

IN-RROW PRECISION AIR CONDITIONING

FC10X, FC16X, FC32X (DX BASED)

They are precision-controlled air conditioners designed for cooling solution to Inrow data centers, providing active cooling for applications with high heat load per cabin, and can adjust their capacity according to the cooling need with inverter technology.



- It provides 10kW, 16kW and 32kW cooling capacity in 42U,
- 47U 300x1000 or 300x1200 cabinets
- User-friendly 7" color touch screen with graphic display as an option,
- Up to 8 teamwork,
- Co-aging feature,
- It provides maximum efficiency by making Capacity
- Control with inverter drive technology.
- High efficiency at full and part load,
- Optional temperature and humidity control,
- Preventing low blowing temperature in the dehumidification process with the optional 3-stage 3kW,
- 6kW and 9kW electric heater support,
- Maximum energy efficiency (EER>3),
- It has been specially developed for cold and hot aisle closure applications.
- No raised floor required.
- Variable speed fans with hot-swappable EC technology,
- Optionally, copper pipe connection possibility from the top or the bottom,
- Option to work according to temperature or pressure difference,
- Consumption calculation with energy analyzer option,
- While remote control support is provided with Modbus RTU in standard products, remote control is offered as an option with Web Interface, SNMP, Modbus TCP/IP, Bacnet,
- SMTP, NTP support.

IN-ROW PRECISION AIR CONDITIONING

FC52X (DX BASED)

They are precision-controlled air conditioners designed for cooling solution to Inrow data centers, providing active cooling for applications with high heat load per cabin, and can adjust their capacity according to the cooling need with inverter technology.

- It provides 52kW cooling capacity in 42U, 47U 600x1000 or 600x1200 cabinet.
- User-friendly 7" color touchscreen with graphic display as an option,
- Up to 8 teamwork,
- Co-aging feature,
- It provides maximum efficiency by making Capacity
- Control with inverter drive technology between 22.5kW and 52kW
- High efficiency at full and part load,
- Optional temperature and humidity control,
- Preventing low blowing temperature in the dehumidification process with the optional 3-stage 9kW electric heater support,
- Maximum energy efficiency (EER>3),
- It has been specially developed for cold and hot aisle closure applications.
- No raised floor required.
- Variable speed fans with hot-swappable EC technology,
- Optionally, copper pipe connection possibility from the top or bottom,
- Option to work according to temperature or pressure difference,
- Consumption calculation with energy analyzer option,
- While remote control support is provided with Modbus
- RTU in standard products, remote control is offered as an option with Web Interface, SNMP, Modbus TCP/IP,
- Bacnet, SMTP, NTP support.



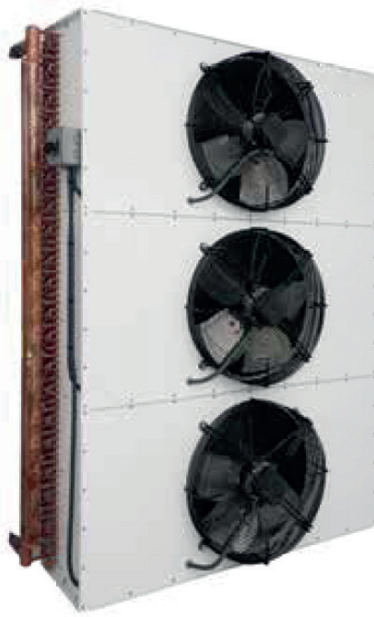
Technical Specifications

Inrow Indoor Unit		FC10X		FC16X		FC32X		FC52X	
Cooling Capacity		min.	max.	min.	max.	min.	max.	min.	max.
Total Capacity ¹	kW	5,1	10	5,8	16	11	32,1	22,5	52
Sensible Capacity ¹	kW	5,1	10	5,8	16	11	32,1	22,5	52
SHR		1							
Total Capacity ²	kW	5,5	10,7	6,2	17,1	11,8	34,4	24,1	55,7
Sensible Capacity ²	kW	5,5	10,7	6,2	17,1	11,8	34,4	24,1	55,7
SHR		1							
Total Capacity ³	kW	5,9	11,5	6,7	18,4	12,8	36,8	25,9	59,5
Sensible Capacity ³	kW	5,9	11,5	6,7	18,4	12,8	36,8	25,9	59,5
SHR		1							
Fan									
Fan Type		Radial						Axial	
Fan Total Air Flow	m ³ /h	3500		3500		5000		8850	
Total Power Consumption	Watt	280		300		660		720	
Number of Fans		3							
External Pressure Drop	Pa	20							
Noise Data									
Noise Level	dB(A)	55		60		61		63	
Air Filter									
Filter Model		G2							
Electric Data									
Power Supply	V-Ph-Hz	230/1/50-60		G2		230/1/50-60		G2	
Cooling Data									
Refrigerant		R410A							
Number of Circuits		1							
Conexions									
Tube connections	Output line (ODS Ø)mm	12		16		28			
	Inlet line (ODS Ø)mm	19		22		19			
Humidifier									
Type	kg/h	Elektrode							
Humidifier capacity	kW	8							
Power Input		6							
Electric Heater									
Electric Heater Capacity	kW	3		4,5		6		9	
Number of Levels		3							
Dimensions and Weights									
Length	mm	300						600	
Depth (42U / 47U)	mm	1000/1200							
Height(42U / 47U)	mm	1980/2042							
Weight 42U (1000/1200)	kg	150/160		154/164		158/170		295/310	
Weight 47U (1000/1200)	kg	159/172		163/176		167/180		310/320	
Operating Temperature Range	23 °C %60 RH	50 °C %20 RH							



Outdoor Unit Technical Features

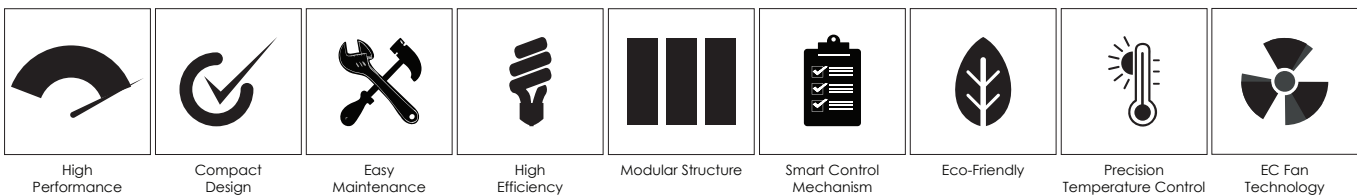
Inrow Indoor Unit		FC10X		FC16X		FC32X	
Cooling Capacity		min.	max.	min.	max.	min.	max.
Number of Compressors		1					
Compressor Power Consumption	kW	1,4	2,7	1,6	4,1	2,66	7,9
Fan							
Fan Type		Axial					
Fan Total Flow	m³/h	3500		5500		11000	
Total Power Consumption	kW	0,22		0,57		1,14	
Number of Fans		1		2			
Total EER							
Total Consumption	kW	3,3		5,1		9,71	
EER		3,16		3,25		3,3	
Connections							
Tube connections	Output line(ODS Ø)mm	12		16		16	
	Inlet line(ODS Ø)mm	19		22		22	
Electric Connections							
Power Supply	V-Ph~Hz	380/3/50-60					
Noise Data							
Noise Data	dB(A)	54		61		64	
Dimensions and Weight							
Length	mm	1081		1084		10163	
Depth	mm	387		405		430	
Height	mm	729		1135		1541	
Weight	kg	115		150		188	
Operating Temperature Range		-20°C + 50°C					



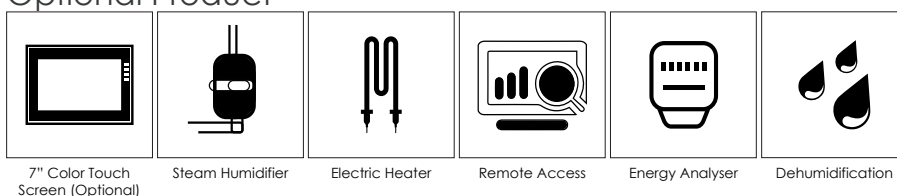
Outdoor Unit Technical Features

Inrow Indoor Unit		FC52X
Fan		
Fan Type		Axial
Fan Total Flow	m ³ /h	16500
Total Power Consumption	kW	1,7
Number of Fans		3
Connections		
Tube Connections	Output line(ODS Ø)mm	28
	Inlet line(ODS Ø)mm	19
Electrical Connections		
Power Supply	V-Ph~Hz	380/3/50-60
Noise Data		
Sound power	dB(A)	68
Dimensions and Weight		
Length	mm	1400
Depth	mm	310
Height	mm	1800
Weight	kg	170
Operating Temperature Range		-20°C + 50°C

Product Features



Optional Product



Cooling Performance

FC10X					
Cooling Capacity kW		Ambient Temperature			
		35 °C	40 °C	45 °C	50 °C
Return Air Temperature °C	26	7,2	6,7	6,1	5,6
	28	7,7	7,2	6,6	6
	30	8,3	7,8	7,1	6,5
	32	9	8,4	7,7	7
	34	9,6	9	8,3	7,6
	36	10,3	9,7	8,9	7,9
	38	11	10,3	9,5	8,5
	40	11,9	11,1	10,2	9,4

FC16X					
Cooling Capacity kW		Ambient Temperature			
		35 °C	40 °C	45 °C	50 °C
Return Air Temperature °C	26	11,6	10,7	9,9	9
	28	12,6	11,6	10,7	9,7
	30	13,4	12,5	11,5	10,4
	32	14,4	13,4	12,4	11,3
	34	15,5	14,4	13,3	12,2
	36	16,5	15,5	14,4	13,2
	38	17,8	16,7	15,4	14,1
	40	19	17,8	16,5	15

FC32X					
Cooling Capacity kW		Ambient Temperature			
		35 °C	40 °C	45 °C	50 °C
Return Air Temperature °C	26	22,4	20,3	18	15,6
	28	24,3	22,1	19,7	17,2
	30	26,3	24	21,6	18,9
	32	28,5	26,1	23,4	20,7
	34	30,5	28,2	25,7	23,2
	36	32,9	30,4	27,8	25,2
	38	35,3	32,8	30,2	27,2
	40	37,8	35,2	32,1	29,5

FC52X					
Cooling Capacity kW		Ambient Temperature			
		35 °C	40 °C	45 °C	50 °C
Return Air Temperature °C	26	37,8	35,2	32,4	29,5
	28	40,7	37,9	34,8	31,7
	30	43,6	40,7	37,4	34,2
	32	46,9	43,7	40,3	36,8
	34	50,2	46,9	43,3	39,5
	36	53,8	50,3	46,4	42,3
	38	57,5	53,7	49,7	45,5
	40	61,3	57,4	53,2	48,8

Graphic Table

