Hyperchill Plus
Industrial Oil Chillers for Precision Cooling

Short description

Extremely compact and easy to use, Hyperchill Plus is designed for safe and reliable operation in the most varied working conditions, providing a precise and accurate control of the oil temperature. The availability of a wide range of accessories and options makes Hyperchill Plus a very flexible solution that fits the needs of industrial applications.

Each individual Hyperchill Plus unit is extensively tested to guarantee efficient operation and reliability in all working conditions.

Hyperchill Plus is suitable for cooling industrial oils or cutting liquids. It ensures stable working conditions and improves efficiency as well as productivity of the respective processes. It significantly contributes to the reduction of plant downtime and maintenance cost.

Customer Benefits

- Because of its compact design the Hyperchill Plus provides a space saving and easy to install solution.

- Condenser filters reduce dirt, thereby preventing system downtime.

- Reliable operation even in extreme ambient conditions. The standard units allow maximum ambient temperatures up to 48 °C. The tropicalized units up to 53 °C.

- The stainless steel hydraulic circuit maintains the quality of the coolant ensuring stable working conditions, improving productivity and decreasing maintenance costs.

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Product Specification
Hyperchill Plus Oil Range

The use of cooled oil is essential in machine tools, cutting machines, plastic injection moulding machines, processes with hydraulic oil circuits. Reliability and ease in adjusting the cooling system to the specific application are key factors in order to ensure uninterrupted production and to optimize the entire process, reducing its costs. Thanks to its high performances and configurability, Hyperchill Plus is the right solution for oil industrial applications.

Product Features
Complete solution, easy to install and manage

- Cooling capacity between 2 and 24kW aligned with the needs of the market.

- Hydraulic circuit composed of stainless steel components and stainless steel plate evaporator to prevent oil contamination. Without tank, oil pump optional.

- **Electronic controllers with proprietary software** provide access to all the parameters of the units and allow special management for any specific need, with remote monitoring available.

- **Completely configurable with many options** and kits to fit the needs of industrial applications.

- **Compact design** for installation in limited spaces.

- **Condenser filters** reduce dirt, thereby preventing system downtime.

- Designed with **eyebolts** (till ICEP014) **for easy handling.**

- **IP54 standard** from ICEP007.

- **Independent condensing plenum** enables routine and special maintenance to be performed without stopping the system.

- Unit structure and design guarantee **full internal access for easy maintenance.**

- ICEP020 and ICEP024 designed with **fan step control** in order to work in low ambient temperatures down to -10 °C.

- **RS485 card** available on all models (standard from ICEP007).

- High reliability and Low energy consumption

  Maximum ambient temperature up to 48 °C on standard units, Tropicalization up to 53 °C and low ambient options ensure reliable operation in extreme ambient conditions.

- **Oversized condensers and evaporators** guarantee high performing heat exchange increasing COP.

- **PID software** developed and tested to give the highest temperature consistency even at variable loads.

- **Use of compliant scroll compressors** (from ICEP007) designed specifically for high efficiency and long life in industrial applications.

- **low ambient speed-control** (optional) on fan-motor ensures constant performances at different temperatures, long lifetime of the fans and a reduction in absorbed power when ambient temperature is low.
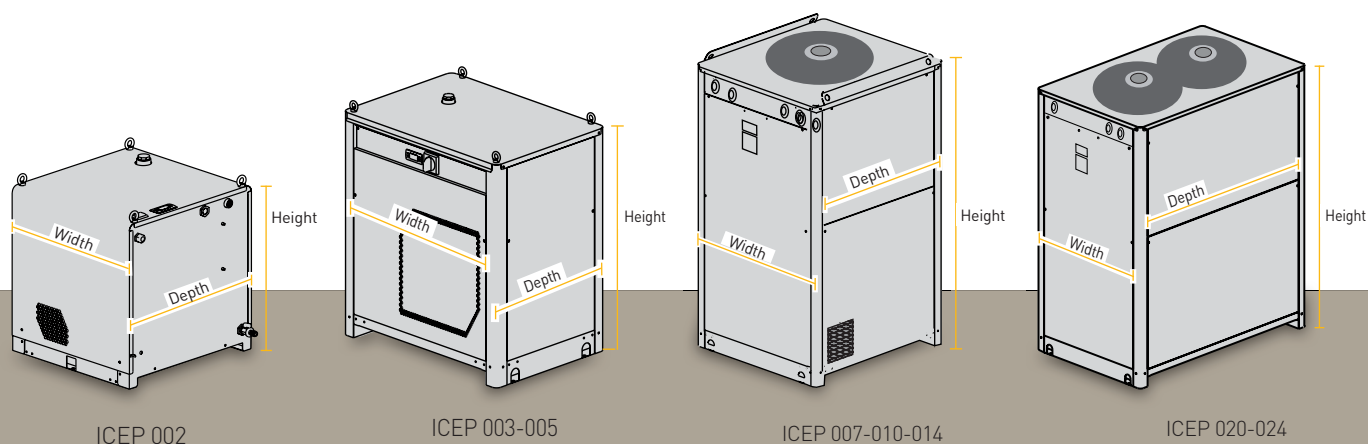
Product Specification
Hyperchill Plus Oil Range

Hyperchill Plus Oil Range

Model ICEP		002-O	003-O	005-O	007-O	010-O	014-O	020-O	024-O
Cooling capacity[1]	kW	1,6	3,5	4,4	7,3	9,8	13,9	18,2	21
Compressor abs. power[1]	kW	0,6	1,6	1,6	1,9	2,9	3,6	4,8	6,0
Power supply	V/ph/Hz	230/1/50			400/3/50				
Protection index		33			54				
Refrigerant		R407c							
Compressor									
Type		hermetic pistons			scroll				
Compressors / circuit		1 / 1							
Max. abs. power[1] compressor	kW	0,7	1,3	1,5	2,4	3,8	4,4	5,7	6,6
Axial fans									
Quantity	n.°	1	1	1	1	1	1	2	2
Max. abs. power[1] fan	kW	0,07	0,12	0,12	0,3	0,3	0,4	0,4	0,4
Air flow	m³/h	430	1295	1295	3437	3437	4337	6878	6159
Water cooled version									
Condenser water flow	m³/h	N.A.					1,5	2,1	2,5
Condenser connections	in	N.A.					3/4"	3/4"	3/4"
Dimension and weight									
Width	mm	520	755	755	756	756	756	756	756
Depth	mm	500	535	535	806	806	806	1206	1206
Height	mm	550	801	801	1405	1405	1405	1405	1405
Connections in/out	in	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"
Weight (axial)	kg	30	68	70	125	130	140	175	185
Weight (water cooled)	kg	n/a	n/a	n/a	n/a	n/a	140	175	185
Noise level									
Sound pressure (axial)[2]	dB(A)	52	52	52	53	53	50	50	50

1) at oil in/out temperature 40/30 °C, oil ISO VG 32, 32 °C ambient temperature (air-cooled models) or 30 °C condenser water
   inlet temperature with 40 °C condensing temperature (water-cooled models)
2) referred to axial fan version in free field conditions at a distance of 10 m from until, measured on condenser side, 1 m from ground

ICEP 002

ICEP 003-005

ICEP 007-010-014

ICEP 020-024

Product Specification
Hyperchill Plus Oil Range

Options

	ICEP002-O	ICEP003-O	ICEP005-O	ICEP007-O	ICEP010-O	ICEP014-O	ICEP020-O	ICEP024-O
Oil Pump (max. 10 bar)	on request							
Harting Plug	✓	✓	✓	✓	✓	✓	✓	✓
Close Control (+/-0,5 °C)		✓	✓	✓	✓	✓	✓	✓
Fan Speed Control				✓	✓	✓	✓	✓
Low Ambient -20 °C				✓	✓	✓	✓	✓
Differential Dynamic Set Point				✓	✓	✓	✓	✓
Tropicalization (53 °C, without ambient fill kit)						✓	✓	✓
Siemens Electrical Components (no control)	on request							

Versions

	ICEP002-O	ICEP003-O	ICEP005-O	ICEP007-O	ICEP010-O	ICEP014-O	ICEP020-O	ICEP024-O
Water Cooled (plate condenser)						✓	✓	✓

Assessories

Remote control kits: base version for remote ON/OFF and general alarm monitoring.
Advanced version for complete remote unit monitoring.
Wheels (ICEP002 - ICEP014): for ease of transport.
Oil filters: for circuit cleanliness and machinery protection.
Control panel cover: from ICEP007, can be supplied already installed.

BULICEPO-00-EN

EMEA Product Information Centre
Free phone: 00 800 27 27 5374
(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

US Product Information Centre
Toll-free number: 1-800-27 27 537

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