

BROAD AIR CONDITIONING

Micro Gas Air Con — Saves Operating Cost

Applications

To provide air conditioning for commercial, administrative, public buildings sized from 200 m 2 ~5000 m 2 . Especially, suitable for medium & small sized hotels, restaurants, office buildings and villas.

Functions

Cooling, Heating (hot water for special orders)

Cooling capacity

16kW, $\bar{2}$ 3kW, $70\bar{k}$ W, 115kW equal to 4.6RT, 6.6RT, 20RT and 33RT or 7HP, 10HP, 30HP, 50HP (a single unit can serve a 200 m² \sim 2000 m² building).

Energy

Natural Gas, Town Gas, Biogas, LPG, Diesel (Steam, Hot Water, Exhaust can be used for special orders)

Low energy cost

By using natural gas, in many countries, the operating cost is only 30%~60% of that by using electric air conditioning (per actual results).

Clock and watch

The performance of BROAD micro gas air con is the same as BROAD packaged non-electric chiller, only a matter of size, just like the difference between a clock and a watch. Also, BCT70, BCT115 can be synchronized with BROAD packaged non-electric chillers.

Micro Gas Air Con Performance Data

Model		BCT16	BCT23	BCT70	BCT115
Cooling capacity	kW	16	23	70	115
	equal to HP	7	10	30	50
Heating capacity	kW	16	23	70	115
	10 ⁴ kcal/h	1.4	2	6	10
Chilled/heating water					
Chilled water O/I temp.	°C	7/14	7/14	7/14	7/14
Heating water O/I temp.	°C	57/50	57/50	57/50	57/50
Flow rate	m³/h	2.0	2.9	8.6	14.3
External head	mH ₂ O	8	8	11	12
Fuel consumption (full load)					
Cooling natural gas	m³/h	1.5	2.2	6.4	10.5
diesel oil	kg/h	1.24	1.82	5.29	8.68
Heating natural gas	m³/h	1.8	2.6	7.8	13.0
diesel oil	kg/h	1.49	2.15	6.45	10.75
Electricity consumption (full load	d)				
Cooling	kW	1.00	1.45	3.95	5.78
Heating	kW	0.40	0.68	1.70	2.34

^{1.} Fuel: NG, Town Gas, LPG, Diesel, please specify it in purchase orders. Natural gas consumption is calculated per low heating value 10 kWh/m3 and diesel oil per low heating value of 12 kWh/kg.

2. The product life design is 20 years.

Patented technology

All BROAD technologies are self developed uniquely. There are more than 20 patented technologies.

Indoor unit design advantage

Combining BROAD outdoor units with BROAD indoor units will realize optimal system performance and take full advantage of remote monitoring via the internet, but the BROAD outdoor unit can also be combined with any other indoor units.

Model selection & ordering

BROAD recommends: For residences and hotels: 40~70 W/m² For restaurants and shopping malls: 100~200W/m²

Outdoor unit quantity selection per building area cooling load 1 unit for buildings $\leq 300 \text{ m}^2 \text{ 1}{\sim}2 \text{ units for}$ buildings $\leq 2,000 \text{ m}^2 \text{ 2}{\sim}4 \text{ units for buildings} \leq 5,000 \text{ m}^2$ For year around non-stop applications, at least 2 units are recommended, but standby units are not recommended. Several units can all be combined as an integrated system.

Lead time: 3~5 months for small quantity orders. Orders greater than 300 units, it takes at least 5 months.

