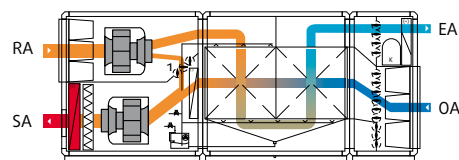


Popis funkce

Wintertime conditions

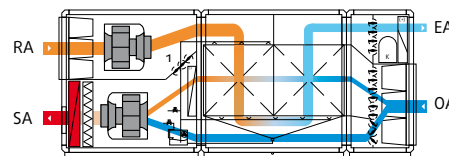
In case of low outside temperatures the system operates completely in heat recovery mode. The standard heating coil (LPHW) compensates for ventilation and transmission heat losses of the building as required.



Defrosting circuit

All recuperative heat exchangers tend to ice over in the exhaust air section in case of low outside temperatures. In defrost operation, the OA-SA bypass opens, reducing the outside air flow rate

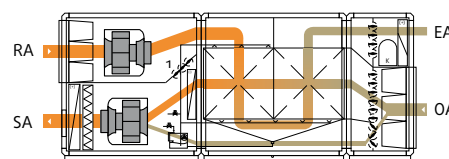
going through the recuperator. The heat contained in the return air melts any ice in the heat exchanger, while the airflow rate routed past the recuperator is regulated as required.



Transitional period

As the outside air temperatures rise, the heat recovery requirement is reduced. The OA/SA bypass damper, which runs along the entire depth of the unit, is

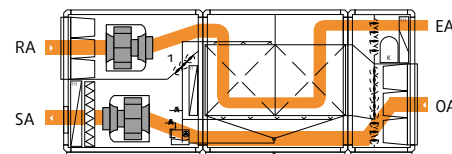
continuously regulated in order to achieve the desired supply air temperature.



Free cooling

If the outside temperatures continue to rise, the heat recovery is bypassed. The structural design of the OA/SA bypass ensures that the pressure losses within

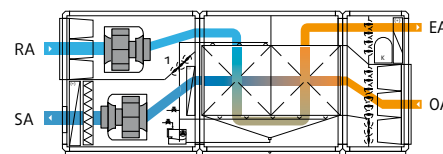
the unit are low and that the power consumption of both fans in bypass mode is also low.



Summertime conditions

If the outside temperature rises above the return temperature, the highly efficient heat exchanger is used as a "cooling recovery system".

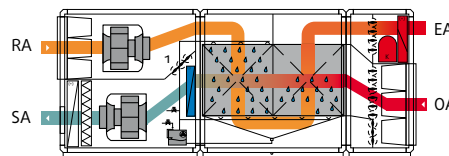
The warm outside air is cooled by the return air.



Indirect adiabatic evaporative cooling

The Menerga Adsolair principle uses the advantages of indirect adiabatic evaporative cooling without the disadvantages of supply air humidification. A major component of the Adsolair principle is the double plate heat exchanger, in which the return air is adiabatically cooled. In return, the outside air is cooled by the humid, cold exhaust air, without being humidified.

The high efficiency rate lies in the fact that both processes (adiabatic evaporative cooling of the return air + cooling of the outside air) take place simultaneously in the heat exchanger. The high degree of temperature efficiency of the double plate heat exchanger allows significant cooling of the OA-SA by over 12 K*. If required, the compressor refrigeration system will switch on and cool the supply air even further.



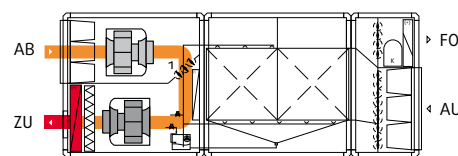
* at OA = 34° C / 40 % r.h.

Recirculation air operation (heating)*

In recirculation air mode, the outdoor and exhaust air dampers are closed. The air is heated via the heating coil. Rooms which are not used all of the time, such as

lecture halls or sports halls, can therefore be quickly heated before being used.

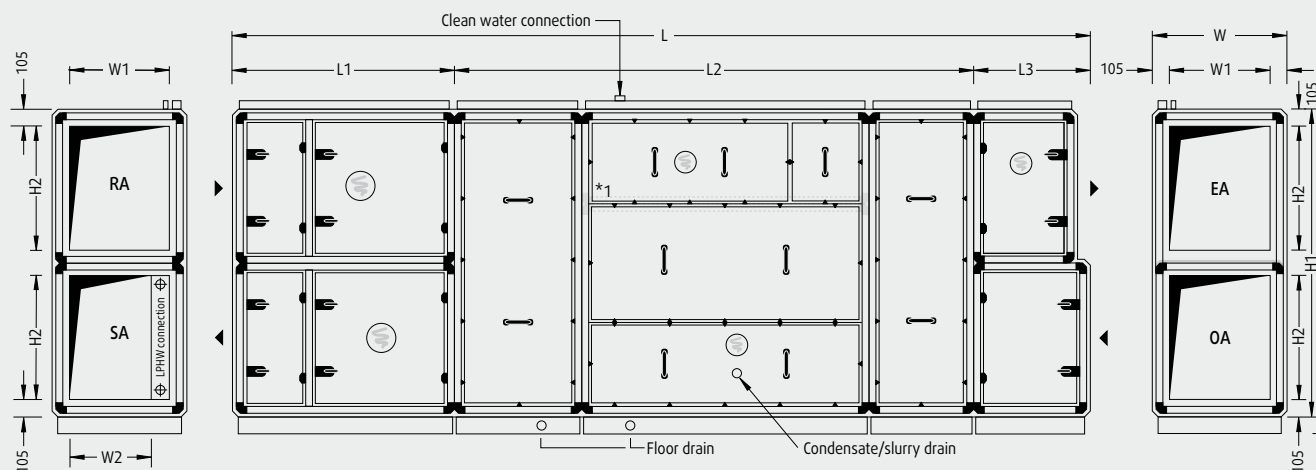
* only possible with optional recirculation air dampers for heating purposes



1 Recirculation air damper (additional equipment)

Adsolair Type 56

■ Rozměry jednotky a hmotnosti



Important! Where a system is operated in parallel, the supply air and return air ducts of the two units have to be brought together.

Where units are run in parallel, each unit has a controls cabinet.

Proportions/details vary depending on system size.

Mirror-image design possible.

Unit type	L ¹	W ²	H ³	L ¹	L ²	L ³	W ¹	W ²	H ¹	H ²	Weight ¹
56 03 01	4,510	790	1,700	1,240	2,670	600	580	510	1,520	580	1,120
56 05 01	4,670	1,110	1,700	1,400	2,670	600	900	830	1,520	580	1,370
56 06 01	5,790	790	2,340	1,400	3,790	600	580	420	2,160	900	1,570
56 10 01	5,790	1,110	2,340	1,400	3,790	600	900	740	2,160	900	1,880
56 13 01	5,950	1,430	2,340	1,560	3,790	600	1,220	1,060	2,160	900	2,230
56 16 01	5,950	1,750	2,340	1,560	3,790	600	1,540	1,380	2,160	900	2,560
56 19 01	5,950	2,070	2,340	1,560	3,790	600	1,860	1,700	2,160	900	2,840
56 25 01	6,590	2,070	2,980	1,560	4,430	600	1,860	1,700	2,800	1,220	3,840
56 32 01	7,390	2,070	3,620	1,560	5,230	600	1,860	1,700	3,440	1,540	4,700
56 36 01	7,390	2,390	3,620	1,560	5,230	600	2,180	2,020	3,440	1,540	5,280

► Největší transportní díly *

► Operating weight

► Rozvaděč

Unit Type	L ¹	W ²	H ³	Weight ¹
56 03 01	2,670	790	1,700	620
56 05 01	2,670	1,110	1,700	770
56 06 01	3,790	790	2,340	970
56 10 01	3,790	1,110	2,340	1,150
56 13 01	3,790	1,430	2,340	1,340
56 16 01	3,790	1,750	2,340	1,540
56 19 01	3,790	2,070	2,340	1,720
56 25 01	4,430	2,070	2,980	2,440
56 32 01	5,230	2,070	3,620	3,150
56 36 01	5,230	2,390	3,620	3,550

Unit Type	Weight ¹
56 03 01	1,160
56 05 01	1,410
56 06 01	1,620
56 10 01	1,950
56 13 01	2,320
56 16 01	2,670
56 19 01	2,980
56 25 01	4,030
56 32 01	4,930
56 36 01	5,840

Unit Type	H x W x D ¹	Position at unit
56 03 01	1,120 x 640 x 210	SA/RA side
56 05 01	1,120 x 640 x 210	SA/RA side
56 06 01	1,120 x 640 x 210	SA/RA side
56 10 01	1,120 x 640 x 210	SA/RA side
56 13 01	1,120 x 640 x 210	SA/RA side
56 16 01	1,120 x 640 x 210	SA/RA side
56 19 01	1,120 x 640 x 210	SA/RA side
56 25 01	1,120 x 640 x 210	SA/RA side
56 32 01	1,280 x 640 x 210	SA/RA side
56 36 01	1,280 x 640 x 210	SA/RA side

For service work, a clearance corresponding to dimension W is required on the operating side of the unit. If dimension W is smaller than one metre, please leave a clearance of one metre. For service work above the unit, please allow 50 mm working height clearance above the cable duct.

Please comply with the dimensions for body size, air duct connections and electrical switch cabinet.

All lengths are given in mm, weights in kg, weight incl. controls cabinet.

- 1 May change depending on chosen option
- 2 Door fitting assembly increase unit width by 65 mm each operating side
- 3 incl. 120 mm base frame, plus 60 mm cable duct

* Partitioning of unit for smaller apertures possible (at extra cost).

Technické specifikace a výkony

Unit Type		56 03 01	56 05 01	56 06 01	56 10 01	56 13 01	56 16 01
Max. volume flow rate	m ³ /h	2,200	3,200	3,800	5,500	7,300	9,100
Optimum flow rate	m ³ /h	2,200	3,200	4,200	6,000	7,900	9,900
Coefficient of power efficiency according to EN 13053:2012		%	71	71	73	73	73
Heat recovery rate according to EN 308		%	72.3	72.3	75.5	75.8	75.8
Total electrical power rating ¹		kW	1.76	2.30	2.76	3.82	5.92
Max. current consumption ¹		A	9.1	9.1	9.1	10.7	17.4
Operating voltage			3 / N / PE 400 V 50 Hz				
Ext. pressure loss							
Supply and fresh air channel		Pa	300	300	300	300	300
Return and exhaust air channel		Pa	300	300	300	300	300
Sound power level							
Acoustic pressure at a distance of 1 m from the unit ²		dB(A)	40	42	43	47	47
Fan units							
Rated motor input for supply air ³		kW	0.80	1.08	1.34	1.93	3.02
Rated motor input for return air ³		kW	0.66	0.92	1.12	1.59	2.50
SFP category supply air return air			1 2	1 2	1 2	1 2	1 2
Nominal rating supply air return air		kW	2.5 2.5	2.5 2.5	2.5 2.5	2.9 2.9	5.0 5.0
Inner specific fan power (SFP _{int}) ⁴		Ws/m ³	637	595	842	807	769
Adiabatic evaporative cooling system ⁵							
Cooling capacity ⁶		kW	7.9	11.7	13.6	19.8	32.7
Rated pump input		kW	0,3	0,3	0,3	0,3	0,4
Efficiency classes according to EN 13053:2012							
Heat recovery class			H1	H1	H1	H1	H1
Power consumption of fan motors SA RA			P1 P1	P1 P1	P1 P1	P1 P1	P1 P1
Air velocity class			V1	V1	V1	V1	V1
Eurovent energy efficiency class			A+	A+	A+	A+	A+
Filtration according to ISO 16890							
Supply air Outside air			ISO ePM1 55 % (F7) ISO ePM10 60 % (M5)				
Return Air			ISO ePM10 60 % (M5)				
LPHW							
Heating capacity SA=22° C ⁷		kW	5.3	8.1	7.4	10.4	17.6
Heating capacity Defrost ^{7,8}		kW	6.8	10.4	10.9	16.3	26.6
Water flow rate and pressure losses at heating capacity SA=22° C							
LPHW		m ³ /h kPa	0.51 4.2	0.88 3.5	0.88 3.9	1.38 3.8	2.14 3.3
LPHW valve		m ³ /h kPa	0.11 10.1	0.16 4.8	0.15 4.9	0.20 4.8	0.27 4.6
LPCW (optional) ¹⁰							
Cooling capacity SA = 17° C ^{11,12} (latent total)		kW	1.5 5.3	3.7 9.1	2.3 7.9	5.6 13.7	7.3 18.1
Air temperature (Inlet Outlet)		°C	22.2 17.0	22.0 17.0	21.6 17.0	21.6 17.0	21.6 17.0
Water flow rate and pressure losses at cooling capacity SA=17° C							
LPCW		m ³ /h kPa	0.66 0.4	1.19 2.9	0.82 0.5	1.90 2.2	2.58 1.8
LPCW valve		m ³ /h kPa	0.66 17.0	1.19 8.8	0.82 10.9	1.90 9.1	2.58 10.4
Connections							
LPHW connection		DN	32	32	32	32	40
LPHW control valve connection		DN	15	15	15	15	15
LPCW connection		DN	32	40	40	50	65
LPCW control valve connection		DN	15	20	20	25	32
Fresh water connection ⁹		DN	15	15	15	15	20
Condensate / slurry drain		DN	40	40	40	40	40
Floor drains		DN	40	40	40	40	40

Specifications of technical data relate to the optimum flow rate and return air condition 22° C / 40% r.h., outside air condition -12° C / 90% r.h. and standard density (1.204 kg/m³), unless otherwise specified.

- 1 dependent on configuration of measurement and control system/unit
- 2 at 250 Hz mid-band frequency
- 3 with average filter contamination

- 4 according EU guideline No. 1253/2014 [Ecodesign guideline]
- 5 water quality of make-up water corresponds to VDI 3803 table B3 with a bacteria count < 100 CFU/ml, water hardness range "middle".
- 6 for RA 26° C; 55% r.h. and OA 32° C; 40% r.h.
- 7 FL = 70° C
- 8 At OA=-15° C, SA=18° C, 66% optimum flow rate and active defrost function
- 9 2 bar system pressure required at 25 l/min flow rate.

- 10 may require of alteration of technical equipment
- 11 Note higher power consumption of SA fan units
- 12 FL = 6° C, return air condition 26° C / 55% r.h., outside air condition 32° C / 40% r.h.

Please seek approval of technical data and specifications prior to start of the planning process. With every single selection we do to your individual requirements our certified selection software automatically checks the Ecodesign compliance.

Technické specifikace a výkony

Unit Type		56 19 01	56 25 01	56 32 01	56 36 01	56 xx xx
Optimum flow rate	m ³ /h	10,900	12,800	16,800	19,900	
Max. volume flow rate	m ³ /h	11,800	15,000	19,800	22,800	< 40,800
Coefficient of power efficiency according to EN 13053:2012						
Heat recovery rate according to EN 308	%	73	77	74	74	
Total electrical power rating ¹	kW	7.97	10.26	15.78	18.62	
Max. current consumption ¹	A	18.8	33.6	36.4	39.7	
Operating voltage		33/N/PE 400V 50Hz				
Ext. pressure loss						
Supply and fresh air duct	Pa	400	400	500	500	
Return and exhaust air duct	Pa	400	400	500	500	
Sound power level						
Acoustic pressure at a distance of 1 m from the unit ²	dB(A)	55	49	53	57	
Fan units						
Rated motor input for supply air ³	kW	3.99	2x 2.66	2x 3.45	2x 4.00	
Rated motor input for return air ³	kW	3.48	2x 2.22	2x 3.03	2x 3.53	
SFP category supply air return air		1 2	2 3	2 3	2 3	
Nominal rating supply air return air	kW	6 5	2x 5 2x 5	2x 5 2x 5	2x 6 2x 6	
Inner specific fan power (SFP _{int}) ⁴	Ws/m ³	768	833	706	725	
Adiabatic evaporative cooling system⁵						
Cooling capacity ⁶	kW	39.1	48.3	61.0	72.1	
Rated pump input	kW	0.50	0.50	0.50	1.10	
Efficiency classes according to EN 13053:2012						
Heat recovery class		H1	H1	H1	H1	
Power consumption of fan motors SA RA		P1 P1	P2 P1	P1 P1	P1 P1	
Air velocity class		V1	V1	V1	V1	
Eurovent energy efficiency class 2018		A+	A+	A+	A+	
Filtration according to ISO 16890						
Supply air Outside air		ISO ePM1 55 % (F7) ISO ePM10 60 % (M5)				
Return Air		ISO ePM10 60 % (M5)				
LPHW						
Heating capacity SA=22° C ⁷	kW	20.8	17.0	29.5	36.1	
Heating capacity Defrost ^{7,8}	kW	28.3	30.3	42.6	50.9	
Water flow rate and pressure losses at heating capacity SA=22° C						
LPHW	m ³ /h kPa	2.14 4.8	3.86 3.9	4.77 3.5	4.77 3.9	
LPHW (pump warm water) valve	m ³ /h kPa	1.58 6.3	2.31 5.3	2.61 4.4	2.93 5.5	
LPCW (optional)¹⁰						
Cooling capacity SA = 17° C ^{11,12} (latent total)	kW	9.6 25.4	10.4 28.0	13.9 38.0	19.3 50.0	
Air temperature (Inlet Outlet)	°C	21.5 17.0	21.2 16.9	21.5 17.0	21.5 16.7	
Water flow rate and pressure losses						
LPCW	m ³ /h kPa	3,03 1,3	3,36 0,9	4,5 1,0	5,53 1,6	
LPCW valve	m ³ /h kPa	3,03 9,2	3,36 11,3	4,5 12,9	5,53 7,7	
Connections						
LPHW connection	DN	40	50	50	65	
LPHW control valve connection	DN	20	25	25	25	
LPCW	DN	80	80	80	100	
LPCW valve	DN	40	50	50	50	
Fresh water connection ⁹	DN	20	20	20	20	
Condensate / slurry drain	DN	40	40	40	40	
Floor drains	DN	40	40	40	40	

Technical details upon request.

Specifications of technical data relate to the optimum flow rate and return air condition 22° C / 40% r.h., outside air condition -12° C / 90% r.h. and standard density (1.204 kg/m³), unless otherwise specified.

- 1 dependent on configuration of measurement and control system/unit
- 2 at 250 Hz mid-band frequency
- 3 with average filter contamination

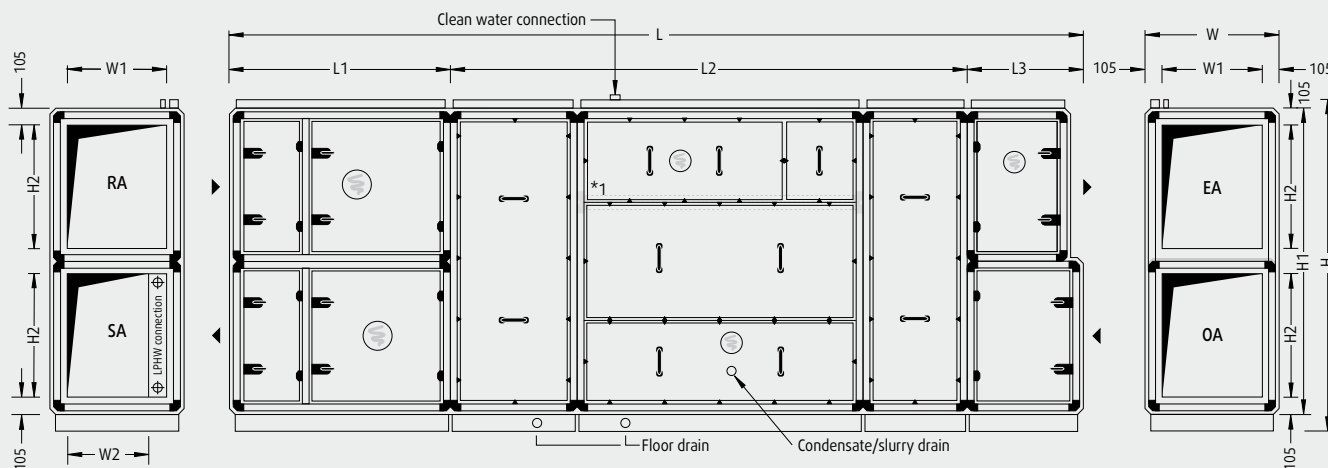
- 4 according EU guideline No. 1253/2014 [Ecodesign guideline]
- 5 water quality of make-up water corresponds to VDI 3803 table B3 with a bacteria count < 100 CFU/ml, water hardness range "middle".
- 6 for RA 26° C; 55 % r.h. and OA 32° C; 40% r.h.
- 7 FL = 70° C
- 8 At OA=-15° C, SA=18° C, 66% optimum flow rate and active defrost function
- 9 2 bar system pressure required at 25 l/min flow rate.

- 10 may require of alteration of technical equipment
- 11 Note higher power consumption of SA fan units
- 12 FL = 6° C, return air condition 26° C / 55% r.h., outside air condition 32° C / 40% r.h

Please seek approval of technical data and specifications prior to start of the planning process. With every single selection we do to your individual requirements our certified selection software automatically checks the Ecodesign compliance.

Adsolair Type 58

■ Rozměry jednotky a hmotnosti



Important! Where a system is operated in parallel, the supply air and return air ducts of the two units have to be brought together.

Where units are run in parallel, each unit has a controls cabinet.

Mirror-image design possible.

Proportions/details vary depending on system size.

Unit Type	L ¹	W ²	H ³	L ¹	L ²	L ³	W ¹	W ²	H ¹	H ²	Weight ¹
58 03 01	4,830	790	1,700	1,240	2,670	920	580	510	1,520	580	1,320
58 05 01	4,990	1,110	1,700	1,400	2,670	920	900	830	1,520	580	1,620
58 06 01	6,110	790	2,340	1,400	3,790	920	580	420	2,160	900	1,800
58 10 01	6,110	1,110	2,340	1,400	3,790	920	900	740	2,160	900	2,130
58 13 01	6,270	1,430	2,340	1,560	3,790	920	1,220	1,060	2,160	900	2,590
58 16 01	6,270	1,750	2,340	1,560	3,790	920	1,540	1,380	2,160	900	2,830
58 19 01	6,270	2,070	2,340	1,560	3,790	920	1,860	1,700	2,160	900	3,340
58 25 01	6,910	2,070	2,980	1,560	4,430	920	1,860	1,700	2,800	1,220	4,440
58 32 01	7,910	2,070	3,620	1,560	5,230	920	1,860	1,700	3,440	1,540	5,400
58 36 01	7,910	2,390	3,620	1,560	5,230	920	2,180	2,020	3,440	1,540	6,400

■ Largest transport unit *

Unit Type	L ¹	W ²	H ³	Weight ¹
58 03 01	2,670	790	1,700	640
58 05 01	2,670	1,110	1,700	790
58 06 01	3,790	790	2,340	1,000
58 10 01	3,790	1,110	2,340	1,200
58 13 01	3,790	1,430	2,340	1,400
58 16 01	3,790	1,750	2,340	1,620
58 19 01	3,790	2,070	2,340	1,810
58 25 01	4,430	2,070	2,980	2,580
58 32 01	5,230	2,070	3,620	3,400
58 36 01	5,230	2,390	3,620	3,800

■ Operating weight

Unit Type	Weight ¹
58 03 01	1,340
58 05 01	1,640
58 06 01	1,830
58 10 01	2,170
58 13 01	2,640
58 16 01	2,940
58 19 01	3,440
58 25 01	4,590
58 32 01	5,580
58 36 01	6,990

■ Controls cabinet

Unit Type	H x W x D ¹	Position at unit
58 03 01	1,280 x 640 x 210	SA/RA side
58 05 01	1,280 x 640 x 210	SA/RA side
58 06 01	1,280 x 640 x 210	SA/RA side
58 10 01	1,280 x 640 x 210	SA/RA side
58 13 01	1,280 x 640 x 210	SA/RA side
58 16 01	1,280 x 640 x 210	SA/RA side
58 19 01	1,280 x 640 x 210	SA/RA side
58 25 01	1,280 x 640 x 210	SA/RA side
58 32 01	1,280 x 640 x 210	SA/RA side
58 36 01	1,600 x 640 x 250	SA/RA side

For service work, a clearance corresponding to dimension W is required on the operating side of the unit. If dimension W is smaller than one metre, please leave a clearance of one metre. For service work above the unit, please allow 50 mm working height clearance above the cable duct.

Please comply with the dimensions for body size, air duct connections and electrical switch cabinet.

All lengths are given in mm, weights in kg, weight incl. controls cabinet.

- 1 May change depending on chosen option
- 2 Door fitting assembly increase unit width by 65 mm each operating side
- 3 incl. 120 mm base frame, plus 60 mm cable duct

* Partitioning of unit for smaller apertures possible (at extra cost).

Technické specifikace a výkony

Unit Type		58 03 01	58 05 01	58 06 01	58 10 01	58 13 01	58 16 01
Optimum flow rate	m ³ /h	2,200	3,200	3,800	5,400	7,300	9,100
Max. volume flow rate	m ³ /h	2,200	3,200	4,200	5,950	7,900	9,950
Total cooling capacity ¹	kW	16,5	23,3	23,6	35	44,9	57,2
Energy Efficiency Ratio ^{1,2}	EER	6,9	8,3	10,3	10,3	11,5	10,0
Coefficient of power efficiency according to EN 13053:2012	%	71	71	73	74	73	73
Heat recovery rate according to EN 308	%	72.3	72.3	75.5	76.0	75.7	75.8
Total electrical power rating ³	kW	3.95	4.88	4.87	6.99	8.65	11.44
Max. current consumption ³	A	16.12	17.25	16.35	21.15	29.36	34.58
Operating voltage		3 / N / PE 400 V 50 Hz					
Ext. pressure loss							
Supply and fresh air duct	Pa	300	300	300	300	300	300
Return and exhaust air duct	Pa	300	300	300	300	300	300
Sound power level							
Acoustic pressure at a distance of 1 m from the unit ⁴	dB(A)	41	42	43	47	42	47
Fan units							
Rated fan input for supply air ⁵	kW	0.85	1.12	1.40	1.97	2.61	3.14
Rated fan input for return air ⁵	kW	0.70	0.96	1.17	1.62	2.14	2.60
SFP category supply air return air		1 2	1 2	1 2	1 2	1 2	1 2
Nominal rating supply air return air	kW	2.5 2.5	2.5 2.5	2.5 2.5	2.9 2.9	5.0 5.0	5.0 5.0
Inner specific fan power (SFP _{int}) ⁶	Ws/m	640	591	835	787	781	766
Adiabatic evaporative cooling system^{1,7}							
Cooling capacity	kW	7.9	11.7	13.6	19.4	26.2	32.7
Rated pump input	kW	0.3	0.4	0.4	0.5	0.5	1.1
Compressor refrigeration system							
Refrigerant type		R410A					
Rated compressor input	kW	2.1	2.4	1.9	2.9	3.4	4.6
Mechanical cooling capacity ^{1,8}	kW	8.6	11.6	10.0	15.6	18.7	24.5
Efficiency classes according to EN 13053:2012							
Heat recovery class		H1	H1	H1	H1	H1	H1
Power consumption of fans SA RA		P1 P1	P1 P1	P1 P1	P1 P1	P1 P1	P1 P1
Air velocity class		V1	V1	V1	V1	V1	V1
Filtration according to ISO 16890							
Supply air Outside air		ISO ePM1 55 % (F7) ISO ePM10 60 % (M5)					
Return Air		ISO ePM10 60 % (M5)					
LPHW							
Heating capacity SA=22° C ⁹	kW	5.3	8.0	7.4	10.1	13.9	17.5
Heating capacity Defrost ^{9,10}	kW	5.8	8.7	9.9	14.0	18.8	23.7
Water flow rate and pressure losses at heating capacity SA=22° C							
LPHW	m ³ /h kPa	0.51 4.2	0.88 3.5	0.88 3.9	1.39 3.8	2.14 3.3	2.16 4.0
LPHW valve	m ³ /h kPa	0.11 10.1	0.16 4.8	0.15 4.9	0.20 4.9	0.27 4.6	0.34 4.7
Connections							
LPHW connection	DN	32	32	32	32	40	40
LPHW control valve connection	DN	15	15	15	15	15	15
Fresh water connection ¹¹	DN	15	15	15	15	15	20
Condensate / slurry drain	DN	40	40	40	40	40	40
Floor drains	DN	40	40	40	40	40	40

Specifications of technical data relate to the optimum flow rate and return air condition 22° C / 40% r.h., outside air condition -12° C / 90% r.h. and standard density (1.204 kg/m³), unless otherwise specified.

- for RA 26° C; 55% r.h. and OA 32° C; 40% r.h.
- incl. evaporative cooling capacity taking into account power consumption for adiabatic pump(s)
- dependent on configuration of measurement and control system/unit

- at 250 Hz mid-band frequency
- with average filter contamination according EU guideline No. 1253/2014 [Ecodesign guideline]
- water quality of make-up water corresponds to VDI 3803 table B3 with a bacteria count < 100 CFU/ml, water hardness range "middle".
- at supply air ≈ 17° C
- FL = 70° C

- At OA=-15° C, SA=18° C, 66% of optimum flow rate and active defrost function
- 2 bar system pressure required at 25 l/min flow rate

Please seek approval of technical data and specifications prior to start of the planning process. With every single selection we do to your individual requirements our certified selection software automatically checks the Ecodesign compliance.

Technické specifikace a výkony

Unit Type		58 19 01	58 25 01	58 32 01	58 36 01	58 xx xx
Optimum flow rate	m ³ /h	10,900	12,700	16,700	19,900	< 40,800
Max. volume flow rate	m ³ /h	11,800	14,800	19,500	22,500	
Total cooling capacity ¹	kW	69.8	83.7	106.5	120.2	
Energy Efficiency Ratio ^{1,2}	EER	10.0	10.7	11.0	12.8	
Coefficient of power efficiency according to EN 13053:2012	%	68	68	70	70	
Heat recovery rate according to EN 308	%	71	70	73	73	
Total electrical power rating ³	kW	15.14	18.54	25.50	27.80	
Max. current consumption ³	A	41.9	56.3	69.0	71.8	
Operating voltage		3 / N / PE 400 V 50 Hz				
Ext. pressure loss						
Supply and fresh air channel	Pa	400	400	500	500	
Return and exhaust air channel	Pa	400	400	500	500	
Sound power level						
Acoustic pressure at a distance of 1 m from the unit ⁴	dB(A)	54	49	54	57	
Fan units						
Rated fan input for supply air ⁵	kW	4.12	2x 2.74	2x 3.55	2x 4.12	
Rated fan input for return air ⁵	kW	3.56	2x 2.28	2x 3.11	2x 3.66	
SFP category supply air return air		2 3	2 3	2 3	2 3	
Nominal rating supply air return air	kW	6.0 6.0	2x 5.0 2x 5.0	2x 5.0 2x 5.0	2x 6.0 2x 6.0	
Inner specific fan power (SFP _{int}) ⁶	Ws/m	764	846	718	722	
Adiabatic evaporative cooling system ^{1, 7}						
Cooling capacity	kW	39.1	47.9	60.6	72.1	
Rated pump input	kW	1.1	1.1	1.5	1.5	
Compressor refrigeration system						
Refrigerant type		R410A				
Rated compressor input	kW	5.9	6.7	8.2	7.9	
Mechanical cooling capacity ^{1,8}	kW	30.7	35.8	45.9	48.1	
Efficiency classes according to EN 13053:2012						
Heat recovery class		H1	H1	H1	H1	
Power consumption of fans SA RA		P1 P1	P2 P1	P1 P1	P1 P1	
Air velocity class		V1	V1	V1	V1	
Filtration according to ISO 16890						
Supply air Outside air		ISO ePM1 55 % (F7) ISO ePM10 60 % (M5)				
Return Air		ISO ePM10 60 % (M5)				
LPHW						
Heating capacity SA=22° C ⁹	kW	20.8	16.6	29.1	36.0	
Heating capacity Defrost ^{9,10}	kW	28.3	30.3	42.1	50.9	
Water flow rate and pressure losses at heating capacity SA=22° C						
LPHW	m ³ /h kPa	2.13 4.5	3.88 3.3	4.81 3.6	4.78 3.6	
LPHW (pump warm water) valve	m ³ /h kPa	0.39 7.1	0.31 3.8	0.55 3.7	0.68 3.7	
Connections						
LPHW connection	DN	40	50	50	65	
LPHW control valve connection	DN	20	25	25	25	
Fresh water connection	DN	20	20	20	20	
Condensate / slurry drain	DN	40	40	40	40	
Floor drains	DN	40	40	40	40	

Technical details upon request.

Adsolair

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- incl. evaporative cooling capacity taking into account power consumption for adiabatic pump(s)
- dependent on configuration of measurement and control system/unit

- at 250 Hz mid-band frequency
- with average filter contamination
- according to EU-regulation No. 1253/2014 [Ecodesign Directive]

- water quality of make-up water corresponds to VDI 3803 table B3 with a bacteria count < 100 CFU/ml, water hardness range "middle".
- at supply air ≈ 17° C
- FL = 70° C

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