



Surface burner

Infrared ray burner

Rinnai gas infrared burner

It is lightweight and compact infrared burner and there are also energy saving type and far infrared type.

Feature

About Infrared

Infrared is a kind of electromagnetic wave same as light, radio waves and so on. The "visible light part" which appears to be orange and the invisible "infrared part" are emitted at the same time and can heat any substance without contact.

1 Direct heating

Infrared rays are irradiated directly to the object without warming the air in the middle of the radiator.

2 Large infrared emissivity

Since 70% of the energy of gas is converted to infrared light, it effectively irradiates heat quantity.

3 Can be used in any direction

The radiator (integral with the burner) can be used in any direction.

4 Low cost

Since it transfers heat by radiant heat, there is no need for a blower, a heat exchanger, etc., and the equipment cost is very low.

5 Optimum wavelength

The infrared wavelength emitted is 2 to 4 μm . Infrared rays in the vicinity have the highest caloric value and are particularly easily absorbed by water, so it is very suitable for baking and drying.



【Left】Far infrared plate (R-B)

【Right】Energy saving plate (R-E)

Specifications

Besides the general type (Bunsen mixed type [standard plate]) and small fire type (TAN type), there is forced mixing type (blast mixing type). In addition, there are also new series of **energy saving plates**, **far infrared plates**, and **rotary damper** compatible models.

Handling Precautions

- Use gas pressure is a city gas 0.7kPa, natural gas 1.5kPa, propane gas 2.8kPa is standard. The higher the gas pressure, the shorter the life of the burner will be.
- In the case of city gas, please use the low pressure equipment governor (pressure regulator) as much as possible.
- Please do not use it like sucking exhaust of burner (as primary air).

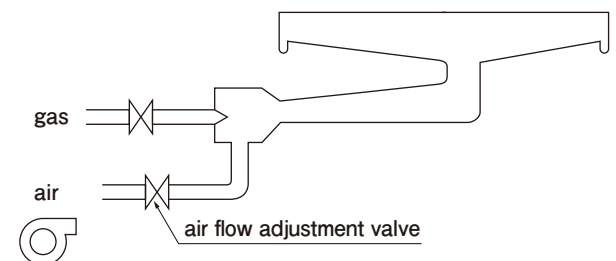
- Please take care to prevent combustion failure by sucking dust. (Please clean it from time to time.)
- Since this infrared burner falls under direct fire combustion method according to regulations of Occupational Health and Safety Regulations Article 294, 10, it can not be used for drying equipment for hazardous materials.

Lineup explanation

In addition to the general type we have the following lineup.

Forced mixing type (BA type) *order production

- 1 The forced mixing type feeds fresh air in a sealed state, so there is no problem of burning failure or efficiency reduction. due to the influence of the surroundings, and a more stable combustion state can be obtained.
- 2 The primary air volume is structured so that it can be easily adjusted by the air conditioner, so you can easily control the burner surface temperature.
- 3 In the forced mixing type, since dust and dust do not get inside the burner, it maintains stable combustion for a long time without combustion failure and leads to energy saving.
- 4 Since it adopts ceramic plate with improved heat resistance, it can be used even in high temperature atmosphere.



Simple premix method

【Mixing ratio of gas and air of this burner】

- LP gas:air 30
- 13A gas:air 15

Small thermal power corresponding type(TAN type) *order production

- 1 Because it adopts a ceramic plate which is easy to squeeze compared with the general type, it is convenient when you use it by squeezing it with preheating etc. which does not require firepower.
- 2 It is compatible with infrared burner unit of general type.

New series

Energy saving plate (R - E)

※It is our monopoly

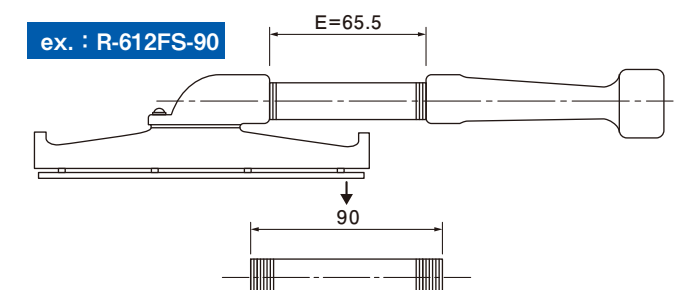
- 1 It is a burner that saves gas consumption while keeping radiation power intact.
- 2 It has the same mounting dimensions as the standard type burner and can be replaced as it is.
- 3 When used as a burning low, the heat flow rate will be reduced by about 10% from the standard type.

Far infrared plate (R - B)

- 1 The peak of the wavelength of infrared radiation emitted by gas combustion is on the far red wavelength side compared with the conventional product.
- 2 Suitable for substances with relatively low surface tolerance temperature, such as preheating rice snacks and drying of laver.
- 3 It takes less heat away and dissipation to the outside, and it can heat efficiently.

Request for ordering special size burner

- 1 If you customize the dimensions of the joint part, please check its total length.
- 2 The total length of the joint is included behind the product model.



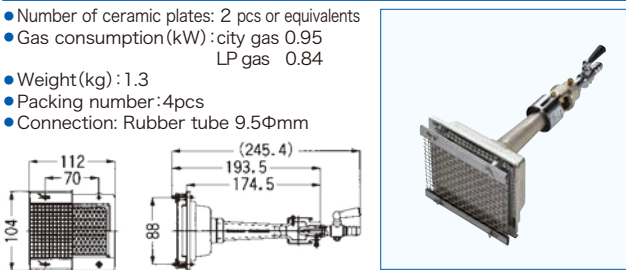
Product list

General type (standard plate / energy saving plate / far infrared plate)

R-E Energy saving plate (R-E) compatible **R-B** Far infrared plate (R-B) compatible **TK** Rotary damper compatible model

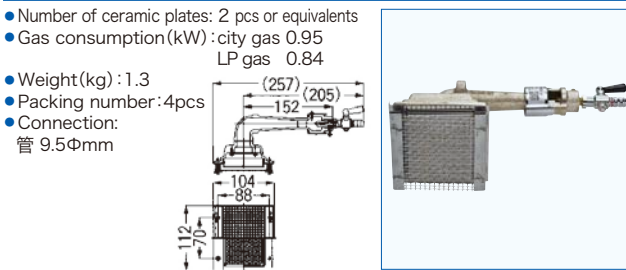
R-206S (A)

- Number of ceramic plates: 2 pcs or equivalents
- Gas consumption (kW): city gas 0.95
LP gas 0.84
- Weight (kg): 1.3
- Packing number: 4pcs
- Connection: Rubber tube 9.5Φmm



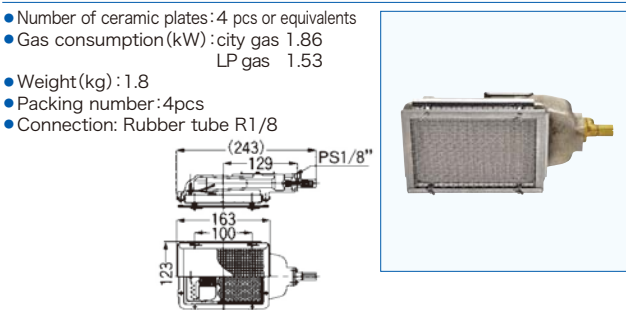
R-206LS (A)

- Number of ceramic plates: 2 pcs or equivalents
- Gas consumption (kW): city gas 0.95
LP gas 0.84
- Weight (kg): 1.3
- Packing number: 4pcs
- Connection: 管 9.5Φmm



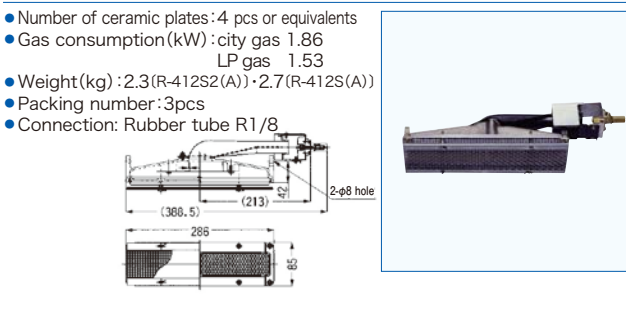
R-402S2 (A)

- Number of ceramic plates: 4 pcs or equivalents
- Gas consumption (kW): city gas 1.86
LP gas 1.53
- Weight (kg): 1.8
- Packing number: 4pcs
- Connection: Rubber tube R1/8



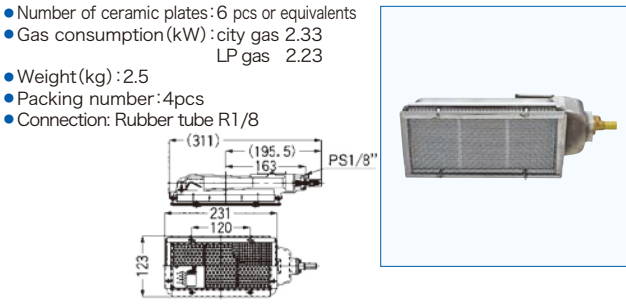
R-412S2 (A) (Mixing tube sheet metal type) **R-412S (A)** (Mixed tube casting type)

- Number of ceramic plates: 4 pcs or equivalents
- Gas consumption (kW): city gas 1.86
LP gas 1.53
- Weight (kg): 2.3 (R-412S2(A)) · 2.7 (R-412S(A))
- Packing number: 3pcs
- Connection: Rubber tube R1/8



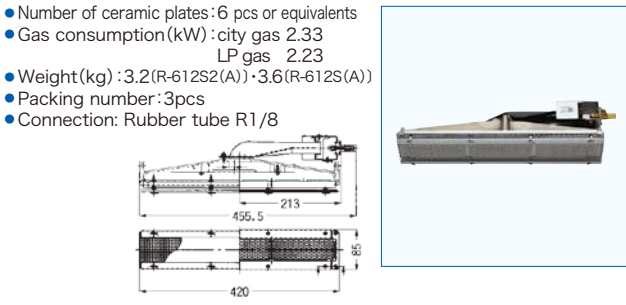
R-601S2 (A)

- Number of ceramic plates: 6 pcs or equivalents
- Gas consumption (kW): city gas 2.33
LP gas 2.23
- Weight (kg): 2.5
- Packing number: 4pcs
- Connection: Rubber tube R1/8



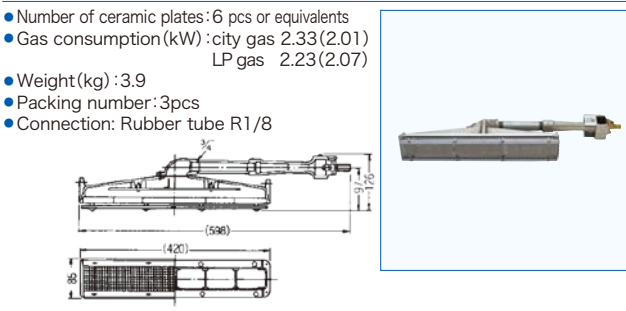
R-612S2 (A) (Mixing tube sheet metal type) **R-612S (A)** (Mixed tube casting type)

- Number of ceramic plates: 6 pcs or equivalents
- Gas consumption (kW): city gas 2.33
LP gas 2.23
- Weight (kg): 3.2 (R-612S2(A)) · 3.6 (R-612S(A))
- Packing number: 3pcs
- Connection: Rubber tube R1/8



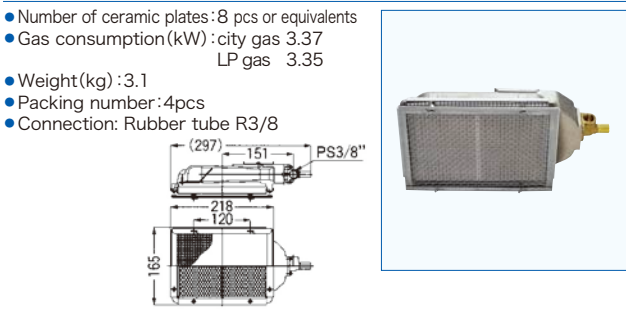
R-612FS **TK** **R-E** R-E612FS-S **R-B** R-B612FS

- Number of ceramic plates: 6 pcs or equivalents
- Gas consumption (kW): city gas 2.33 (2.01)
LP gas 2.23 (2.07)
- Weight (kg): 3.9
- Packing number: 3pcs
- Connection: Rubber tube R1/8



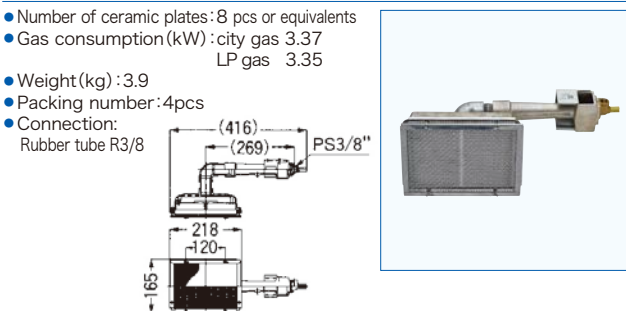
R-801S2 (A)

- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37
LP gas 3.35
- Weight (kg): 3.1
- Packing number: 4pcs
- Connection: Rubber tube R3/8



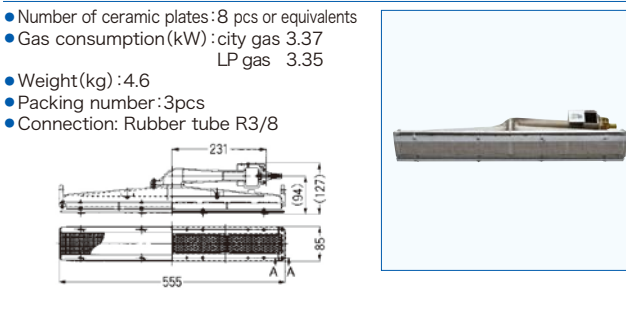
R-804S2 (A)

- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37
LP gas 3.35
- Weight (kg): 3.9
- Packing number: 4pcs
- Connection: Rubber tube R3/8



R-823S (A)

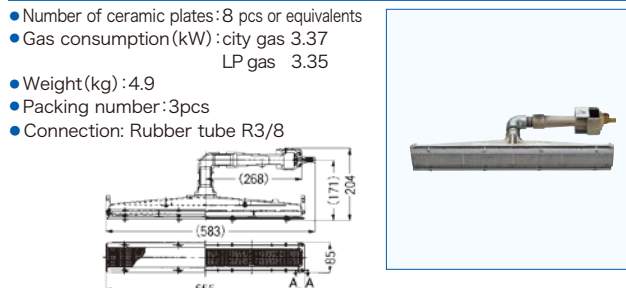
- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37
LP gas 3.35
- Weight (kg): 4.6
- Packing number: 3pcs
- Connection: Rubber tube R3/8



※ () Means, energy saving type gas consumption

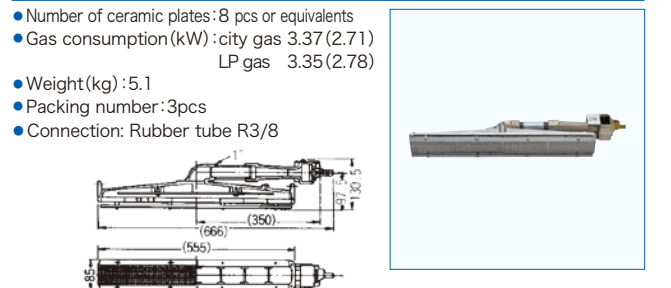
R-823NS

- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37
LP gas 3.35
- Weight (kg): 4.9
- Packing number: 3pcs
- Connection: Rubber tube R3/8



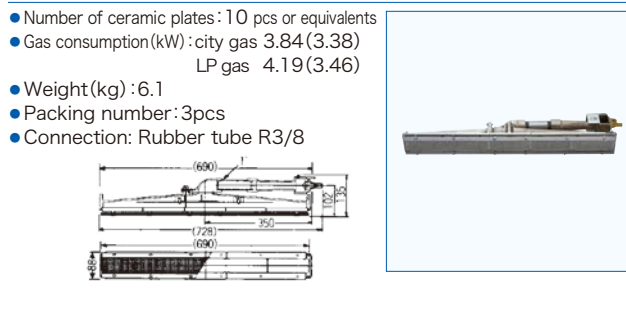
R-823FS **TK** **R-E** R-E823FS-S **R-B** R-B823FS

- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37 (2.71)
LP gas 3.35 (2.78)
- Weight (kg): 5.1
- Packing number: 3pcs
- Connection: Rubber tube R3/8



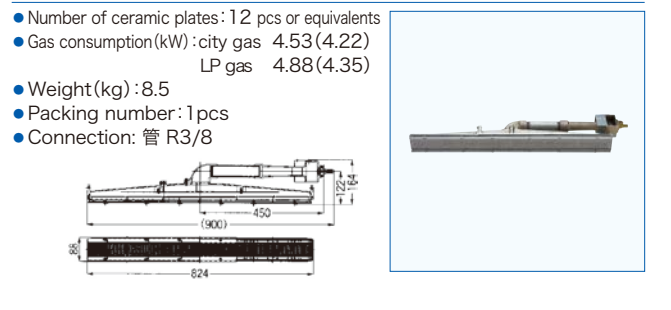
R-1004S **TK** **R-E** R-E1005FS-S **R-B** R-B1005FS

- Number of ceramic plates: 10 pcs or equivalents
- Gas consumption (kW): city gas 3.84 (3.38)
LP gas 4.19 (3.46)
- Weight (kg): 6.1
- Packing number: 3pcs
- Connection: Rubber tube R3/8



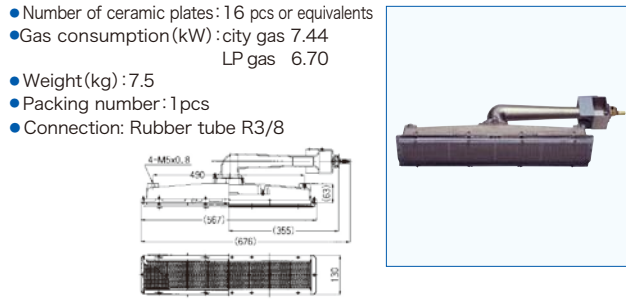
R-1207C2 **TK** **R-E** R-E1208FS-S **R-B** R-B1208FS

- Number of ceramic plates: 12 pcs or equivalents
- Gas consumption (kW): city gas 4.53 (4.22)
LP gas 4.88 (4.35)
- Weight (kg): 8.5
- Packing number: 1 pcs
- Connection: 管 R3/8



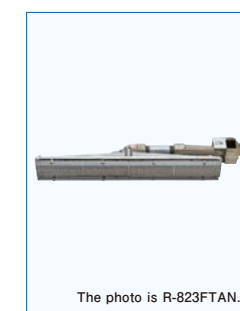
R-1603S2 (one mixing tube burner) **R-1603S3** (Mixing tube joint type)

- Number of ceramic plates: 16 pcs or equivalents
- Gas consumption (kW): city gas 7.44
LP gas 6.70
- Weight (kg): 7.5
- Packing number: 1 pcs
- Connection: Rubber tube R3/8



Small Thermal Power Corresponding Type (TAN Type) *order production

- Because it adopts a ceramic plate which is easy to squeeze compared with the general type, it is convenient when you use it by squeezing it with preheating etc. which does not require firepower.
- It is compatible with infrared burner unit of general type.
- It is 2 kinds of limited production of LPG · 13A.



R-412FTAN-40

- Number of ceramic plates: 4 pcs or equivalents
- Gas consumption (kW): city gas 1.86
LP gas 1.53
- Weight (kg): 2.7
- Packing number: 4pcs
- Connection: Rubber tube R1/8

R-612FTAN

- Number of ceramic plates: 6 pcs or equivalents
- Gas consumption (kW): city gas 2.33
LP gas 2.23
- Weight (kg): 3.9
- Packing number: 3pcs
- Connection: Rubber tube R1/8

R-823FTAN

- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW): city gas 3.37
LP gas 3.35
- Weight (kg): 5.1
- Packing number: 3pcs
- Connection: Rubber tube R3/8

R-1004FTAN

- Number of ceramic plates: 10 pcs or equivalents
- Gas consumption (kW): city gas 3.84
LP gas 4.19
- Weight (kg): 6.1
- Packing number: 3pcs
- Connection: Rubber tube R3/8

R-1208CTAN

- Number of ceramic plates: 12 pcs or equivalents
- Gas consumption (kW): city gas 4.53
LP gas 4.88
- Weight (kg): 8.5
- Packing number: 1 pcs
- Connection: Rubber tube R3/8

Product list

Forced mixing type (BA type) *order production



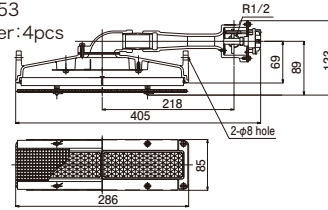
The photo is R - 823 BA.

- The forced mixing type feeds fresh air in a sealed state, so there is no problem of burning failure or efficiency reduction due to the influence of the surroundings, and a more stable combustion state can be obtained.
- The primary air volume is structured so that it can be easily adjusted by the air conditioner, so you can easily control the burner surface temperature.
- In the forced mixing type, since dust and dust do not get inside the burner, it maintains stable combustion for a long time without combustion failure and leads to energy saving.
- Since it adopts ceramic plate with improved heat resistance, it can be used even in high temperature atmosphere.

R-E R-E Energy saving plate (R-E) compatible ※ () Means, energy saving type gas consumption

R-412BA

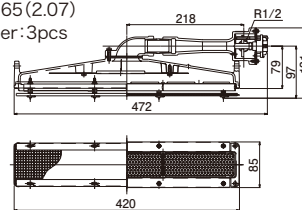
- Number of ceramic plates: 4 pcs or equivalents
- Gas consumption (kW) : city gas 1.86
LP gas 1.53
- Weight (kg) : 2.7 ● Packing number: 4pcs
- Connection: Gas R3/8·Air R1/2



R-612BA

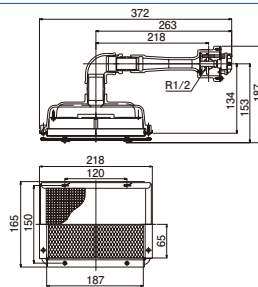
R-E R-E612BA-S

- Number of ceramic plates: 6 pcs or equivalents
- Gas consumption (kW) : city gas 2.33 (2.01)
LP gas 2.65 (2.07)
- Weight (kg) : 3.9 ● Packing number: 3pcs
- Connection: Gas R3/8·Air R1/2



R-804BA (A)

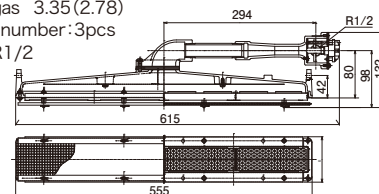
- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW) : city gas 3.37
LP gas 3.35
- Weight (kg) : 3.9 ● Packing number: 4pcs
- Connection: Gas R 3/8·Air R1/2



R-823BA

R-E R-E823BA-S

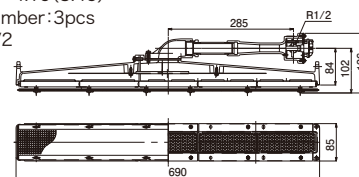
- Number of ceramic plates: 8 pcs or equivalents
- Gas consumption (kW) : city gas 3.37 (2.71)
LP gas 3.35 (2.78)
- Weight (kg) : 5.1 ● Packing number: 3pcs
- Connection: Gas R3/8·Air R1/2



R-1004BA

R-E R-E1005BA-S

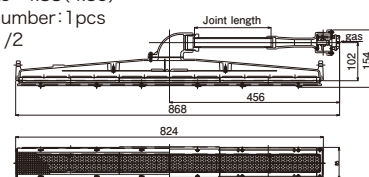
- Number of ceramic plates: 10 pcs or equivalents
- Gas consumption (kW) : city gas 3.84 (3.38)
LP gas 4.19 (3.46)
- Weight (kg) : 6.1 ● Packing number: 3pcs
- Connection: Gas R3/8·Air R1/2



R-1208CBA

R-E R-E1208BA-S

- Number of ceramic plates: 12 pcs or equivalents
- Gas consumption (kW) : city gas 4.53 (4.22)
LP gas 4.88 (4.35)
- Weight (kg) : 8.5 ● Packing number: 1pcs
- Connection: Gas R3/8·Air R1/2



R-1603BA

- Number of ceramic plates: 16 pcs or equivalents
- Gas consumption (kW) : city gas 7.44
LP gas 6.7
- Weight (kg) : 7.5 ● Packing number: 1pcs
- Connection: Gas R3/8·Air R1/2

