



DFC series

dehumidification and ventilation
for industrial processes and swimming pool

fisair.com



archives



delicate foodstuffs



swimming pools, sports
and beauty centers



museums



wineries



DFC series

dehumidification and ventilation
for industrial processes and swimming pool

symbology



winter time
heating mode



scroll
compressors



EC plug fans



air filter



remote control
via RS485



R410A
refrigerant gas



high efficiency
fans



heat recovery



low noise
version



de-humidification

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wall mounted dehumidifiers



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DDS

wall mounted dehumidifiers



HEATING



R-410A

OZONE FRIENDLY



SCROLL COMP.



DEHUMIDIFICATION



LOW NOISE



RS485

PROTOCOL

CONNECTION LINK



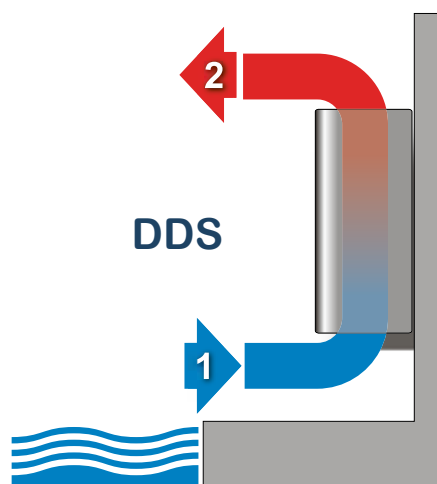
VARIABLE SPEED

DDS series dehumidifiers with advanced control are completely autonomous and are conceived for wall-mounted installation in small private swimming pools.

DDS models are thought to be installed directly in the room to be dehumidified and the pleasant design is suitable also for other ambiances, such as museum, archives, libraries, churches, cellars and basements.

The sober but elegant look eases the installation in public and private ambiances, generally characterized by a sophisticated design.

DDS dehumidifiers with advanced control are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.



Technical sheet of the range DDS

		040	050	060	070	090	100	160	190	210	230	300
Dehumidifying capacity	L / day	46	52	62	68	89	98	165	186	211	226	290
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	350	450	500	600	700	800	1000	1200	1500	1500	2000
Available static pressure	Pa	40	40	40	40	40	40	40	40	40	40	40
Hot water coil capacity	kW	3.7	4.5	4.8	6.1	6.8	7.5	10.1	11.5	14.5	14.5	17
Electrical heater capacity	kW	1	1	1,5	2	3,2	3,2	4	4	7,2	7,2	7,2
Power supply	V/ph/Hz	230 / 1+N / 50								400 / 3+N / 50		
Sound level	dB (A)	43	45	46	47	48	49	51	53	54	55	57
Dimensions L x P x H	mm	850 x 280 x 780			1050 x 280 x 780			1350 x 330 x 850		1550 x 330 x 850		
Weight	kg	46	46	46	55	55	55	88	88	100	100	102

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C

options:

- Hot water coil with 3-ways valve
- Electrical heaters
- Modulating EC fans
- Hot gas defrost
- Silent version
- Kit for display at distance
- RS485 Serial board
- Feet kit for floor installation





DCS

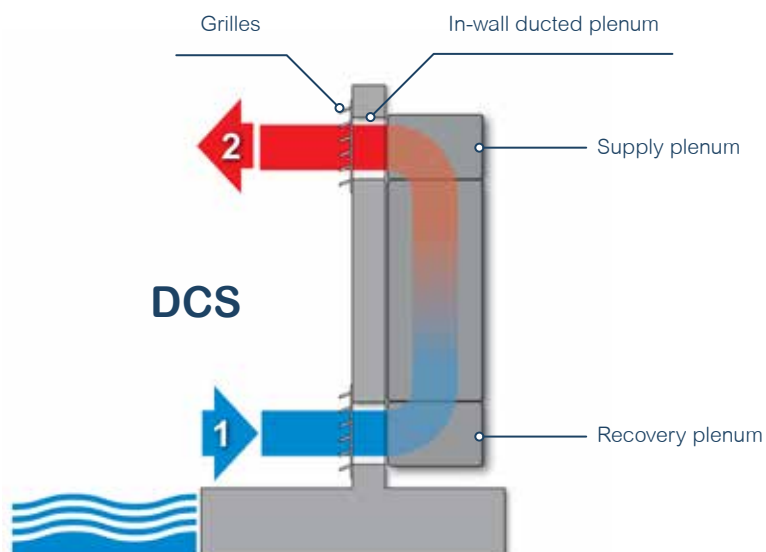
wall mounted dehumidifiers for technical room



DCS series dehumidifiers with advanced control are completely autonomous and are conceived for wall-mounted installation in small private swimming pools.

DCS models are thought for the installation in a technical room adjacent to the ambience to dehumidify: in this case, the installation requires supply and recover grilles.

DCS dehumidifiers with advanced control are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.



Technical sheet of the range DCS

		040	050	060	070	090	100	160	190	210	230	300
Dehumidifying capacity	L / day	42	52	62	68	89	98	165	186	211	226	290
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	350	450	500	600	700	800	1000	1200	1500	1500	2000
Available static pressure	Pa	40	40	40	40	40	40	40	40	40	40	40
Hot water coil capacity	kW	3.7	4.5	4.8	6.1	6.8	7.5	10.1	11.5	14.5	14.5	17
Electrical heater capacity	kW	1	1	1,5	2	3,2	3,2	4	4	7,2	7,2	7,2
Power supply	V/ph/Hz	230 / 1+N / 50								400 / 3+N / 50		
Sound level	dB (A)	43	45	46	47	48	49	51	53	54	55	57
Dimensions L x P x H	mm	803 x 257 x 764			1003 x 256 x 745			1302 x 306 x 834		1503 x 306 x 834		
Weight	kg	46	46	46	55	55	55	88	88	100	100	102

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C

options:

- Hot water coil with 3-ways valve
- Electrical heaters
- Modulating EC fans
- Hot gas defrost
- Silent version
- Kit for display at distance
- RS485 Serial board
- In wall ducted plenum (2 pcs)
- Supply and recovery air plenum (2 pcs)
- Supply and recovery air grilles (2 pcs)





DVS

vertical floor-standing dehumidifiers



HEATING



R-410A

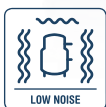
OZONE FRIENDLY



SCROLL COMP.



DEHUMIDIFICATION



LOW NOISE



RS485

PROTOCOL

CONNECTION LINK

The new dehumidifiers of the range DVS with advanced control are completely autonomous and are conceived for a vertical installation in private swimming pools. The attractive design is perfectly suitable also to other ambiances, such as museums, archives and cellars.

DVS models are thought for an installation directly in the room that need to be dehumidified and the sober, but elegant, look eases the installation in public and private ambiances, generally characterized by a sophisticated design. This series consists of 7 models, from 68 up to 230L / day.

The DVS dehumidifiers are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.

Technical sheet of the range DVS		070	090	100	160	190	210	230
Dehumidifying capacity	L / day	67	92	99	161	182	213	225
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	600	700	800	1000	1200	1400	1400
Available static pressure	Pa	40	40	40	40	40	40	40
Hot water coil capacity	kW	6,1	7.5	7,5	10,4	11,9	13,3	13,3
Electrical heater capacity	kW	2	3	3	4	4	4	4
Power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50	
Sound level	dB (A)	46	48	48	50	51	53	54
Dimensions L x P x H	mm	550 x 330 x 1700			750 x 330 x 1770			
Weight	kg	80	80	80	140	140	160	160

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C

options:

- Hot water coil with 3-ways valve
- Electrical heaters
- Hot gas defrost
- Silent version
- Cable for display connection
- RS485 Serial board
- Display mounted on board
- Kit rectangular flange, top supply
- Kit rectangular flange, back supply



Display mounted on board





DOS

horizontal dehumidifiers for ducted installation



The new DOS series dehumidifiers with advanced control are completely autonomous, and are designed for use in private swimming pools where a ducted machine for under ceiling installation is required.

DOS dehumidifiers are perfect for all wet environments such as museums, libraries, archives, cellars.

Designed for suspended ceiling installation, they can also be supplied with all the air distribution accessories such as plenums, grilles, ducts. The series consists of 7 models, from 67 up to 225 L/day.

The dehumidifiers of the DOS series are completely autonomous in the management of humidity and ambient temperature: the probes are supplied on board as standard and the control manages the compressor and the heating coil, if supplied.

The installation of these units is therefore particularly simple.

Technical sheet of the range DOS		070	090	100	160	190	210	230
Dehumidifying capacity	L / day	67	92	99	161	182	213	225
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	600	700	800	1000	1200	1500	1500
Available static pressure	Pa	200	175	150	230	200	150	150
Hot water coil capacity	kW	6,1	7.5	7,5	10,4	11,9	13,3	13,3
Electrical heater capacity	kW	2	3	3	4	4	4	4
Power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50	
Sound level	dB (A)	46	47	48	50	52	53	54
Dimensions L x P x H	mm	1105 x 800 x 410			1105 x 1050 x 510			
Weight	kg	84	84	84	147	147	168	168

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C

options:

- High efficiency air filter, Class G4
- Hot water coil with 3-ways valve
- Electrical heaters
- Hot gas defrost
- Silent version
- Cable for display connection
- RS485 Serial board
- Kit supply flange for circular ducts
- Kit extraction flange for circular ducts



Display mounted on board





ID / SP

dehumidifiers for swimming pools and industry



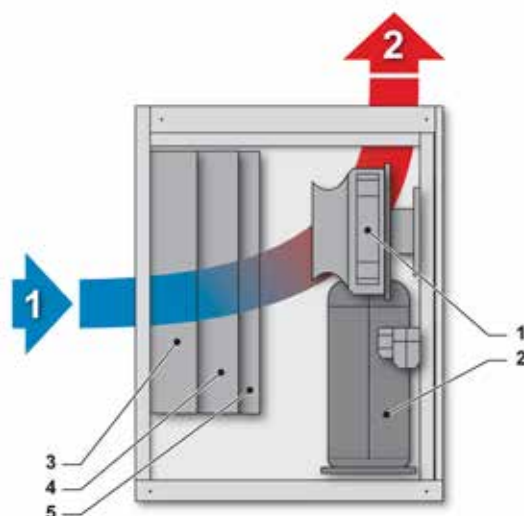
The ID and SP range dehumidifiers are designed for use in high latent load environments requiring 24hrs/day operation. They are typically installed in environments such as public and private swimming pools, dairies, basements, ironing shops, curing cellars, warehouses and wherever a lack of humidity control can damage the structure or the product.

Technical sheet range ID - SP		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity	L / day	100	128	157	190	210	268	302	358	452	581
Air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800
Hot water coil capacity	kW	5,5	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Electric power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50				
Dimensions L X P X H	mm	550 x 700 x 900					850 x 700 x 900		850 x 830 x 1350		

Technical sheet range ID - SP		0750	0950	1100	1400	1500	1700	1900	2200	3000
Dehumidifying capacity	L / day	760	955	1120	1380	1480	1710	1870	2180	2960
Air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	18000	25000
Hot water coil capacity	kW	48	55	76	83	98	107	107	118	168
Electric power supply	V/ph/Hz	400 / 3+N / 50								
Dimensions L X P X H	mm	10400 x 1000 x 1350		1950 x 1000 x 1640		2500 x 1000 x 1640			3390 x 1000 x 1640	

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C

1. Recirculation air fan
2. Compressor
3. Evaporator coil
4. Condenser coil
5. Post heating coil (optional)


options:

	Standard Control (*)	Advanced Control
Filter holder frame for suction ducting	x	x
Mechanical hygrostat	x	–
Electronic chrono – hygrostat	x	–
Hot water coil with 3ways valve	x	x
Chilled water coil with 3ways valve	x	x
Silent version -2 dB(A)	x	x
Soft-start	x	x
Manometers	x	x
Hot gas defrost	x	x
De-superheater	x	x
De-superheater for swimming pool water	x	x
Centrifugal fan with high prevalence	x	x
Electronic radial fans	–	x
ACF - Automatic Control Flow	–	x
Clock card – time scheduling	–	x
Dirty filters sensor	–	x
Remote user terminal including 20 m cable	–	x
TH probe for duct installation	–	x
Serial board Modbus, Lonworks, Bacnet, Konnex	–	x
Version for outdoor installation	x	x
Panels thermal insulation, thickness 20 mm	x	x
Pivoting wheels	x	x

X Available

– Not available

(*) Available for models up to 0950





IT / ST

dehumidifiers for industries / swimming pools with temperature control



The dehumidifiers of the series IT and ST are conceived for the use in high latent load environments requiring 24hrs/day operation. Thanks to the temperature control function, with an external condenser, these units grant a full control, not only of the humidity, but also of the ambient temperature.

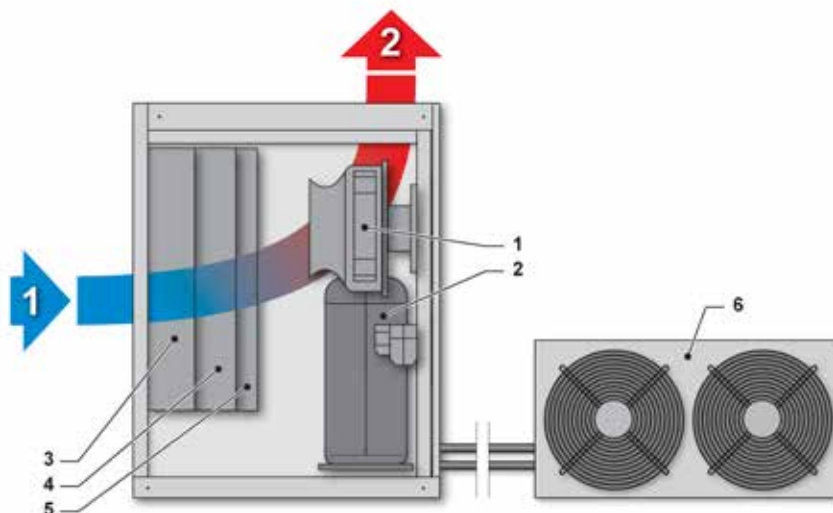
Therefore, these units are suitable for those applications in which the contemporary control of both the parameters is required, such as swimming pools, food storage, salami and cheese seasoning processes and wherever the non-control of temperature and humidity can damage the goods.

Technical sheet range IT - ST		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity	L / day	100	128	157	190	210	268	302	358	452	581
Air flow rate	m ³ /h	800	1200	1600	1600	2000	2800	2800	3800	4000	4800
Cooling power	kW	4,9	6,5	8	10	11	15	16	19	23	30
Hot water coil capacity	kW	5,5	9.8	9.8	9.8	16,5	17	17	26,5	26,5	27
Electric power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50				
Dimensions L X P X H	mm	550 x 700 x 900					850 x 700 x 900		850 x 830 x 1350		

Technical sheet range IT - ST		0750	0950	1100	1400	1500	1700	1900	2200	3000
Dehumidifying capacity	L / day	760	955	1120	1380	1480	1710	1870	2180	2960
Air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	25000
Cooling power	kW	38	50	56	66	75	86	96	110	148
Hot water coil capacity	kW	48	55	76	83	98	107	107	118	168
Electric power supply	V/ph/Hz	400 / 3+N / 50								
Dimensions L X P X H	mm	1400 x 1000 x 1350		1950 x 1000 x 1640		2500 x 1000 x 1640			3390 x 1000 x 1640	

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C, outdoor air: 30°C - 50% RH.

1. Recirculation air fan
2. Compressor
3. Evaporator coil
4. Condenser coil
5. Post heating coil (optional)
6. External condenser


options:

	Standard Control (*)	Advanced Control
Filter holder frame for suction ducting	x	x
Mechanical hygrostat	x	—
Electronic chrono – hygrostat	x	—
Hot water coil with 3ways valve	—	x
Silent version -2 dB(A)	x	x
Soft-start	x	x
Manometers	x	x
Hot gas defrost	x	x
De-superheater	x	x
De-superheater for swimming pool water	x	x
Centrifugal fan with high prevalence	x	x
Electronic radial fans	—	x
ACF - Automatic Control Flow	—	x
Clock card – time scheduling	—	x
Dirty filters sensor	—	x
Remote user terminal including 20 m cable	—	x
TH probe for duct installation	—	x
Serial board Modbus, Lonworks, Bacnet, Konnex	—	x
Version for outdoor installation	x	x
Panels thermal insulation, thickness 20 mm	x	x
Pivoting wheels	x	x
Mirror version (access on the left)	—	—

X Available

— Not available

(*) Available for models up to 0950




SPR

swimming pool dehumidifiers with enhanced air renewal and high-efficiency heat recovery system



The SPR units are ideal for swimming pools that not only require dehumidification but must also renew the indoor air without dispersing heat outdoors. Up to 80% yield is guaranteed by the high-efficiency recovery system.

The SPR units represent the state-of-the-art in terms of efficiency, reliability and emitted sound power. The SPR range only uses electronic radial fans with high-energy efficiency incorporated inverter.

HideW has developed a sophisticated adjustment software to adjust the SPR dehumidifiers air flow rate.

This software sets, measures and controls the air flow rate, eliminating any chance of incorrectly calculating the ducts' pressure drops, thereby making dehumidifier installation and system commissioning extremely easy and quick and reducing installation times and costs.

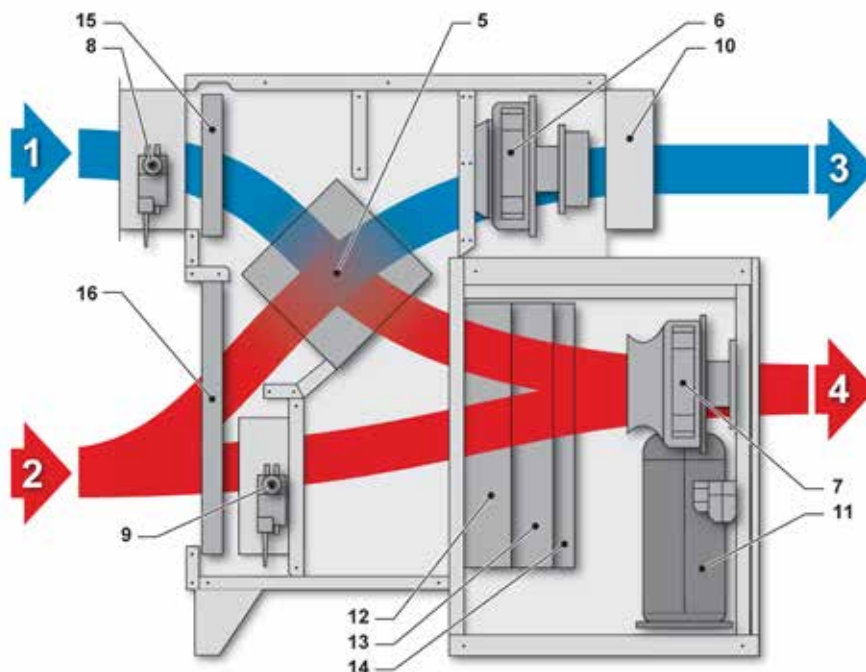
Technical sheet range SPR		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity (1)	L / day	128	128	157	190	210	268	302	358	452	581
Recirculation air flow rate	m ³ /h	1200	1200	1600	1600	2000	2800	2800	3800	4000	4800
Fresh air flow rate	m ³ /h	0-1200	0-1200	0-1200	0-1200	0-2000	0-2000	0-2000	0-2000	0-2000	0-2000
Hot water coil capacity (1)	kW	9,8	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Heat recovery system efficiency (2)	%	70	70	70	70	70	70	70	70	70	70
Electrical power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50				
Dimensions L X P X H	mm	550 x 1452 x 1320					850 x 1452 x 1320		850 x 1682 x 1769		

Technical sheet range SPR		0750	0950	1100	1400	1500	1700	1900	2200	3000
Dehumidifying capacity (1)	L / day	760	955	1120	1380	1480	1710	1870	2180	2960
Recirculation air flow rate	m ³ /h	7000	8200	11000	12500	13000	15000	15000	17000	2500
Fresh air flow rate	m ³ /h	0-2000	0-6000	0-11000	0-12500	0-13000	0-15000	0-15000	0-17000	0-25000
Hot water coil capacity (1)	kW	48	55	76	83	98	107	107	118	168
Heat recovery system efficiency (2)	%	70	70	70	70	70	70	70	70	70
Electrical power supply	V/ph/Hz	400 / 3+N / 50								
Dimensions L X P X H	mm	1400 x 2331 x 1950		2700 x 1950 x 2340		2700 x 1950 x 2340			2500 x 3390 x 2380	

(1) Inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C; 100% recirculation.

(2) Indoor air: 26°C - 60% RH; outdoor air: -5°C - 80% RH.

1. Inlet fresh outdoor air flow
2. Indoor recirculation air flow
3. Expelled outdoors air flow
4. Supply air flow indoors
5. High-efficiency crossed flows heat recovery system
6. Exhaust air exhaust fan
7. Recirculation air fan
8. Outdoor air damper
9. Calibration damper
10. Discharged air gravity damper
11. Compressor
12. Evaporator coil
13. Condenser coil
14. Reheat coil (optional)
15. Outdoor fresh air filter
16. Indoor recirculation air filter



options:



- High efficiency air filters
- Hot water coil with 3-ways valve
- Chilled water coil with 3-ways valve
- Free cooling
- Silent version -2 dB(A)
- Soft-start
- Manometers
- De-superheater for swimming pool water
- ACF - Automatic Control Flow
- Clock card – time scheduling
- Dirty filters sensor
- Remote user terminal including 20 m cable
- TH probe for duct installation
- Serial board Modbus, Lonworks, Bacnet, Konnex



STR

dehumidifiers with high air renewal and temperature control



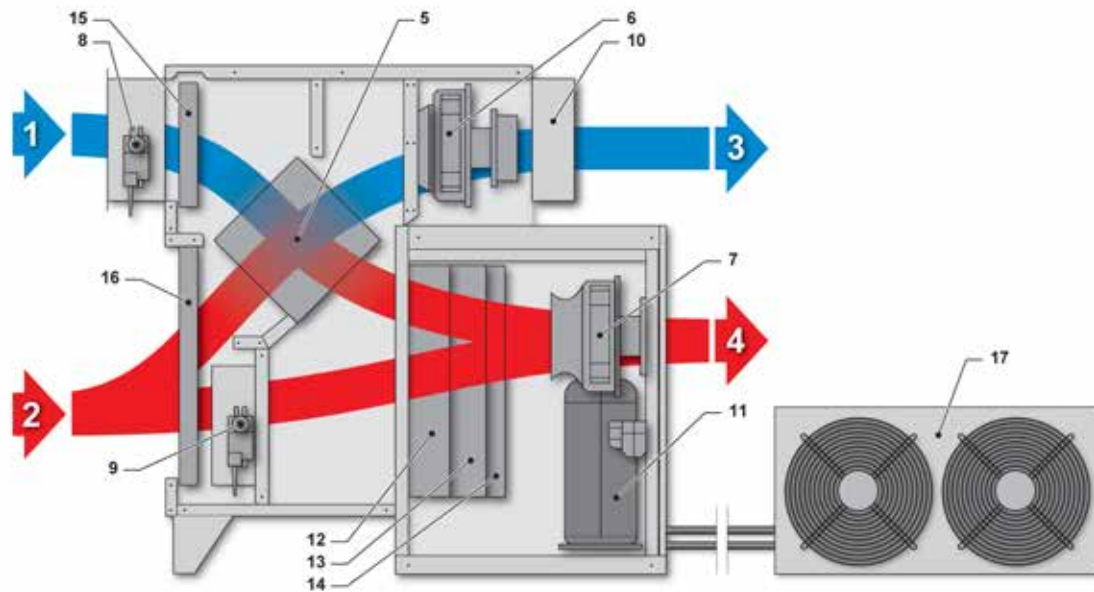
The STR models are the ideal units for industries and swimming pools that require not only dehumidification, but also a high air renewal, without dispersing the internal heat outdoors, and the temperature control. With an efficiency of the recovery up to 80%, these units represent the state-of-art in terms of efficiency, reliability and emitted sound power. The STR range only uses electronic radial fans with high-energy efficiency inverter integrated. Thanks to the temperature control function, with an external condenser, these units grant a full control, not only of the humidity, but also of the ambient temperature. Therefore, these units are suitable for those applications in which the contemporary control of both the parameters is required.

Moreover, thanks to a sophisticated software, developed in Fisair, the air flow can be set, measured and controlled: it eliminates any chance of incorrect calculation of load losses. Finally, the installation and the first start of these units results simple, quick and cheap.

Technical sheet range STR		0130	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity (1)	L / day	100	128	157	190	210	268	302	358	452	581
Recirculation air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800
Fresh air flow rate	m³/h	0-1200	0-1200	0-1200	0-1200	0-2000	0-2000	0-2000	0-2000	0-2000	0-2000
Cooling power (1)	kW	4,9	6,5	8	10	11	15	16	18	23	30
Hot water coil capacity (1)	kW	9,8	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Heat recovery system efficiency (2)	%	70	70	70	70	70	70	70	70	70	70
Electrical power supply	V/ph/Hz	230 / 1+N / 50					400 / 3+N / 50				
Dimensions L X P X H	mm	550 x 1452 x 1320					850 x 1452 x 1320		850 x 1682 x 1769		

Technical sheet range STR		0750	0950	1100	1400	1500	1700	1900	2200	3000
Dehumidifying capacity (1)	L / day	760	955	1120	1380	1480	1710	1870	2180	2960
Recirculation air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	2500
Fresh air flow rate	m³/h	0-6000	0-6000	0-11000	0-12500	0-13000	0-15000	0-15000	0-17000	0-25000
Cooling power (1)	kW	38	50	56	66	75	86	96	110	148
Hot water coil capacity (1)	kW	48	55	76	83	98	107	107	118	168
Heat recovery system efficiency (2)	%	70	70	70	70	70	70	70	70	70
Electrical power supply	V/ph/Hz	400 / 3+N / 50								
Dimensions L X P X H	mm	1400 x 2331 x 1950		2700 x 1950 x 2340		2700 x 1950 x 2340			2500 x 3390 x 2380	

(1) Inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C; outdoor air: 30°C - 50% RH; 100% recirculation. (2) Indoor air: 26°C - 60% RH; outdoor air: -5°C - 80% RH.



- | | | |
|---|-----------------------------------|-------------------------------------|
| 1. Inlet fresh outdoor air flow | 6. Exhaust air exhaust fan | 12. Evaporator coil |
| 2. Indoor recirculation air flow | 7. Recirculation air fan | 13. Condenser coil |
| 3. Expelled outdoors air flow | 8. Outdoor air damper | 14. Reheat coil (optional) |
| 4. Supply air flow indoors | 9. Calibration damper | 15. Outdoor fresh air filter |
| 5. High-efficiency crossed flows heat recovery system | 10. Discharged air gravity damper | 16. Indoor recirculation air filter |
| | 11. Compressor | 17. External condenser |

options:

- High efficiency air filters
- Hot water coil with 3-ways valve
- Chilled water coil with 3-ways valve
- Free cooling
- Silent version -2 dB(A)
- Soft-start
- Manometers
- Hot gas defrost
- De-superheater
- De-superheater for swimming pool water
- ACF - Automatic Control Flow
- Clock card – time scheduling
- Dirty filters sensor
- Remote user terminal including 20 m cable
- TH probe for duct installation
- Serial board Modbus, Lonworks, Bacnet, Konnex
- External version (outside temperature down to -10°C)
- Panels thermal insulation, thickness 20 mm





DFC series

dehumidification and ventilation
for industrial processes and swimming pool

