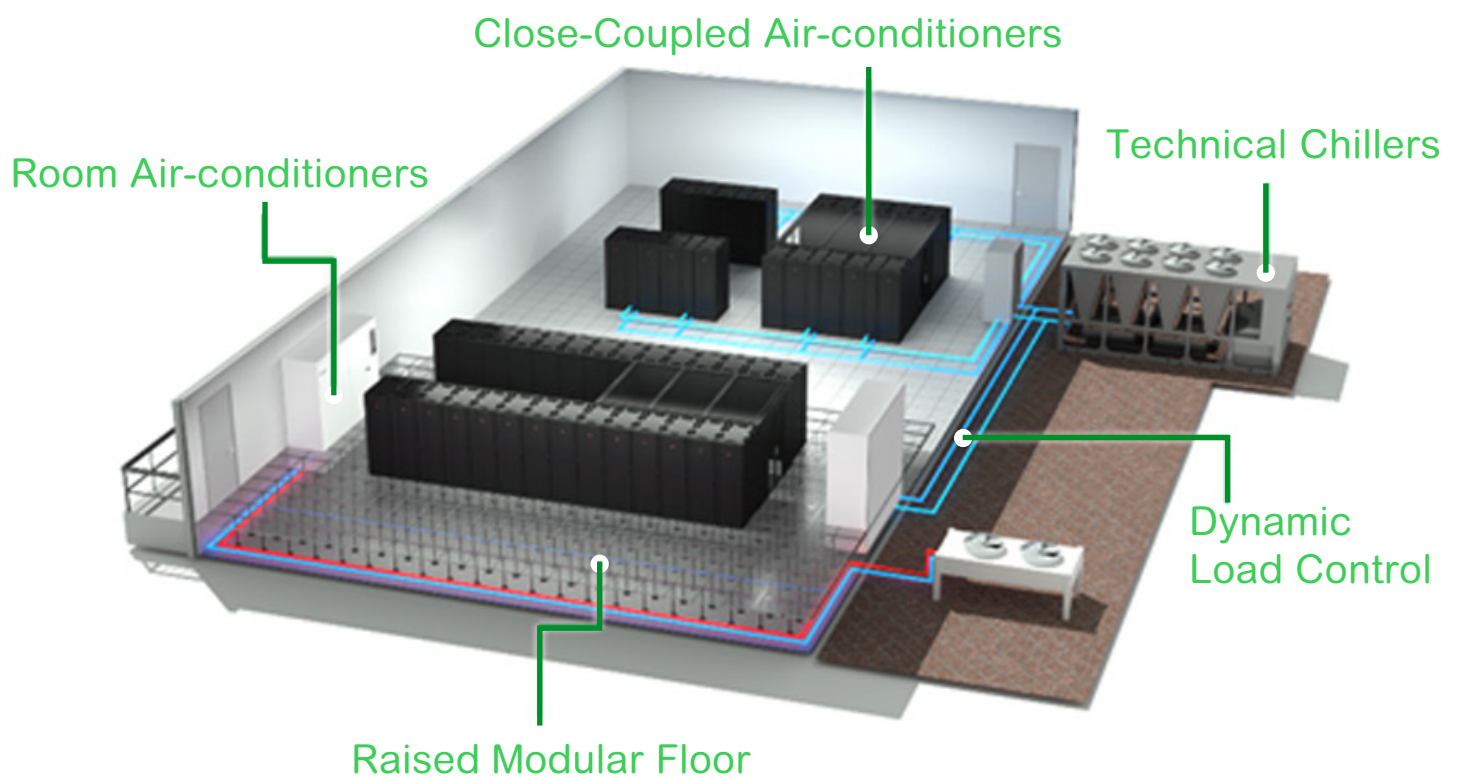


Cooling Infrastructure Solution

Room, Row and Chiller



One Stop Complete Cooling Solution

- Amico
- Leonardo
- Leonardo Max
- HXCV
- Unisplit
- Fan Wall



- InRow Direct Expansion
- InRow Chilled Water
- Thermal Containment



- InRack direct expansion
- Read Door Heat Exchanger
- Liquid cooling



- Technical Chillers
- Free Cooling Chillers and Economizers



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UniflairAir Cooled Precision Cooling Amico & Leonardo (5-280kW)

Standard Features

- 1 High Efficiency Tandem scroll compressor
- 2 Higher part load efficiency due to Tandem arrangement
- 3 Electronic Expansion Valve standard on leonardo units
- 4 Energy efficient EC fans
- 5 Hydrophilic coating on evaporator coil
- 6 Stainless Steel drain tray with insulation
- 7 Variable capacity steam humidifier
- 8 Multistage AL strip heaters
- 9 Liquid Receiver, LLSV, NRV as safety components
- 10 Micr-Vee high efficiency EU4 filters
- 11 CAREL Controller
- 12 Refrigerant R-410A / R407C

AMICO

Air cooled / Water cooled direct expansion Precision units with direct drive AC motor					
Model SDA-SUA	0151	0251	0351	0501	0601
Height mm	1740	1740	1740	1740	1740
Width mm	550	550	850	1200	1200
Depth mm	450	450	450	450	450
Weight kg	130	135	185	260	265
Airflow m ³ /h	1600	1600	3000	5000	5000
Total cooling capacity kW*	5.7	8.0	12.5	16.1	18.9
Sensible cooling capacity kW*	5.4	6.4	11.0	16.1	17.0
Refrigerant circuits	1	1	1	1	1
Compressors	1	1	1	1	1
Electric supply voltage	400 V / 3 PH / 50 Hz				

(*) Based on 24°C / 50% RH, Condensing temperature=45°C with R407C



Air cooled / Water cooled direct expansion Precision units with EC motor																		
Model TDAV-TUAV / LDAV	611	811	721	921	1011	1021	1321	1422	1622	1822	2222	2242	2522	2542	2842	3342	3542	
Height mm	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960
Width mm	1010	1010	1310	1310	1010	1310	1720	2185	2185	2185	2582	2582	2582	2582	2582	2582	2582	2600
Depth mm	750	750	865	865	750	865	865	865	865	865	865	865	865	865	865	865	865	900
Weight kg	400	430	430	440	450	450	575	700	715	720	910	920	930	940	1040	1100	1130	
Airflow m ³ /h	6000	6000	8500	8500	8500	8500	12500	16000	16000	16000	23500	23500	23500	23500	23500	23500	27000	
Total cooling capacity kW*	19.9	28.1	27.2	33.2	37.0	36.9	44.7	54.1	61.6	68.9	73.0	79.7	92.6	88.9	100.0	114.2	125	
Sensible cooling capacity kW*	18.8	28.1	27.2	31.7	35.0	34.5	44.7	54.1	61.0	61.1	73.0	78.5	86.0	84.2	93.7	100.3	118	
Refrigerant circuits	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	
Compressors	1	1	2	2	1	2	2	2	2	2	2	4	2	4	4	4	4	
Electric supply voltage	400 V / 3 PH / 50 Hz																	

(*) Based on 24°C / 50% RH, Condensing temperature=45°C with R-410A

AMICO

Chilled Water Based Precision Air conditioning units with direct drive AC motor					
Model SDA-SUA	0200	0250	0300	0400	0600
Height mm	1740	1740	1740	1740	1740
Width mm	550	700	850	850	1200
Depth mm	450	450	450	450	450
Weight kg	100	115	150	155	220
Airflow m ³ /h	1600	1900	2050	3020	5000
Total cooling capacity kW*	7.5	9.6	10.6	13.6	22.1
Sensible cooling capacity kW*	6.3	8.0	8.6	11.7	19.0
Electric supply voltage	230 v / 1 ph / 50 Hz				

(*) Based on 24°C / 50% RH, Chilled water at 7/12°C



Chilled Water Based Precision Air conditioning units with direct drive EC motor															
Model TDCV-TUCV	600	700	1000	1200	1700	2000	2500	2700	3400	4000	4300	4600	HXCV5500	HXCV6200	HXCV6800
Height mm	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960	2510	2510	2510	2510
Width mm	1010	1010	1310	1310	1720	2185	2185	2185	2582	2582	2582	2582	2582	3200	3400
Depth mm	750	750	865	865	865	865	865	865	865	865	865	865	1100	1100	1100
Weight kg	280	285	310	315	400	450	460	500	700	740	820	900	1050	1100	1200
Airflow m ³ /h	6000	6000	10000	10000	14000	19000	19000	19000	25000	25000	30000	34000	35000	48000	55000
Total cooling capacity kW*	21.1	24.6	33.4	42.2	59.1	69.3	88.4	98	110.8	125.6	168.7	185	200	250	280
Sensible cooling capacity kW*	21.1	24.6	32.7	40.0	57.7	67.0	82.2	88.8	103.8	113.6	155	175	200	250	280
Electric supply voltage	400 V / 3 PH / 50 Hz														

(*) Based on 24°C / 50% RH, Chilled water at 10/15°C

Uniflair Variable Speed Air Cooled Precision Cooling IDAV (15-135kW)



Standard Features

- 1 High Efficiency DC Inverter scroll compressor
- 2 Higher part load efficiency due to variable speed compressor
- 3 Electronic Expansion Valve
- 4 Energy efficient EC fans
- 5 Hydrophilic coating on evaporator coil
- 6 Stainless Steel drain tray with insulation
- 7 Variable capacity steam humidifier
- 8 Multistage AL strip heaters
- 9 Liquid Receiver, Oil separator, LLSV, NRV as safety components
- 10 Micr-Vee high efficiency EU4 filters
- 11 CAREL Controller
- 12 Refrigerant R-410A

Brushless VSD scroll compressor

- Discharge temperature control
- High energy efficiency at partial load
- Low starting current
- No sliding contacts

Air cooled / Water cooled direct expansion Variable Speed DC Inverter Compressor Precision units								
Model IDAV-IUAV	511	811	1011	1311	1811	2522	3022	3822
Height mm	2100	2100	2100	2100	2150	2150	2150	2150
Width mm	1010	1010	1010	1200	1777	2082	2650	2650
Depth mm	900	900	900	900	900	900	900	900
Weight kg	450	480	500	520	650	750	950	1100
Airflow m ³ /h	5000	8000	11000	11000	18000	18000	23000	29000
Total cooling capacity kW*	18	30	37	45	64	88	100	130
Sensible cooling capacity kW*	17.5	29	36	43	64	88	100	130
Refrigerant circuits	1	1	1	1	1	2	2	2
Compressors	1	1	1	1	1	2	2	2
Electric supply voltage	400 V / 3 PH / 50 Hz							

(*) Based on 24°C / 50% RH, Condensing temperature=45°C with R-410A

Main configurable options

Power supply

- Single power supply
- Double power supply with automatic commutation to provide redundancy and ensure a constant power supply

Construction options

- Downflow units (IDAV): top air return with bottom or front discharge (without /small additional floor stands)
- Upflow units (IUAV): front or bottom air return with top discharge
- Underfloor units (IDAV): top air return with bottom supply with multiple fan module configurations
- Standard, cleanable or low conductivity humidifier (cooling + humidification configuration)
- Standard electrical heaters with extended fins, complete with double safety thermostat and manual resetting
- EU4 (standard) or EU5 air filters with or without motorized damper
- Automatic Floor Pressurization System through Active Floor Control (AFC)

Fan module configurations (IDAV models)

- Fan module with bottom supply
- Fan module with rear supply
- Fan module with front supply
- Fan module with front and side supply
- Fan module with fully open supply

Air-cooled remote condensers

- Vertical or horizontal installation
- Fan speed regulator works exclusively via Modbus commands
- Coil protection treatment for aggressive ambient (optional)
- Low temperature versions to operate down to 40°C (optional)

Additional accessories

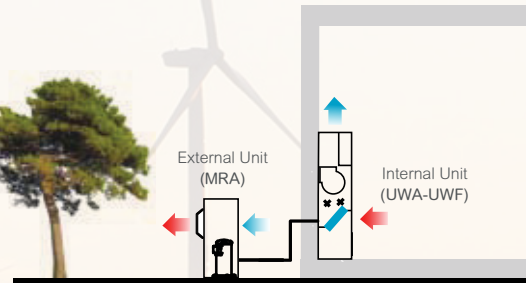
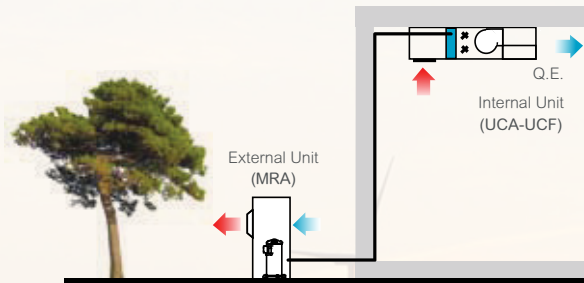
- High efficiency air filters
- Motorized damper
- Water leak detector
- Room air temperature / humidity sensor

Unisplit UCA-UCF - UWA-UWF

range 5,9 - 14,5 kW (Ceiling & Wall Mount Precision AC units)



MRA



Evaporator sections are equipped with:

- Microprocessor control
- EU4 filter (optional)

Power supply:

- 230V/ 1/ 50 Hz or 400V/3+N/50Hz (standard, according to the model)
- Main power supply + UPS 48VDC (evaporator DC-fan/s) (Optional)

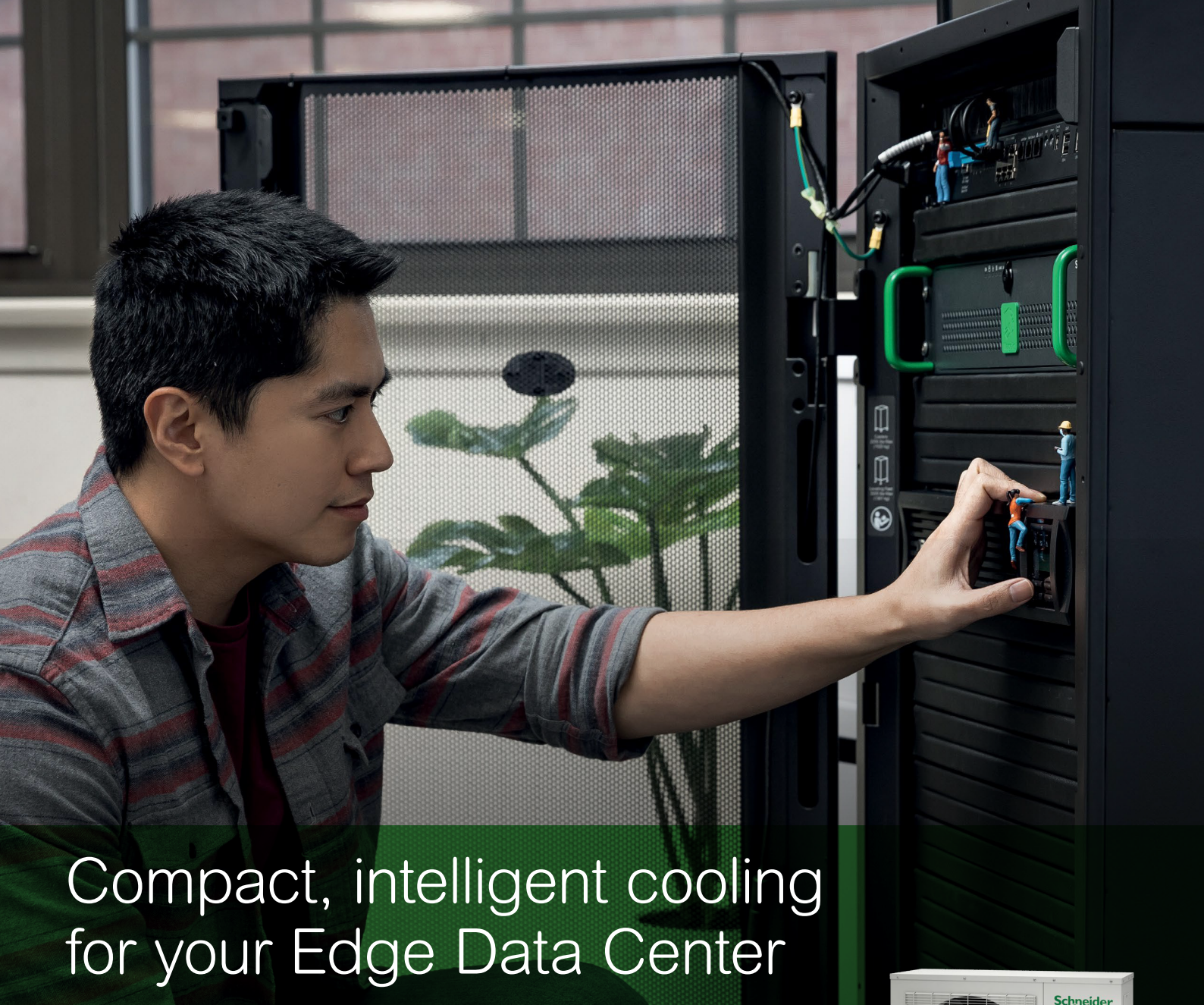
Condensing units are equipped with:

- Scroll compressor
- Modulating fan/s speed control

Unisplit

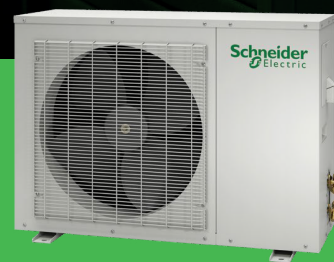
Air cooled direct expansion Ceiling/Wall Mount Precision units					
Model		Ceiling UCA/UCF		Wall UWA/UWF	
		0341	0481	0341	0481
Airflow	m3/h	1850	3900	1850	3900
Total cooling capacity kW*		7.1	14.5	7.1	14.5
Sensible cooling capacity kW*		7.1	14.5	7.1	14.5
Indoor unit					
Height	mm	330	410	2100	2150
Width	mm	950	1150	1200	1777
Depth	mm	1050	1300	900	900
Power supply		230/1/50		230/1/50	
Outdoor unit					
Height	mm	610	1230	2100	2150
Width	mm	850	1200	1200	1777
Depth	mm	345	480	900	900
Power supply		230/1/50	400/3/50	230/1/50	400/3/50

(*) Based on 26°C / 45% RH, ambient temperature=35°C with R407C



Compact, intelligent cooling for your Edge Data Center

Uniflair Rack Mounted
Room Cooling
3.5kW, 5U, direct expansion split solution



se.com/cooling

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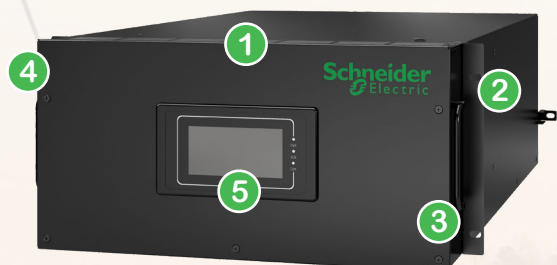
Schneider
Electric

Technical specifications

INDOOR UNIT	50 Hz CE version
Commercial References	ACRMD4KI-1
Total Cooling Capacity	3.6 kW (12,300 BTU/hr)
Sensible Cooling Capacity*	3.5 kW (11,900 BTU/hr)
Rated Power Input	200-240 V~, 1 Ph, 50 Hz
Rated Air Volume	700 m³/h (410 SCFM)
Number of Fans	1
IDU Fan Input Power	0.43 kW
Size of Liquid Pipe/Air Pipe Connection	9.52/12.7 mm (0.37/0.50 in.)
Energy Efficiency Ratio (EER)	2.5
Sound Pressure Level	62.5 dB(A)

OUTDOOR UNIT	50 Hz CE version
Commercial References	ACRMD4KI-2 (precharged) ACRMD4KI-3 (non-precharged)
Heat Exchange	6.3 kW
Rated Air Volume	1700 m³/h (1000 SCFM)
Input Power	1.00 kW
Number of Fans	1
Number of Compressors	1
Sound Pressure Level	51.1 dB(A)

Main features - Internal unit



1 Variable Speed DC Fan

Designed for 24x7 mission critical operation and high airflow output. Quickly responds to heat loads and lowers energy consumption.

2 Electronic Expansion Valve

Quick and accurate response to control the refrigerant flow once the IT load changes to ensure rack always stays at constant cold temperature.

3 Front mounting flanges

Discrete, easy installation with any rack.

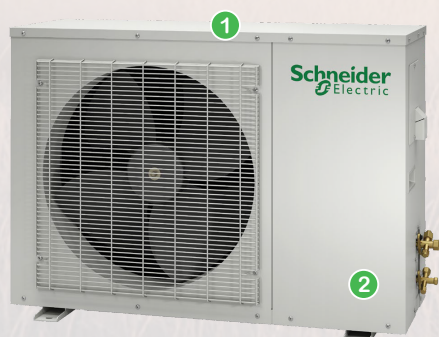
4 Upward air plenum

Ensures even cooling distribution to the entire height of the rack.

5 Optional embedded user interface

Color touchscreen display ensures easy temperature control and system monitoring.

Main features - External unit



1 Compact design

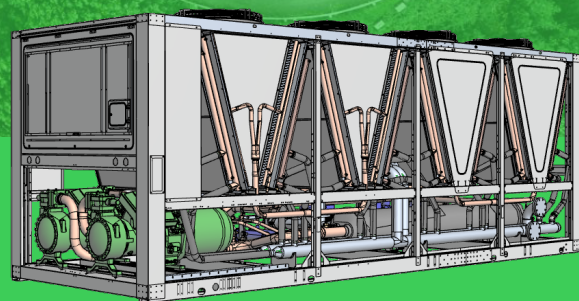
Condensing unit can be placed almost anywhere: on the ground, on a wall, or even on top of the rack.

2 Robust design

Built for 24x7 mission critical operation.



Top class chillers to ensure continuative cooling



Chillers designed for technical
cooling applications in data centers,
buildings, and industrial processes
5 - 2000 kW

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Schneider
Electric

Air cooled Variable Capacity/Speed Screw Compressor Precision Chiller Units

Model XRAC		1812	2212	2512	2812	3212	3612	4212	4812	5622	6422
Height	mm	5305	6735	6735	6735	9110	9110	10540	10540	11955	13385
Width	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Depth	mm	2531	2531	2531	2531	2531	2531	2531	2531	2551	2551

Stepless Version - R134a

Cooling capacity kW*	601,8	758,4	807,4	954,3	1170	1283,5	1509	1656,3	1876	2085,6
Power consumption kW*	146	180,8	196,1	236,5	280,2	317,1	376	414,1	457,8	501,9
EER	4,12	4,19	4,12	4,04	4,18	4,05	4,01	4,00	4,10	4,16

Hybrid Version - R134a

Cooling capacity kW*	613,3	750	835	963,6	1187,9	1298,4	1527,7	1678,4	1850,1	2063,5
Power consumption kW*	150,5	179,5	204,4	244,6	290,3	325	389,7	428,7	439,5	486,9
EER	4,08	4,18	4,09	3,94	4,09	4,00	3,92	3,92	4,21	4,24

Full VSD Version - R134a

Cooling capacity kW*	624,8	741,5	862,8	972,7	1206,4	1313,4	1546,2	1700,6	1823,8	2041
Power consumption kW*	155,1	178,2	212,7	252,7	300,5	333	403,4	443,3	421,3	472
EER	4,03	4,16	4,06	3,85	4,01	3,94	3,83	3,84	4,33	4,32

Stepless Version - R1234ze

Cooling capacity kW*	490,7	620	657,9	768,6	956,3	1053,6	1257	1342	1501,2	1678,8
Power consumption kW*	107,4	131,7	142,8	170,5	198,1	225,2	272,5	295,7	331,7	365,5
EER	4,57	4,71	4,61	4,51	4,83	4,68	4,61	4,54	4,53	4,59

Hybrid Version - R1234ze

Cooling capacity kW*	498,9	608,6	677,1	781,4	965,1	1055,6	1271,6	1365,5	1481	1658
Power consumption kW*	110,9	131,8	148,9	176,4	207,4	230,2	280,5	307,9	319,7	355,9
EER	4,50	4,62	4,55	4,43	4,65	4,59	4,53	4,43	4,63	4,66

Full VSD Version - R1234ze

Cooling capacity kW*	507,3	597,5	696,8	797,6	974	1057,7	1286,6	1388,9	1461,1	1637,6
Power consumption kW*	114,4	131,9	155	182,4	216,8	235,2	288,6	320,2	307,8	346,5
EER	4,43	4,53	4,50	4,36	4,49	4,50	4,46	4,34	4,75	4,73

*Inlet/outlet evaporator temp. 30/20°C, 0% ethylene glycol

- Outdoor temp. 35°C
- Units equipped with EC fans
- Basic noise version

Above mentioned range is also available in free cooling version and other refrigerants R513A & R1234yf as well



Intelligently controlled high-performance close-coupled cooling

Uniflair InRow Cooling



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Electric

Air cooled / Chilled water based Inrow Precision units						
Type	Air Cooled			Chilled Water		Dual Fluid
Model	ACRD101	ACRC301	ACRD602	ACRC300	ACRC600	ACRH301
Airflow m3/h	3800	5800	6900	7140	10200	5250
Cooling capacity	10 kW to 35kW			20kW to 70kW		27 kW
Indoor unit						
Height mm	1991	1991	1991	1991	1991	1991
Width mm	300	300	600	300	600	300
Depth mm	1095	1095	1070	1095	1070	1095

Close-coupled architecture

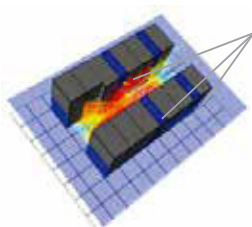
Flexible, reliable, standardized solutions

- Modular unit design allows a pod/zone expansion as IT needs change and grow
- Greenfield/brownfield environments
- Raised/slab floor
- Room neutral
- Non-conventional IT spaces/office space
- Worldwide availability

Predictable solution for the unpredictable environment

A close-coupled cooling architecture moves the cooling unit from a traditional perimeter placement to a location that is in the row or above the IT racks.

The Uniflair InRow unit targets the heat that is generated by the IT equipment by pulling the hot air directly from the hot aisle where the heat is generated. The unit removes the heat and supplies cool air into the cold aisle/environment, which is the source of cool air for the IT equipment.

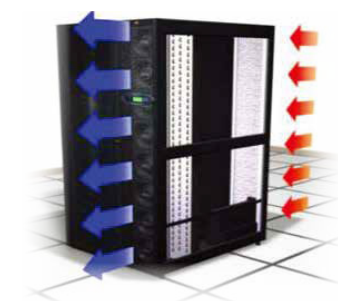


Cooling units

Close coupling keeps the hot air in the hot aisle



Uniflair InRow cooling with EcoAisle containment maximizes efficiency and predictability



Initial deployment



Expansion



Final deployment



Uniflair InRow cooling products are designed by combining cutting-edge technology with extensive tests for energy efficiency and continuous availability.

Energy savings, complete reliability, and total flexibility guarantee TCO reduction.

25 kW

per rack when combined with thermal containment system

+80%

of additional capacity* by capturing the heat at the source

*29.4 °C (85 °F) vs. 22.2 °C (72 °F) return air temperature



Uniflair Cooling solutions for IT rooms without a raised floor

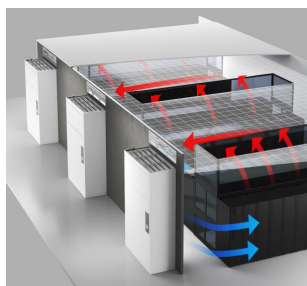
Application guide to customized fan wall & hyper front flow chilled water cooling solutions

Non-raised Floor Solutions



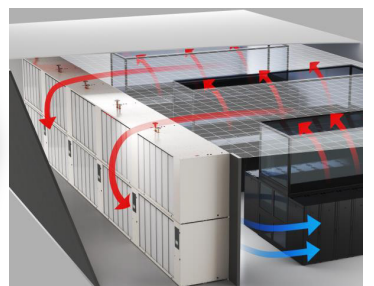
FXCV

Frontal
Discharge
Chilled Water
Room Cooling



FWCV

Hyper Front
Flow Chilled
Water Room
Cooling



FXCV MODEL - InCorridor		4000	5000	6000	6500	6800
HT - High temperature version						
Airflow	m3/h	32000	40000	45000	53000	56000
Net sensible cooling capacity	kw	140	174	200	231	244
HT - High temperature extended						
Airflow	m3/h	32000	40000	45000	53000	56000
Net sensible cooling capacity	kw	132	164	188	220	230
EC Fans	nr	2	3	3	4	4
DIMENSIONS						
Width	mm	2170	2580	3110	3405	3405
Depth	mm	1070	1070	1070	1070	1070
Height	mm	3150	3150	3150	3150	3270

RAT: 37°C, 30%R.H.

Humidity: 30%;

ESP: 20 Pa; EU4 filter

HT: Water temperature inlet-outlet: 20-30°C, 0% glycol

HTE: Water temperature inlet-outlet: 20-30°C, 0% glycol

FWCV MODEL		0065L	0085L	0100L	0120L	0135L
Airflow	m3/h	62150	74750	110000	118000	138000
Net sensible cooling capacity	kW	234	286	415	432	507
EC Fans	nr	4	8	8	12	12
Width	mm	2400	3600	3600	4000	4000
Depth	mm	1600	1600	1600	1600	1600
Height	mm	4000	4000	4000	4000	4000

RAT: 37°C, 30%R.H.

Humidity: 30%;

ESP: 20 Pa; EU4 filter

Life Is On



To learn more about Schneider Electric cooling solutions visit
se.com/cooling

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Bengaluru, Karnataka 560105