

# **Liebert**®

HPM Plus from 32 to 102 kW

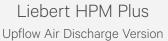
The Direct Expansion Unit Maximizing Cooling Capacity



## **Direct Expansion Floor Mount Units Maximum Cooling Capacity and Minimized TCO**

Liebert® HPM Plus direct expansion cooling unit is equipped with the most advanced industry technology, guaranteeing precise cooling of data centers and server rooms. The units come complete with R410A refrigerant and include new generation EC Fans. The cost-effective unit design has been optimized with enhanced heat exchangers, delivering high levels of overall cooling capacity.







Liebert HPM Plus

Downflow Up Air Discharge Version

**DIRECT EXPANSION TECHNOLOGY** 

#### **Liebert® HPM Plus Features**



# Precise Temperature Control

Close monitoring and control of room temperature extend server lifetime.



#### **EC Fans**

The new generation of EC Fans are the core element of the direct expansion units, significantly minimizing noise levels and increasing the unit's efficiency.



#### **Heat Load Monitoring**

Continuous heat monitoring minimizes energy consumption.



#### Vertiv<sup>™</sup> ICOM<sup>™</sup> Control: When Smart Means Efficient

Smart mode is a control algorithm developed for containment applications, meeting cooling and airflow needs of the servers while ensuring that only necessary Watts are invested in targeted cooling.



#### **European ErP Directive**

Liebert HPM Plus units comply with the latest European ErP Directive requirements, respecting environmental commitments while reducing operating costs.



#### **Highest Availability**

First-class availability achieved through the development of market leading technologies.







## **Liebert® HPM Plus - Scroll**

SINGLE CIRCUIT							
Model		MS03C	MS04A	MS04E	MS05A		
Total Gross Cooling Capacity	kW	32.7	39.9	43.8	50.0		
SHR		0.83	0.92	0.90	0.91		
EER		3.55	3.83	3.72	3.76		
Airflow	m³/h	6819	9728	10350	12100		
Maximum ESP (@ Nominal Airflow)	Pa	22	81	92	144		
Dimensions (W x D)	mm	844 x 890	1200 x 890	1200 x 890	1750 x 890		
Height (H)	mm	1970	1970	1970	1970		
Weight	kg	340	452	456	637		
Number of Capacity Steps		1	1	1	1		
Aiflow Delivery  Down Flow UP - Fans Over the Raised Floor							
4 Up Flow				_			
→ Frontal			<u>-</u> -	>			
Cooling Version:  Air Cooled							



DOUBLE CIRCUITS								
Model		MD04D	MD05D	MD06B	MD07D	LD08B	LD09D	LD10D
Total Gross Cooling Capacity	kW	41.8	49.8	58.2	72.8	83.5	91.0	101.9
SHR		1.00	0.92	1.00	0.88	0.93	0.89	0.84
EER		3.68	3.91	3.32	3.58	3.90	3.87	3.73
Airflow	m³/h	12500	12544	17100	16460	21822	21822	21822
Maximum ESP (@ Nominal Airflow)	Pa	86	80	91	83	81	81	81
Dimensions (W x D)	mm	1750 x 890	1750 x 890	1750 x 890	1750 x 890	2550 x 890	2550 x 890	2550 x 890
Height (H)	mm	1970	1970	1970	1970	1970	2570	1970
Weight	kg	638	642	680	680	931	929	931
Number of Capacity Steps		2	2	2	2	2	2	2
Aiflow Delivery				9			<b>V</b>	
Down Flow UP - Fans Over the Raise	d Floor		4				4	
<ul><li>✓ Up Flow</li><li>Frontal</li></ul>			-0				т.	
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Cooling Version:  Air Cooled			<u> </u>				<b></b>	

Performances at 24°C 50% - 45°C condensing temperature Nominal ESP 20 Pa

## **Model Configurations**

# **AIR DISCHARGE VERSION**



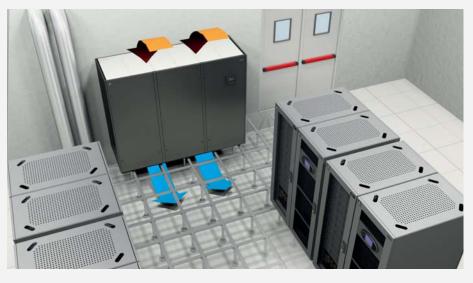
### **Upflow**

Return air enters the unit from the bottom front, while supply air is discharged from the top.



#### **Downflow Frontal**

Return air enters the unit from the top, while supply air is discharged from the bottom front.



### **Downflow Up**

Return air enters the unit from the top, while supply air is discharged from below, exiting beneath the floor.



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