

# Uniflair LE Direct Expansion

15 kW – 100 kW

Perimeter, direct expansion cooling for data centers



## Reliable, efficient, and flexible cooling

The Uniflair LE Direct Expansion product line utilizes leading edge precision air-conditioning technologies. Tandem scroll compressors, electronically commutated fans, electronic expansion valves, and front service access are all standard and integrated into one high-efficiency system. Available with four heat rejection methods: air, water/glycol, twin-cool, and economizer, the DX line easily adapts to changing environments inside the data center.

# Uniflair LE Direct Expansion features and benefits

## 1 Reliable

### Display Interface

- > Clearly shows malfunctions or alarms with a record of the last 100 events

### Microprocessor Controller

- > Provides reliability through intelligent controls

### Continuous Operation

- > Designed specifically for data center environments, operating 24/7/365



## 2 Efficient

### Tandem Scroll Compressors

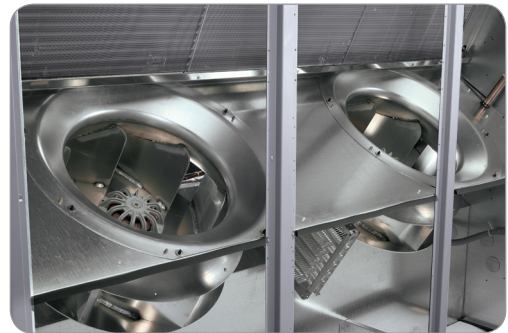
- > Increase efficiency by utilizing an oversized coil for one compressor during part-load operation

### Economization

- > Achieved by utilizing cool ambient air during winter months, automatically changing outdoor heat exchanger set points to take advantage of economizer hours, and eliminating compressor operation (energy saving units)

### Electronic Expansion Valve

- > Ensures an increase in coefficient of performance (COP) and energy savings through accurate refrigerant control



Pictured: Units come standard with high efficiency EC (Electronically Commutated) Fans.

## 3 Flexible

### Multiple Heat Rejection Configurations

- > Air-cooled, water-cooled, glycol-cooled, twin-cooled, and economizer systems

### Building Management Systems

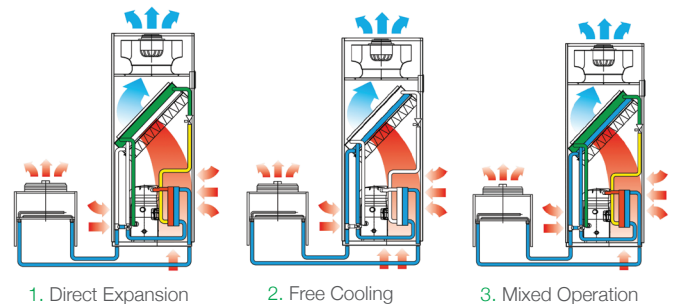
- > Designed to work with the most common BMS, including BACnet™ and Modbus™

### Complete Front Serviceability

- > Enables all maintenance of the unit through front access

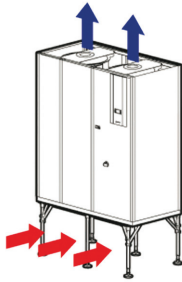
### Group Control

- > Up to 10 Uniflair™ units can communicate with each other. Provides redundancy, demand-fighting prevention, mode assist, and global sharing of certain settings

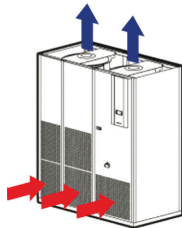


## Airflow configurations

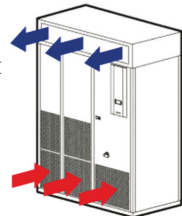
Bottom return with top supply



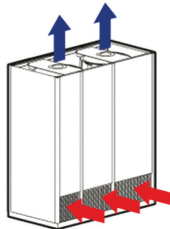
Front return with top supply



Front return with top front supply  
(Plenum and Grille)



Rear return with top supply



Top return with bottom supply  
(Plenum and Grille)



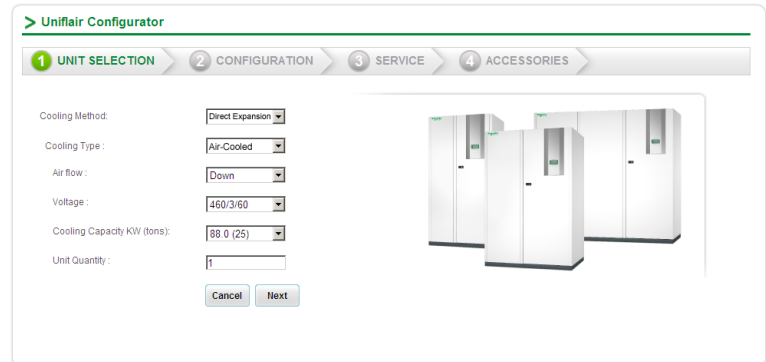
Top return with bottom supply  
(Floorstand)



## Standard features

- > Electronically Commutated (EC) Fans
- > Non-fused, Main Disconnect Switch
- > 30% Efficiency Filters
- > Tandem Scroll Compressors
- > Interlaced Coils
- > Double-skinned Panels
- > Full Front Service Access
- > Group Control
- > Electronic Expansion Valve
- > Hydrophilic Coil Coating
- > R-410a Refrigerant

Schneider Electric Design Portal



Pictured: Uniflair Product Configuration Tool

## User-configured options

- > Gravity and Motorized Dampers
- > Floorstands (12 – 24” adjustable, 36” fixed, and seismic rated)
- > Water Leak Detection (spot and tape)
- > Graphic User Interface
- > BMS Connectivity (BACnet, Modbus, TCP/IP, Metasys®, Trend®)
- > Condensate Pumps
- > Firestat/Smoke Detection
- > Plenums/Sub-bases (with or without front discharge grille)
- > Air-cooled Condensers/Fluid Coolers
- > Low Ambient Condenser Kits (to -40°F)
- > Crankcase Heaters
- > Dual Pump Packages
- > Humidity Control
  - Humidification — Steam Generating Humidifier
  - Dehumidification — Electric, Hot Gas, or Hot Water Reheat
- > Colors
  - Schneider White (Standard)
  - Uniflair Blue (Optional)
  - Data Center Gray (Optional)
  - Raven Black (Optional)

Pictured: Condenser 2 EC Fan



# → A Comprehensive Portfolio of Services

Schneider Electric Critical Power & Cooling Services (CPCS) provides the highest quality services and solutions by trained and trusted professionals. Our world-class services offer a smart way to build, operate, and maintain your critical applications, ensuring the right people, in the right place, at the right time.

## Start-Up Service

Start-Up Service by a certified Field Service Engineer (FSE) ensures full factory warranty coverage. A Schneider Electric certified installation of your solution ensures your equipment is properly and safely configured for optimal performance. This service features a standard eight-hour, five-day response time, with upgrades available for off-business hours.

## Advantage Plans

Flexible service packages offer hassle-free system maintenance to improve uptime at a predictable cost. These packages provide your system with the care it needs to operate most efficiently while minimizing downtime. The Advantage Plus, Prime, Ultra, and Max are full-service packages that include technical support, preventive maintenance, quick on-site response, and remote monitoring. Response time upgrades are available.

## Remote Monitoring Service (RMS)

RMS is an economical and easy-to-use Web-based service that lets you quickly respond to environmental or system changes. Trained technicians provide secure 24-hour monitoring of your physical infrastructure to diagnose and resolve problems before they become critical.

## Technical Specifications

Model		511	611	921	1121	1422	1622	1822	2242	2542	2842	3342
Net cooling capacity kBTU/Hr (kW) based on 75°F DB, 62.5°F WB, 50% RH												
T*AV (Air-cooled)	Total	55 (16.1)	59 (17.3)	86 (25.2)	111 (32.5)	146 (42.8)	159 (46.6)	164 (48.1)	237 (69.5)	239 (70.1)	-	317 (92.9)
	Sensible	55 (16.1)	59 (17.3)	86 (25.2)	111 (32.5)	146 (42.8)	159 (46.6)	164 (48.1)	222 (65.3)	223 (65.4)	-	256 (75.0)
T*WV (Glycol-cooled) 40% Glycol	Total	53 (15.4)	57 (16.6)	80 (23.3)	105 (30.7)	137 (40.2)	152 (44.6)	157 (46)	216 (63.3)	225 (65.9)	251 (73.6)	-
	Sensible	53 (15.4)	57 (16.6)	80 (23.3)	105 (30.7)	137 (40.2)	152 (44.6)	157 (46)	216 (63.3)	225 (65.9)	251 (73.6)	-
T*EV (Energy Saving)	Total	51 (14.9)	57 (16.7)	77 (22.6)	109 (31.9)	139 (40.7)	153 (45.3)	162 (47.5)	211 (61.8)	215 (63.0)	256 (74.9)	-
	Sensible	51 (14.9)	57 (16.7)	77 (22.6)	109 (31.9)	139 (40.7)	153 (45.3)	156 (45.7)	174 (51.0)	176 (51.6)	189 (55.4)	-
T*DV (Twin-cool Water-cooled) 0% Glycol	Total	61 (17.9)	67 (19.6)	99 (29.0)	124 (36.3)	158 (46.3)	175 (51.3)	183 (53.6)	239 (70.0)	242 (70.9)	273 (80.0)	-
	Sensible	61 (17.9)	63 (18.5)	84 (24.6)	111 (32.5)	154 (45.1)	154 (45.1)	155 (45.2)	182 (53.3)	184 (53.9)	196 (57.4)	-
T*TV (Twin-cool Air-cooled)	Total	56 (16.4)	59 (17.3)	92 (27)	115 (33.7)	145 (42.5)	162 (47.5)	168 (49.2)	228 (66.8)	232 (68.0)	265 (77.8)	-
	Sensible	56 (16.4)	59 (17.3)	85 (24.9)	115 (33.7)	145 (42.5)	155 (45.4)	155 (45.4)	179 (52.5)	180 (52.7)	192 (56.3)	-
Physical												
Weight - lb. (kg)		617 (280)	617 (280)	948 (430)	1,208 (548)	1,539 (698)	1,574 (714)	1,574 (714)	2,006 (910)	2,050 (930)	2,421 (1,098)	2,421 (1,098)
Height - in. (mm)		77.2 (1,960)	77.2 (1,960)	77.2 (1,960)	77.2 (1,960)	77.2 (1,960)	77.2 (1,960)	77.2 (1,960)	85.4 (2,170)	85.4 (2,170)	85.4 (2,170)	85.4 (2,170)
Length - in. (mm)		39.8 (1,010)	39.8 (1,010)	51.6 (1,310)	66.7 (1,720)	85.4 (2,170)	85.4 (2,170)	85.4 (2,170)	101.6 (2,580)	101.6 (2,580)	101.6 (2,580)	101.6 (2,580)
Depth - in. (mm)		29.5 (750)	29.5 (750)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)	34.1 (865)

\* All values are accurate to +/-5% † Contact local sales representative for special conditions