

Liebert HIROSS



HISP

HIGH PERFORMANCE AIR CONDITIONING



Hisp air conditioners are the split solution for technological rooms and telecommunication sites: they are composed of an internal evaporating unit (SE, Split Evaporator) and an external condensing section (SC, Split Condenser).

Energy Saving And Cost Effective Cooling

The most modern design and components such as scroll compressor, plug-type fans and the freecooling mode assure high energy saving and greatly reduce running and lifetime cost.

High Reliability

Hisp can be powered by either 48VDC or 230/1/50 in case of mains failure, ventilating and maximising freecooling to keep the indoor temperature below the shut-down limit and guarantee continued operation of the telecommunication equipment.

High Connectivity

The standard on board control allows teamwork with other units and connectivity to innovative Liebert-HIROSS supervision system or to third-party monitoring. Connections can make use of existing Ethernet LAN and new interactive solutions via Web are available.

Full Installation Accessories Range

The unit can be supplied complete with all main accessories for installation such as plate and flexible or rigid ducts for freecooling connections, overpressure gravity damper, external rain proof grill for freecooling intake or to protect the overpressure damper.

High Flexibility

The air conditioners may be installed either on a ceiling or on a wall, allowing maximum flexibility of use in the available space. The remote display allows flexibility in positioning the control interface.



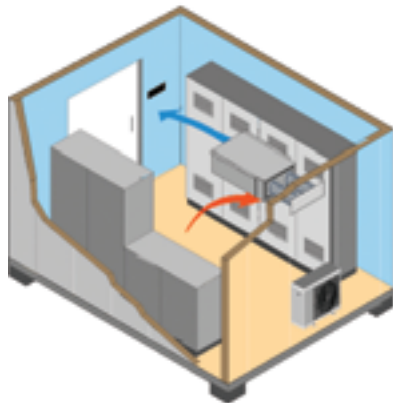
General Features

Model Hisp SE+SC	05	06	08	10	13	14	
Evaporating side installation	Horizontal or vertical						
Main power supply	230V/1Ph/50HZ		400V/3Ph+N+PE/50HZ				
Emergency power supply (opt.)	48V DC or 230V/1Ph/50HZ						
Performances							
Total cooling capacity ⁽¹⁾	kW	4,8	5,8	8,5	10,9	13,7	15,2
Sensible cooling capacity ⁽¹⁾	kW	4,6	5,3	8,5	10,2	13,3	13,8
Compressor AC power input ⁽¹⁾	kW	1,21	1,62	1,77	2,63	3,48	4,52
Condenser fan AC power input ⁽¹⁾	kW	0,18	0,18	0,26	0,26	0,26	0,77
Evaporator fan AC power input ⁽¹⁾	kW	0,26	0,26	0,7	0,7	1,12	1,12
Evaporator fan DC power input ⁽¹⁾	kW	0,14	0,14	0,34	0,34	0,6	0,6
Evaporator airflow	m³/h	1.510	1.510	2.670	2.270	3.950	3.950
Condenser max.airflow	m³/h	2.390	2.390	3.800	3.800	3.800	5.320
Freecooling max.airflow	m³/h	1.400	1.400	2.230	2.230	3.600	3.600
Outdoor sound pressure level ⁽²⁾	dB(A)	47	48	52	54	56	58
Indoor sound pressure level ⁽²⁾	dB(A)	55	55	60	60	62	62
Max.ambient temperature ⁽³⁾	°C	48	45	48	48	45	46
Refrigeration Circuit							
Compressor type/quantity	-	scroll/1					
Refrigerant	-	R407C					
Expansion device	-	thermostatic valve					
Evaporator Fan							
Quantity/type/poles AC version	-	2/centrifugal/4					
Quantity/type/poles DC version	-	2/plug/-					
Driven/motor protection	-	direct/IP44					
Condenser Fan							
Quantity/type/poles	-	1/axial/6				1/axial/4	
Driven/motor protection	-	direct/IP54					
Control system	-	variable speed					
Filter type/efficiency (CEN-EU)	-	pleated/G3					
Electric heating (opt.)	kW	3,0		6,0			
Cabinet							
Frame	-	galvanized steel					
Painting	-	polyester - RAL7035					
Insulation type/thickness	-/mm	polyurethane class A1/10					
Evaporator (SE) Width	mm	800		1.100			
Evaporator (SE) Depth/with freecooling	mm	800/1.050		1.095/1.395			
Evaporator (SE) Height	mm	310		395			
Evaporator (SE) Weight/with freecooling	kg	54/62		110/122		120/132	
Condenser (SC) Width	mm	800		1.050			
Condenser (SC) Depth	mm	285		500			
Condenser (SC) Height	mm	537		690			
Condenser (SC) Weight	kg	49	51	112	115	124	125

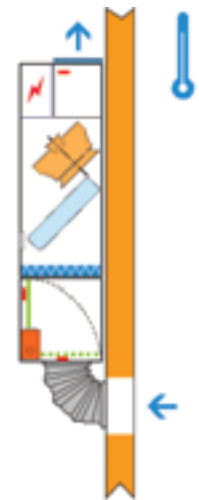
(1) Reference conditions are 27°C, &47% R.H indoor, 35°C outdoor; nominal power supply.

(2) Measured with outdoor temperature 35°C, 2 meters from the unit, free field conditions.

(3) Maximum outdoor temperature referred to indoor air temperature =24°C.



Example of horizontal installation direct expansion mode



Example of vertical installation freecooling mode

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