7. Indoor Unit Selection

Units to be connected to the DX-Interface series 2 must satisfy the following requirements.

	Allowed Heat exchanger Capacity (kW) (1)				Heat Exchanger Inner Volume (dm^3) (2)			Recommended Heat Exchanger Air flow (m^3/min)	
DX-Code	Mode	Min	Nom	Max	Min	Max	Max(2) (Only Utopia RAS-XH(V)NP(1)E)	Min	Max
EXV-2.0E2	Cooling	4.0	5.0	5.6	0.57	1.16	1.64	8.0	21.0
	Heating	4.5	5.6	7.1					
EXV-2.5E2	Cooling	4.8	6.0	6.3	0.89	1.35	1.83	11.5	26.0
	Heating	5.6	7.0	7.1					
EXV-3.0E2	Cooling	5.7	7.1	8.0	1.03	1.57	2.89	12.5	30.0
	Heating	6.4	8.0	9.0					
EXV-4.0E2	Cooling	8.0	10.0	11.2	1.51	2.37	4.56	20.0	36.0
	Heating	9.0	11.2	12.5					
EXV-5.0E2	Cooling	10.0	12.5	14.0	1.92	2.37	4.56	23.0	41.5
	Heating	11.2	14.0	16.0					
EXV-6.0E2	Cooling	11.2	14.0	16.0	1.92	2.92	5.11	25.0	42.5
	Heating	12.8	16.0	18.0					
EXV-8.0E2	Cooling	16.0	20.0	22.4	2.92	3.89	6.93	59.0	78.0
	Heating	17.9	22.4	25.0					
EXV-10.0E2	Cooling	20.0	25.0	28.0	3.89	4.76	10.73	68.0	89.0
	Heating	22.4	28.0	31.5					

(1) Cooling and heating capacity data are based on the following indoor and outdoor temperature conditions, according to the EN14511 standard.

Operation conditions		Cooling	Heating
Indoor air inlet temperature	DB	27.0 ºC	20.0 ºC
	WB	19.0 ºC	-
Outdoor air inlet temperature	DB	35.0 ºC	7.0 ºC
	WB	-	6.0 ºC

DB: dry bulb, WB: wet bulb
Pipe length: 7.5 m, pipe height: 0 m.

(2) Check the limits of piping length vs HEX volume in chapter 12

NOTE

1 *Check that the unit or device connected to the DX heat exchanger allows the desired operation mode, and use it exclusively in the proper mode.*

2 *Please refer to the Installation Manual and the Technical Catalogue of the connected units and devices, to make sure that installation conditions are within the allowed ranges.*

7.1 Cycle design evaporating and condensing temperatures

Please make sure that the Heat Exchanger element to be connected to the DX-Interface series 2 satisfies the following installation and design requirements. Failure to satisfy any of the items below may cause unappropriated system response, malfunction of any of the system components, and/or damage to the components.

- The design pressure of the system is 4.15 MPa. The compression strength of the pipes must exceed 12.45 MPa (3 times the design pressure)

- The inner volume of the heat exchanger piping must be within the limits specified in the technical documentation of each DX-Interface series 2. Please make sure the design of the heat exchanger as well as the refrigerant charge follow such limitations.

- The capacity of the heat exchanger must meet the specified nominal capacity of each DX-Interface series 2 under the following temperature conditions. Failure to ensure heat exchanger capacity may lead to system malfunction.

Design temperatures	Heating	Design temperatures	Cooling
Air temperature:	DX-interface HEX (T_{in}): 20ºC(DB) Outdoor: 7ºC(DB)/6ºC(WB)	Design air temperature:	DX-Interface HEX (T_{in}): 27ºC(DB)/19ºC(WB) Outdoor: 35ºC(DB)
Condensing Temperature:	40ºC ~ 45ºC	Evaporation Temperature:	6ºC
Subcooling Temperature:	3ºC	Superheating Temperature:	5ºC