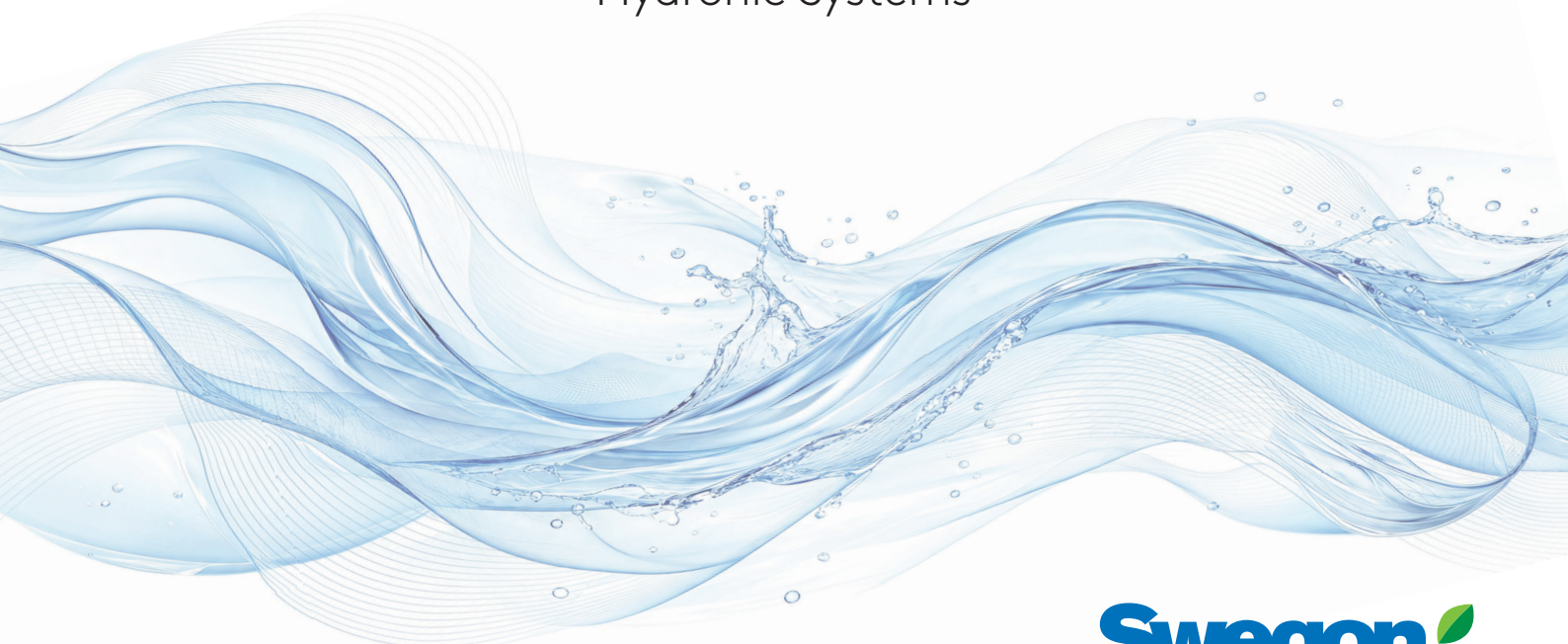


TETRIS SKY NA

AIR-TO-WATER REVERSIBLE HEAT PUMPS & CHILLERS

Engineered for North American Electrified
Hydronic Systems



Swegon 

TETRIS SKY HP NA

2-Pipe Reversible Heat Pump

TETRIS SKY NA

Cooling-Only Chiller

Factory-packaged monobloc design keeps all refrigerant outdoors, simplifying installation and removing refrigerant from the occupied building space.



Packaged monobloc units from 30–140 tons

TETRIS SKY NA

Configurations	Chiller or 2-Pipe Heat Pump
Capacities	30–140 tons
Refrigerant	R-454B (A2L, Low GWP)
Heating	Up to 140° F (60° C) Leaving Water Temperature Ambient Operation from -4° F (-20° C) and up to 118° F (48° C)
Cooling	Chilled water as low as 17° F and up to 68° F (-8° C to +20° C) Ambient Operation from -4° F (-20° C) and up to 122° F (50° C)
Power	460V/3Ph/60Hz & 600V/3Ph/60Hz
Plant Integration	SMART Link+, MULTIOLOGIC, HYZER, SWEGON INSIDE



Designed for Real-World Hydronic Plants

- Central plant electrification
- 2-pipe seasonal changeover systems
- Hybrid heat pump + boiler plants
- Cold climate heating applications

Performance & Operating Envelope



Heating: TETRIS SKY HP NA

- Heating Ambient Operation: -4° F to 118° F (-20° C to 48° C)
- Cooling Ambient Operation: -4° F to 122° F (-20° C to 50° C)
- Heating Leaving Hot Water: Up to 140° F (60° C)
- Cooling Leaving Chilled Water: As Low as 17° F and up to 68° F (-8° C to 20° C)
- Liquid injection compressors for low ambient operation and reliability

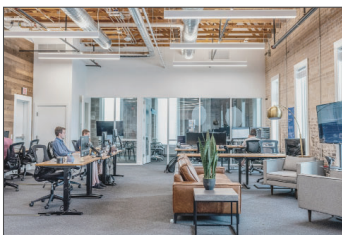
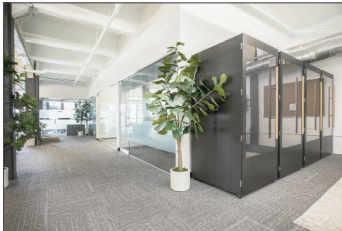
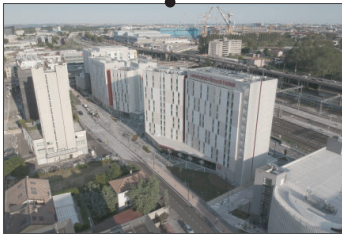
Suitable for AHUs, DOAS, fan coils, radiant systems, DHW preheat, and medium-temperature retrofits.



Cooling: TETRIS SKY HP NA & Chiller

- Cooling Ambient Operation: -4° F to 122° F (-20° C to 50° C)
- Leaving Chilled Water: As Low as 17° F and up to 68° F (-8° C to 20° C)

Engineering Advantages



Dual-Circuit Reliability

- Two independent refrigerant circuits
- Tandem scroll compressors per circuit
- Single-circuit defrost for stable water temperatures

Delivers redundancy, stability, and improved part-load efficiency.

Optimized for Cold Climates

- Liquid injection compressors
- Hydrophilic coated coils
- Oversized heated drain pans for longer operation between subsequent defrost operation
- Condensate discharge pipes
- Standard antifreeze protection on heat exchangers

Confidently applied across northern U.S. and Canadian markets.

Environmental & Code Compliance

- R-454B refrigerant (GWP 466)
- UL/CSA 60335-2-40 certified for A2L refrigerants
- Optimized low refrigerant charge
- 60 Hz, 3-Phase power

Hydronic-Centric Design

- ASME-certified brazed plate heat exchangers available. Canadian Registration Number (CRN) standard for Canadian Market
- Insulated and heat-traced
- Field-configurable piping
- Glycol compatibility up to 50% P.G or E.G.
- Optional desuperheater for DHW preheat (up to 75° C)

Simplified Installation

- Factory-packaged monobloc construction
- Single-point electrical connection
- Factory-mounted disconnect
- Twin configuration up to 280 tons
- Reduces field piping and installation cost compared to highly modular systems

Integrated Plant Controls



HYZER

Unified central plant optimization platform providing predictive staging, pump management, variable flow efficiency, and simplified commissioning.

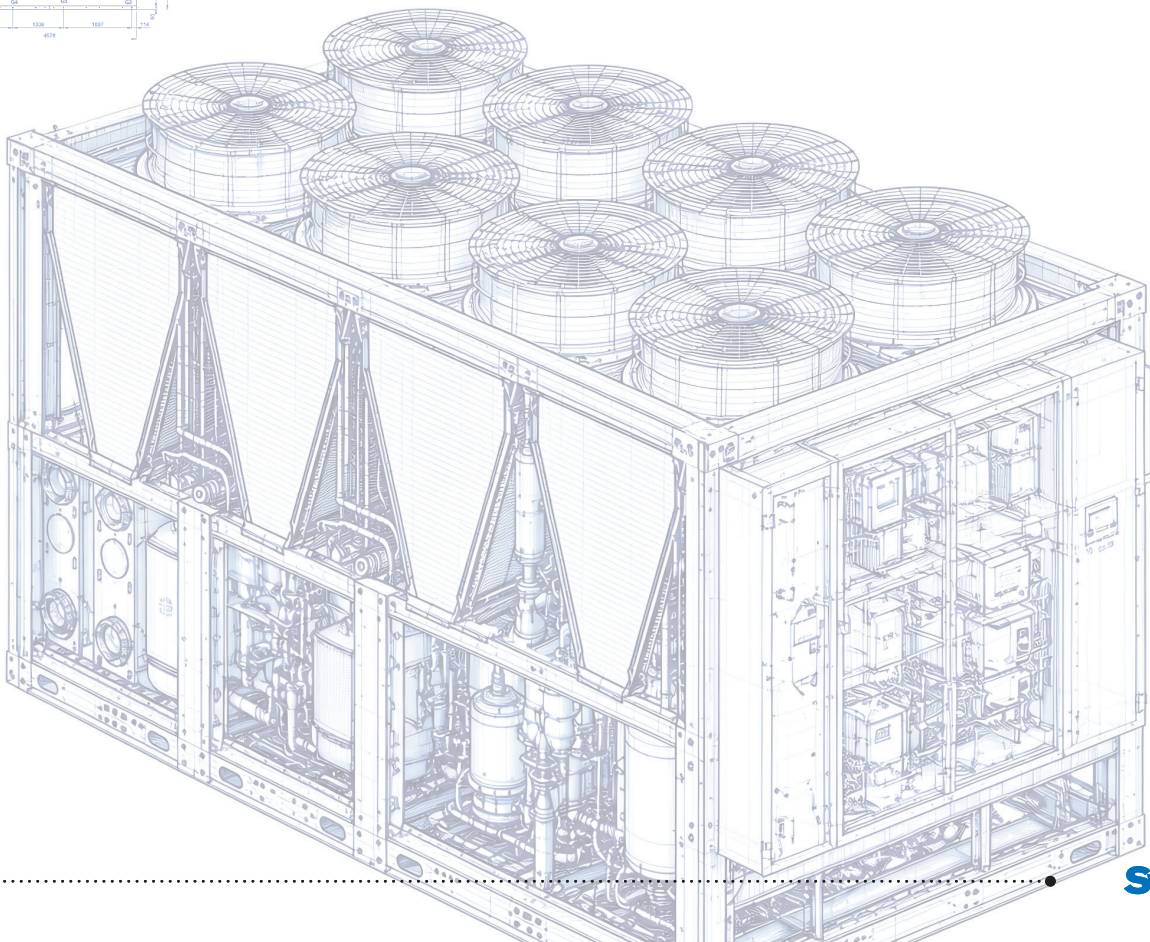
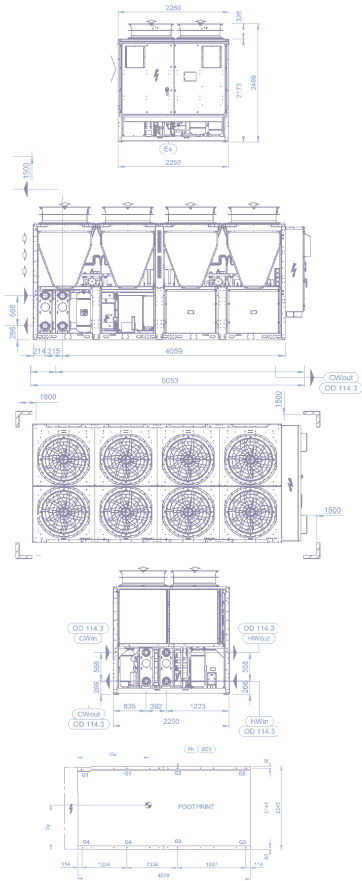


MULTILOGIC

Centralized multi-unit staging, intelligent compressor sequencing, coordinated defrost, and built-in redundancy.

SWEGON INSIDE

A cloud-based digital platform for connecting and monitoring Swegon HVAC systems enabling remote supervision, diagnostics, and performance analysis of installed equipment.



 MULTILOGIC

Core Functions

- Control solution without the need for additional controllers or panels, MULTILOGIC software runs on a designated Client unit and controls all units in the central plant and supports integration of up to 32 units
- Simplifies thermodynamic staging controls in applications with a circulator pump for each unit in the central plant, or with a control valve on each unit with central primary pumps (pumps controlled by BMS)
- Combine different types of units in a single plant: seamlessly integrate Chillers, Reversible Heat Pumps and 4-Pipe Multifunction units according to the plant design.
- Maintains plant supply temperature setpoint via measurement of global supply temperature
- Stages compressors and circuits based on real-time demand while balancing operating hours across compressors and circuits according to the unit staging control method.
- Coordinates defrost cycles across the central plant on all active circuits, preventing multiple circuits from defrosting at the same time
- Integrates auxiliary boiler control
- Provides redundancy and failover logic

Result:

Turnkey thermodynamic control solution, stable temperature control, optimized efficiency, and reliable multi-unit operation.

MULTILOGIC

Centralized Unit Staging & Plant Coordination

Modern hydronic plants often combine multiple heat pumps, chillers, or 4-pipe multifunction units. MULTILOGIC™ is the thermodynamic control layer within the HYZER system, providing centralized capacity management across the entire plant.

While HYZER manages hydraulic performance and variable flow, MULTILOGIC manages thermal capacity. Together, they maintain thermal equilibrium and stable plant operation. For plants with primary pump controls by BMS, MULTILOGIC is available as a standalone solution.

There are no additional controllers or panels required to take advantage of MULTILOGIC. The software is built into the controllers, and only requires a set of global temperature sensors for the main supply/return headers and ethernet connections between units to have multiple units run as a single entity.

Operating Logic

MULTILOGIC offers three selectable capacity distribution strategies:



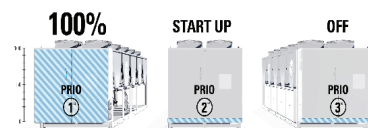
Optimized Logic

- A hybrid strategy balancing thermodynamic efficiency and pump energy impact.
- Units operate as a combination of Balanced and Saturated modes to achieve optimal overall system efficiency.



Balanced Logic

- Units operate in parallel with equal priority.
- Maximizes part-load efficiency and improves overall plant COP.



Saturated Logic

- The units are operated sequentially, once a unit is at 100% capacity, the next unit is staged on ensuring flow is only delivered to units that require it.

Defrost Coordination

MULTILOGIC coordinates defrost cycles across the entire plant to:

- Prevent simultaneous defrost events across multiple circuits in the central plant.
- Improve water temperature stability
- Reduce required buffer tank volume (~ 20–40%)
- Redistribute thermal demand during defrost to standby units/circuits

Redundancy & Failover

MULTILOGIC enhances plant reliability through:

- Automatic redistribution of capacity upon unit failure
- Compressor and circuit fault detection
- Client (master) failover protection
- Pump and communication monitoring
- Runtime equalization across compressors
- Units available with separate power feed for controller and heat tracing, to allow for the client unit's controller to continue to operate when power is disconnected for maintenance

Swegon INSIDE

A Connected HVAC Ecosystem

- Secure connection via Ethernet or INSIDE Connect router (GSM modem – no internet connection to building system required)
- Remote monitoring of unit operation and alarms
- Real-time performance data from connected equipment
- Enables remote diagnostics and predictive maintenance

Why INSIDE?

For Service Teams

- Faster diagnostics
- Remote troubleshooting
- Reduced site visits

For Customers

- Lower service costs
- Reduced downtime
- Improved reliability

For Building Owners

- Better energy performance
- Greater operational visibility



Swegon INSIDE

Connected HVAC. Smarter Service.

INSIDE transforms Swegon units into connected, data-driven systems, enabling smarter service, optimized performance, and predictive maintenance. By linking equipment to the INSIDE Cloud, the platform provides continuous visibility of system operation, helping service teams and facility managers maintain optimal performance and reliability. All managed securely through the INSIDE platform.

The INSIDE Platform

INSIDE Portal

Central hub for managing connected buildings and equipment.

- Configure buildings and units
- Manage users and access rights
- Monitor key operating parameters
- Receive alarm notifications

INSIDE Manager

Advanced diagnostic and service platform accessible from desktops or mobile devices.

- Visualize system performance
- Access full operating data
- Analyze historical trends
- Create dashboards and reports

INSIDE Connect

Secure remote access to unit controllers.

- Read and modify operating parameters
- Check alarms and system status
- Upload software updates and download logs

BlueBox Digital Services

INSIDE enables advanced digital services designed to improve system performance, simplify maintenance and reduce operational costs.

Unit Analyzer (Performance Monitoring)

The Unit Analyzer provides intuitive dashboards to evaluate system performance and efficiency.

- Energy consumption and capacity produced
- System operating modes
- Compressor and pump runtime
- Alarm history and trends

This allows faster troubleshooting and better performance optimization.

Predictive Maintenance (Detect problems)

Using machine learning algorithms and digital twin models, INSIDE continuously monitors unit performance and detects anomalies before failures occur.

- Pressures and temperatures
- Compressor performance
- Fan and inverter speed
- Water flow and heat exchanger efficiency

Early detection enables proactive service planning and reduces unexpected downtime

TETRIS SKY NA HP 460V/3ph/60Hz – Technical Data

	Unit	30.4	45.4	55.4	75.4	100.4	125.4	135.4
COOLING¹								
Refrigeration Capacity	RT	25.4	40	49.2	65.9	89.7	116	132
EER	BTU/W	9.38	10.2	9.41	9.61	9.67	9.46	9.32
IPLV	BTU/W	15.3	16.8	15.7	16.4	16.5	15	15.5
HEATING²								
Heating Capacity	MBH	340.7	534.2	661.3	889.8	1206.5	1575.4	1763.1
COP	W/W	3.27	3.27	3.26	3.24	3.26	3.26	3.28
COMPRESSORS								
Compressors/Circuits	n°/n°	4/2	4/2	4/2	4/2	4/2	4/2	4/2
FANS								
Quantity	n°	2	4	4	6	8	10	10
NOISE LEVELS								
Sound power level cooling ³	dB(A)	86	88	89	92	94	95	96
Sound pressure level cooling ⁴	dB(A)	54	56	57	60	62	62	63
DIMENSIONS & WEIGHTS								
Length	inch	109	109	109	201	201	291	291
Depth	inch	89	89	89	89	89	89	89
Height	inch	98	98	98	98	98	98	98
Operating weight	lb	5512	5732	5952	8598	9039	11905	12125

(1) External air temperature 95° F; cold user side outlet water temperature 44.6° F. Values compliant with standard AHRI 550/590.

(2) External air temperature 46.4° F DB, 42.8° F WB, condenser outlet water temperature 104° F. Values compliant with standard AHRI 550/590.

(3) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35° C and water input/output temperature from/to heat exchanger and user equal to 12/7° C. Values taken by measurements made in accordance with standard ISO 3744.

(4) Values obtained from the sound power level (conditions: note 3), related to a distance of 10 m from the unit in free field with directivity factor Q=2.

Non-binding values

TETRIS SKY NA CH 460V/3ph/60Hz – Technical Data

	Unit	30.4	45.4	55.4	75.4	100.4	125.4	135.4
COOLING¹								
Refrigeration Capacity	RT	27.4	43.5	53.6	72.4	99.1	126.1	141.3
EER	BTU/W	10.65	11.6	11.11	11.25	11.13	11.08	10.99
IPLV	BTU/W	16.89	18.39	17.2	17.98	18.02	17.61	16.92
COMPRESSORS								
Compressors/Circuits	n°/n°	4/2	4/2	4/2	4/2	4/2	4/2	4/2
FANS								
Quantity	n°	2	4	4	6	8	10	10
NOISE LEVELS								
Sound power level cooling ³	dB(A)	84	86	88	90	94	95	95
Sound pressure level cooling ⁴	dB(A)	52	54	56	58	62	62	62
DIMENSIONS & WEIGHTS								
Length	inch	110	110	110	151	199	242	242
Depth	inch	89	89	89	89	89	89	89
Height	inch	97.4	97.4	97.4	97.4	97.4	97.4	97.4
Operating weight	lb	4189	4410	4630	5402	7055	8370	8599

(1) External air temperature 95° F; cold user side outlet water temperature 44.6° F. Values compliant with standard AHRI 550/590.

(3) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35° C and water input/output temperature from/to heat exchanger and user equal to 12/7° C. Values taken by measurements made in accordance with standard ISO 3744.

(4) Values obtained from the sound power level (conditions: note 3), related to a distance of 10 m from the unit in free field with directivity factor Q=2.

Non-binding values

TETRIS SKY NA HP 575V/3ph/60Hz – Technical Data

	Unit	30.4	45.4	55.4	75.4	100.4	125.4	135.4
COOLING¹								
Refrigeration Capacity	RT	25.4	40	49.2	65.9	89.7	116	132
EER	BTU/W	9.36	10.17	9.43	9.63	9.66	9.45	9.33
IPLV	BTU/W	15.3	16.8	15.7	16.4	16.5	16	15.5
HEATING²								
Heating Capacity	MBH	340.7	534.2	661.3	889.8	1206.5	1575.4	1763.1
COP	W/W	3.27	3.26	3.26	3.24	3.26	3.27	3.28
COMPRESSORS								
Compressors/Circuits	n°/n°	4/2	4/2	4/2	4/2	4/2	4/2	4/2
FANS								
Quantity	n°	2	4	4	6	8	10	10
NOISE LEVELS								
Sound power level cooling ³	dB(A)	86	88	89	92	94	95	96
Sound pressure level cooling ⁴	dB(A)	54	56	57	60	62	62	63
DIMENSIONS & WEIGHTS								
Length	inch	109	109	109	201	201	291	291
Depth	inch	89	89	89	89	89	89	89
Height	inch	97.4	97.4	97.4	97.4	97.4	97.4	97.4
Operating weight	lb	5292	5512	5733	7210	8576	10168	10340

(1) External air temperature 95° F; cold user side outlet water temperature 44.6° F. Values compliant with standard AHRI 550/590.

(2) External air temperature 46.4° F DB, 42.8° F WB, condenser outlet water temperature 104° F. Values compliant with standard AHRI 550/590.

(3) Unit operating at rated capacity, with no accessories of any kind - external air temperature 35° C and water input/output temperature from/to heat exchanger and user equal to 12/7° C. Values taken by measurements made in accordance with standard ISO 3744.

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Non-binding values

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COMPRESSORS								
Compressors/Circuits	n°/n°	4/2	4/2	4/2	4/2	4/2	4/2	4/2
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Operating weight	lb	4189	4410	4630	5402	7055	8370	8599

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Non-binding values

Feel good **inside**

