Gas condensing boilers









Technical pages 50-82 84-88 90-92 93-95

96-99

Duo-tec Compact



- · Digital control panel with back-lighted wide LCD display
- Wide modulation ratio up to 1÷7: better efficiency thanks to reduced switch-on/switch-off of the boiler
- Ultra compact dimensions (700x400x299 mm)
- Gas Adaptive Control (GAC) system: combustion automatic control to maintain constantly the highest level of efficiency
- Single speed circulating pump
- Complete soundproofing of the generator



Modulation ratio the modulation system is able to adapt the heat output to the energy demanded by the building.



Compact dimensions Duo-tec Compact is ideal to be installed in narrow space thanks to its compact dimensions

Hydraulic system

3 way electric diverter valve Stainless steel premixing burner Stainless steel water/flue heat exchanger

Stainless steel enhanced DHW exchanger to ensure condensation also in DHW mode Modulating fan with electronic speed adjusting system

Automatic by-pass

Single speed low energy pump of the heating circuit with built-in air vent

System to prevent pump and diverter valve sticking operating every 24 hours Central relief valve set at 3 bar

Thermoregulation system Built-in climatic regulation (outdoor sensor available as optional) Control of multi-zones system option

Control system

Overheat limit thermostat of the water/flue exchanger

Hydraulic pressure switch to prevent boiler operating in event of low water Safety NTC sensor against flues overheat Electronic temperatures control by NTC sensors Full anti-frost device Electronic thermometer Digital heating circuit pressure gauge

| | Combi | | | | Heating only▲ |
|-------------------------------------|-------|---------|---------|---------|---------------|
| | | 20 GA | 24 GA | 28 GA | 1.24 GA |
| Product code | | 7108973 | 7106765 | 7106766 | 7108974 |
| Maximum DHW heat input | kW | 19,9 | 24,7 | 28,9 | - |
| Maximum heating heat input | kW | 19,9 | 20,6 | 24,7 | 24,7 |
| Maximum DHW heat output | kW | 19,4 | 24 | 28 | - |
| Maximum heating heat output 80/60°C | kW | 19,4 | 20 | 24 | 24 |
| Maximum heating heat output 50/30°C | kW | 21,1 | 21,8 | 26,1 | 26,1 |
| Minimum heating heat output 80/60°C | kW | 3,4 | 3,4 | 3,8 | 3,4 |
| Minimum heating heat output 50/30°C | kW | 3,7 | 3,7 | 4,1 | 3,7 |
| | | | | | |
| Energetic efficiency (92/42/CEE) | | *** | *** | *** | *** |

| Energetic efficiency (92/42/CEE) | | *** | *** | *** | **** |
|---|-------|-----------------|-----------------|-----------------|-----------------|
| Average efficiency (DIN 4702-T8) | % | 109,8 | 109,8 | 109,8 | 109,8 |
| Nominal efficiency 80/60°C | % | 97,7 | 97,7 | 97,7 | 97,6 |
| Nominal efficiency 50/30°C | % | 105,8 | 105,8 | 105,8 | 105,7 |
| Efficiency 30% | % | 107,6 | 107,6 | 107,6 | 107,6 |
| NOx class (EN 483) | | 5 | 5 | 5 | 5 |
| Minimum working temperature | °C | -5 | -5 | -5 | -5 |
| Expansion vessel capacity/pre-charge | l/bar | 7/0,8 | 7/0,8 | 7/0,8 | 8/0,8 |
| Heating temperature range. | °C | 25/80 | 25/80 | 25/80 | 25/80 |
| DHW temperature range | °C | 35/60 | 35/60 | 35/60 | 35/60 |
| DHW production ΔT 25°C (1) | l/min | 11,4 | 13,8 | 16,1 | - |
| | | | | | |
| Minimum capacity DHW flow rate | l/min | 2 | 2 | 2 | - |
| Minimum pressure DHW circuit | bar | 0,15 | 0,15 | 0,15 | - |
| Maximum pressure heating circuit | bar | 3 | 3 | 3 | 3 |
| Maximum pressure DHW circuit | bar | 8 | 8 | 8 | - |
| Coaxial flue system Ø 60/100 max length | m | 10 | 10 | 10 | 10 |
| Dual flue system Ø 80 max length | m | 80 | 80 | 80 | 80 |
| Maximum flue mass flow rate | kg/s | 0,009 | 0,011 | 0,014 | 0,012 |
| Minimum flue mass flow rate | kg/s | 0,002 | 0,002 | 0,002 | 0,002 |
| Maximum flue temperature | °C | 80 | 80 | 80 | 80 |
| | | | | | |
| Dimensions (h x w x d) | mm | 700 x 400 x 299 |
| | | 7. | 7 / | | 7.0 |

| Maximum flue temperature | °C | 80 | 80 | 80 | 80 | |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| | | | | | | |
| Dimensions (h \times w \times d) | mm | 700 x 400 x 299 | |
| Net weight | kg | 34 | 34 | 34 | 30 | |
| Gas type | Natural Gas/LPG | | | | | |
| Power consumption | W | 95 | 102 | 114 | 102 | |
| Grade of protection | | IPx5D | IPX5D | IPX5D | IPX5D | |

without flow restrictor.

[▲] Heating only models are connectable to UB-UB INOX 80/120 lt cylinder. See page 36 for sanitary performance.