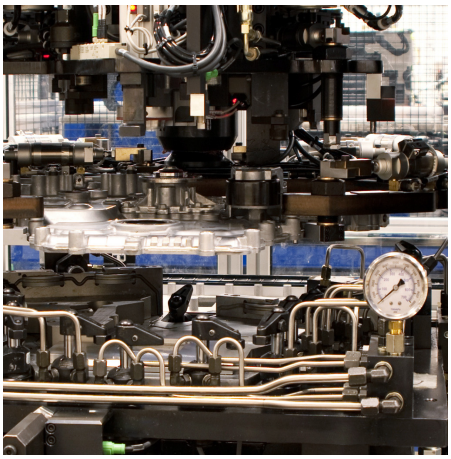
Hyperchill Plus 60 Hz Version

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 118 °F. The tropicalized units up to 127 °F.**
- **The stainless steel hydraulic circuit maintains the quality of the coolant ensuring stable working conditions, improving productivity and decreasing maintenance costs.**

Parker Hiross

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Product Specification

Hyperchill Plus Oil Range - 60 Hz Version

The use of cooled oil is essential in machine tools, cutting machines, plastic injection molding 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 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 14 °F.
- **RS485 card** available on all models (standard from ICEP007).
- **UL approval** available for models from ICEP003 to ICEP024.

High reliability and Low energy consumption

- **Maximum ambient temperature up to 118 °F** on standard units, Tropicalization up to 127 °F 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.

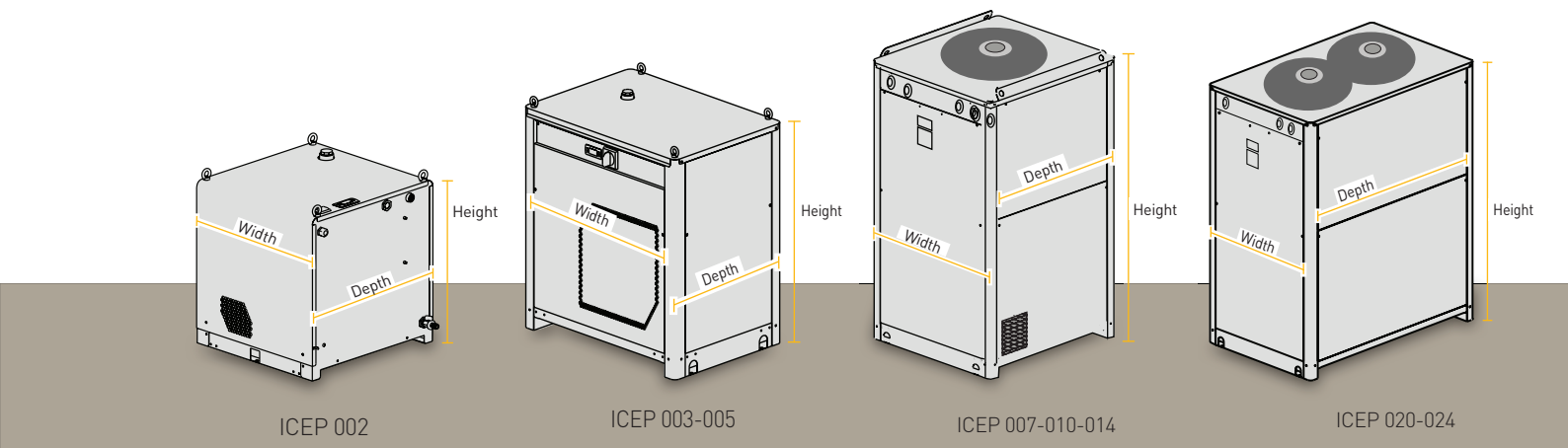
Product Specification

Hyperchill Plus Oil Range - 60 Hz Version

Hyperchill Plus Oil Range 60 Hz

Model ICEP		002	003	005	007	010	014	020	024
Cooling capacity[1]	BTU/h	5118	11601	13990	21838	33780	47770	62783	72679
Compressor abs.power[1]	BTU/h	2047	4436	4777	5801	9213	10578	13649	17402
Power Supply	V/ph/Hz	230/1/60			460/3/60				
Protection index		IP33			IP54				
Refrigerant		R407c							
Compressor									
Type		hermetic pistons			scroll				
Compressors / circuit		1 / 1							
Max.abs.power 1 compressor	kW	0,8	1,4	1,6	2,5	3,9	4,5	5,8	6,7
Axial fans									
Quantity	n.°	1	1	1	1	1	1	2	2
Max.abs.power 1 fan	kW	0,1	0,2	0,2	0,3	0,3	0,7	0,7	0,7
Air flow	scfm	278	838	838	2225	2225	2808	4453	3988
Water cooled version									
Condenser water flow	gpm	N.A.					6,6	9,2	11
Condenser connections	in	N.A.					3/4"	3/4"	3/4"
Dimension and weight									
Width	in	20,5	29,7	29,7	29,8	29,8	29,8	29,8	29,8
Depth	in	19,7	21,1	21,1	31,7	31,7	31,7	47,5	47,5
Height	in	21,7	31,5	31,5	55,3	55,3	55,3	55,3	55,3
Connections in/out	in	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"
Weight (axial)[2]	lb	66	150	155	276	287	309	386	408
Weight (water cooled)[2]	lb	n/a	n/a	n/a	n/a	n/a	309	386	408
Noise level									
Sound pressure (axial)[3]	dB(A)	52	52	52	53	53	50	50	50

1) At oil in/out temperature 104/86 °F, oil ISO VG 32, 90 °F ambient temperature (air-cooled models)
2) Weights are inclusive of pallet and refrigerant charge
3) Referred to axial fan version in free field conditions at a distance of 10 m from unit, measured on condenser side, 1 m from ground



ICEP 002 ICEP 003-005 ICEP 007-010-014 ICEP 020-024

Product Specification

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Correction factors

A) ambient temperature (air cooled models)	°F	41	50	59	68	77	90	95	104
correction factor (f1)		1,18	1,18	1,12	1,07	1,04	1,00	0,97	0,93
B) oil outlet temperature	°F	68		77		86		95	
correction factor (f2)		0,76		0,85		1		1,1	
C) oil type	type	ISO VG 10		ISO VG 22		ISO VG 32	ISO VG 46		ISO VG 68
correction factor (f3)		1,15		1,1		1	0,9		0,82

To obtain the required cooling capacity, multiply the value at nominal conditions by the above correction factors (i.e. cooling capacity = Px f1 x f2 x f3, where P is the cooling capacity at the oil type ISO VG 32, oil outlet temperature of 86 °F, ambient conditions of 90 °F). The above correction factors are approximate: for a precise selection, always refer to the software selection program.

Options

	ICEP002-O	ICEP003-O	ICEP005-O	ICEP007-O	ICEP010-O	ICEP014-O	ICEP020-O	ICEP024-O
Oil Pump (max. 145 psi)	on request							
Harting Plug	✓	✓	✓	✓	✓	✓	✓	✓
Close Control (+/-1 °F)		✓	✓	✓	✓	✓	✓	✓
Fan Speed Control				✓	✓	✓	✓	✓
Low Ambient -4 °F				✓	✓	✓	✓	✓
Differential Dynamic Set Point				✓	✓	✓	✓	✓
Tropicalization (127°F, without ambient fill kit)						✓	✓	✓
Siemens Electrical Components (with standard Parker controller)	on request							

Accessories

	ICEP002-O	ICEP003-O	ICEP005-O	ICEP007-O	ICEP010-O	ICEP014-O	ICEP020-O	ICEP024-O
Wheels	✓	✓	✓	✓	✓	✓		
Remote Control (base)	✓	✓	✓	✓	✓	✓	✓	✓
Remote Control (advanced)				✓	✓	✓	✓	✓
Control Panel Cover				✓	✓	✓	✓	✓
Oil filter	on request							

Versions

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

BULICEPO60Hz-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
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