

COMMERCIAL AIR CONDITIONERS PRODUCT CATALOGUE

SPLIT COMMERCIAL UNIT



SPLIT COMMERCIAL UNIT

CEILING CONCEALED TYPE

FS-ST1C(H) 20W/N1- 104W/N1 Cooling Capacity 19.5kW - 103.7kW



FEATURES -

· Wide cooling capacity range

11 sizes available ranging from 19.5 kW to 103.7 kW cooling capacity. Wide application as hotel, apartment, villa, factory, shopping center, office building and school etc.

Durable construction

Panels and frame are made from metal steel protected with polyester powder painting to ensure total resistance to atmospheric agents.

• Reliable scroll compressor

High efficiency scroll compressor for the whole range, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.

Famous brand compressor: Copeland, Danfoss and Panasonic.

Outstanding reliability and Quieter operation

Light-weight design, and fewer moving parts design.

Multi-protection design and reliably: High/low pressure switch

protection, Three-phase protector, Overheat protection, Current overload protection and Time delay and Antifreeze switch etc. Outdoor units are equipped with low noise axial fans, Indoor units are equipped with quiet centrifugal fans. Compact indoor design, long air supply distance.

• Easy for installation

Split installation, connected by means of flare/welding coupling. Units are completely assembled, internally wired, charged outdoor unit with refrigerant at the factory. The site work only needs to connect refrigerant pipes and communication wires between outdoor unit and indoor unit.

- Easy operation line controller
- Cooling/Heating/Fan/Auto
- Error indication
- Timing On/Off

SPECIFICATIONS -

М	odel FS-ST1HW/N1	1	20	25	32	36	42	48	52	62	72	88	104
Nominal cooling capacity*		kW	19.5	24.8	31.2	35.6	41.3	47.4	51.3	63.3	71.3	87.9	103.7
Nominal heating capacity**		kW	22.6	28.9	35.8	40.8	46.9	54.4	58.9	72.6	81.9	100.0	115.8
Cooling rated input current		Α	12.87	16.62	21.09	22.88	26.99	32	32.89	41.29	47.55	50.23	70.25
Heating rated input current		Α	12.74	16.46	20.88	22.65	26.72	31.68	32.56	40.88	47.08	49.70	69.55
Connection method		1	Flare	Flare	Flare	Flare	Welding	Welding	Welding	Welding	Welding	Welding	Welding
Liquid pipe diameter		₡mm	9.52x2	12.7x2	12.7x2	12.7×2	15.88/12.7	15.88/12.7	15.88/12.7	15.88×2	15.88×2	15.88×3	15.88×3
Ga	Gas pipe diameter		15.88x2	15.88×2	19.05x2	22×2	28/19.05	28/19.05	28/19.05	28×2	28×2	28×3	28×3
	Compressor												
	Qty/circuit number	Nr.	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3
╘	Cooling power input*	kW	7.2	9.3	11.8	12.8	15.1	17.9	18.4	23.1	26.6	28.1	39.3
N N	Heating power input**	kW	7.13	9.21	11.68	12.67	14.95	17.72	18.22	22.87	26.33	27.82	38.91
OUTDOOR UNIT	Axial fans												
5	Quantity	Nr.	1	1	1	1	2	2	2	2	2	2	2
ō	Airflow	m3/h	9400	9400	12500	14200	18800	18800	21500	26500	29880	36500	43500
	Sound pressure level***	dB(A)	67	67	68	70	71	71	71	71	71	71	71
	Net weight	kg	170	180	220	230	260	280	330	340	460	600	650
	Centrifugal fans												
	Quantity/Power input	Nr.x kW	2x0.25	2x0.32	2x0.55	2x0.55	2x0.8	2x0.8	2x0.8	2x1.5	2x1.8	2x2.2	2x4
Ę	Airflow	m³/h	3500/2500/2000	4500/3700/3000	5400/4200/3200	6400	7400	8500	9250	11450	12900	14800	17100
INDOOR UNIT	ESP	Pa	100	100	150	130	180	200	200	300	300	300	500
	Drain pipe	mm	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25	DN25
	Sound pressure level***	dB(A)	64	64	66	66	68	68	68	68	69	69	70
	Net weight	kg	90	100	150	160	180	200	220	230	300	320	400
Outdoor dimension L×W×H		mm	1120×830×1030		1180×960×1130		1640×880×1130		1840×970×1130		2120×970×1130	2243×1250×1520	
Indoor dimension L×W×H		mm	1660×9	15×487	1660×915×588	1810×915×580	1840×1045×690	2065×1160×690	2165×1160×690	1870×1230×995	1870×1230×1096	2100×12	70×1298

Performance values refer to the following conditions:

^{*} Cooling capacity is measured under the condition: indoor temperature DB 27°C/WB 19°C, ambient temperature DB 35°C / WB 24°C.

^{**} Heating capacity is measured under the condition: indoor temperature DB 20°C / WB 15°C, ambient temperature DB 7°C / WB 6°C.

^{***} Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a clear field.

SPLIT COMMERCIAL UNIT

FIOOR STANDING DUCTED TYPE

FS-ST1C(H) 20W/N2 - 124W/N2 Cooling Capacity 20kW - 124kW

FIOOR STANDING FREE BLOW TYPE

FS-ST1C(H) 20W/N3 - 62W/N3 Cooling Capacity 20kW - 62kW



FEATURES -

· Wide cooling capacity range

Available in 2 types, Floor standing ducted and floor standing free blow

9 sizes available ranging from 20 kW to 124 kW cooling capacity.

Outstanding reliability and Quieter operation

Patent design frame structure, elegant appearance and fewer moving parts design.

High efficiency scroll compressor for the whole range, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.

It applies high pure and full-closed internal thread copper tube and aluminum fin through mechanical tube expansion, to make the copper and aluminum fin tighter to realize the optimum heat transfer ability. The hydrophilic fins effectively decrease the thickness of condensate water and the thermal resistance of water film, hence It further improves the heat transfer efficiency. Heat transfer efficient increased by 67% comparing with normal evaporator. Air cooled condenser adopt high efficient grooved copper tube and aluminum fin, which possess high heat transfer efficiency.

Apply double suction type centrifugal impeller. The impeller is examined by dynamic balance and operated without any

malfunction in a long term to ensure fully air supply.

It adopts the world-famous control components in refrigerating system, such as DANFOSS, EMERSON etc. It also adopts the world-famous controllers, such as LG, OMRON etc.

The unit equips multiple protection devices to ensure safety operation, including high/low pressure, exhausting temperature, fans and compressor relay protection device etc.

Unit applies with double soundproof structure, compressor is independent from air handling system, noise will not disturb each other. There is sound-absorbing foam in the cover panel, further to reduce the noise.

• Easy for installation, Maintenance and Operation

Units are completely assembled, internally wired, charged outdoor unit with refrigerant at the factory. The site work only needs to connect refrigerant pipes and communication wires between outdoor unit and indoor unit.

The nylon filter could be easily mounted and dismounted for replacing and cleaning.

We can look up the unit state and error history and change the parameter, easy maintenance and operation.

SPECIFICATIONS -

Model FS-ST1HW/N2(3)			20	25	32	36	52	62	72	104	124
Nominal cooling capacity*		kW	20	25.5	30	37	52	62	74	105	124
Nominal heating capacity**		kW	21	28	34	41	58	68	82	115	135
Cooling rated current		Α	16.5	21.8	25.6	27.8	40.2	48.2	56.1	81.8	97.8
Heating rated current		Α	16.4	21.3	24.8	27.7	38.9	47.4	55.1	78.2	96.0
Cooling power input		kW	7.8	9.9	11.9	14.2	20	23.8	29.7	41	49
Heating power input		kW	7.7	9.65	11.6	13.8	18.8	23.4	28.9	39	48
Connection method		1	Flare	Flare	Flare	Welding	Welding	Welding	Welding	Welding	Welding
Liquid pipe diameter		₡mm	12.7x2	12.7x2	12.7x2	12.7×2	15.88x2	15.88×2	12.7×4	15.88×4	15.88×4
Gas	s pipe diameter	₡mm	19.05x2	19.05×2	19.05x2	22×2	28x2	28×2	22×4	28×4	28×4
E	Compressor										
S	Туре	Nr.	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
OUTDOOR UNIT	Outdoor dimension LxWxH	mm	1403x821x980		1560x880x1170		1810×1090×1190		1560x880x1170	1810×1090×1190	
Ę	Outdoor quantity	Nr.		1			1		2		
ಠ	Net weight	kg	220	240	260	315	492	544	2x315	2x492	2x544
	Centrifugal fans										
	Power input	kW	1.1	1.5	1.5	2.2	2.2	4	5.5	5.5	7.5
	Airflow	m³/h	4200	5000	6000	8000	10000	12000	15000	20000	24000
	ESP (Top discharge)	Pa	150	150	150	150	150	200	200	200	250
-	ESP (Free blow)		0	0	0	0	0	0	_	-	_
FIND	Drain pipe	mm	R3/4	R1	R1	R1	R1	R1	R1	R1-1/4	R1-1/4
NDOOR	Sound pressure level*** (Top discharge)	dB(A)	60	61	62	63	65	65	68	73	73
ND	Sound pressure level*** (Free blow)	dB(A)	59	60	61	63	64	64	-	-	_
	Net weight	kg	155	180	245	270	310	380	420	460	460
		LxW	1250x500	1250x500	1480x500	1480x500	1580x700	1580x700	1850x880	1850x1500	1850x1500
	Dimension	H (Top)	1600	1600	1600	1600	1900	1900	1900	1900	1900
2		H (Side)	1800	1800	1800	1800	2200	2200	-	_	_

Performance values refer to the following conditions:

^{*} Cooling capacity is measured under the condition: indoor temperature DB 27 °C / WB 19 °C, ambient temperature DB 35 °C / WB 24 °C.

^{**} Heating capacity is measured under the condition: indoor temperature DB 20 $^\circ$ C / WB 15 $^\circ$ C, ambient temperature DB 7 $^\circ$ C / WB 6 $^\circ$ C.

^{***} Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a clear field.

Due to FUJIAIR's ongoing commitment to quality, the specifications and dimensions are subject to change without notice and without incurring liability.











