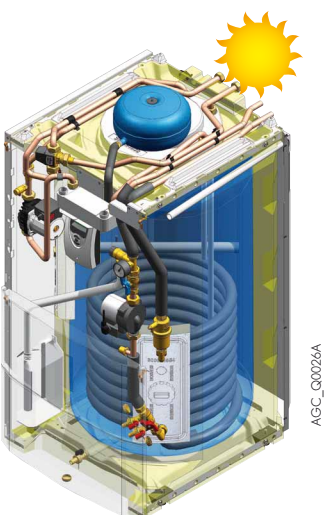
EGC 25/VE 200 SHL



Calorifier E 200 SHL

Stratification solar DHW calorifier equipped with:

- load pump with energy efficiency index EEI<0.23,
- plate exchanger,
- a draining valve,
- a magnesium anode to protect the enamelled tank
- a domestic hot water sensor
- a solar unit (pump, expansion vessel to be ordered- Package ER229, safety unit, air vent, glycol tank, solar control system)



TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Type generator:

- EGC 25: heating only
- EGC 25/V and VE...: heating + DHW with solar calorifier placed under the boiler

Boiler type: condensing

Burner: modulating with complete premixing

Energy used: natural gas or propane

Combustion evacuation: chimney or forced flue

Min. flow temperature: 20°C

Min. return temperature: 20°C

Ref. CE certificate: CE-0085CM0178

⇒ Boiler specifications

Boiler type	EGC...	25, 25/V..., 25/B...
Useful output at 50/30°C P _n in heating mode (min.-max.)	kW	5.6-25.5
Efficiency 100 % P _n , at average temp. 70°C	%	99.2
at... % output 100 % P _n , at return temp. 30°C	%	102.0
and... °C water temp. 30 % P _n , at return temp. 30°C	%	110.1
Seasonal space heating energy efficiency (1)	%	94
Nominal water flow at P _n , Δt = 20K	m³/h	1.06
Stand-by losses at Δt = 30K	W	78
Auxiliary electrical power at P _n (without circul. pump)	W	45
Power heating pump max.	W	52
Useful output at 80/60°C (min.-max.)	kW	5.0-24.8
Manometric height available heating circuit	mbar	200
Gas flow at P _n gas H	m³/h	3.10
(15°C-1 013mbar) propane	kg/h	2.28
Flue gas temperature (min.-max.)	°C	30-80
Min.-max. flue gas mass flow rate	kg/h	8.9-50
CO ₂ content on natural gas H (min.-max.)	%	8.4-8.8
Pressure available at the boiler outlet	Pa	130
Water capacity	l	1.9
Net weight EGC 25	kg	54

(1) According to commission regulation (EU) n°813/2013

⇒ Specifications domestic hot water

Boiler type	EGC...	25/V 100 SL	25/V 200 SSL	25/VE 200 SHL
DHW calorifier capacity	l	90	200	220
Exchanged power	kW	24	24	28
Solar exchanger volume/ Back-up volume	l	-	110/90	166/54
Exchange surface	m²	-	1.0	1.25
Flow over 10 min at Δt = 30K	l/ 10 min	180	180	190
Flow per hour at Δt = 35K	l/h	590	590	690
Spec. flow at Δt = 30K (compliance with EN 13203-1)	l/min	18	18	19
DHW losses through the outer casing at Δt = 45K	W	62	117	117
Coefficient of heat losses	W/K	1.38	2.09	2.09
Net weight	kg	117	172	175

Domestic performance at room temp. 20°C, cold water temp. 10°C, hot water temp. at P_n 45°C, primary hot water temp. 80°C, stockage temp. 60°C

⇒ Solar component data



Boiler type	EGC...	/V 200 SSL	/VE 200 SHL
Solar volume/back-up volume	l	110/90	166/54
Solar exchanger capacity	l	6.7	8.4
Solar exchange surface	m²	1.0	1.25

CONTROL PANEL IniControl

CONTROL PANEL IniControl

The **IniControl control panel** is used to manage a direct circuit and DHW production (without programming). Burner modulation according to the outside temperature is activated by connecting the outside temperature sensor (package FM46 – to be ordered separately).

The display of the boiler temperature, the pressure in the heating network, and the operating status of the generator using symbols

and alphanumeric codes is handled by the large display, which also incorporates a flashing alarm function.

To monitor the installation, optional readout of error history and hour run meters. The IniControl control panel also enables boiler management through a parameterisable 0-10V signal.



IniControl CONTROL PANEL OPTIONS



Outside sensor - Package FM46

Allows the management of the circuit heating by measuring of the outside temperature.



Domestic hot water sensor (length 5m) - Package AD212

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



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).



Non programmable modulating room thermostat "OpenTherm" (wire) - Package AD301

This thermostat handles the regulation of the room temperature adapting the boiler power according to the preset temperature. Handles also the regulation of the DHW temperature. It includes adjustment parameters for the TWINEO boilers:

read out and setting DHW temperature, max. heating temperature..., energy counters (number of startings, number of heating pump, DHW or total operating hours, ...), service alerts, etc...



Programmable room thermostat modulating "OpenTherm" (wire) - Package AD304

Programmable room thermostat modulating "OpenTherm" (wireless) - Package AD303

These thermostats handle the regulation and programming of the heating and of DHW. They include setting parameters for the boiler: heating slope, maximum boiler temperature, fan speed, ... as well as a energy metering estimate (number of operating hours of the DHW heat pump). The regulator adapts the power boiler to the needs, 3 modes of operating are possible:

- **AUTOMATIC:** according the weekly programming used: for each programmed period, we can indicate the set temperature.

- **PERMANENT:** maintains the set temperature chosen for the day, night or antifreeze.

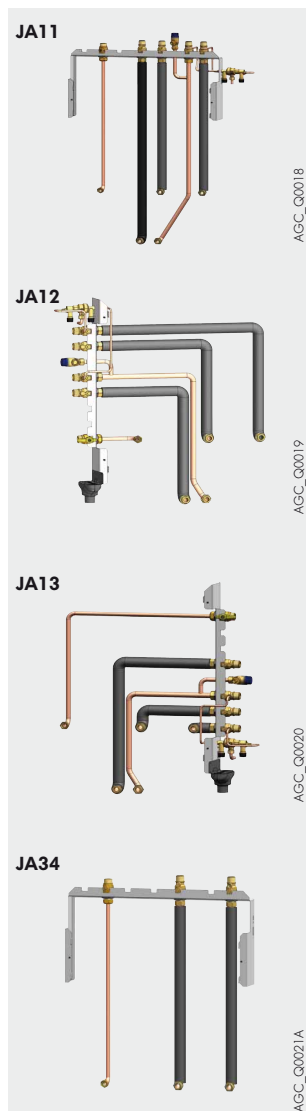
- **VACATION:** intended for absences of long duration. Allows to bring in the dates of beginning and end of the vacation as well as the desired temperature. For operation according to the outside temperature, a outside sensor (package FM46) can be added.

The wireless version is delivered with a transmitter box to install on the wall close to the boiler.



BOILER OPTIONS

HYDRAULIC CONNECTING KITS



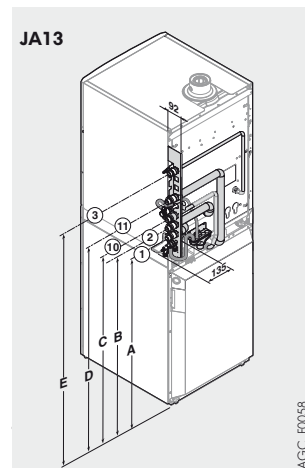
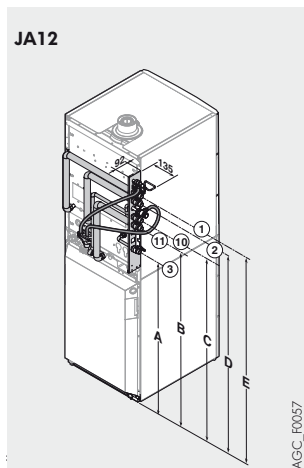
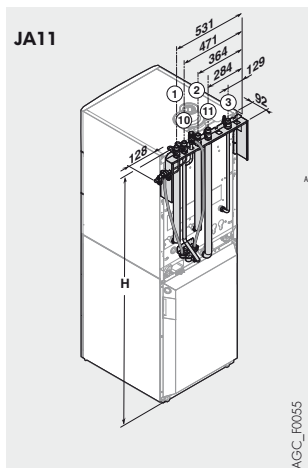
⇒ For EGC.../V 100 SL, EGC.../V 200 SSL and EGC.../VE 200 SHL (column models)

Central connection kit - Package JA11

Left connection kit - Package JA12

Right connection kit - Package JA13

Connection kits with prefitted water and gas stop cocks, integrated disconnecter and DHW safety unit and boiler connecting pipes in the middle (Package JA11), to the right (Package JA13) or to the left (Package JA12).



EGC 25	H
V 100 SL	1469
V 200 SSL and VE 200 SHL	2029

A	B	C	D	E
818	983	1038	1148	1203
1378	1543	1598	1708	1763

A	B	C	D	E
815	873	928	1038	1203
1375	1433	1488	1598	1763

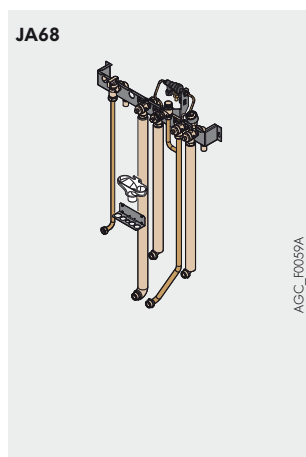
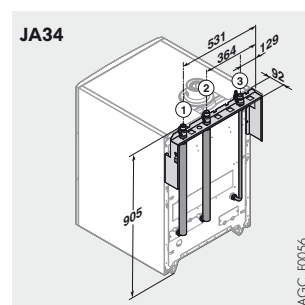
⇒ For EGC... (heating only) and EGC.../B 200 SSL (to be juxtaposed to the right or left of the boiler)

Mounting kit for heating only - Package JA 34

This board is delivered with the water and gas valves prefitted. It is attached to the back of the boiler and is used to carry the gas inlet, the heating return and the heating flow to the top.

- ① Heating return direct circuit G 3/4
- ② Heating flow direct circuit G 3/4
- ③ Gas inlet G 3/4

- ⑩ Domestic cold water inlet G 3/4
- ⑪ Domestic hot water outlet G 3/4



⇒ For EGC.../V 100 SL, EGC.../V 200 SSL and EGC.../VE 200 SHL (column models)

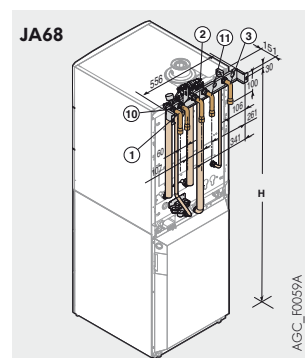
Hydraulic pre-mounting kit - Package JA68

This optional pre-assembly kit is delivered to be preinstalled. This allows the installer to carry out in advance all hydraulic connections and sealing tests and put the boiler in place at the last moment.

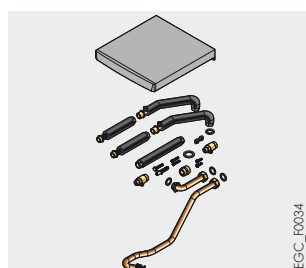
It includes fittings for direct circuit (flow/return), the cold water inlet and the domestic hot water outlet, gas arrival and allows connections from below or from above.

- ① Heating return direct circuit
Ø 18 mm int.
- ② Heating flow direct circuit
Ø 18 mm int.
- ③ Gas inlet Ø 18 mm int.

- ⑩ Domestic cold water inlet
Ø 18 mm int.
- ⑪ Domestic hot water outlet
Ø 18 mm int.



	H
V 100 SL	1415
V 200 SSL and VE 200 SHL	1975



Connection kit for 200 SSL or E 200 SHL solar calorifier juxtaposed - Package ER228

This kit includes the boiler/calorifier connection kit as well as the cover for the calorifier.



BOILER OPTIONS

OTHER OPTIONS

DU13



Condensates neutralisation system with pump (boiler up to 120 kW) - Package DU13

Granule refill for neutralisation tank (10 kg) - Ref. 94225601*

Granule refill for neutralisation tank (25 kg) - Package SA7

* to order at the spare parts department

SA1



Neutralization station with gravity flow (boiler up to 75 kW) - Package SA1

Wall bracket for neutralisation tank - Package SA2

Granule refill for neutralisation tank (10 kg) Ref. 94225601*

Granule refill for neutralisation tank (25 kg) - Package SA7

The materials used for the condensates flow pipes must be appropriate; otherwise the condensates must be neutralised.

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

* to order at the spare parts department

SA2



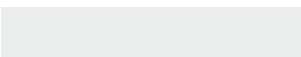
Flue gas thermostat - Package JA38

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



Cleaning tool boiler body - Package HR45

Connects to a classic vacuum cleaner and allows an easy boiler body cleaning.



Propane conversion kit - Package JA40



Solar expansion vessel 18 litre - Package JA74

In replacment of the 12 liters delivered expansion vessel with the EGC../200 SSL. The supplied bracket allows the mounting of the 18 liters

expansion vessel vertically in front under the boiler casing.

BOILER OPTIONS

STOVE FITTING ACCESSORIES SPECIFIC TO BOILERS EGC



Adapter Ø 80/125mm - Package HR38

Is fitted instead and in the place of the Ø 60/100mm fitting delivered mounted on the

boiler. It enables the direct connection of a vertical forced flue Ø 80/125 mm.



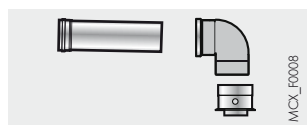
Adapter bi-flow Ø 60/100mm to 2 x Ø 80mm - Package DY868



Reduction elbow - Package JA 43

When, for reasons of space, the horizontal forced flue with its elbow cannot be installed, this elbow is mounted instead and in place of the fitting

(Ø 60/100mm) on the boiler and thus allows a height saving of 70mm.



Connecting kit Ø 80/125mm on collective flue system duct - Package DY887

If connected to a collective flue system duct, the adapter Ø 60/100mm delivered with the boiler should be removed and replaced by

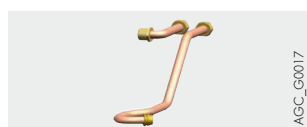
package DY887, which incorporates the adapter Ø 80/125mm.

FOR DHW PRODUCTION



Kit DHW expansion vessel 8 litre for EGC 25/V 100 SL - Package ER233

Can be integrated in the boiler, prevents water loss during tank reheating in DHW mode.






Connecting kit for the connection of a independent calorifier - Package JA10

For EGC (heating only), this kit mounted under the casing of the boiler allows the connection of a independent calorifier.

INFORMATION REQUIRED FOR INSTALLATION

FLAT COLLECTORS RECOMMENDED WITH BOILER EGC 25/V 200 SSL AND EGC 25/VE 200 SHL

Number of people living in the home		from  to 			from 		
		1 x DH 200 SL (2.0 m ²)			2 x DH 200 SL (4.0 m ²)		
Flat solar collectors or solar collector field («roof» packs) recommended:	Package	Terrace ER777 (1)	ST (1) ER771	ST (2) ER774	Terrace ER778	ST (1) ER772	ST (2) ER775
Heat carrying fluid type L (premixure 60/40, - 21°C)	Package	EG101	EG101	EG101	EG101	EG101	EG101

(1) Roof pack with universal bracket for mechanical tiles.

(2) Roof pack for slate roofs.

STATUTORY INSTRUCTIONS ON 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.

LOCATION

The EGC condensing boilers must be installed in premises protected from frost, which can also be ventilate.

Compliance with a minimum distance between the flue gas evacuation system or the boiler and combustible materials (furniture, for example) is not necessary.



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. 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 (Chimney connection only B_{23p})

The cross-section of the boiler room ventilation (through) with combustive air is taken in must comply with the prevailing standard.

Note:

- For boilers connected to a concentric forced flue (type C_{13x} or C_{33x} connections) ventilation of the installation premises is not necessary, unless the gas supply includes one or more mechanical connections (cf. prevailing standard).
- See also recommendations in the «Flue Systems» booklet.

INFORMATION REQUIRED FOR INSTALLATION

GAS CONNECTION

Compliance with prevailing instructions and regulations is mandatory. In all cases, a sectional valve is fitted as close as possible to the boiler. This valve is delivered in the hydraulic connection kits available as optional equipment. A gas filter must be fitted to the boiler inlet.

The diameters of the pipes must be defined according to the prevailing regulations.

- 20mbar on natural gas H₂
- 37mbar on propane.

ELECTRICAL CONNECTION

This must comply with the prevailing national or even local instructions and regulations.

The boiler must be powered by an electrical circuit comprising an omnipolar switch with an opening gap > 3mm. Protect the connection to the mains with a 6A fuse.

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

Connection to the heating circuit

EGC 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

Certificate of conformity

The installer is required to draw up a certificate of conformity approved by the ministers responsible for construction and gas safety.

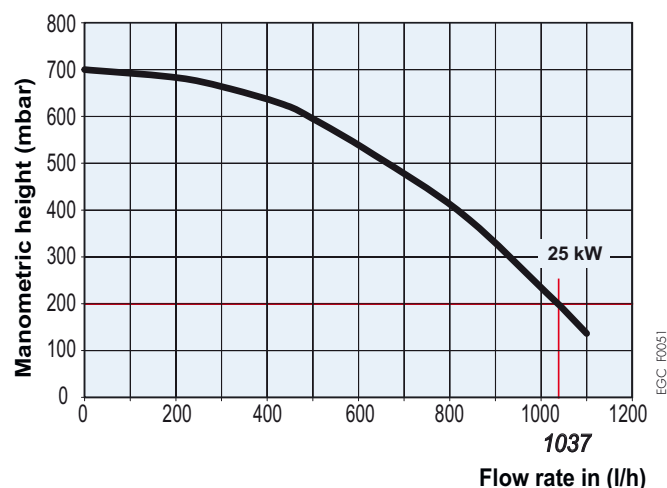
Note:

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

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.

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 at the boiler output with pump UPM2 15-70 RES



Condensates discharge

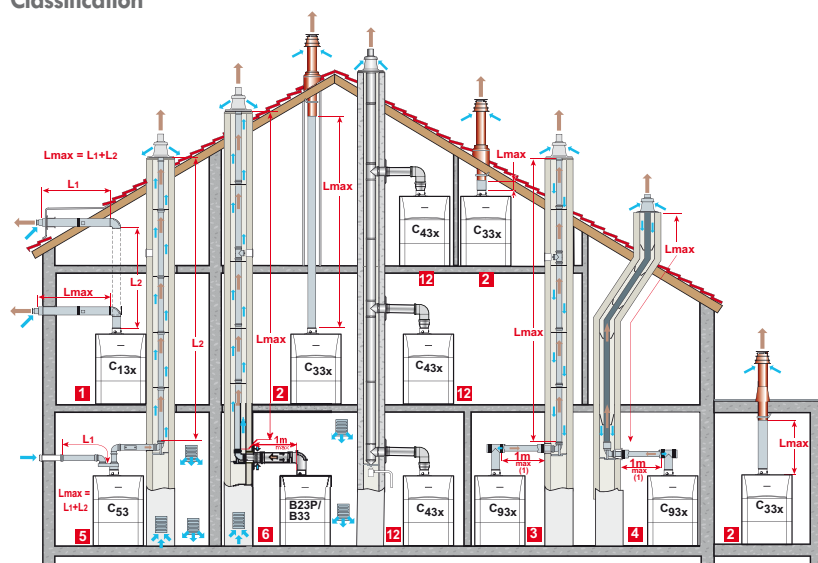
The siphon provided must be connected to the waste water discharge system. The connection must be removable and the flow of condensates visible. The connections and pipes must

be in corrosion-resistant material. An optional condensates neutralisation system is available (package SA1 see page 8).

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 Configuration C_{13x}**: Air/flue gas connection by means of concentric pipes to a horizontal terminal (so-called forced flue)
- 2 Configuration C_{33x}**: Air/flue gas connection by means of concentric pipes to a vertical terminal (roof outlet)
- or
- 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 C₅₃**: Separate air and flue gas connection using a bi-flow adapter and single pipes (combustive air taken from outside)
- 6 Configuration B_{23P}/B₃₃**: Connection to a chimney (combustive air taken from the boiler room)
- 12 Configuration C_{43x}**: Connection to a collective flue system conduit

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

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

Type of air/flue gas connection			L_{max} of the connecting pipes in m TWINEO EGC 25/...
Concentric pipes connected to a horizontal terminal (PPS)	C _{13x}	Ø 60/100mm	4.2
		Ø 80/125mm	20
Concentric pipes connected to a vertical terminal (PPS)	C _{33x}	Ø 60/100mm	11
		Ø 80/125mm	20
Pipes - concentric in the boiler room, - single in the chimney (combustive air with counter current) (PPS)	C _{93x} C _{33x}	Ø 60/100mm Ø 60mm	9
		Ø 60/100mm Ø 80mm	20
		Ø 80/125mm Ø 80mm	-
		Ø 80/125mm Ø 80mm	20
Pipes - concentric in the boiler room, - "flex" in the chimney (combustive air with counter current) (PPS)	C _{93x} C _{33x}	Ø 80/125mm Ø 80mm	20
Bi-flow adapter and separate single air/flue gas pipes (combustive air taken from outside) (Alu)	C ₅₃	Ø 60/100mm to 2 x Ø 80mm	40
In the chimney rigid or flex, (combustive air taken from the premises) (PPS)	B _{23P} / B ₃₃	Ø 80mm (rigid)	40
		Ø 80mm (flex)	40 (1)
Collective flue system conduit for sealed boiler	C _{43x}	To size such a system, contact the supplier of the collective flue system duct	

(1) Δ : Max. height in the flue pipe (C_{93x} and B_{23P}/B₃₃ configurations) from the support elbow to the outlet mustn't exceed 25m for flex PPS. In case of higher lengths, holding collars must be added by slices of 25m.

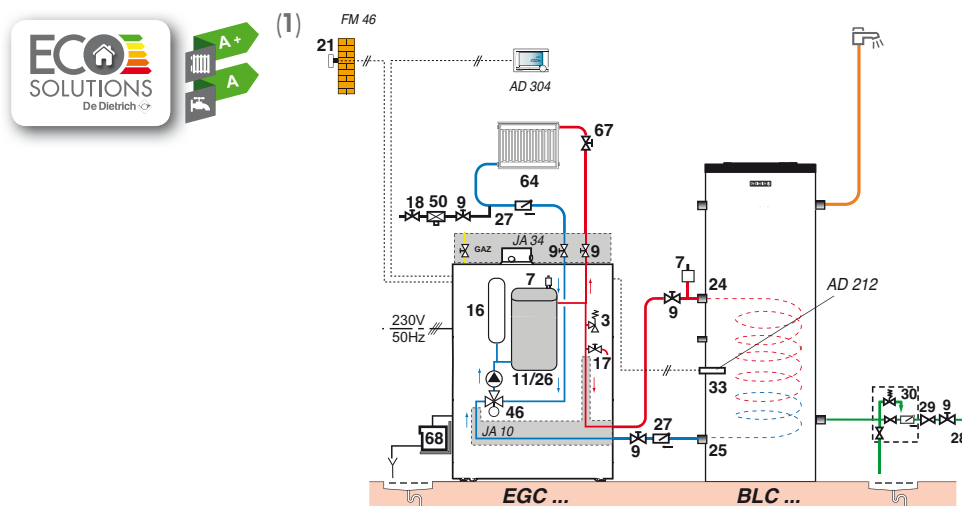
EXAMPLES OF INSTALLATIONS

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 EGC 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.

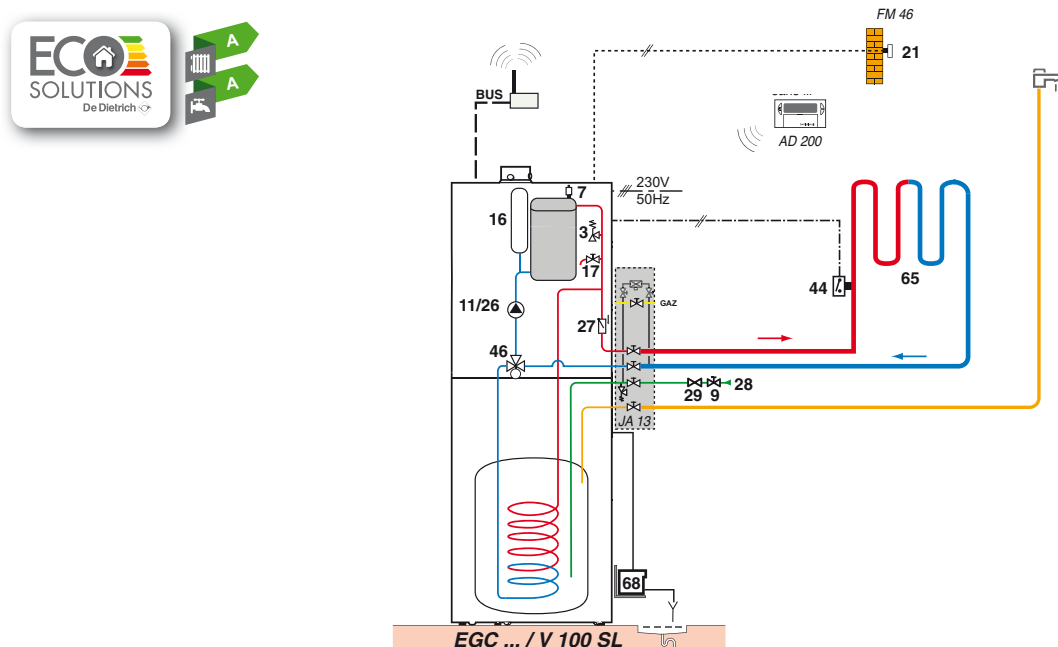
Attention: For the connection of domestic hot water, a sleeve made of steel, cast iron or any other insulating material must be interposed between the hot water outlet and these pipes to prevent any corrosion to the connections, if the distribution pipes are made of copper.

EGC 25 + 1 direct circuit + 1 independent DHW calorifier, one outside sensor, remote control with room sensor



(1) With outside sensor FM46 and room sensor AD301, AD303 or AD304.

EGC 25/V 100 SL + 1 circuit with mixing valve, outside sensor, «radio» remote control

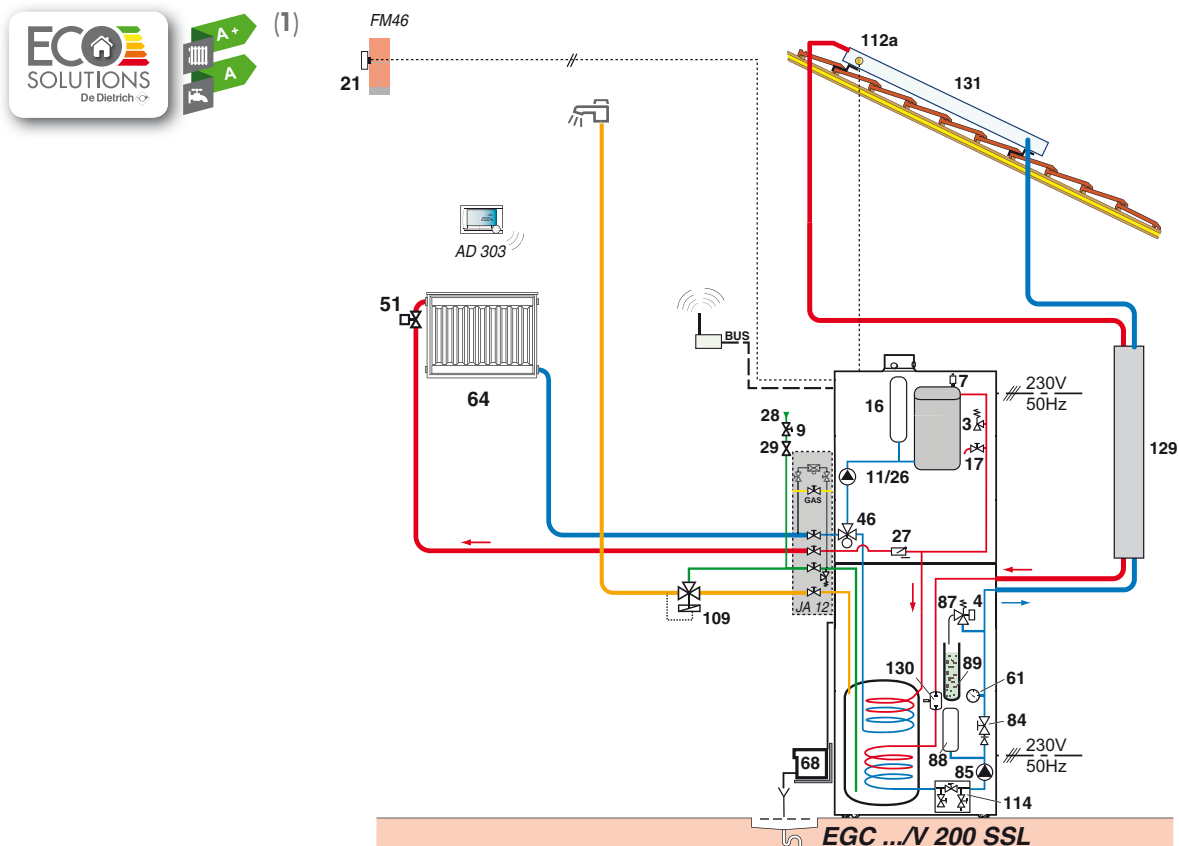


Key

- | | | | |
|---|--|--|--|
| 3 Safety valve 3bar | 27 Non-return valve | 56 DHW circulation loop return | 87 Safety valve sealed and calibrated to 6bar |
| 4 Pressure gauge | 28 Domestic cold water inlet | 61 Thermometer | 88 Solar expansion tank |
| 9 Isolation valve | 29 Pressure reducer | 64 Radiator circuit (gentle heat radiators, for example) | 89 Recipient for heat transfer fluid |
| 11 Electronic heating pump | 30 Sealed safety device calibrated to 7bar | 65 Low temperature circuit (underfloor heating, for example) | 109 Thermostatic mixing valve |
| 16 Expansion tank | 32 (optional) DHW loop pump | 67 Manual valve | 112a Solar collector sensor |
| 17 Draining valve | 33 DHW temperature sensor | 68 Condensates neutralisation system propyleneglycol | 114 Solar circuit drainage valve (note: propyleneglycol) |
| 18 Device for filling the heating circuit | 44 65°C limiter thermostat with manual rest for underfloor heating | 84 Stop valve with release non return valve | 130 Degasser with manual purge (Airstop) |
| 21 Outside sensor | 46 3 way-directional valve with motor reversing | 85 Solar circuit pump (to connect to the solar control) | 131 Collector field |
| 24 Primary inlet on the DHW tank exchanger | 50 Disconnector | | |
| 25 Primary outlet on the DHW tank exchanger | 51 Thermostatic valve | | |
| 26 Domestic water load pump | | | |

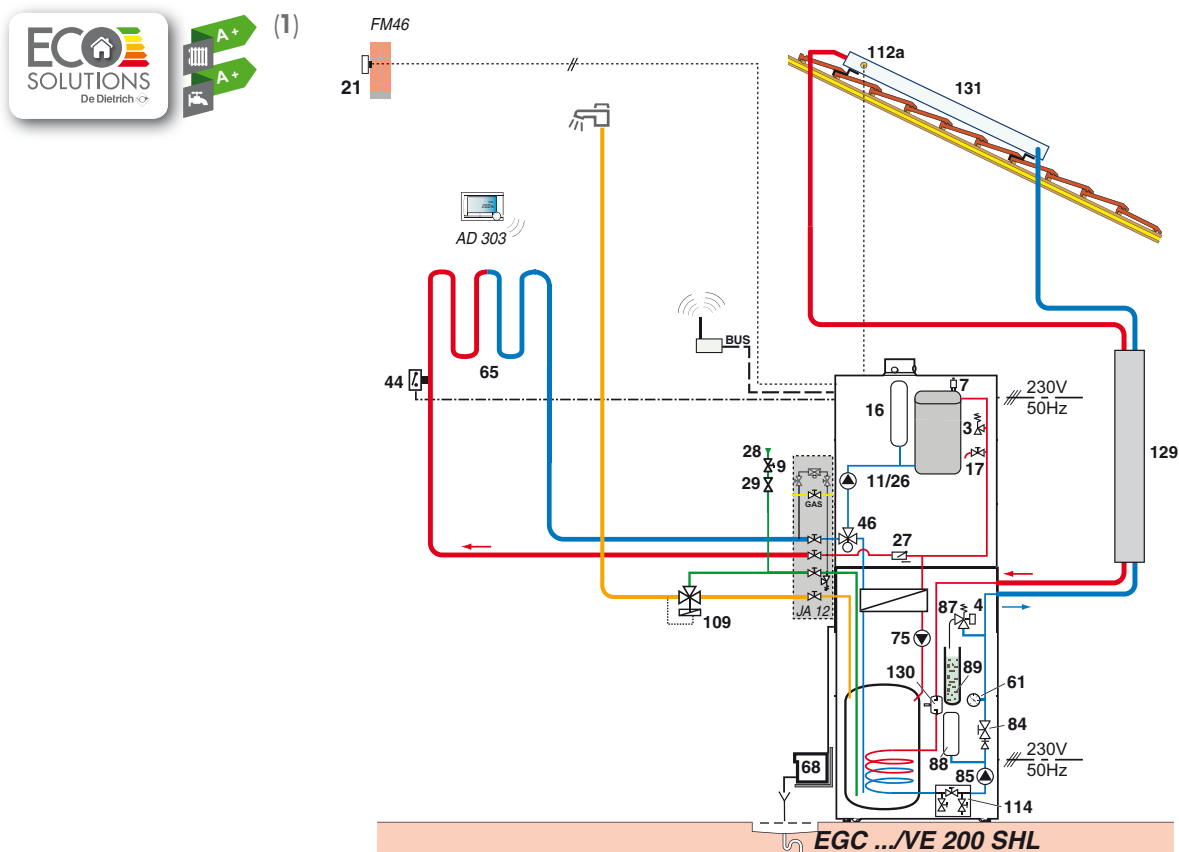
EXAMPLE OF INSTALLATIONS

EGC 25/V 200 SSL + direct circuit, outside sensor, «radio» remote control with sensor, 2 flat collectors



(1) With outside sensor FM46 and room sensor AD301, AD303 or AD304.

EGC 25/VE 200 SHL + 1 underfloor heating circuit, outside sensor, remote control with room sensor



(1) With outside sensor FM46 and room sensor AD301, AD303 or AD304.

EGC_F0011G

EGC_F0055A

DESCRIPTION

TWINEO EGC...

FLOOR-STANDING GAS CONDENSING BOILER FOR CONNECTION TO A CHIMNEY OR A FORCED FLUE

Brand: De Dietrich

NOx classification: 5

Model:

- EGC 25: for heating only
- EGC 25/V 100 SL: for heating and domestic hot water preparation by associated DHW calorifier
- EGC 25/V 200 SSL: for heating and domestic hot water preparation by associated solar-DHW calorifier placed under the boiler
- EGC 25/VE 200 SHL: for heating and domestic hot water preparation by associated high performance solar-DHW calorifier placed under the boiler

Homologation: B_{23P}-B₃₃-C_{13x}-C_{33x}-C_{93x}-C₅₃-C_{43x}-C_{83x}

Protection index: IP 21

Power supply: 230V/50Hz

Useful output in heating mode at 50/30°C (max.)

EGC 25: 25.5kW

Specific flow in DHW mode:

- EGC 25/V 100 SL: 18l/min
- EGC 25/V 200 SSL: 18l/min
- EGC 25/VE 200 SHL: 19l/min

Max. operating temperature: 90°C

Max. operating pressure: 3bar

Safety thermostat: 110°C

Dimensions: _____ x _____ x _____ mm

Weight empty: _____ kg

DESCRIPTION

Complies with the requirements of European Directives

New 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 IniControl control panel is a control panel with new control ergonomics and incorporates a programmable electronic control system as standard. Suitable for managing a direct circuit and a DHW circuit.

New ergonomics and optimization of management of combined heating systems.

Boiler delivered and prefitted with, a heating pump with energy efficiency index EEI<0.23, 3-bar safety valve, 12-litre expansion tank, heating/DHW reversal valve, automatic air vent, a drain tap.

EGC 25/V 100 SL: with enamelled, insulated 100 litre DHW calorifier placed under the boiler. Boiler/tank connecting pipes, magnesium anode and DHW sensor included.

EGC 25/V 200 SSL and EGC 25/VE 200 SHL: with enamelled, insulated 200 litre solar DHW calorifier placed under the boiler. Boiler/tank connecting pipes, magnesium anode, DHW sensor included. Prefitted with all the components required to connect and control a solar installation: solar station with pump, expansion vessel (to order separately - Package ER229), safety unit, solar regulation, degasser, glycol recovery tank. Air/flue gas connection Ø 60/100mm with measuring point.

Control panel options

- Domestic hot water sensor
- Outside sensor
- Programmable room thermostat (wire)
- Programmable room thermostat (wireless)
- Non programmable room thermostat (wire)
- Modulating programmable room thermostat "OpenTherm" (wire)
- Modulating programmable room thermostat "OpenTherm" (wireless).

Boiler options

- Central connection kit
- Left connection kit
- Right connection kit
- Solo connection kit
- Condensates neutralisation system with pump
- Condensates neutralisation system without pump
- Neutralisation granules (10kg)
- Condensate neutralisation tank
- Wall bracket for neutralisation tank
- Granule refill for neutralisation tank (2kg)
- Flue gas thermostat
- Cleaning tool boiler body
- Propane conversion kit
- Adapter Ø 80/125mm
- Adapter bi-flow Ø 60/100mm to 2 x Ø 80mm
- Reducing elbow
- Connecting kit Ø 80/125mm on collective flue system conduit
- Kit DHW expansion vessel 8 litre for EGC 25/V 100 SL
- Connecting kit for the connection of a independent calorifier.

DE DIETRICH THERMIQUE

S.A.S. with corporate capital of 22 487 610 €

57, rue de la Gare - F-67580 MERTZWILLER

Tel. +33 3 88 80 27 00 - Fax +33 3 88 80 27 99

www.dedietrich-heating.com

De Dietrich 