Fuel oil/gas boilers

GT 530





Installation and Service Manual

Declaration of conformity CE

The appliance complies with the standard model described in declaration of compliance C E. It is manufactured and distributed pursuant to the requirements of european directives.

The original declaration of conformity is available from the manufacturer.

DÉCLARATION DE CONFORMITÉ CE

EG - VERKLARING VAN OVEREENSTEMMING

EC - DECLARATION OF CONFORMITY

EG - KONFORMITÄTSERKLÄRUNG

Fabricant/Manufacturer/Hersteller/Fabrikant

Adresse/Addres/Adress

Ville, pays Stad, Land/City, Country/Land, Ort

déclare ici que les produit(s) suivant(s) verklaart hiermede dat de toestel(len)

this is to declare that the following product(s) erklärt hiermit das die Produk(te)

produit (s) par

: DE DIETRICH THERMIQUE

: 57 rue de la gare : F-67580 MERTZWILLER

7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19,

20, 21, 22, 23, 24, 25 éléments

: DE DIETRICH THERMIQUE

: 57, rue de la Gare

: F-67580 MERTZWILLER

répond/répondent aux directives CEE suivantes: voldoet/voldoen aan de bepalingen van de onderstaande EEG-richtlijnen: is/are in conformity with the following EEC-directives:

den Bestimmungen der nachfolgenden EG-Richtlinien entspricht/entsprechen: 92/42/CEE **CEE-Directive:** normes appliquées, toegepaste normen: EEG-Richtlijn: 92/42/EEG tested and examined to the following norms:

EEC-Directive: 92/42/EEC verwendete Normen: EG-Richtlinie: 92/42/EWG EN 303.2(1999), EN 304(1993)

> 90/396/CEE EN 303.3 (1999) 90/396/EEG

90/396/EEC

90/396/EWG

73/23/CEE DIN EN 50165(2001) EN 50165 (1997+A1:2001) 73/23/EEG DIN EN 60335-1(2003), EN 60335-1(2002)

73/23/EEC

73/23/EWG

89/336/CEE EN 55014-1(2000+A1:2001) 89/336/EEG EN 55014-2(1997+A1:2001) EN 61000-3-2(2000). 89/336/EEC EN 61000-3-3(1995+A1:2001) 89/336/EWG EN55022 classe B (1998+A1 :2000)

97/23/CEE (art.3 section 3) 97/23/EEG (art. 3, lid 3) 97/23/EEC (article 3, sub 3) 97/23/EWG (Art. 3, Absatz 3)

Mertzwiller, 24 septembre 2009

Wim HARBERS Directeur des Opérations et de la Recherche et Développement

C002722-A

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Introduction

1.1 Symbols and abbreviations

Caution danger

Risk of injury and damage to equipment. Attention must be paid to the warnings on safety of persons and equipment.

Specific information

Information must be kept in mind to maintain comfort.



Reference

Refer to another manual or other pages in this instruction manual.

DHW: Domestic hot water

1.2 General

We congratulate you for having chosen a quality product. We advise you warmly to read the instructions below in oder to ensure the optimal operation of your burner. We are convinced that it will give you complete satisfaction and meet all your expectations.

- Keep these instructions in a safe place close to the appliance.
- In the interest of customers, De Dietrich Thermique SAS are continuously endeavouring to make improvements in product quality. All the specifications stated in this document are therefore subject to change without notice.

1.2.1 **Manufacturer's liability**

The liability of De Dietrich Thermique SAS as the manufacturer may not be invoked in the following cases:

- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.
- Failure to abide by the instructions on installing the appliance.

1.2.2 Installer's liability

The installer is responsible for the installation and commissioning of the appliance. The installer must respect the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Carry out installation in compliance with the prevailing legislation and standards.
- Perform the initial start up and carry out any checks necessary.

When handing over the installation to the user, the installer will draw the user's particular attention to the following points:

- The safety of the installation.
- The functioning of the installation and the boiler.
- Periodic maintenance to be done.

1.2.3 **User's liability**

To ensure the optimum operation of your appliance, we strongly recommend that you abide by the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance.
- Call on qualified professionals to:
- Carry out installation in compliance with the prevailing legislation and standards.
- Perform the initial start up.
- Carry out work on the appliance and the installation.
- Ensure the Appliance is serviced in accordance with the manufacturer's instructions by a suitable qualified person.
- Get your installer to explain your installation to you.

1.3 Homologations

1.3.1 Certifications

Certificate of compliance (For France)

In application of Article 25 of the Order of 27 April 2009 amending the Order of 2 August 1977 amended and Article 1 of the amended Order of 05/02/1999, the installer is required to draw up certificates of conformity approved by the Ministers responsible for construction and gas safety:

- Different forms (forms 1, 2 or 3) for a new gas installation,
- Model 4 in particular after replacing a furnace with a new one.

CE identification no: 1312 AQ 954 (France).

CE identification no: 1312 AQ 953 (Germany, Switzerland).

1.3.2 Directive 97/23/EC

Gas and oil boilers with a maximum operating temperature of 110°C and hot water tanks with a maximum operating pressure of 10 bar pertain to article 3.3 of the directive, and therefore, cannot be CEmarked to certify compliance with the directive 97/23 EC.

The boilers and hot water tanks are designed and manufactured in accordance with the sound engineering practice, as requested in article 3.3 of the directive 97/23/EC, it is certified by compliance with the directives 90/396/EC, 92/42/EC, 2006/95/EC and 2004/108/EC.

Safety instructions and recommendations

Safety instructions

For a proper operating of the boiler, follow carefully the

Only qualified professionals are authorised to work on the appliance and the installation.

Incorrect use or unauthorised modifications to the installation or the equipment itself invalidate any right to Before any work, switch off the mains supply to the appliance.

Keep to the polarity shown on the terminals: phase (L), neutral (N) and earth 🖶.

Keep children away from the boiler.

2.1.1 Fire hazard



Nt is forbidden to store inflammable products and materials in the boiler room or close to the boiler, even temporarily.



If you smell gas, do not use a naked flame, do not smoke, do not operate electrical contacts or switches (doorbell, lights, motor, lift, etc.).

1.Shut off the gas supply.

- Open the windows.
- 3. Extinguish all flames.
- 4. Evacuate the premises.
- **5.**Contact a qualified professional.
- **6.**Inform the gas supplier.

2.1.2 Risk of intoxication



Do not obstruct the air inlets in the room (even partially).



If you smell flue gases:

- **1.**Switch the appliance off.
- 2.Open the windows.
- 3. Evacuate the premises.
- **4.**Contact a qualified professional.

2.1.3 Risk of being burnt



Depending on the settings of the appliance:

- The temperature of the flue gas conduits may exceed 60°C.
- The temperature of the radiators may reach 95°C.
- The temperature of the domestic hot water may reach 65°C.

2.1.4 Risk of damage



Do not stock chloride or fluoride compounds close to the appliance.



Install the appliance in frost-free premises.

Do not neglect to service the appliance: Contact a qualified professional or take out a maintenance contract for the annual servicing of the appliance.

Recommendations

- Check regularly that the installation contains water and is pressurised.
- Keep the appliance accessible at all times.
- Avoid draining the installation.
- The appliance should be on Summer or Antrifreeze mode rather than switched off to guarantee the following functions:
 - Anti blocking of pumps
 - Antifreeze protection
 - Protection against corrosion on domestic hot water tanks fitted with a titanium anode

18/03/2016 - 300011906-02 GT 530

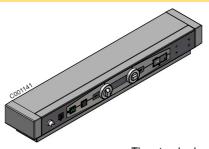
3 Technical description

3.1 General description

The boilers of the GT 530 range are pressurised hot water boilers designed for connecting to a flue pipe which require a separate automatic fuel-oil or gas burner.

3.2 Composition of the range

3.2.1 Standard control panel- S3



Standard panel to be fitted

Panel comprising the settings, control and safety devices allowing the boiler to operate autonomously, without regulation.

The standard panel is used to connect the boiler to the boiler room control cabinet.

This cabinet can be fitted with control units.

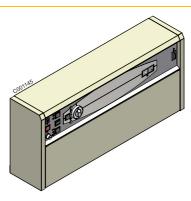
3.2.2 K3 control panel



Separate panel

Panel comprising the settings, control and safety devices allowing the boiler to operate autonomously.

Control panel K3 also allows the boiler to be used as a secondary boiler for installations with 2 to 10 boilers in cascade, one of which is fitted with a "DIEMATIC-m3" control panel.

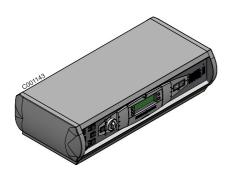


Side panel



A version of the K3 control panel with lateral attachment is also available.

3.2.3 DIEMATIC-m3 control panel



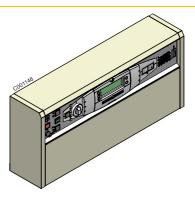
Separate panel

Top of the range electronic control panel with digital display, comprising the settings, control and safety devices allowing the boiler to operate autonomously.

The DIEMATIC-m3 panel is fitted as standard with a control unit which operates according to the outside temperature.

The DIEMATIC-m3 panel also allows the boiler to be used as a master boiler for installations with 2 to 10 boilers in cascade.

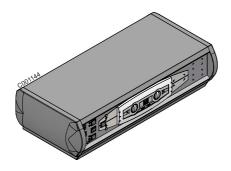
The other boilers (1 to 9) must be fitted with a "K3" control panel.



Side panel

A version of the DIEMATIC-m3 control panel with lateral attachment is also available.

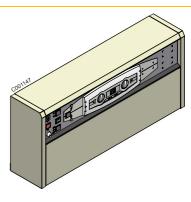
3.2.4 B3 control panel



Separate panel

Top of the range electronic control panel with digital display, comprising the settings, control and safety devices allowing the boiler to operate autonomously.

This panel makes it possible to give priority to DHW.



Side panel

A version of the B3 control panel with lateral attachment is also available

3.3 Technical specifications

3.3.1 Boilers for following countries: France, Algeria, Belgium, Bulgaria, China, Cyprus, Spain, Greece, Luxemburg, Poland, Portugal, Czech Republic, Romania, Tunisia

Conditions of use:

Maximum operating pressure: 6 bar Maximum operating temperature: 100 °C Boiler thermostat setting: 30 to 90°C Safety thermostat setting: 110 °C

	Boiler		GT 530	GT 530	GT 530	GT 530	GT 530	GT 530	GT 530	GT 530	GT 530	GT 530									
			-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-522	-23	-24	-525
Useful output		kW	348 to 406	406 to 464	464 to 522	522 to 580	580 to 638	638 to 696	696 to 754	754 to 812	812 to 870	870 to 928	928 to 986	986 to 1044	1044 to 1102	1102 to 1160	1160 to 1218	1218 to 1276	1276 to 1334	1334 to 1400	1400 to 1450
Power input		kW	380 to 447	442 to 508	505 to 571	566 to 632	635 to 703	701 to 769	763 to 831	821 to 890	897 to 967	954 to 1024	1022 to 1093	1077t o 1147	1146 to 1216	1198 to 1268	1265 to 1336	1333 to 1404	1393 to 1464	1463t o 1544	1532 to 1595
Number of sect	ions		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Water content		I	389	427	465	503	541	579	617	655	693	731	769	807	845	905	943	981	1019	1057	1095
Water	Δ T = 10K	mbar	18	22	28.4	34.8	42	50	57.6	67.2	77.6	26.2	30.2	35.8	41.4	48.0	53.6	59.2	64.8	71.6	78.4
resistance (1)	∆ T = 15K		8	9.9	12.6	15.5	18.7	22.4	25.8	30	34.7	11.7	13.5	14.0	18.5	21.5	24	26.5	29	32	35
	∆ T = 20K		4.5	5.5	7.1	8.7	10.5	12.5	14.4	16.8	19.4	6.5	7.6	9.0	10.4	12.0	13.4	14.8	16.2	17.9	19.6
Pressure in the nozzle pressure		mbar	1.7	1.75	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.85	3	3.1	3.2	3.3	3.4	3.5
Flue gas tempe Ambient tempe		K	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
Mass flue gas	Fuel oil	Kg/h	690	790	790	980	1080	1180	1380	1380	1480	1580	1670	1770	1870	1970	2070	2170	2260	2360	2460
flow rate (1) (2)	Gas		720	830	930	1030	1140	1240	1340	1450	1550	1650	1760	1860	1960	2070	2170	2270	2380	2480	2580
Combustion chamber	Inscribed diameter	mm	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614
	Equivalent diameter	mm	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694
	Depth	mm	706	817	928	1039	1150	1261	1372	1483	1594	1705	1816	1927	2038	2189	2300	2411	2522	2633	2744
	Volume	m^3	0.28	0.32	0.36	0.40	0.45	0.49	0.53	0.57	0.61	0.65	0.70	0.74	0.78	0.84	0.88	0.92	0.96	1.00	1.05
Maintenance consumption*	Δ T = 30K	%	0.11	0.10	0.09	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
Weight (empty)		kg	1852	2046	2237	2412	2601	2810	3000	3171	3364	3561	3756	3955	4124	4343	4538	4734	4930	5107	5297

^{*}Maintenance consumption: total heat emission when the burner is off as a percentage of the nominal input power when the difference between the mean boiler temperature and the room temperature is 30 K - in accordance with DIN 4702 - EN 303.

- (1) Nominal operation (top boiler power)
- (2) $CO_2 = 13.1$ to 13.5% with fuel oil and 9.5% with natural gas.
- (3) Boiler temperature: 80 °C Ambient temperature: 20 °C
- (4) In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle.

3.3.2 Boilers for following countries: Germany, Austria, Serbia, Slovenia

Conditions of use:

Maximum operating pressure: 6 bar Maximum operating temperature: 100 °C Maximum operating temperature: 120 °C (in accordance with TRD 702) Boiler thermostat setting: 30 to 90°C Safety thermostat setting: 110 °C

			GT	GT	GT	GT	GT	GT											
Е	Boiler		530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530
			-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-22	-23	-24	-25
Useful output		kW	415	460	505	550	595	640	685	730	730	820	865	910	955	1000	1045	1090	1135
			to 460	to 505	to 550	to 595	to 640	to 685	to 730	to 775	to 820	to 865	to 910	to 955	to 1000	to 1045	to 1090	to 1135	to 1180
Power input		kW	448	494	547	597	643	689	743	790	790	886	935	982	1034	1082	1131	1180t	1227
			to 500	to 546	to 599	to 649	to 696	to 741	to 797	to 842	to 892	to 938	to 987	to 1034	to 1085	to 1133	to 1182	o 1231	to 1278
Number of section	ns	•	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Water content		I	465	503	541	579	617	655	693	731	769	807	845	905	943	981	1019	1057	1095
Water	Δ T = 10K		22	25.9	30.5	37	43.5	50	55.8	21.8	24.2	26.8	30	33	35.6	38.9	42.9	45.6	48.9
resistance (1)	Δ T = 15K	mbar	9.8	11.5	13.6	16.4	19.3	22.2	24.8	9.7	10.8	11.9	13.3	14.7	15.8	17.3	19.1	20.3	21.9
	∆ T = 20K		5.5	6.9	8.1	9.2	10.6	12	13.9	4.5	5.8	6.5	7.2	7.9	8.6	9.4	1.6	11.8	12.4
Pressure in the function nozzle pressure		mbar	1.4	1.45	1.5	1.55	1.6	1.65	1.7	1.75	1.8	1.85	1.95	2.05	2.1	2.15	2.2	2.25	2.3
Flue gas tempera Ambient tempera		К	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
Mass flue gas	Fuel oil	Kg/h	770	850	920	1000	1070	1150	1220	1300	1370	1450	1520	1600	1670	1750	1820	1900	1970
flow rate (1)(2)	Gas	rxy/II	810	890	970	1040	1120	1200	1280	1360	1440	1520	1590	1670	1750	1830	1910	1990	2070
Combustion chamber	Inscribed diameter	mm	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614
	Equivalent diameter	mm	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694
	Depth	mm	928	1039	1150	1261	1372	1483	1594	1705	1816	1927	2038	2189	2300	2411	2522	2633	2744
	Volume	m ³	0.36	0.40	0.45	0.49	0.53	0.57	0.61	0.65	0.70	0.74	0.78	0.84	0.88	0.92	0.96	1.00	1.05
Maintenance consumption*	Δ T = 30K	%	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10
Weight (empty)		kg	2205	2391	2567	2771	2945	3120	3314	3494	3684	3872	4040	4266	4444	4639	4817	4994	5168

^{*}Maintenance consumption: total heat emission when the burner is off as a percentage of the nominal input power when the difference between the mean boiler temperature and the room temperature is 30 K - in accordance with DIN 4702 - EN303.

- (1) Nominal operation (top boiler power)
- (2) $CO_2 = 13.1$ to 13.5% with fuel oil and 9.5% with natural gas.
- (3) Boiler temperature: 80 °C Ambient temperature: 20 °C
- (4) In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle.

3.3.3 Boilers for following countries: Switzerland

Conditions of use:

Maximum operating pressure: 6 bar Maximum operating temperature: 100 °C Boiler thermostat setting: 30 to 90°C

Safety thermostat setting: 110 °C

Е	Boiler		GT 530 -8	GT 530 -9	GT 530 -10	GT 530 -11	GT 530 -12	GT 530 -13	GT 530 -14	GT 530 -15	GT 530 -16	GT 530 -17	GT 530 -18	GT 530 -19	GT 530 -20	GT 530 -21	GT 530 -522	GT 530 -23	GT 530 -24	GT 530 -525
Useful output		kW	250 to 365	275 to 395	300 to 435	330 to 470	360 to 510	390 to 550	420 to 580	440 to 620	470 to 660	495 to 690	530 to 730	550 to 770	580 to 810	610 to 840	640 to 880	670 to 920	690 to 960	720 to 1000
Power input		kW	260 to 390	291 to 425	315 to 465	346 to 495	381 to 550	409 to 590	440 to 620	460 to 650	492 to 710	519 to 740	557 to 785	578 to 825	609 to 870	642 to 905	679 to 945	705 to 990	728 to 1030	764 to 1075
Number of sections			8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Water content		I	427	465	503	541	579	617	655	693	731	769	807	845	905	943	981	1019	1057	1095
Water resistance	Δ T = 10K		13.9	15.8	19.1	23.1	27.6	32.2	35.2	40.3	15.7	17.1	19.3	21.5	23.4	25.1	28.0	30.2	32.1	37.0
(1)	∆ T = 15K	mbar	6.2	7	8.5	10.3	12.3	14.3	15.7	17.9	7	7.6	8.6	9.5	10.4	11.2	12.4	13.3	14.5	16.5
	∆ T = 20K		3.5	4.2	5.1	5.7	6.7	7.7	8.8	10	3.8	4.1	4.6	5.1	5.6	6.1	7.6	7.8	8.2	9.3
Pressure in the furn pressure = 0 (4)	ace for nozzle	mbar	1.05	1.05	1.1	1.1	1.15	1.2	1.2	1.25	1.3	1.3	1.35	1.4	1.5	1.5	1.55	1.6	1.6	1.65
Flue gas temperature (1) (3)	re - Ambient	К	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160	<160
Mass flue gas flow	Fuel oil	kg	0.160	0.174	0.191	0.203	0.226	0.242	0.254	0.267	0.291	0.304	0.322	0.339	0.357	0.371	0.388	0.406	0.423	0.441
rate (1) (2)	Gas	per sec	0.174	0.190	0.207	0.221	0.245	0.263	0.276	0.290	0.316	0.330	0.350	0.367	0.388	0.403	0.421	0.441	0.459	0.479
Combustion chamber	Inscribed diameter	mm	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614
	Equivalent diameter	mm	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694
	Depth	mm	817	928	1039	1150	1261	1372	1483	1594	1705	1816	1927	2038	2189	2300	2411	2522	2633	2744
	Volume	m^3	0.32	0.36	0.40	0.45	0.49	0.53	0.57	0.61	0.65	0.70	0.74	0.78	0.84	0.88	0.92	0.96	1.00	1.05
Maintenance consumption*	Δ T = 30K	%	0.13	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09
Weight (empty)		kg	2046	2237	2412	2601	2810	3000	3171	3364	3561	3756	3955	4124	4343	4538	4734	4930	5107	5297

^{*}Maintenance consumption: total heat emission when the burner is off as a percentage of the nominal input power when the difference between the mean boiler temperature and the room temperature is 30 K - in accordance with DIN 4702 - EN 303.

- (1) Nominal operation (top boiler power)
- (2) $CO_2 = 13.1$ to 13.5% with fuel oil and 9.5% with natural gas.
- (3) Boiler temperature: 80 °C Ambient temperature: 20 °C
- (4) In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle.

3.3.4 Boilers for following countries: Russia

Conditions of use:

Maximum operating pressure: 6 bar Maximum operating temperature: 100 °C Maximum operating temperature: 120 °C (in accordance with TRD 702) Boiler thermostat setting: 30 to 90°C Safety thermostat setting: 110 °C

E	Boiler		GT 530 -9	GT 530 -10	GT 530 -11	GT 530 -12	GT 530 -13	GT 530 -14	GT 530 -15	GT 530 -16	GT 530 -17	GT 530 -18	GT 530 -19	GT 530 -20	GT 530 -21	GT 530 -522	GT 530 -23	GT 530 -24	GT 530 -525
Useful output		kW	464 to 522	522 to 570	570 to 617	617 to 665	665 to 712	712 to 760	760 to 807	807 to 863	863 to 919	919 to 974	974 to 1030	1030 to 1086	1086 to 1142	1142 to 1198	1198 to 1254	1254 to 1309	1309 to 1365
Power input		kW	503 to 571	566 to 632	623 to 703	676 to 769	727 to 831	776 to 890	831 to 967	881 to 1024	941 to 1093	1002 to 1147	1067 to 1216	1117 to 1268	1183 to 1336	1244 to 1404	1306 to 1464	1369 to 1544	1426 to 1595
Number of section	ons		9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Water content		- 1	465	503	541	579	617	655	693	731	769	807	845	905	943	981	1019	1057	1095
Water resistance (1)	Δ T = 15K	mbar	12.6	15.0	17.5	20.4	22.9	26.2	29.8	10.1	11.7	13.4	16.1	18.6	21.0	23.1	25.9	28.2	31.3
Pressure in the fi		mbar	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1
Flue gas tempera Ambient tempera		К	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190	<190
Mass flue gas	Fuel oil	Kg/h	870	950	1040	1120	1200	1270	1360	1450	1540	1640	1730	1810	1910	2010	2100	2200	2290
flow rate (1)(2)	Gas	- Kg/II	920	1000	1090	1170	1260	1340	1420	1520	1620	1720	1820	1900	2010	2110	2210	2310	2400
Combustion chamber	Inscribed diameter	mm	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614
	Equivalent diameter	mm	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694
	Depth	mm	928	1039	1150	1261	1372	1483	1594	1705	1816	1927	2038	2189	2300	2411	2522	2633	2744
	Volume	m ³	0.36	0.40	0.45	0.49	0.53	0.57	0.61	0.65	0.70	0.74	0.78	0.84	0.88	0.92	0.96	1.00	1.05
Maintenance consumption*	Δ T = 30K	%	0.16	0.15	0.14	0.13	0.13	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10
Weight (empty)		kg	2205	2391	2567	2771	2945	3120	3314	3494	3684	3872	4040	4266	4444	4639	4817	4994	5168

^{*}Maintenance consumption: total heat emission when the burner is off as a percentage of the nominal input power when the difference between the mean boiler temperature and the room temperature is 30 K - in accordance with DIN 4702 - EN303.

- (1) Nominal operation (top boiler power)
- (2) $CO_2 = 13.1$ to 13.5% with fuel oil and 9.5% with natural gas.
- (3) Boiler temperature: 80 °C Ambient temperature: 20 °C
- (4) In order for the boiler to operate correctly, it is imperative to respect the draught at the nozzle.

4 Installation

4.1 Regulations governing installation

4.1.1 In general



Installation must be carried out in accordance with the prevailing regulations, the codes of practice and the recommendations in these instructions.

4.1.2 In particular for France

Heating installations must be designed and constructed in such a way as to prevent the return of water from the heating circuit and products put into it into the drinking water network located upstream. The installation must not be in direct relation with the drinking water network (Article 16-7 of the departmental health Directive).

When these installations are fitted with a filling system connected to the drinking water network, they comprise a CB disconnector (disconnector for zones with non-controllable pressure differences) which satisfy the functional requirements of the NF P 43-011 standard.

■ Residential buildings

Statutory terms and conditions of installation and maintenance:

The installation and maintenance of the appliance must be carried out by a qualified professional in compliance with the statutory texts of the codes of conduct in force, particularly:

- Order of 27 April 2009 amending the Order of 2 August 1977
 Technical and safety rules applicable to combustible gas and liquefied hydrocarbon installations situated inside residential buildings and their annexes.
- NF P 45-204 standards Gas installation, (formerly DTU 61-1, gas installations: April 1982, addendum no 1: July 1984).
- Local Sanitary Regulations

For appliances connected to the electricity network:

- NF C 15-100 standards Low voltage electrical installation - Rules...

■ Establishments open to the public

Statutory terms and conditions of installation:

The installation and maintenance of the appliance must be carried out in compliance with the statutory texts and rules of the codes of conduct in force, particularly:

- Safety regulations against fire and panic in establishments open to the public:
- a. General regulations

For all appliances:

- Articles GZ - Installations operating on combustible gases and liquefied hydrocarbons.

Then, depending on use:

- Articles CH-Heating, ventilation, refrigeration, air conditioning and production of steam and domestic hot water.
- **b.** Instructions specific to each type of establishment open to the public (hospitals, stores, etc.).

■ Certificate of compliance (only concerns GT 530 boilers fitted with a gas burner)

In application of Article 25 of the Order of 27 April 2009 amending the Order of 2 August 1977 amended and Article 1 of the amended Order of 05/02/1999, the installer is required to draw up certificates of conformity approved by the Ministers responsible for construction and gas safety:

- Different forms (forms 1, 2 or 3) for a new gas installation
- Model 4 in particular after replacing a furnace with a new one.

4.1.3 In particular for Germany

Abide by the following standards, rules and directives when installing and commissioning the boiler:

- DIN 4705: calculation of chimney dimensions
- DIN EN 12828 (June 2003 edition): heating systems in buildings. Planning of hot water heating installations (up to a maximum operating temperature of 105°C and a maximum output of 1 MW)
- DIN 4753: drinking and industrial water heating installations
- DIN 1988: technical rules on drinking water installations (TRW)
- DVGW-TRGI: technical rules on gas installations, including complementary equipment
- Working paper DVGW G 260/I: technical rules on the nature of the

4.2 Package list



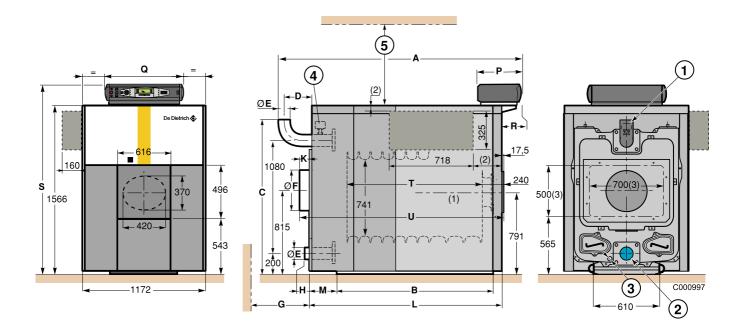
See assembly instructions

Mounting



For mounting instructions, see installation instructions.

Main dimensions 4.3.1



- (1) Burner centre line
- The lateral control panel can be mounted to the right or left of the boiler. Exact height positioning defined by the fitter during assembly.
- (3) max

- Heating flow Ø E (weld) (1)
- Heating return Ø E (weld)
- Draining Mk3/4
- Flow sensor
- Minimum height for sweeping = 850

		GT																		
	Boiler	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530
		-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-522	-23	-24	-525
A (mm)	B3, K3, DIEMATIC-m3	1761	1872	1983	2094	2205	2316	2427	2538	2649	2760	2871	3017	3128	3279	3390	3501	3612	3723	3834
	Standard	1606	1717	1828	1939	2050	2161	2272	2383	2494	2605	2716	2862	2973	3124	3235	3346	3457	3568	3679
B (mm)		967	1078	1078	1300	1300	1522	1522	1744	1744	1966	1966	2188	2188	2450	2450	2672	2672	2894	2894
C (mm)		1488	1488	1488	1488	1488	1488	1488	1488	1488	1488	1488	1504	1504	1504	1504	1504	1504	1504	1504
D (mm)		240	211	212	233	234	255	256	217	188	189	210	236	257	208	209	230	231	252	253
Ø E (weld	l) (mm)	139.7	139.7	139.7	139.7	139.7	139.7	139.7	139.7	139.7	139.7	139.7	159	159	159	159	159	159	159	159
ØF (mm)		300	300	300	350	350	350	350	400	400	400	400	400	400	400	*	*	*	*	*
G** (mm)		-	-	-	-	-	-	-	-	150	150	370	370	370	650	650	650	980	980	980
H (mm)		21	-8	-7	14	15	36	37	-2	-31	-30	-9	-8	13	-36	-35	-14	-13	8	9
K*** (mm))	33	4	5	26	27	48	49	10	-19	-18	3	4	25	-24	-23	-2	-1	20	21
L (mm)		1305	1445	1555	1645	1755	1845	1955	2105	2245	2355	2445	2555	2645	2845	2955	3045	3155	3245	3355
M (mm)		249	265	319	243	297	221	275	259	324	269	321	265	299	269	324	269	324	249	303
P (mm)	B3, K3, DIEMATIC-m3	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355	355
	Standard	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Q (mm)	B3, K3, DIEMATIC-m3	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755
	Standard	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738
R (mm)	B3, K3, DIEMATIC-m3	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175	175
	Standard	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
S (mm)	B3, K3, DIEMATIC-m3	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760	1760
	Standard	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670	1670
T (mm)	•	706	817	928	1039	1150	1261	1372	1483	1594	1705	1816	1927	2038	2189	2300	2411	2522	2633	2744
U (mm)		1355.5	1466.5	1577.5	1688.5	1799.5	1910.5	2021.5	2132.5	2243.5	2354.5	2465.5	2576.5	2687.5	2838.5	2949.5	3060.5	3171.5	3282.5	3393.5
V (mm)	B3, K3, DIEMATIC-m3	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755	755
	Standard	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738	738

* Plain plate, requires cutting. Maximum cut-out 500 x 700.

** G = Length required for clearing the water distributing tube.

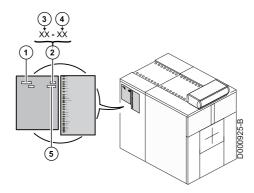
*** Dimension representing the end of the 100 mm long chimney connection.

with models GT 530-21, GT 530-22, GT 530-23, GT 530-24 and GT 530-25, a plain plate which must be cut out is supplied without the 100 mm chimney connection.

4.3.2 Type plate

The rating plate fixed on the side of the boiler during installation is used to identify the boiler correctly and also provides the main specifications of the boiler.

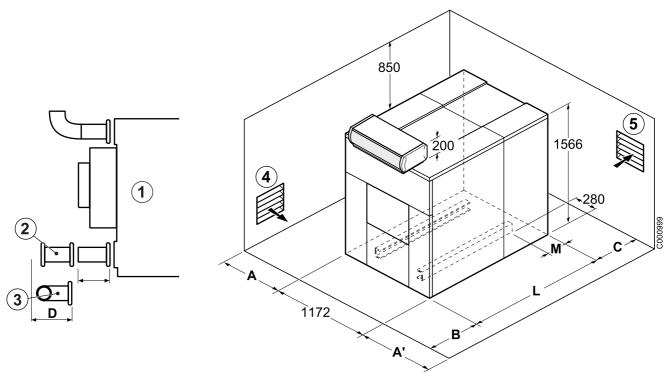
- ① Boiler type
- 2 Manufacturing date
- 3 Year of manufacture
- 4 Week of manufacture
- ⑤ Serial no. of the appliance



4.3.3 Boiler location

For the assembly and because of their design, GT 530 boilers require no special base. Their closed furnace system means that the floor need not have refractory properties. All you have to ensure is that the floor can support the weight of the boiler when it is fitted for operation.

If the boiler location is not determined precisely, leave enough space around the boiler to facilitate monitoring and maintenance operations.



- Boiler body *
- Straight connection (not supplied) *
 - * 1) In order to facilitate subsequent work on the boiler(replacing the water distributing tube etc.) use a flanged connection from the boiler to the system, making sure you comply with minimum clearance dimension **D**.
- (3) Angled connection (not supplied)
- Air inlet
- Air outlet

If A = 1.2 m (door opening side), A' = 0.5 m

If A = 0.5 m, A' = 1.2 m (door opening side): adapt the dimensions on the basis of the dimensions of the burner when the door is open.

B = 1.5 m: adapt the dimensions on the basis of the dimensions of the burner.

	GT																		
Boiler	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530
	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-522	-23	-24	-525
L	1305	1445	1555	1645	1755	1845	1955	2105	2245	2355	2445	2555	2645	2845	2955	3045	3155	3245	3355
M	248	265	319	243	297	221	275	259	324	269	321	265	299	269	324	269	324	249	303
C min.	300	300	300	300	300	300	300	300	436	436	656	656	656	936	936	936	1266	1266	1266
D min.	-	-	-	-	-	-	-	-	136	136	356	356	356	636	636	636	966	966	966

4.3.4 Ventilation

The location of air inlets in relation to the high ventilation openings shall ensure that the air is renewed in the entire volume of the boiler room.

Position the air inlets in relation to the high ventilation vents in order that the air is refreshed throughout the boiler room.



It is in any case imperative to conform to the local regulations in force.



Do not obstruct the air inlets in the room (even partially).

Upper and lower air vents compulsory:

Top ventilation:

 Cross section equal to half the total cross section of the flue gas pipes with a minimum of 2.5 dm².

Bottom ventilation:

- Direct air inlet: S (dm2) $\geq 0.86P$

P = Installed power in kW

 Λ

In order to avoid damage to the boiler, it is necessary to prevent the contamination of combustion air by chlorine and/or fluoride compounds, which are particularly corrosive.

These compounds are present, for example, in aerosol sprays, paints, solvents, cleaning products, washing products, detergents, glues, snow clearing salts, etc.

Therefore:

- Do not pull in air evacuated from premises using such products: hairdressing salons, dry cleaners, industrial premises (solvents), premises containing refrigeration systems (risk of refrigerant leakage), etc.
- Do not stock such products close to the boilers.

If the boiler and/or peripheral equipment are corroded by such chloride or fluoride compounds, the contractual guarantee cannot be applied.

France

The minimum cross sections and the emplacement of the fresh air inlet and the air discharge are governed by the order of 21/03/1968 amended by the orders of 26/02/1974 and 03/03/1976.

Generator installed in a building for collective use (installations less than 70 kW)

- ▶ The fresh air inlet must:
 - Come out in the lower section of the premises,
 - Have a free minimum cross section calculated on the basis of 0.03 dm² per kilowatt installed output and at least equal to 2.5 dm².
- ▶ The air discharge must:
 - Be located in the upper section of the premises,
 - Rise above the roof (unless using an equivalent system which does not cause a nuisance to neighbours),
 - Have a free cross section (corresponding to 2/3 of that of the air inlet and at least equal to 2.5 dm²).

Generator installed in a builing for individual use

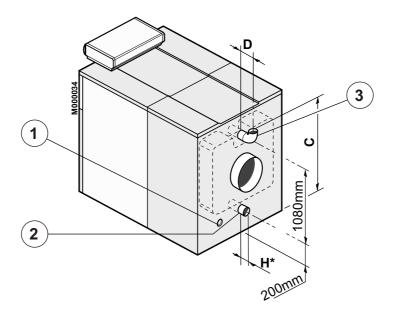
- An adequate supply of fresh air must be provided as close as possible to the appliances. Its cross section must be at least 0.5 dm².
- In the upper section of the premises, an air outlet must ensure effective ventilation.

Establishments open to the public

- New establishment: Refer to the order of 25/06/1980 (installations of more than 20 kW and less than or equal to 70 kW).
- Existing establishment: Refer to the order of 25/06/1980 (installations less than 70 kW).

4.4 Hydraulic connections

4.4.1 Dimensional information required



Draining outlet 3/4"

(2) Heating return:

- 7 to 17 sections: 139.7 - 5" - 18 to 25 sections: 159 - 6" weld.

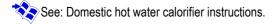
(3) Heating flow:

- 7 to 17 sections: 139.7 - 5" - 18 to 25 sections: 159 - 6" weld.

* dimension without connection (see figure on chapter Boiler location, straight or angled connection).

	GT																		
Boiler	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530	530
	-7	-8	-9	-10	-11	-12	-13	-14	-15	-16	-17	-18	-19	-20	-21	-522	-23	-24	-525
C (mm)	1488	1488	1488	1488	1488	1488	1488	1488	1488	1488	1488	1504	1504	1504	1504	1504	1504	1504	1504
D (mm)	240	211	212	233	234	255	256	217	188	189	210	236	257	208	209	230	231	252	253
H (mm)	21	-8	-7	14	15	36	37	-2	-31	-30	-9	-8	13	-36	-35	-14	-13	8	9

4.4.2 Connection of the water circuit for domestic use



■ Water flow in the boiler

The water flow in the boiler when the burner is operating must correspond with the following formulae:

- Nominal water flow Qn = 0.86 Pn/20.
- Minimum flow Qmin = 0.86 Pn/45 (this flow also corresponds with the minimum recycle flow in the boiler).
- Maximum water flow Qmax = 0.86 Pn/5.

 $Qn = flow in m^3/h$

Pn = Nominal output (full boiler output) in kW.

■ Operation in cascade

After stopping the burner:

- Timeout required before the order to close a 2 way valve: 3 min.
- Switch a possible shunt pump (located between the boiler and a butterfly valve) off via the end of run contact of the butterfly valve.

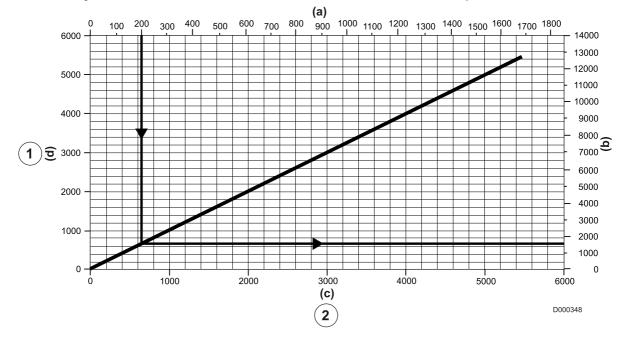
Operation with 2-stage burner

- The water temperature in the boiler is maintained at 50°C or more;
 The first stage must be set to a minimum of 30% of the nominal stage.
- Operation at modulated low temperature (minimum outlet temperature: 40°C); The first stage must be set to a minimum of 50% of the nominal stage.

Operation with modulating burner

- The water temperature in the boiler is maintained at 50°C or more: The burner can modulate down to 30% of the nominal stage.
- Operation at modulated low temperature (minimum outlet temperature: 40°C); The burner can modulate down to 50% of the nominal stage.

■ Minimum safety valve flowrate as a function of maximum boiler nominal output



- Minimum relieving capacity
- Maximum gross boiler output

Jnit (a) = kW

- (b) = lb/h
- () MD(
- (c) = MBtu/h
- (d) = Kg/h

Example:

Maximum boiler nominal output is 800 kW.

Minimum safety valve flowrate must be 2600 Kg/h.

There must be no total or partial closing mechanism between the boiler and the safety valves (France: DTU - 65.11, § 4.22 - NF P 52-203).

4.5 Filling the system

Filling shall be performed with a low flow rate from a low point in the boiler room in order to ensure that all the air in the boiler is bled from the high point of the system.

All the pumps must be stopped before filling (included shunt pump(s)).

VERY IMPORTANT: Instructions for starting up the boiler for the first time after the system is fully or partly drained: If all the air is not bled naturally to an expansion vessel which opens out onto the air, the system must include manual bleeder valves, in addition to automatic bleeder valves with the capability to bleed the system by themselves when it is operating, the manual bleeder valves are used to bleed all the high points of the system and to make sure that the filled system is free of air before the burner is turned on.



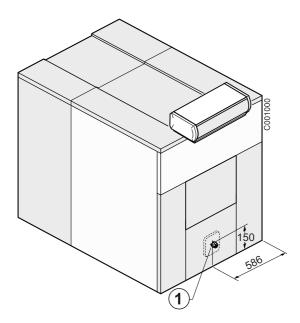
Do not add cold water suddenly into the boiler when it is

4.6 Sludge removal

A tapped \emptyset 2" hole with a plug has been provided on the bottom of the front of the boiler.. Fit a 1/4 turn valve (not supplied) on the opening to remove the sludge.

Sludge removal leads to the draining of large quantities of water, so remember to refill the system after the operation.

never replace a boiler in an existing system without carefully rinsing the system first. Install a sludge decanting pot on the return pipe, very close to the boiler.



1) 2" tapped sludge removal hole

4.7 Chimney connection

The high-performance features of modern boilers and their use in specific conditions as a result of the advance in burner technology (e.g. first-stage or low modulation range operation) lead to very low flue gas temperatures (<160°C).

For this reason:

- Use flue gas pipes designed to enable the flow of condensates which may result from such operating modes in order to prevent damage to the chimney.
- Install a draining tee at the bottom of the chimney.

The use of a draught moderator is recommended as well.

4.7.1 Flue size

Refer to applicable regulations while determining the size of the flue.

Please note that GT 530 boilers have pressurised and tight furnaces and that the pressure at the connection to the chimney must not exceed 0 mbar, unless special sealing precautions have been taken, for instance in order to connect a static condenser/regenerator.

4.7.2 Connection to the flue gas pipe

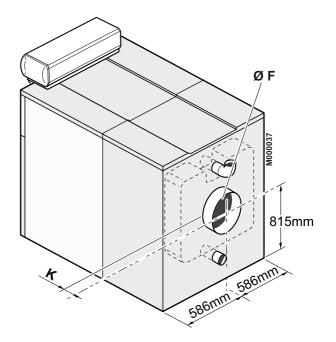
The connection shall be removable, and offer minimum load losses, i.e. it must be as short as possible with no sudden change in section.

Its diameter shall always be at least equal to that of the boiler outlet, i.e.:

- Ø 300 mm for 7 to 9 sections.
- Ø 350 mmfor 10 to 13 sections.
- Ø 400 mmfor 14 to 20 sections.

Boilers with 21 to 25 sections are supplied with a plain plate. The maximum cut-out dimensions are 500 x 700 mm.

Fit a measuring point (\emptyset 10 mm hole) on the flue, in order to adjust the burner (combustion check).



Boiler	GT 530 -7	GT 530 -8	GT 530 -9	GT 530 -10	GT 530 -11	GT 530 -12	GT 530 -13	GT 530 -14	GT 530 -15	GT 530 -16	GT 530 -17	GT 530 -18	GT 530 -19	GT 530 -20	GT 530 -21	GT 530 -522	GT 530 -23	GT 530 -24	GT 530 -525
ØF	300	300	300	350	350	350	350	400	400	400	400	400	400	400		Р	lain pla	te	
K	33	4	5	26	27	48	49	10	-19	-18	3	4	25	-24	-23*	-2*	-1*	20*	21*

^{*}Dimension representing the end of the 100 mm long chimney connection.

Note: with models GT 530-21, GT 530-22, GT 530-23,, GT 530-24 and GT 530-25, a plain plate which must be cut out is supplied without the 100 mm chimney connection.

Fuel-oil or gas connections



Refer to the instructions supplied with the burner.

Electrical connections



Refer to the connection instructions supplied with the control panel..

Commissioning



- Control panel instructions
- Burner instructions
- Domestic hot water calorifier instructions

Switching off the boiler

Set the On/Off switch to O.



See: Control panel instructions

Cut the gas supply to the boiler (if present)

■ DIEMATIC-m3 control panel



The panel must always be supplied with 230V voltage:

- to ensure the anti-grip of the heating pump,
- to ensure Titan Active System® operation when a titanium anode is protecting the DHW tank.

Use the mode:

- summer to shut down the heating.
- antifreeze to shut down the boiler if you are to be absent.

Precautions required in the case of long boiler stops

- The boiler and the chimney must be swept carefully.
- Close all the doors of the boiler to prevent air from circulating inside
- We advise removing the pipe which connects the boiler to the chimney and to close off the nozzle with a cover.

Precautions required if the heating is stopped when there is a risk of freezing 6.2

We recommend the use of a correctly dosed antifreeze agent to prevent to the heating circuit from freezing.

If this cannot be done, drain the system completely.

7 Checking and maintenance

7.1 System maintenance

7.1.1 Water level

Regularly check the level of water in the system and top up if required, taking care that cold water is not added suddenly into the boiler when it is hot.

This operation should be required only a few times in each heating season, with very low quantities of water; otherwise, look for the leak and repair it.

7.1.2 Draining

We advise you against draining the system unless it is absolutely necessary.

7.2 Boiler

↑ The

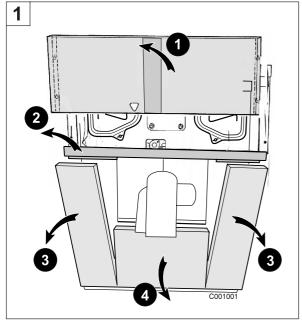
The operations described below shall only be performed with the boiler and power supply off.



The boiler will only operate efficiently if the exchange surfaces are kept clean.

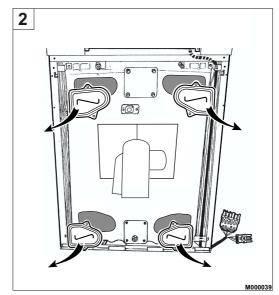
The boiler should be cleaned as soon as required and as the chimney, at least once a year or more, depending upon applicable regulations and specific needs.

7.2.1 Sweeping



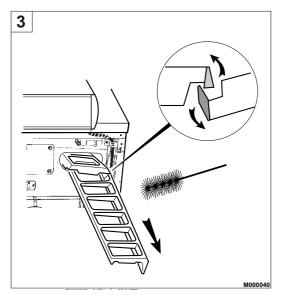
Step 1:

- ▶ Cut the power supply to the boiler.
- Remove the upper front panel.
- 2 Remove the front upper holding cross-bar.
- 3 Unhook the lower left and right front panels.
- Remove the lower front panel.



Step 2:

Unfasten the wing nuts and remove the 4 sweeping doors.



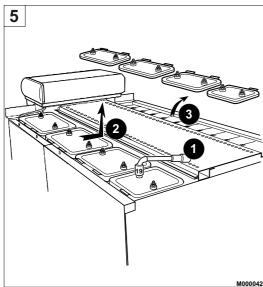
Step 3:

- ▶ Remove the baffle plates from the upper flue ways.
- Carefully sweep the flue ways with the brush supplied for that purpose.
- ▶ Brush the baffle plates as well.
- If possible, use a vacuum cleaner.



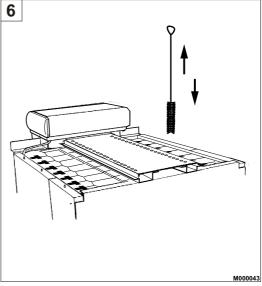
Step 4:

- ▶ Remove the left and right-hand casing covers.
- ▶ Remove the top insulating material.



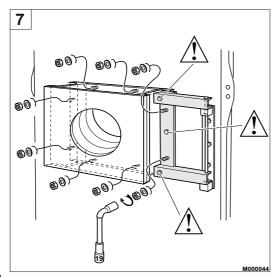
Step 5:

- Unfasten the nuts up to the stop.
- Push in the handles of the sweeping covers.
- 3 Remove the sweeping covers.



Step 6:

- Brush the vertical plates.
- Put back the sweeping covers, insulating material and casing covers by reversing the procedure above.
- Chemical sweeping is recommended for such boilers. See chapter "Chemical sweeping".
- ▶ Put the baffle plates back in place. Interlock them with each other while fitting them into the flue ways.
- Close the upper sweeping doors.

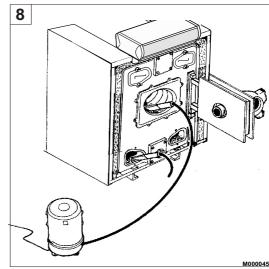


Step 7:

Unscrew the 8 closing nuts and open the furnace door.

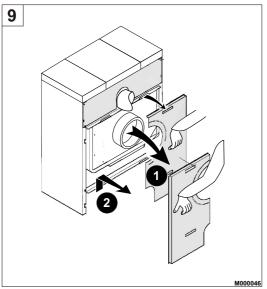


These 3 screws must not be unfastened in any event.



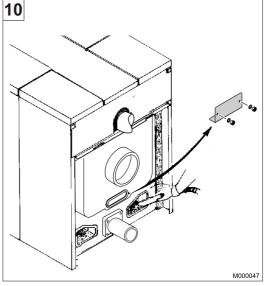
Step 8:

- Brush out the inside of the furnace.
- Clean the soot accumulated in the furnace and lower flue ways with a vacuum cleaner.
- Close the lower sweeping doors.
- Put back the front casing panels by reversing the removal procedure.
- See chapter "Chemical sweeping".



Step 9:

- 1 Remove the lower rear panels.
- Remove the lower rear crosspiece.
- Remove the lower insulating material on the rear.



Step 10:

- Unfasten the wing nuts and remove the lower left and righthand sweeping doors.
- ▶ Remove any soot deposit with a scraper or a vacuum cleaner.
- Proper the lower sweeping cover of the flue gas box (2 H 10 nuts + Ø 10 washers).
- Remove the soot.
- Put back the sweeping cover and doors.
- Put back the lower insulating material, the crosspiece and panels by reversing the removal procedure.

General principle

Boilers are traidtionally swept mechanically. There are now chemical sweeping methods which facilitate this maintenance work.

A chemical reagent is applied to the boiler's heating surfaces.

After application, the reaction is completed by igniting the burner. The initial deposits are neutralised and pyrolised. The remaining pulverent residues are easy to remove by sweeping or vacuum cleaning.

■ The products

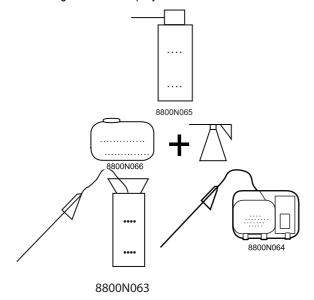
The product must be suitable for boilers with a cast iron body. Various manufacturers offer products in the form of a concentrated liquid or aerosol

The aerosols are packaged in 0.5 to 1 I spray cans for treating domestic boilers. Refer to the instructions supplied with the product.

The liquid products are available in 1 to 50 I containers. These concentrated liquids are diluted before application with a spray.

Sprays exist in various forms suitable for their intended use:

- Low capacity (2 or 3 l) spray with built-in reservoir for small boilers and moderate frequency. Manual pressurisation of the reservoir.
- 5 I spray with separate reservoir, nozzle and connecting tube. The nozzles enable easy application at the back of the combustion chamber. Manual pressurisation of the reservoir.
- Motor-assisted pressurisation spray with reservoir, nozzle and connecting tube. These sprays are intended for intensive use.



Operational mode

The operating mode mentioned corresponds to standard user situations. Refer to the manufacturer's instructions for specific advice on the product used.

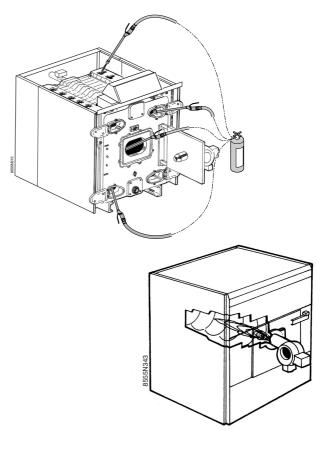
Application:

- Depending on the product, the boiler must be cold or heated. Refer to the instructions supplied with the product.
- Direct application to the heating surfaces with aerosol sprays.

- The concentrates are diluted in the proportions 1/5 to 1/20 ((depending on the product and the condition of the boiler).
- Application with the spray is done in the upper part of the boiler and on the walls of the combustion chamber. Surfaces are dampened but not washed. It is not necessary to use the spray to get between the heating surfaces.
- A volume of one litre of solution is generally used for 1 m² of heating surface (domestic boiler), i.e. 0.05 to 0.2 l of concentrate.

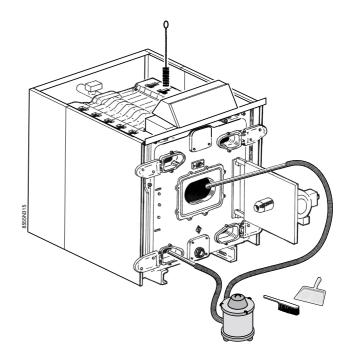
Ignition

The burner is ignited after allowing the product time to penetrate for 2 to 5 min. Refer to the instructions supplied with the product.



■ Cleaning

- Remove the baffle plates.
- Light sweeping will remove the pulverent residues remaining after
- The remaining pulverent residues are easy to remove by sweeping or vacuum cleaning.
 - For certain products, brief application after cleaning has a preventive effect, limiting deposits on the heating surfaces.
- Replace the baffle plates.
- Close the door of the combustion chamber.
- Service the burner.
- Replace the front panel.



7.2.3 Maintenance of the burner



Refer to the instructions supplied with the burner.

Cleaning the casing material

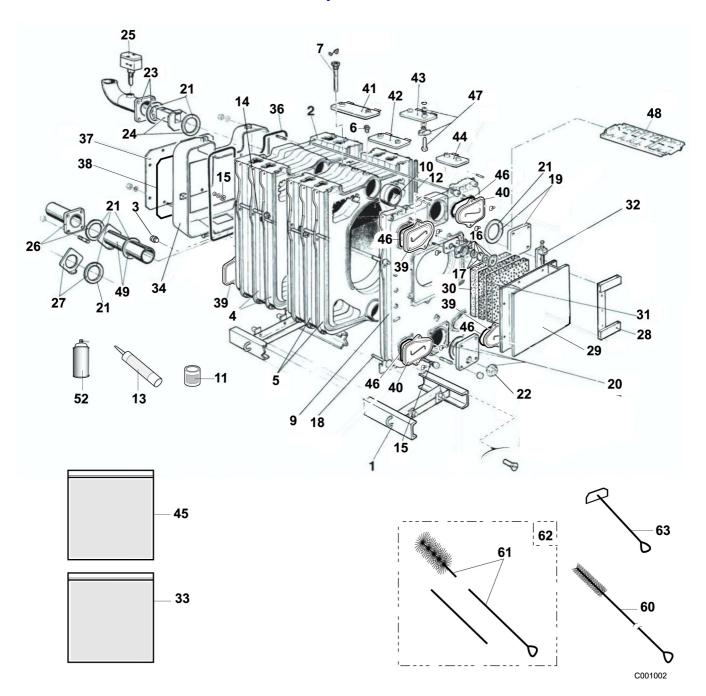
Use a soapy solution and a sponge only.

Rinse with clean water and dry with chamois leather or a soft cloth.

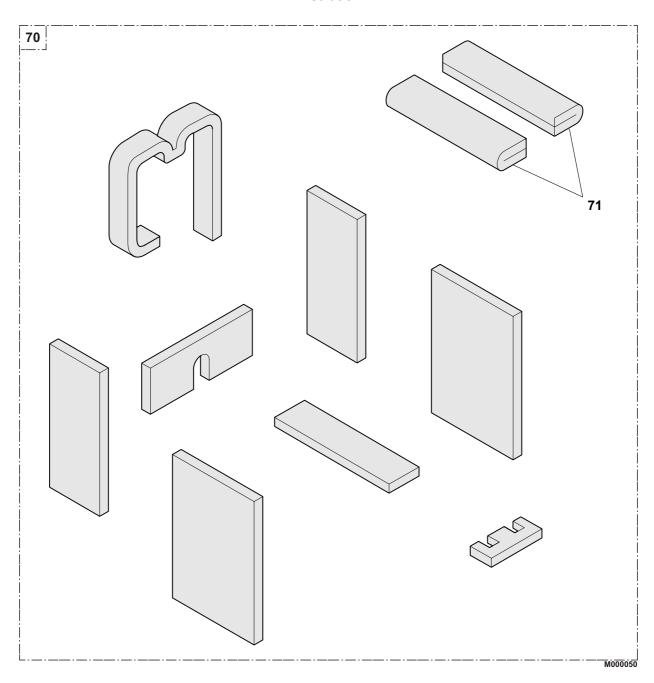
To order a spare part, quote the reference number next to the part required.

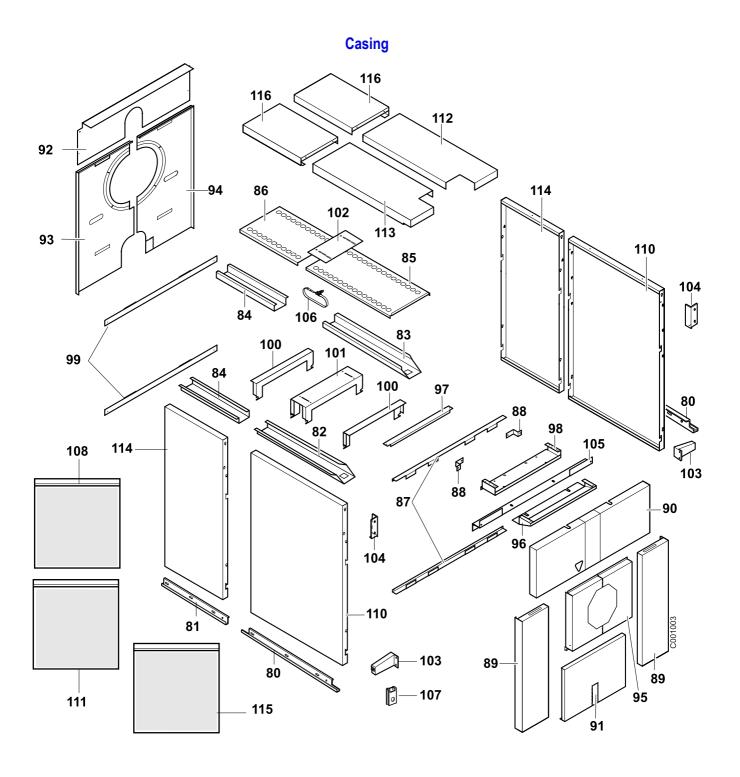
300011906-002-B

Boiler body + Miscellaneous



Insulation



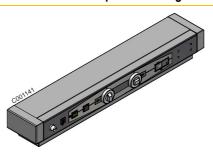


Control panels



Refer to the Spare Parts list in the panel instructions.

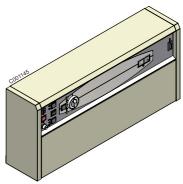
S3 control panel - Package MD4



K3 control panel

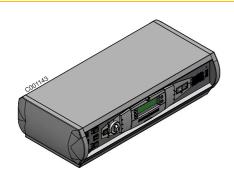




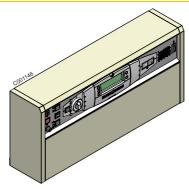


Side panel - Package MD139

DIEMATIC-m3 control panel

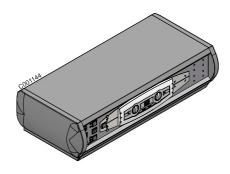


Separate panel - Package MD1

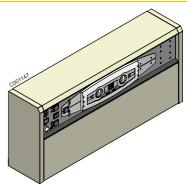


Side panel - Package MD138

B3 control panel



Separate panel - Package MD3



Side panel - Package MD140

Ref.	Code no.	Description
		Boiler body + Accessories
		Base frame
1	8259-8953	Complete frame 7 sections
1	8259-8954	Complete frame 8,9 sections
1	8259-8955	Complete frame 10,11 sections
1	8259-8956	Complete frame 12,13 sections
1	8259-8957	Complete frame 14,15 sections
1	8259-8958	Complete frame 16,17 sections
1	8259-8959	Complete frame 18,19 sections
1	8259-8960	Complete frame 20,21 sections
1	8259-8961	Complete frame 22,23 sections
1	8259-8962	Complete frame 24,25 sections
		Boiler body + Accessories
2	8555-5505	Complete rear section
3	9495-0140	plug no. 290 3/4"
4	8259-8948	Normal intermediate section
5	8259-8949	Special intermediate section
6	9495-0110	plug no. 290 1/2"
7	8500-0027	1/2" sensor tube
9	8259-8950	Complete front section
10	8006-0212	Painted nipple Ø 148.62
11	9430-5027	Putty for nipple 300 gr
12	9508-6032	Silicone-coated fibreglass seal - (Metre)
13	9428-5095	Silicone filler tube 310 ml
14	8015-8927	Assembly rod Ø 12 - 300 mm
14	8015-8928	Assembly rod Ø 12 - 385 mm
14	8015-8929	Assembly rod Ø 12 - 420 mm
14	8015-8930	Assembly rod Ø 12 - 520 mm
15	9754-0120	Spring for assembly rod
16	8015-8902	Complete indicator with frame
17	8015-7700	Sight glass + Gaskets
18	8015-8907	Assembly rod Ø 14 - 895 mm 7 sections
18	8015-8908	Assembly rod Ø 14 - 1006 mm 8 sections
18	8015-8909	Assembly rod Ø 14 - 1117 mm 9 sections
18	8015-8910	Assembly rod Ø 14 - 1228 mm 10 sections
18	8015-8911	Assembly rod Ø 14 - 1339 mm 11 sections
18	8015-8912	Assembly rod Ø 14 - 1450 mm 12 sections
18	8015-8913	Assembly rod Ø 14 - 1571 mm 13 sections
18	8015-8914	Assembly rod Ø 14 - 1683 mm 14 sections
18	8015-8915	Assembly rod Ø 14 - 1796 mm 15 sections
18	8015-8916	Assembly rod Ø 14 - 1908 mm 16 sections
18	8015-8917	Assembly rod Ø 14 - 2021 mm 17 sections
18	8015-8918	Assembly rod Ø 14 - 2133 mm 18 sections
18	8015-8919	Assembly rod Ø 14 - 2246 mm 19 sections

Ref.	Code no.	Description
18	8015-8920	Assembly rod Ø 14 - 2398 mm 20 sections
18	8015-8921	Assembly rod Ø 14 - 2511 mm 21 sections
18	8015-8922	Assembly rod Ø 14 - 2623 mm 22 sections
18	8015-8923	Assembly rod Ø 14 - 2736 mm 23 sections
18	8015-8924	Assembly rod Ø 14 - 2848 mm 24 sections
18	8015-8925	Assembly rod Ø 14 - 2960 mm 25 sections
19	8006-8906	Plain square flange + Gasket
20	8006-8907	Square flange with tapped hole + Gasket
21	9501-4155	Gasket 222 x 170 x 4
22	8112-0028	Plug 2"
23	8008-8904	Flange with outlet piece + Gasket 7 to 17 sections
23	8008-8905	Flange with outlet piece + Gasket 18 to 25 sections
24	8008-8922	Nozzle + Gasket
25	8802-4731	Flow controller
25	8802-4733	Flow controller
25	8802-4734	Flow controller
25	8802-4735	Flow controller
25	8802-4736	Flow controller
25	8802-4737	Flow controller
25	8802-4738	Flow controller
25	8802-4739	Flow controller
25	8802-4740	Flow controller
25 25	8802-4742 8802-4743	Flow controller Flow controller
25	8802-4744	Flow controller
25	8802-4745	Flow controller
25	8802-4746	Flow controller
25	8802-4750	Flow controller
25	8802-4751	Flow controller
25	8802-4752	Flow controller
25	8802-4753	Flow controller
25	8802-4754	Flow controller
25	8802-4755	Flow controller
25	8802-4756	Flow controller
25	8802-4757	Flow controller
25	8802-4759	Flow controller
26	8008-8908	Flange with return piece + Gasket 7 to 17 sections
26	8008-8909	Flange with return piece + Gasket 18 to 25 sections
27	8008-8924	Diaphragm + Gasket
28	8228-8905	Complete articulation of furnace plate
29	9757-0424	Plain furnace door
30	9755-0236	Furnace door guard
31	9755-0235	Furnace door insulation
		On demand
29	9757-0425	Furnace door Ø 165

Ref.	Code no.	Description
29	9757-0426	Furnace door Ø 186
29	9757-0427	Furnace door Ø 210
29	9757-0428	Furnace door Ø 295
29	9757-0429	Furnace plate Ø 240
29	9757-0433	Furnace plate Ø 290
29	9757-0434	Furnace plate Ø 350
32	8008-8915	Furnace plate hinge
33	8555-8592	Bag of screws for furnace door
34	8555-5528	Flue gas outlet
36	9504-6115	Thermocord gasket Ø 15 - (Metre)
37	8555-5508	connection plate Ø 400 + Gasket
37	8555-5506	connection plate Ø 300 + Gasket
37	8555-5507	connection plate Ø 350 + Gasket
37	8555-5509	Plain connection plate + Gasket
38	9508-6041	adhesive gasket 15 x 9
39	8555-5514	Left-hand sweeping door + Thermocord
40	8555-5541	Right-hand sweeping door + Thermocord
41	8555-5510	sweeping cover N1 + Thermocord
42	8555-5511	sweeping cover N2 + Thermocord
43	8555-5512	sweeping cover N3 + Thermocord
44	8555-5513	sweeping cover N4 + Thermocord
45	8555-8593	Bag of screws for sweeping door
46	9508-6032	Silicone-coated fibreglass seal
47	8555-5515	Complete lock
48	8259-0010	Upper baffle
49	8008-8910	Distributing tube + Gasket 15 and 16 sections
49	8008-8911	Distributing tube + Gasket 17 to 19 sections
49	8555-5502	Distributing tube + Gasket 20 to 22 sections
49	8555-5503	Distributing tube + Gasket 23 and 24 sections
49	8555-5504	Distributing tube + Gasket 25 sections
52	9434-5103	Retouching spray paint - White
52	9434-5102	Retouching spray paint - anthracite grey
		Cleaning tools
60	9696-8026	Brush for plate
61	8013-8703	Metal brush + rod 1300 mm 10 sections
61	8013-8704	Metal brush + rod 1800 mm 11 to 15 sections
62	8015-8716	Metal brush +rod 1300 mm + extensions for 16 to 22 sections
62	8015-8723	Metal brush + rod 1800 mm + extensions for 23 to 25 sections
63	9750-5103	scraper 1200 mm
63	9750-5106	scraper 1500 mm
63	9750-5108	scraper 1800 mm
		Insulation

Ref.	Code no.	Description
		Insulating material for body
70	8555-5516	Complete insulating material for body 7 sections
70	8555-5517	Complete insulating material for body 8 and 9 sections
70	8555-5518	Complete insulating material for body 10 sections
70	8555-5519	Complete insulating material for body 11 and 12 sections
70	8555-5520	Complete insulating material for body 13 and 14 sections
70	8555-5521	Complete insulating material for body 15 sections
70	8555-5522	Complete insulating material for body 16 and 17 sections
70	8555-5523	Complete insulating material for body 18 and 19 sections
70	8555-5524	Complete insulating material for body 20 sections
70	8555-5525	Complete insulating material for body 21 and 22 sections
70	8555-5526	Complete insulating material for body 23 and 24 sections
70	8555-5527	Complete insulating material for body 25 sections
		Insulating material for sweeping covers
71	8555-5529	Complete insulating material for sweeping covers 7 sections
71	8555-5530	Complete insulating material for sweeping covers 8 and 9 sections
71	8555-5531	Complete insulating material for sweeping covers 10 sections
71	8555-5532	Complete insulating material for sweeping covers 11 and 12 sections
71	8555-5533	Complete insulating material for sweeping covers 13 and 14 sections
71	8555-5534	Complete insulating material for sweeping covers 15 sections
71	8555-5535	Complete insulating material for sweeping covers 16 and 17 sections
71	8555-5536	Complete insulating material for sweeping covers 18 and 19 sections
71	8555-5537	Complete insulating material for sweeping covers 20 sections
71	8555-5538	Complete insulating material for sweeping covers 21 and 22 sections
71	8555-5539	Complete insulating material for sweeping covers 23 and 24 sections
71	8555-5540	Complete insulating material for sweeping covers 25 sections
		Casing
80	8555-8008	rail 1225 mm
80	8555-8009	rail 1365 mm
80	8555-8010	rail 1475 mm
80	8555-8011	rail 1565 mm
80	8555-8012	rail 1675 mm
80	8555-8013	rail 1765 mm
80	8555-8014	rail 1875 mm
80	8555-8015	rail 2025 mm
80	8555-8016	rail 2165 mm

Ref.	Code no.	Description
80	8555-8017	rail 2275 mm
80	8555-8018	rail 2365 mm
81	8555-8021	supplementary rail 1246 mm
82	8555-8035	left-hand cable channel 1260 mm
82	8555-8036	left-hand cable channel 1400 mm
82	8555-8037	left-hand cable channel 1510 mm
82	8555-8038	left-hand cable channel 1600 mm
82	8555-8039	left-hand cable channel 1710 mm
82	8555-8040	left-hand cable channel 1800 mm
82	8555-8041	left-hand cable channel 1910 mm
82	8555-8042	left-hand cable channel 2060 mm
82	8555-8043	left-hand cable channel 2200 mm
82	8555-8044	left-hand cable channel 2310 mm
82	8555-8045	left-hand cable channel 2400 mm
83	8555-8048	right-hand cable channel 1260 mm
83	8555-8049	right-hand cable channel 1400 mm
83	8555-8050	right-hand cable channel 1510 mm
83	8555-8051	right-hand cable channel 1600 mm
83	8555-8052	right-hand cable channel 1710 mm
83	8555-8053	right-hand cable channel 1800 mm
83	8555-8054	right-hand cable channel 1910 mm
83	8555-8055	right-hand cable channel 2060 mm
83	8555-8056	right-hand cable channel 2200 mm
83	8555-8057	right-hand cable channel 2310 mm
83	8555-8058	right-hand cable channel 2400 mm
84	8555-8080	additional cable channel 1196 mm
85	8555-8066	central upper plate 1131 mm
85	8555-8067	central upper plate 1271 mm
85	8555-8068	central upper plate 1381 mm
85	8555-8069	central upper plate 1471 mm
85	8555-8070	central upper plate 1581 mm
85	8555-8071	central upper plate 1671 mm
85	8555-8072	central upper plate 1781 mm
85	8555-8073	central upper plate 1931 mm
85	8555-8074	central upper plate 2071 mm
85	8555-8075	central upper plate 2181 mm
85	8555-8076	central upper plate 2271 mm
86	8555-8079	additional central plate 1196 mm
		Common parts
87	8259-8014	Lower front crosspiece
88	8555-8515	Fastening bracket for front side pane
89	8259-8818	Complete lower front side panel
90	200007613	Complete upper front panel
91	8555-8517	Complete lower front panel
92	8555-8518	Upper rear panel

Ref.	Code no.	Description
93	8259-8021	Lower left-hand rear panel
94	8259-8022	Lower right-hand rear panel
95	8259-0518	Panel for furnace door
96	8555-8519	Control panel trim
97	8555-8520	Rear cover for standard control panel
98	8555-8521	Control panel bracket
99	8259-8055	Lower rear crosspiece
100	8555-8522	Upper crosspiece
101	8555-8526	Intermediate upper crosspiece
102	8555-8082	Joining central plate
103	8555-8523	Lower tab of rail
104	8555-8022	Upper bracket
105	8555-0526	Upper front crosspiece
106	9532-0780	Clamp
107	9775-8859	Rapid nut
108	8555-8525	Fasteners for common parts
		Front side casing
110	200007426	Front side panel - 800 mm
110	200007427	Front side panel - 940 mm
110	200007428	Front side panel - 1050 mm
111	8555-8514	Fasteners for front side panel
112	8555-8507	right-hand upper front plate for sweeping 800 mm
112	8555-8508	right-hand upper front plate for sweeping 940 mm
112	8555-8509	right-hand upper front plate for sweeping 1050 mm
112	8555-8510	left-hand upper front plate for sweeping 800 mm
113	8555-8511	left-hand upper front plate for sweeping 940 mm
113	8555-8512	left-hand upper front plate for sweeping 1050 mm
		Rear side casing
114	8555-8500	rear side panel 400 mm
114	8555-8501	rear side panel 600 mm
115	8555-8513	Fasteners for rear side panel
116	8555-8505	upper rear plate for sweeping 400 mm
116	8555-8506	upper rear plate for sweeping 600 mm
	1	

Warranty

You have just purchased one of our appliances and we thank you for the trust you have placed in our products. Please note that your appliance will provide good service for a longer period of time if it is regularly checked and maintained. Your fitter and our customer support network are at your disposal at all times.

Warranty terms

Starting from the purchase date shown on the original fitter's invoice, your appliance has a contractual guarantee against any manufacturing defect.

The length of the guarantee is mentioned in the price catalogue.

The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified fitter). In particular, the manufacturer shall not be held responsible for any damage, loss or injury caused by installations which do not comply with the following:

- applicable local laws and regulations
- specific requirements relating to the installation, such as national and/or local regulations
- the manufacturer's instructions, in particular those relating to the regular maintenance of the unit
- the rules of the profession

The warranty is limited to the exchange or repair of such parts as have been recognised to be faulty by our technical department and does not cover labour, travel and carriage costs. The warranty shall not apply to the replacement or repair of parts damaged by normal wear and tear, negligence, repairs by unqualified parties, faulty or insufficient monitoring and maintenance, faulty power supply or the use of unsuitable fuel. Sub-assemblies such as motors, pumps, electric valves etc. are guaranteed only if they have never been dismantled.

■ France

The preceding dispositions are not exclusive of benefits for the purchaser of the legal guarantee as stated in Civil Code articles 1641 to 1648.

Poland

Warranty conditions are included in the warranty card.

■ Switzerland

The application of the warranty is subject to the terms and conditions of sale, delivery and warranty of the company marketing our products.

■ Belgium

The preceding dispositions about the contractual guarantee are not exclusive of profit if the need arises for the purchaser in Belgium of the applicable legal dispositions on hidden defects.

■ Italy

The duration of our warranty is shown on the certificate delivered with the appliance.

Our liability as manufacturer may not be invoked in respect of incorrect use of the appliance, incorrect or insufficient maintenance thereof, or incorrect installation of the appliance (you must therefore ensure that installation and maintenance operations are carried out respectively by a qualified professional and by an after sales service company).

The legislation laid down by European Directive 99/44/EEC, transposed by Legislative Decree No. 24 of 2 February 2002 published in O.J. No. 57 of 8 March 2002, continues to apply.

■ Russia

The foregoing provisions in no way affect the rights of the consumer, which are guaranteed by the legislation of the Russian Federation as regards hidden defects.

The terms and conditions of warranty and the terms and conditions of application of the warranty are indicated on the warranty form.

The warranty shall not apply as regards the replacement or repair of wearing parts under normal use. Such parts include thermocouples, injection nozzles, flame control and ignition systems, fuses and gaskets.

■ Turkey

Due to the laws and regulations the product life for this product is 10 years. During that time the producer and/or the distributor has to provide after sales services and spare parts.

■ Other countries

The above provisions do not restrict the benefit of the legal laws regarding hidden defects applicable in the buyer's country.

DE DIETRICH THERMIQUE S.A.S.



www.dedietrich-thermique.fr

Direction des Ventes France 57, rue de la Gare F- 67580 MERTZWILLER +33 (0)3 88 80 27 00 +33 (0)3 88 80 27 99

REMEHA GmbH



www.remeha.de Rheiner Strasse 151 D-48282 EMSDETTEN +49 (0)25 72 / 9161-0 +49 (0)25 72 / 9161-102

DE DIETRICH



www.dedietrich-otoplenie.ru 129164, Россия, г. Москва Зубарев переулок, д. 15/1 Бизнес-центр «Чайка Плаза», офис 309 © +7 (495) 221-31-51 info@dedietrich.ru

VAN MARCKE

info@remeha.de



www.vanmarcke.be Weggevoerdenlaan 5 B-8500 KORTRIJK Ø +32 (0)56/23 75 11

NEUBERG S.A.



www.dedietrich-heating.com 39 rue Jacques Stas L-2010 LUXEMBOURG \$\text{\$\psi\$} +352 (0)2 401 401



www.dedietrich-calefaccion.es C/Salvador Espriu. 11

08908 L'HOSPITALET de LLOBREGAT ¢ +34 935 475 850 info@dedietrich-calefaccion.es

DE DIETRICH SERVICE



www.dedietrich-heiztechnik.com

Freecall 0800 / 201608

WALTER MEIER (Klima Schweiz) AG



www.waltermeier.com Bahnstrasse 24 CH-8603 SCHWERZENBACH +41 (0) 44 806 44 24 Serviceline +41 (0)8 00 846 846 **(4)** +41 (0) 44 806 44 25

ch.klima@waltermeier.com

WALTER MEIER (Climat Suisse) SA

www.waltermeier.com



+41 (0) 21 943 02 33 ch.climat@waltermeier.com

DUEDI S.r.I.



www.duediclima.it Distributore Ufficiale Esclusivo De Dietrich-Thermique Italia Via Passatore, 12 - 12010 San Defendente di Cervasca **CUNEO**

+39 0171 857170 +39 0171 687875 info@duediclima.it

DE DIETRICH



www.dedietrich-heating.com Room 512, Tower A, Kelun Building 12A Guanghua Rd, Chaoyang District C-100020 BEIJING

+86 (0)106.581.4017 +86 (0)106.581.4018 +86 (0)106.581.7056 ### +86 (0)106.581.4019

contactBJ@dedietrich.com.cn

BDR Thermea (Czech republic) s.r.o



www.dedietrich.cz Jeseniova 2770/56 130 00 Praha 3 +420 271 001 627 dedietrich@bdrthermea.cz

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De Dietrich DE DIETRICH THERMIQUE 57, rue de la Gare F- 67580 MERTZWILLER - BP 30

