

**COMMERCIAL RANGE**

STEEL BOILERS

# REX DUAL

## STACKED COMBUSTION CHAMBERS

*Design pressure 5bar*

**Main features**

REX DUAL stacked module steel boiler, employs cylindrical concentric combustion chambers with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube plate facilitating a fully submersed wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

Some of the product's main features are related below:

- boiler body built from high quality steel, made from front tube sheet flanged to the combustion chamber using RSB procedures and from concave rear plate (rather than a flat surface for a better resistance internal pressure),
- cylindrical reverse flame combustion chamber, supported by a submerged nozzle; the flame is positioned centrally within the chamber, whilst the hot gases return to the front of the furnace forming a second pass within the furnace, with the hot gases being conveyed through the tube bundle to the rear smoke box
- EN10217-2 P235GH smoke tubes welded to tube plates, fitted with special helical turbulators
- the rear smoke box, manufactured from thermally insulated steel sheets, constructed in one piece that can be easily opened and that allows smoke tube inspections, fastened with bolts, equipped with chimney connection and cleaning door.
- boiler casing equipped with system and working device connections, all manufactured with approved welding procedures and qualified personnel.
- high density, glass wool mattress insulation, protected by easily removable, varnished steel panels.
- steel sheet, fiber-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules.

**Standard equipment:**

- Complete insulating casing
- Turbolators
- Cleaning brush
- Delivery and return hydraulic collectors
- Kit for generator hydraulic coupling

| Accessories  | Code         |
|--|--------------|
| <b>Control panels</b>  |              |
| Thermostatic control panel   | QACC01ELMDCE |
| <i>Features can be seen in "Thermostatic control panels section"</i> |              |
| Boiler management  control panel                                     | QETERM01CE   |
| Boiler management  control panel                                     | QETERM01RU2* |
| System management layouts  | QETERM02     |

*For characteristics and other accessories see " etherm" system" section*

\* This code refers to markets of: Russia, Belarus, Ukraine, Georgia and Kazakhstan

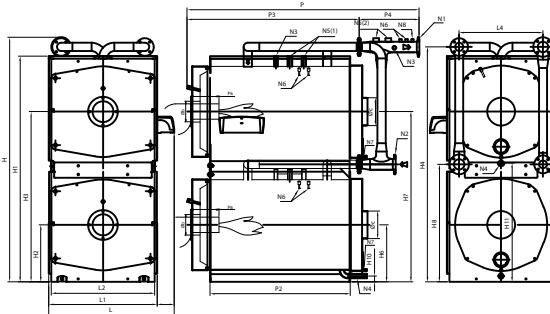
For higher pressures see our commercial department.

When purchasing, always indicate used fuel. In case of heavy oil or biogas the product will undergo modifications.

# COMMERCIAL RANGE

## STEEL BOILERS

### REX DUAL



**Legend:**

- N1 Boiler flow
- N2 Boiler return
- N3 Equipment connections
- N4 System load/drain connection
- N5 Safety valve connection
- N6 Bulb sheath
- N7 Condensate drain
- N8 Instrument pocket

| Characteristics |          | Code product | Nominal Power<br>Temp. Medium<br>70°C<br>kW | Flow<br>Thermal<br>kW | 100% efficiency<br>(ref. C.O.P.)<br>Temp. Medium<br>70°C<br>% | 30%<br>efficiency<br>(ref. C.O.P.)<br>Temp. Medium<br>70°C<br>% | Flue gas<br>pressure drop<br>mbar | Hydraulic<br>pressure drop<br>(ΔT=12°C)<br>mbar | Water<br>content<br>lt | Total weight<br>kg |
|-----------------|----------|--------------|---|-----------------------|---|---|-----------------------------------|---|------------------------|--------------------|
| Model           |          |              |   |                       |   |   |                                   |   |                        |                    |
| REX DUAL 14     | 83801030 | 140          | 152   | 92,11                 | 91,40   | 0,8   | 11                                | 210   | 465                    |                    |
| REX DUAL 16     | 83801040 | 160          | 174   | 91,95                 | 91,50   | 1,0   | 14                                | 210   | 465                    |                    |
| REX DUAL 18     | 83802040 | 180          | 196   | 91,84                 | 91,55   | 0,8   | 18                                | 246   | 549                    |                    |
| REX DUAL 20     | 83802050 | 200          | 218   | 91,74                 | 91,66   | 1,0   | 22                                | 246   | 549                    |                    |
| REX DUAL 24     | 83802060 | 240          | 260   | 92,31                 | 91,45   | 1,1   | 32                                | 246   | 549                    |                    |
| REX DUAL 30     | 83803030 | 300          | 326   | 92,02                 | 91,30   | 1,2   | 22                                | 344   | 726                    |                    |
| REX DUAL 40     | 83803040 | 400          | 432   | 92,59                 | 91,36   | 1,9   | 38                                | 344   | 726                    |                    |
| REX DUAL 50     | 83804030 | 500          | 542   | 92,25                 | 91,70   | 2,0   | 60                                | 440   | 898                    |                    |
| REX DUAL 60     | 83805030 | 600          | 650   | 92,31                 | 91,90   | 2,0   | 86                                | 600   | 986                    |                    |
| REX DUAL 70     | 83806030 | 700          | 758   | 92,35                 | 91,90   | 2,9   | 118                               | 712   | 1122                   |                    |
| REX DUAL 80     | 83807040 | 800          | 866   | 92,38                 | 91,80   | 4,1   | 63                                | 720   | 1285                   |                    |
| REX DUAL 100    | 83808040 | 1000         | 1084  | 92,25                 | 91,90   | 4,2   | 98                                | 1080  | 1830                   |                    |
| REX DUAL 124    | 83809040 | 1240         | 1344  | 92,26                 | 91,80   | 6,4   | 62                                | 1290  | 2065                   |                    |
| REX DUAL 150    | 83810070 | 1500         | 1626  | 92,25                 | 91,80   | 5,2   | 44                                | 1710  | 2621                   |                    |
| REX DUAL 170    | 83810080 | 1700         | 1842  | 92,29                 | 91,80   | 7,2   | 56                                | 1710  | 2621                   |                    |

| Dimensions   | H    | H1   | H2  | H3   | H4   | H6  | H7   | H8   | H10  | H11    | L    | L1   | L2   | L4   | P    | P2   | P3   | P4  | P6      | Øb  | Øc    | N1    | N2  | N1/N2 | N3    | N4    | N5                    | N6    | N7    | N8   |
|--------------|------|------|-----|------|------|-----|------|------|------|--------|------|------|------|------|------|------|------|-----|---------|-----|-------|-------|-----|-------|-------|-------|-----------------------|-------|-------|------|
|              | mm   | mm   | mm  | mm   | mm   | mm  | mm   | mm   | mm   | mm     | mm   | mm   | mm   | mm   | mm   | mm   | mm   | mm  | mm      | mm  | DN/in | DN/in | PN  | DN/in | DN/in | DN/in | DN/in                 | DN/in | DN/in |      |
| REX DUAL 14  | 1693 | -    | 415 | 1245 | 1610 | 415 | 1245 | 780  | 54,5 | 884,5  | 939  | 756  | 700  | 540  | 1365 | 630  | 996  | 369 | 200-250 | 130 | 200   | 65    | 65  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 16  | 1693 | -    | 415 | 1245 | 1610 | 415 | 1245 | 780  | 54,5 | 884,5  | 939  | 756  | 700  | 540  | 1365 | 630  | 996  | 369 | 200-250 | 130 | 200   | 65    | 65  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 18  | 1693 | -    | 415 | 1245 | 1610 | 415 | 1245 | 780  | 54,5 | 884,5  | 939  | 756  | 700  | 540  | 1490 | 755  | 1121 | 369 | 200-250 | 130 | 200   | 65    | 65  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 20  | 1693 | -    | 415 | 1245 | 1610 | 415 | 1245 | 780  | 54,5 | 884,5  | 939  | 756  | 700  | 540  | 1490 | 755  | 1121 | 369 | 200-250 | 130 | 200   | 65    | 65  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 24  | 1693 | -    | 415 | 1245 | 1610 | 415 | 1245 | 780  | 54,5 | 884,5  | 939  | 756  | 700  | 540  | 1490 | 755  | 1121 | 369 | 200-250 | 130 | 200   | 65    | 65  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 30  | 1793 | -    | 440 | 1320 | 1710 | 440 | 1320 | 830  | 54,5 | 934,5  | 989  | 806  | 750  | 590  | 1798 | 1000 | 1400 | 398 | 200-250 | 160 | 250   | 80    | 80  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 40  | 1793 | -    | 440 | 1320 | 1710 | 440 | 1320 | 830  | 54,5 | 934,5  | 989  | 806  | 750  | 590  | 1798 | 1000 | 1400 | 398 | 200-250 | 160 | 250   | 80    | 80  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 50  | 1793 | -    | 440 | 1320 | 1710 | 440 | 1320 | 830  | 54,5 | 1034,5 | 989  | 806  | 750  | 590  | 2048 | 1250 | 1650 | 398 | 200-250 | 160 | 250   | 80    | 80  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 60  | 1993 | -    | 490 | 1470 | 1910 | 490 | 1470 | 930  | 54,5 | 1034,5 | 1089 | 906  | 850  | 690  | 2049 | 1250 | 1651 | 398 | 200-250 | 180 | 250   | 80    | 80  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 70  | 1993 | -    | 490 | 1470 | 1910 | 490 | 1470 | 930  | 54,5 | 1034,5 | 1089 | 906  | 850  | 690  | 2299 | 1500 | 1901 | 398 | 200-250 | 180 | 250   | 80    | 80  | 6     | 1"    | 1"    | 1/2"                  | 1/2"  |       |      |
| REX DUAL 80  | 2244 | 2040 | 500 | 1525 | 2139 | 500 | 1525 | 1069 | 50   | 1075   | 1129 | 946  | 890  | 720  | 2440 | 1502 | 1795 | 645 | 230-280 | 225 | 250   | 100   | 100 | 6     | 1"    | 1"    | 1"1/4(1)<br>+1"1/2(2) | 1/2"  | 1/2"  | 1/2" |
| REX DUAL 100 | 2624 | 2420 | 610 | 1825 | 2520 | 610 | 1825 | 1259 | 60   | 1275   | 1349 | 1166 | 1110 | 900  | 2490 | 1502 | 1847 | 643 | 270-320 | 225 | 300   | 100   | 100 | 6     | 1"    | 1"1/4 | 1"1/4<br>+1"1/2(2)    | 1/2"  | 1/2"  | 1/2" |
| REX DUAL 124 | 2640 | 2420 | 610 | 1825 | 2520 | 610 | 1825 | 1259 | 60   | 1275   | 1349 | 1166 | 1110 | 900  | 2792 | 1792 | 2113 | 679 | 270-320 | 225 | 300   | 125   | 125 | 6     | 1"    | 1"1/4 | 1"1/4<br>+1"1/2(2)    | 1/2"  | 1/2"  | 1/2" |
| REX DUAL 150 | 2935 | 2680 | 675 | 2020 | 2793 | 675 | 2020 | 1372 | 60   | 1405   | 1479 | 1296 | 1240 | 1000 | 2756 | 1753 | 2087 | 668 | 270-320 | 280 | 350   | 150   | 150 | 6     | 1"    | 1"1/4 | 1"1/2<br>+1"1/2(2)    | 1/2"  | 1/2"  | 1/2" |
| REX DUAL 170 | 2935 | 2680 | 675 | 2020 | 2793 | 675 | 2020 | 1372 | 60   | 1405   | 1479 | 1296 | 1240 | 1000 | 2756 | 1753 | 2087 | 668 | 270-320 | 280 | 350   | 150   | 150 | 6     | 1"    | 1"1/4 | 1"1/2<br>+1"1/2(2)    | 1/2"  | 1/2"  | 1/2" |

For each product always indicate the code at the time of the order.

The control panel is sold separately

## COMMERCIAL RANGE

### STEEL BOILERS

# REX DUAL

## ADJACENT COMBUSTION CHAMBERS

*Design pressure 5bar*



### Main features

REXDUAL adjacent module steel boiler, employs cylindrical concentric combustion chambers with reverse flame, a blind furnace completely supported by a submerged nozzle projection welded into the rear tube plate facilitating a fully submersed wet back. The boiler is designed to be used in systems with water temperature between 60 and 100 °C (safety thermostat set at 110 °C). 3 stars classification according to 92/42/EEC directive in compliance with 192/05 and 311/06 Legislation.

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- high density, glass wool mattress insulation, protected by easily removable, varnished steel panels.
- steel sheet, fiber-ceramic, thermal insulated, reversible front door, mounted on hinges, easily opened with equipped lever by drilled ferrules.

#### Standard equipment:

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- Turbolators
- Cleaning brush
- Delivery and return hydraulic collectors
- Kit for generator hydraulic coupling

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|--|--------------|
| <b>Control panels</b>  |              |
| Thermostatic control panel   | QACC01ELMDCE |
| <i>Features can be seen in "Thermostatic control panels section"</i> |              |
| Boiler management  control panel                                     | QETERM01CE   |
| Boiler management  control panel                                     | QETERM01RU2* |
| System management layouts  | QETERM02     |

*For characteristics and other accessories see " etherm" system" section*

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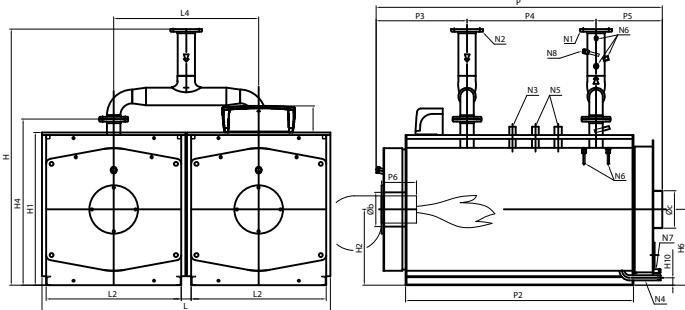
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**Legend:**

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| Characteristics | Code product | Nominal Power<br>Temp. Medium<br>70°C<br>kW | Flow<br>Thermal<br>kW | 100% efficiency<br>(ref. C.O.P.)<br>Temp. Medium<br>70°C<br>% | 30%<br>efficiency<br>(ref. C.O.P.)<br>Temp. Medium<br>70°C<br>% | Flue gas<br>pressure drop<br>mbar | Hydraulic<br>pressure drop<br>(ΔT=12°C)<br>mbar | Water<br>content<br>lt | Total weight<br>kg |
|-----------------|--------------|---|-----------------------|---|---|-----------------------------------|---|------------------------|--------------------|
| Model           |              |   |                       |   |   |                                   |   |                        |                    |
| REX DUAL 80     | 83807030     | 800   | 866                   | 92,38   | 91,80   | 4,1                               | 63  | 720                    | 1167               |
| REX DUAL 100    | 83808030     | 1000  | 1084                  | 92,25   | 91,90   | 4,2                               | 98  | 1080                   | 1705               |
| REX DUAL 124    | 83809030     | 1240  | 1344                  | 92,26   | 91,80   | 6,4                               | 62  | 1290                   | 1925               |
| REX DUAL 150    | 83810050     | 1500  | 1626                  | 92,25   | 91,80   | 5,2                               | 44  | 1710                   | 2409               |
| REX DUAL 170    | 83810060     | 1700  | 1842                  | 92,29   | 91,80   | 7,2                               | 56  | 1710                   | 2409               |
| REX DUAL 190    | 83811030     | 1900  | 2060                  | 92,23   | 91,70   | 5,2                               | 22  | 1900                   | 2833               |
| REX DUAL 200    | 83812070     | 2040  | 2212                  | 92,22   | 91,70   | 4,0                               | 26  | 2400                   | 3686               |
| REX DUAL 240    | 83812080     | 2400  | 2602                  | 92,24   | 91,80   | 5,5                               | 35  | 2400                   | 3686               |
| REX DUAL 260    | 83812090     | 2600  | 2818                  | 92,26   | 91,70   | 6,5                               | 42  | 2400                   | 3686               |

| Dimensions   | H    | H1   | H2  | H4   | H6  | H10 | L    | L2   | L4   | P    | P2   | P3  | P4   | P5  | P6      | Øb  | Øc    | N1    | N2  | N1/N2 | N3    | N4    | N5       | N6    | N7    | N8 |
|--------------|------|------|-----|------|-----|-----|------|------|------|------|------|-----|------|-----|---------|-----|-------|-------|-----|-------|-------|-------|----------|-------|-------|----|
|              | mm   | mm   | mm  | mm   | mm  | mm  | mm   | mm   | mm   | mm   | mm   | mm  | mm   | mm  | mm      | mm  | DN/in | DN/in | PN  | DN/in | DN/in | DN/in | DN/in    | DN/in | DN/in |    |
| REX DUAL 80  | 1690 | 1015 | 500 | 1095 | 500 | 50  | 1901 | 890  | 955  | 1872 | 1502 | 600 | 850  | 422 | 230-280 | 225 | 250   | 100   | 100 | 6     | 1"    | 1"    | 1"1/4(1) | 1/2"  | 1/2"  |    |
| REX DUAL 100 | 1880 | 1205 | 610 | 1285 | 610 | 60  | 2341 | 1110 | 1175 | 1946 | 1502 | 663 | 850  | 433 | 270-320 | 225 | 300   | 100   | 100 | 6     | 1"    | 1"1/4 | 1"1/4    | 1/2"  | 1/2"  |    |
| REX DUAL 124 | 1902 | 1205 | 610 | 1285 | 610 | 60  | 2341 | 1110 | 1175 | 2235 | 1792 | 663 | 1150 | 422 | 270-320 | 225 | 300   | 125   | 125 | 6     | 1"    | 1"1/4 | 1"1/4    | 1/2"  | 1/2"  |    |
| REX DUAL 150 | 1990 | 1335 | 675 | 1417 | 675 | 60  | 2600 | 1240 | 1305 | 2247 | 1753 | 704 | 1100 | 443 | 270-320 | 280 | 350   | 150   | 150 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |
| REX DUAL 170 | 1990 | 1335 | 675 | 1417 | 675 | 60  | 2600 | 1240 | 1305 | 2247 | 1753 | 704 | 1100 | 443 | 270-320 | 280 | 350   | 150   | 150 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |
| REX DUAL 190 | 1990 | 1335 | 675 | 1417 | 675 | 60  | 2600 | 1240 | 1305 | 2497 | 2003 | 704 | 1200 | 593 | 270-320 | 280 | 350   | 200   | 200 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |
| REX DUAL 200 | 2025 | 1485 | 750 | 1568 | 750 | 60  | 2900 | 1390 | 1455 | 2477 | 2003 | 703 | 1200 | 574 | 270-320 | 280 | 400   | 200   | 200 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |
| REX DUAL 240 | 2025 | 1485 | 750 | 1568 | 750 | 60  | 2900 | 1390 | 1455 | 2477 | 2003 | 703 | 1200 | 574 | 270-320 | 280 | 400   | 200   | 200 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |
| REX DUAL 260 | 2025 | 1485 | 750 | 1568 | 750 | 60  | 2900 | 1390 | 1455 | 2477 | 2003 | 703 | 1200 | 574 | 270-320 | 280 | 400   | 200   | 200 | 6     | 1"    | 1"1/4 | 1"1/2    | 1/2"  | 1/2"  |    |

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