

High Capacity Duct type

GRTA-80CQN1, GRTA-100CQN1

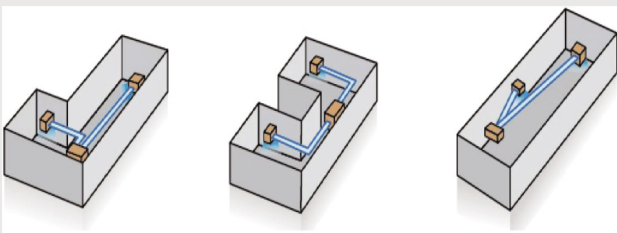
GRTA-120CQN1

GRTA-150CQN1, GRTA-200CQN1,
GRTA-250CQN1



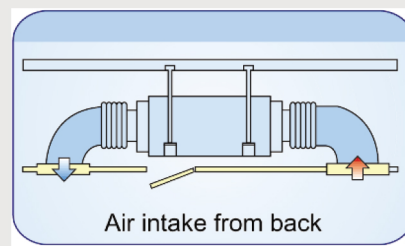
Advance Function

Multi Diffusers



Multi diffusers from one indoor unit supply airflow at the same time.
The unit is suitable for various applications where there are many rooms or halls,
such as restaurants, connect and hotels

Air Inlet



Air inlet and outlet flanges are and easy for duct connection.

Outstanding Features

- High capacity of cooling and heating, and energy saving
- Thin size, even can installed at limited place.
- All round steel shell, for high quality protection of transportation.
- Convenient installation, hidden in the ceiling, unit installation is not hindered by the location of lighting fixtures or room structure.

INDOOR UNIT SPECIFICATIONS



Model		GRTA-80CQN1	GRTA-100CQN1	GRTA-120CQN1	
Power supply		\	208-230V~, 1Ph, 60Hz		
Cooling	Capacity	Btu/h	75,100	95,500	119,400
		W	22,000	28,000	35,000
	Capacity (46°C)	W	19,500	26,500	29,500
	Input	W	7,500	9,600	12,000
	EER	W/W	2.93	2.92	2.92
Heating	Capacity	Btu/h	\	\	\
		W	\	\	\
	Input	W	\	\	\
	COP	W/W	\	\	\
Rated input (Indoor unit)		W	1,700	1,700	1,900
Rated current (Indoor unit)		A	7.5	8.4	9
Indoor air flow (m ³ /h/CFM)		\	4,250 (2,500)	5,100 (3,000)	6,375 (3,750)
Indoor standard ESP		Pa	100	100	150
Indoor noise level		dB(A)	56	56	58
Refrigerant type		\	R410A	R410A	R410A
Refrigerant control		\	Capillary		
Fan	Type	\	Centrifugal fan	Centrifugal fan	Centrifugal fan
	Motor model (×Quantity)	\	YDK250-4X(×2)	YDK300-4X(×2)	YDK195-6B(×3)
	Input (Hi/med/lo)	W	715/605/515	880/725/590	480/408/344
	Capacitor	\	15μF/450V	15μF/450V	15μF/450V
	Speed (Hi/med/lo)	r/min	1,040/960/870	1,160/980/870	940/840/750
Coil	Type	\	Copper tube and aluminum fin		
	Tube size	mm	Φ7	Φ7	Φ7
	No. of rows	\	4	4	4
	Fin spacing	mm	1.5	1.5	1.5
	Tube pitch(a)×row pitch(b)	mm	21×13.37	21×13.37	21×13.37
	Length× height	mm	1,202×378	1,202×378	1,602×588
	Number of circuits	\	14	18	21
Controller		\	R51/CE	R51/CE	R51/CE
Refrigerant pipe (Liquid/ Gas)		mm	Φ9.52/Φ19	Φ9.52/Φ22	Φ12.7/Φ25
Power wire		\	3×2.5mm ²	3×2.5mm ²	3×2.5mm ²
Drain pipe size		mm	Φ41	Φ41	Φ41
Dimension (W×H×D)		mm	1,366×450×716	1,366×450×716	1,828×638×858
Packing (W×H×D)		mm	1,555×500×875	1,555×500×875	2,095×800×964
Net/Gross weight		kg	94/106	96/108	188/220

Notes:

1. ESP: external static pressure . Rated input = Max. input, Rated current = Max. current.
2. Nominal cooling capacities are based on the following conditions:

Indoor temp: 27°CDB, 19°CWB; Outdoor temp: 35°CDB, 24°CWB; Nominal heating capacities are based on the following conditions: Indoor temp: 20°CDB 15°CWB; Outdoor temp: 7°CDB, 6°CWB



INDOOR UNIT SPECIFICATIONS

Model			GRTA-150CQN1	GRTA-200CQN1	GRTA-240CQN1
Power supply		\	208-230V~, 1Ph, 60Hz		
Cooling	Capacity	Btu/h	150,100	179,100	238,840
		W	44,000	52,500	70,000
	Capacity (46°C)	W	37,670	48,940	61,500
	Input	W	15,000	18,100	24,000
	EER	W/W	2.93	2.90	2.92
Heating	Capacity	Btu/h	\	\	\
		W	\	\	\
	Input	W	\	\	\
	COP	W/W	\	\	\
Rated input (Indoor unit)		W	2,400	2,500	2,600
Rated current (Indoor unit)		A	11.5	12.5	13
Indoor air flow (m ³ /h/CFM)		\	7,650 (4,500)	10,000 (5,883)	12,000 (7,060)
Indoor standard ESP		Pa	150	150	150
Indoor noise level		dB(A)	58	60	60
Refrigerant type		\	R410A	R410A	R410A
Refrigerant control		\	Capillary		
Fan	Type	\	Centrifugal fan	Centrifugal fan	Centrifugal fan
	Motor model (×Quantity)	\	YDK520-6B(×3)	YDK520-6B(×3)	YDK520-6B(×3)
	Input (Hi/med/lo)	W	680/600/470	700/630/500	730/650/520
	Capacitor	\	15μF/450V	20μF/450V	25μF/450V
	Speed (Hi/med/lo)	r/min	1,000/950/800	1,050/1,000/850	1,100/1,050/900
Coil	Type	\	Copper tube and aluminum fin		
	Tube size	mm	Φ7	Φ7	Φ7
	No. of rows	\	4	4	4
	Fin spacing	mm	1.5	1.5	1.5
	Tube pitch(a)×row pitch(b)	mm	21×13.37	21×13.37	21×13.37
	Length× height	mm	1,602×588	1,602×588	1,602×588
	Number of circuits	\	28+28	28+28	28+28
Controller		\	R51/CE	R51/CE	R51/CE
Refrigerant pipe (Liquid/ Gas)		mm	Φ9.52/Φ19 (×2)	(Φ9.52/Φ22)×2	Φ12.7/Φ25(×2)
Power wire		\	3×2.5mm ²	3×2.5mm ²	3×2.5mm ²
Drain pipe size		mm	Φ41	Φ41	Φ41
Dimension (W×H×D)		mm	1,828×638×858	1,828×638×858	1,828×638×858
Packing (W×H×D)		mm	2,095×800×964	2,095×800×964	2,095×800×964
Net/Gross weight		kg	190/217	190/220	193/220

Notes:

1. ESP: external static pressure. Rated input = Max. input, Rated current = Max. current.
2. Nominal cooling capacities are based on the following conditions:

Indoor temp: 27°CDB, 19°CWB; Outdoor temp: 35°CDB, 24°CWB; Nominal heating capacities are based on the following conditions: Indoor temp: 20°CDB 15°CWB; Outdoor temp: 7°CDB, 6°CWB



OUTDOOR UNIT SPECIFICATIONS

Model		GRSV-80CN1	GRSV-100CN1	GRSV-120CN1	
Power supply	\	208-230V~, 3Ph, 60Hz			
Ambient temp in cooling	°C	17~52	17~52	17~52	
Ambient temp in heating	°C	\	\	\	
Rated input (Outdoor unit)	W	11,100	16,700	18,200	
Rated current (Outdoor unit)	A	32.5	44.4	53.1	
Noise level	dB(A)	65	69	70	
Compressor	Type ×Qty.	\	Scroll ×1	Scroll ×1	
	Model (Brand)	\	C-SBP205H36A (Sanyo)	SH090A3ALC (Danfoss)	
	Capacity	W	20,400	27,100	32,620
	Input	W	6,700	8,569	10,275
	Rated current	A	20.5	30.7	43.6
	Locked rotor Amp	A	114	203	267
	Refrigerant oil	ml	1,700 (FV68S)	3,000 (POE-160SZ)	3,300 (POE-160SZ)
Refrigerant type/charge	\	R410A/4,500g	R410A/6,500g	R410A/7,500g	
Fan	Type ×Qty.	\	Axial fan ×2	Axial fan ×2	
	Motor model	\	YDK210-6B	YDK320-6B	
	Motor input (4/3 fan blades)	\	320/303	580/560	580/560
	Capacitor	\	10μF/450V	25μF/450V	25μF/450V
	Motor speed (4/3 fan blades)	rpm	910/950	1080/1100	1080/1100
Coil	Type	\	Copper tube and aluminum fin		
	Tube size	mm	Φ7	Φ7	Φ7
	No. of rows	\	2	3	3
	Fin space	mm	1.3	1.3	1.3
	Tube pitch(a)×row pitch(b)	mm	21×13.37	21×13.37	21×13.37
	Coil (W×H)	mm	2,175×882	2,179×882	(1,380×882)+(1,380×882)
	Number of circuits	\	20	20	11+11
Refrigerant pipe	Liquid side/ Gas side	mm	Φ9.52/Φ19	Φ9.52/Φ 22	Φ12.7/Φ25
	Max. pipe length	m	50	50	50
	Max. difference in level	\	25m(O.D. up) /30m(O.D. down)		
Connection wire	Power wire	\	5×10.0mm ²	5×16.0mm ²	5×20.0mm ²
	Signal wire (I.D. & O.D.)	\	2×1.0mm ²	2×1.0mm ²	2×1.0mm ²
	Signal wire (If double.)	\	3×0.5mm ²	3×0.5mm ²	3×0.5mm ²
Dimension (W×H×D)	mm	1,255×908×700	1,255×908×700	1,255×908×700	
Packing (W×H×D)	mm	1,320×1,060×730	1,320×1,060×730	1,320×1,060×730	
Net/ Gross weight	kg	148/167	187/204	199/215	

Notes:

1. Rated input = Max. input, Rated current = Max. current.

2. Nominal cooling capacities are based on the following conditions: Indoor temp: 27°CDB, 19°CWB; Outdoor temp: 35°CDB; Nominal heating capacities are based on the following conditions: Indoor temp: 20°CDB; Outdoor temp: 7°CDB, 6°CWB