

PLM

POLYMORPH HYDRONIC MODULES  
FOR WATER/WATER CHILLERS

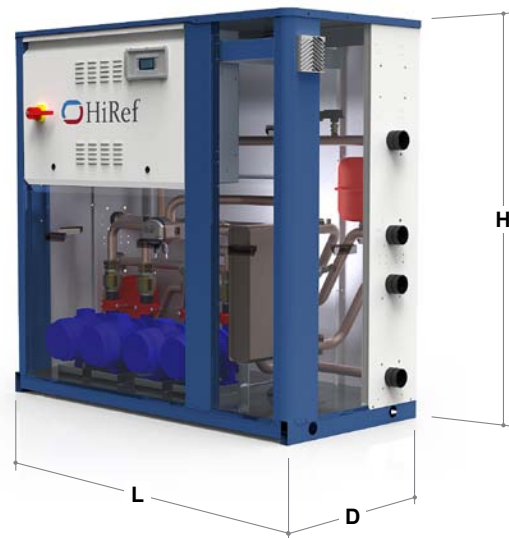
PLM - POLYMORPH H

PLM - POLYMORPH R

PLM - POLYMORPH M

PLM - POLYMORPH P

PLM - POLYMORPH F



PLM		FRAME 1	FRAME 2	FRAME 3	FRAME 4
Dimensions	L=mm	1174	1644	2374	3130
	H=mm	1590	1590	1850	1850
	D=mm	772	772	877	877
Footprint	m²	0.91	1.27	2.08	2.75

Available also for 60 Hz power supply

ITALIAN  
COOLING  
SOLUTIONS

HiRef

POLYMORPH HYDRONIC MODULES  
FOR WATER/WATER CHILLERS

PLM



HiRef

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HF65000222

10 - 200 m³/h





## POLYMORPH HYDRONIC MODULES FOR WATER/WATER CHILLERS

The **POLYMORPH**® modules made by HiRef represent the solution for “converting” a water/water cooling-only chiller into a more advanced system. The water management system is the “masterpiece” of the thermal plant. Thanks to a hydronic circuit specifically designed for the application, and to a built-in software for managing the different operating modes, any water/water chiller (including of a different brand) can become, respectively:

- a reversible heat pump
- a chiller with total recovery
- a multifunction heat pump for 2-pipe systems
- a multifunction heat pump for 4-pipe systems
- an air conditioning system with Free-Cooling



- » The PLM module, unlike traditional pumping modules, is the “master” in the management of the system of one or more chillers in parallel.
- » Built-in software for managing the different modes and interfaces with the chiller.
- » Compatible with any other chiller, even if already installed on the system.
- » VicTaulic-type quick water connections.
- » Suited to all chiller sizes.
- » Also available in the silenced Low-Noise version, with internal compartment lined with soundproof material.
- » High efficiency water pump as standard feature.

PLM - H  
POLYMORPH

### REVERSIBLE HEAT PUMP

With a **POLYMORPH**® **PLM-H** module a cooling-only water/water chillers becomes a reversible heat pump for chilled water or hot water production.

PLM - R  
POLYMORPH

### TOTAL RECOVERY CHILLER

The **POLYMORPH**® **PLM-R** module, combined to a water/water chiller, recovers 100% of the condensation heat, thus avoiding any waste of energy and re-using it for different purposes.

PLM - M  
POLYMORPH

### 2-PIPE MULTI-PURPOSE HEAT PUMP

The **POLYMORPH**® **PLM-M** module is able to turn a cooling-only water/water chiller into a multi-purpose heat pump (with total recovery of the condensation heat), suited for the implementation of a “two pipe” system.

Different running modes are:

- production of chilled water only
- production of hot water only set-point no. 1 (e.g. for heating system)
- production of hot water only set-point no. 2 (e.g. DHW)
- production of chilled water and hot water set-point #2 at the same time

PLM - P  
POLYMORPH

### 4-PIPE MULTI-PURPOSE HEAT PUMP

The **POLYMORPH**® **PLM-P** module is suited for all systems known as “four pipes” where it is necessary to produce hot and chilled water at the same time.

The water/water chiller combined with the PLM-P allows these functions to be carried out:

- production of chilled water only
- production of hot water only
- production of chilled water and hot water at the same time

PLM - F  
POLYMORPH

### FREE-COOLING SYSTEM

A chiller condensed with water from a Dry-Cooler can be combined with a **POLYMORPH**® **PLM-F** module in order to convert the system into a Free-Cooling system. If the outdoor air is cold enough, it can be used for cooling capacity production, thus ensuring considerable energy savings.

Below the TFT (Total Free-Cooling Temperature), the compressors are turned off and the cooling demand is fully covered with the only consumption of auxiliaries (fans and pumps).

*The water/glycole decoupling exchanger is available as an optional device assembled onboard the module. Already included in the PLM-F.*