

## TECHNICAL DATA

MODEL	012 M1 S					018 M1 S					
SIZE	E1					E2					
VERSION (1)	U / O					U / O					
COOLING CAPACITY (2)	100%	80%	60%	40%	30%	100%	80%	60%	40%	30%	
Total	kW	10,4	8,32	6,24	4,16	3,04	21,8	17,4	13,1	8,72	6,39
Sensible	kW	10,2	8,18	6,18	4,15	3,04	20,2	16,4	12,3	8,26	6,39
SHR (3)		0,98	0,98	0,99	1	1	0,93	0,92	0,93	0,94	1
Total power input (Comp. + Fans)	kW	2,82	1,93	1,27	0,78	0,53	6,5	4,83	3,22	1,91	1,41
<b>"EC" SUPPLY FANS</b>	n.	1					1				
Air flow	m <sup>3</sup> /h	2800	2433	2065	1698	1500	4100	3364	2629	1893	1500
Nominal external static pressure	Pa	20	20	20	20	20	20	20	20	20	20
Maximum external static pressure	Pa	75	--	--	--	--	311	--	--	--	--
Power input (4)	kW	0,29	0,21	0,13	0,09	0,07	0,52	0,35	0,22	0,12	0,08
<b>COMPRESSOR</b>		Rotary					Scroll				
BLDC compressor	n.	1					1				
On/Off compressors	n.	0					0				
Cooling Capacity Control		Modulating					Modulating				
Compressors power input	kW	2,53	1,72	1,15	0,69	0,46	5,98	4,48	3	1,79	1,33
<b>AIR FILTERS</b>	n.	1					1				
Filtering surface	m <sup>2</sup>	0,6					0,8				
Efficiency		G4					G4				
<b>GAS CIRCUITS</b>	n.	1					1				
<b>POWER SUPPLY</b>	V/Ph/Hz	400/3+N/50					400/3+N/50				
<b>ENERGY EFFICIENCY INDEXES (2)</b>											
EER - Energy Efficiency Ratio (5)	kW/kW	3,69	4,31	4,91	5,33	5,74	3,35	3,6	4,07	4,57	4,53
<b>DIMENSIONS</b>											
Length	mm	650					785				
Width	mm	675					675				
Height	mm	1925					1925				
<b>NET WEIGHT Over</b>	kg	210					240				
<b>NET WEIGHT Under</b>	kg	220					250				
<b>REFRIGERANT CONNECTIONS</b>											
Gas delivery	ODS Ø	12					16				
Liquid return	ODS Ø	12					12				
<b>HYDRAULIC CONNECTIONS</b>											
<b>CONDENSATE DISCHARGE</b>											
Rubber pipe – internal diameter	Ø mm	19					19				

### THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. U = Under, downflow / O = Over, upflow
2. Gross value. Characteristics referred to entering air at 26°C-40%UR; condensing temperature 45°C; ESP=20Pa.
3. SHR = Sensible cooling capacity / Total cooling capacity.
4. Corresponding to the nominal external static pressure.
5. The Energy Efficiency Index does not consider the remote air-cooled condenser.

The units highlighted in this publication contain <HFC R410A [GWP<sub>100</sub> 2088]> fluorinated greenhouse gas.

### NOTE:

Below 30% of cooling capacity, the inverter compressor enters the "cycling" area in which the compressor operates with ON / OFF cycles below the minimum modulation frequency (operation only for short periods).

SELECT THE UNIT IN THE MODULATION FIELD.

## TECHNICAL DATA

MODEL	022 M1 S						030 M1 S					
SIZE	E3						E4					
VERSION (1)	U / O						U / O					
COOLING CAPACITY (2)	100%	80%	60%	40%	30%		100%	80%	60%	40%	30%	
Total	kW	23,9	19,2	14,3	9,56	6,73	39,3	31,4	23,6	15,7	11,9	
Sensible	kW	23,9	18,9	14,3	9,16	6,73	39,3	31,4	23,6	15,7	11,9	
SHR (3)		1	0,98	1	0,95	1	1	1	1	1	1	
Total power input (Comp. + Fans)	kW	6,74	4,93	3,24	1,96	1,39	11,4	8,01	5,32	3,08	2,21	
<b>"EC" SUPPLY FANS</b>	n.	1						1				
Air flow	m <sup>3</sup> /h	5500	4442	3384	2326	1700	10000	8135	6271	4406	3500	
Nominal external static pressure	Pa	20	20	20	20	20	20	20	20	20	20	
Maximum external static pressure	Pa	831	--	--	--	--	191	--	--	--	--	
Power input (4)	kW	0,78	0,42	0,25	0,13	0,07	2,04	1,12	0,5	0,26	0,16	
<b>COMPRESSOR</b>		Scroll						Scroll				
BLDC compressor	n.	1						1				
On/Off compressors	n.	0						0				
Cooling Capacity Control		Modulating						Modulating				
Compressors power input	kW	5,96	4,51	2,99	1,83	1,32	9,32	6,9	4,82	2,82	2,05	
<b>AIR FILTERS</b>	n.	2						2				
Filtering surface	m <sup>2</sup>	1,2						2,1				
Efficiency		G4						G4				
<b>GAS CIRCUITS</b>	n.	1						1				
<b>POWER SUPPLY</b>	V/Ph/Hz	400/3+N/50						400/3+N/50				
<b>ENERGY EFFICIENCY INDEXES (2)</b>												
EER - Energy Efficiency Ratio (5)	kW/kW	3,55	3,87	4,41	4,88	4,84	3,45	3,92	4,44	5,1	5,38	
<b>DIMENSIONS</b>												
Length	mm	1085						1305				
Width	mm	775						930				
Height	mm	1925						1980				
<b>NET WEIGHT Over</b>	kg	320						430				
<b>NET WEIGHT Under</b>	kg	330						440				
<b>REFRIGERANT CONNECTIONS</b>												
Gas delivery	ODS Ø	16						18				
Liquid return	ODS Ø	16						16				
<b>HYDRAULIC CONNECTIONS</b>												
<b>CONDENSATE DISCHARGE</b>												
Rubber pipe – internal diameter	Ø mm	19						19				

### THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. U = Under, downflow / O = Over, upflow
2. Gross value. Characteristics referred to entering air at 26°C-40%UR; condensing temperature 45°C; ESP=20Pa.
3. SHR = Sensible cooling capacity / Total cooling capacity.
4. Corresponding to the nominal external static pressure.
5. The Energy Efficiency Index does not consider the remote air-cooled condenser.

The units highlighted in this publication contain <HFC R410A [GWP<sub>100</sub> 2088]> fluorinated greenhouse gas.

### NOTE:

Below 30% of cooling capacity, the inverter compressor enters the "cycling" area in which the compressor operates with ON / OFF cycles below the minimum modulation frequency (operation only for short periods).

SELECT THE UNIT IN THE MODULATION FIELD.

## TECHNICAL DATA

MODEL	047 M1 S					042 M2 D					
SIZE	E5					E5					
VERSION (1)	U / O					U / O					
COOLING CAPACITY (2)	100%	80%	60%	40%	30%	100%	80%	60%	40%	30%	
Total	kW	54	43,2	32,4	21,6	16,8	49,2	39,4	29,5	19,7	14,6
Sensible	kW	53,1	43,2	32,4	21,6	16,9	49,2	39,4	29,5	19,7	14,6
SHR (3)		0,98	1	1	1	1	1	1	1	1	1
Total power input (Comp. + Fans)	kW	15,6	10,8	7,11	4,24	3,08	14	9,93	6,48	3,86	2,84
<b>"EC" SUPPLY FANS</b>	n.	1					1				
Air flow	m <sup>3</sup> /h	12000	9881	7761	5642	4700	12000	9924	7848	5772	4700
Nominal external static pressure	Pa	20	20	20	20	20	20	20	20	20	20
Maximum external static pressure	Pa	217	--	--	--	--	283	--	--	--	--
Power input (4)	kW	2,27	1,4	0,76	0,35	0,23	2,05	1,28	0,69	0,33	0,22
<b>COMPRESSOR</b>		Scroll					Scroll				
BLDC compressor	n.	1					2				
On/Off compressors	n.	0					0				
Cooling Capacity Control		Modulating					Modulating				
Compressors power input	kW	13,4	9,43	6,35	3,89	2,85	11,9	8,64	5,79	3,53	2,62
<b>AIR FILTERS</b>	n.	3					3				
Filtering surface	m <sup>2</sup>	2,6					2,59				
Efficiency		G4					G4				
<b>GAS CIRCUITS</b>	n.	1					2				
<b>POWER SUPPLY</b>	V/Ph/Hz	400/3+N/50					400/3+N/50				
<b>ENERGY EFFICIENCY INDEXES (2)</b>											
EER - Energy Efficiency Ratio (5)	kW/kW	3,46	4	4,56	5,09	5,45	3,51	3,97	4,55	5,1	5,14
<b>DIMENSIONS</b>											
Length	mm	1630					1630				
Width	mm	930					930				
Height	mm	1980					1980				
<b>NET WEIGHT Over</b>	kg	480					565				
<b>NET WEIGHT Under</b>	kg	490					575				
<b>REFRIGERANT CONNECTIONS</b>											
Gas delivery	ODS Ø	22					2x16				
Liquid return	ODS Ø	22					2x16				
<b>HYDRAULIC CONNECTIONS</b>											
<b>CONDENSATE DISCHARGE</b>											
Rubber pipe – internal diameter	Ø mm	19					19				

### THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. U = Under, downflow / O = Over, upflow
2. Gross value. Characteristics referred to entering air at 26°C-40%UR; condensing temperature 45°C; ESP=20Pa.
3. SHR = Sensible cooling capacity / Total cooling capacity.
4. Corresponding to the nominal external static pressure.
5. The Energy Efficiency Index does not consider the remote air-cooled condenser.

The units highlighted in this publication contain <HFC R410A [GWP<sub>100</sub> 2088]> fluorinated greenhouse gas.

### NOTE:

Below 30% of cooling capacity, the inverter compressor enters the "cycling" area in which the compressor operates with ON / OFF cycles below the minimum modulation frequency (operation only for short periods).

SELECT THE UNIT IN THE MODULATION FIELD.

## TECHNICAL DATA

MODEL	068 M2 D						094 M2 D					
SIZE	E7						E8					
VERSION (1)	U / O						U / O					
COOLING CAPACITY (2)	100%	80%	60%	40%	30%		100%	80%	60%	40%	30%	
Total	kW	78,9	63,1	47,3	31,6	22,9	105	84	63	42	32,3	
Sensible	kW	78,9	63,1	47,3	31,6	22,9	100	81,1	61,5	40,9	32,3	
SHR (3)		1	1	1	1	1	0,95	0,96	0,97	0,97	1	
Total power input (Comp. + Fans)	kW	22,1	15,8	10,5	6,19	4,34	30,5	21,2	14	8,43	6,07	
<b>"EC" SUPPLY FANS</b>	n.	2						2				
Air flow	m <sup>3</sup> /h	20000	15999	11997	7996	5800	22000	17956	13912	9868	8000	
Nominal external static pressure	Pa	20	20	20	20	20	20	20	20	20	20	
Maximum external static pressure	Pa	451	--	--	--	--	388	--	--	--	--	
Power input (4)	kW	3,51	1,98	0,96	0,41	0,23	3,72	2,23	1,1	0,51	0,35	
<b>COMPRESSOR</b>		Scroll						Scroll				
BLDC compressor	n.	2						2				
On/Off compressors	n.	0						0				
Cooling Capacity Control		Modulating						Modulating				
Compressors power input	kW	18,6	13,8	9,5	5,78	4,11	26,8	18,9	13	7,91	5,72	
<b>AIR FILTERS</b>	n.	4						5				
Filtering surface	m <sup>2</sup>	3,83						4,47				
Efficiency		G4						G4				
<b>GAS CIRCUITS</b>	n.	2						2				
<b>POWER SUPPLY</b>	V/Ph/Hz	400/3+N/50						400/3+N/50				
<b>ENERGY EFFICIENCY INDEXES (2)</b>												
EER - Energy Efficiency Ratio (5)	kW/kW	3,57	3,99	4,5	5,11	5,28	3,44	3,96	4,5	4,98	5,32	
<b>DIMENSIONS</b>												
Length	mm	2175						2499				
Width	mm	930						930				
Height	mm	1980						1980				
<b>NET WEIGHT Over</b>	kg	650						805				
<b>NET WEIGHT Under</b>	kg	705						865				
<b>REFRIGERANT CONNECTIONS</b>												
Gas delivery	ODS Ø	2x18						2x22				
Liquid return	ODS Ø	2x16						2x22				
<b>HYDRAULIC CONNECTIONS</b>												
<b>CONDENSATE DISCHARGE</b>												
Rubber pipe – internal diameter	Ø mm	19						19				

### THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. U = Under, downflow / O = Over, upflow
2. Gross value. Characteristics referred to entering air at 26°C-40%UR; condensing temperature 45°C; ESP=20Pa.
3. SHR = Sensible cooling capacity / Total cooling capacity.
4. Corresponding to the nominal external static pressure.
5. The Energy Efficiency Index does not consider the remote air-cooled condenser.

The units highlighted in this publication contain <HFC R410A [GWP<sub>100</sub> 2088]> fluorinated greenhouse gas.

### NOTE:

Below 30% of cooling capacity, the inverter compressor enters the "cycling" area in which the compressor operates with ON / OFF cycles below the minimum modulation frequency (operation only for short periods).

SELECT THE UNIT IN THE MODULATION FIELD.

## TECHNICAL DATA

MODEL	120 M4 D					150 M4 D					
SIZE	E9					E9					
VERSION (1)	U					U / O					
COOLING CAPACITY (2)	100%	80%	60%	40%	30%	100%	80%	60%	40%	30%	
Total	kW	111	88,8	66,6	44,4	24,1	135	108	81	54	30,8
Sensible	kW	111	88,8	66,6	44,4	24,1	135	108	81	54	30,8
SHR (3)		1	1	1	1	1	1	1	1	1	1
Total power input (Comp. + Fans)	kW	31,6	22,4	14,9	9,43	4,42	41,4	28,6	19,3	11,7	6,04
<b>"EC" SUPPLY FANS</b>	n.	2					2				
Air flow	m <sup>3</sup> /h	28000	23018	18037	13055	8500	32000	25911	19821	13732	8500
Nominal external static pressure	Pa	20	20	20	20	20	20	20	20	20	20
Maximum external static pressure	Pa	572	--	--	--	--	379	--	--	--	--
Power input (4)	kW	4,2	2,56	1,42	0,68	0,33	5,82	3,39	1,74	0,78	0,33
<b>COMPRESSOR</b>		Scroll					Scroll				
BLDC compressor	n.	2					2				
On/Off compressors	n.	2					2				
Cooling Capacity Control		Modulating					Modulating				
Compressors power input	kW	27,4	19,8	13,5	8,75	4,09	35,6	25,2	17,5	11	5,71
<b>AIR FILTERS</b>	n.	6					6				
Filtering surface	m <sup>2</sup>	5,24					5,24				
Efficiency		G4					G4				
<b>GAS CIRCUITS</b>	n.	2					2				
<b>POWER SUPPLY</b>	V/Ph/Hz	400/3+N/50					400/3+N/50				
<b>ENERGY EFFICIENCY INDEXES (2)</b>											
EER - Energy Efficiency Ratio (5)	kW/kW	3,51	3,96	4,47	4,71	5,45	3,26	3,78	4,2	4,62	5,1
<b>DIMENSIONS</b>											
Length	mm	2900					2900				
Width	mm	930					930				
Height	mm	1980					1980				
<b>NET WEIGHT Over</b>	kg	--					--				
<b>NET WEIGHT Under</b>	kg	985					1010				
<b>REFRIGERANT CONNECTIONS</b>											
Gas delivery	ODS Ø	2x28					2x28				
Liquid return	ODS Ø	2x22					2x22				
<b>HYDRAULIC CONNECTIONS</b>											
<b>CONDENSATE DISCHARGE</b>											
Rubber pipe – internal diameter	Ø mm	19					19				

### THE COOLING CAPACITY DOES NOT CONSIDER THE SUPPLY FAN MOTOR THERMAL LOAD

1. U = Under, downflow / O = Over, upflow
2. Gross value. Characteristics referred to entering air at 26°C-40%UR; condensing temperature 45°C; ESP=20Pa.
3. SHR = Sensible cooling capacity / Total cooling capacity.
4. Corresponding to the nominal external static pressure.
5. The Energy Efficiency Index does not consider the remote air-cooled condenser.

The units highlighted in this publication contain <HFC R410A [GWP<sub>100</sub> 2088]> fluorinated greenhouse gas.

### NOTE:

Below 30% of cooling capacity, the inverter compressor enters the "cycling" area in which the compressor operates with ON / OFF cycles below the minimum modulation frequency (operation only for short periods).

SELECT THE UNIT IN THE MODULATION FIELD.