

## EXD-HP1/2 Stand-alone Superheat/Economizer Controller

EXD-HP1/2 are stand-alone universal superheat and or economizer controllers for heat pumps, heating units, air conditioning and precision cooling such as telecom and shelter applications.

### Features EXD-HP1/2

- Self adapting superheat/economizer control in conjunction with EMERSON stepper motor driven electronic expansion Valves EXM/EXL
- Discharge hot gas temperature control by liquid/vapor injection to compressor
- EXD-HP1: Controller with one EXV output
- EXD-HP2: Controller with two independent EXV outputs
- Controllers as slave with Modbus (RTU) communication capability. All data (read/write) accessible by any third party controller having modbus communication (RTU)
- Upload/download key (accessory) for transmission of parameter settings among controllers with the same setting
- Low pressure switch and freeze protection function
- Manual positioning of valve(s)
- Limitation of evaporating pressure (MOP)
- Low/high superheat alarm
- Monitoring of sensors and sensor wiring / detection of sensor and wiring failures
- Integrated display (3-digit LEDs) and keyboard
- Electrical connection via plug-in type screw terminals (included with controller)
- DIN rail mounting housing

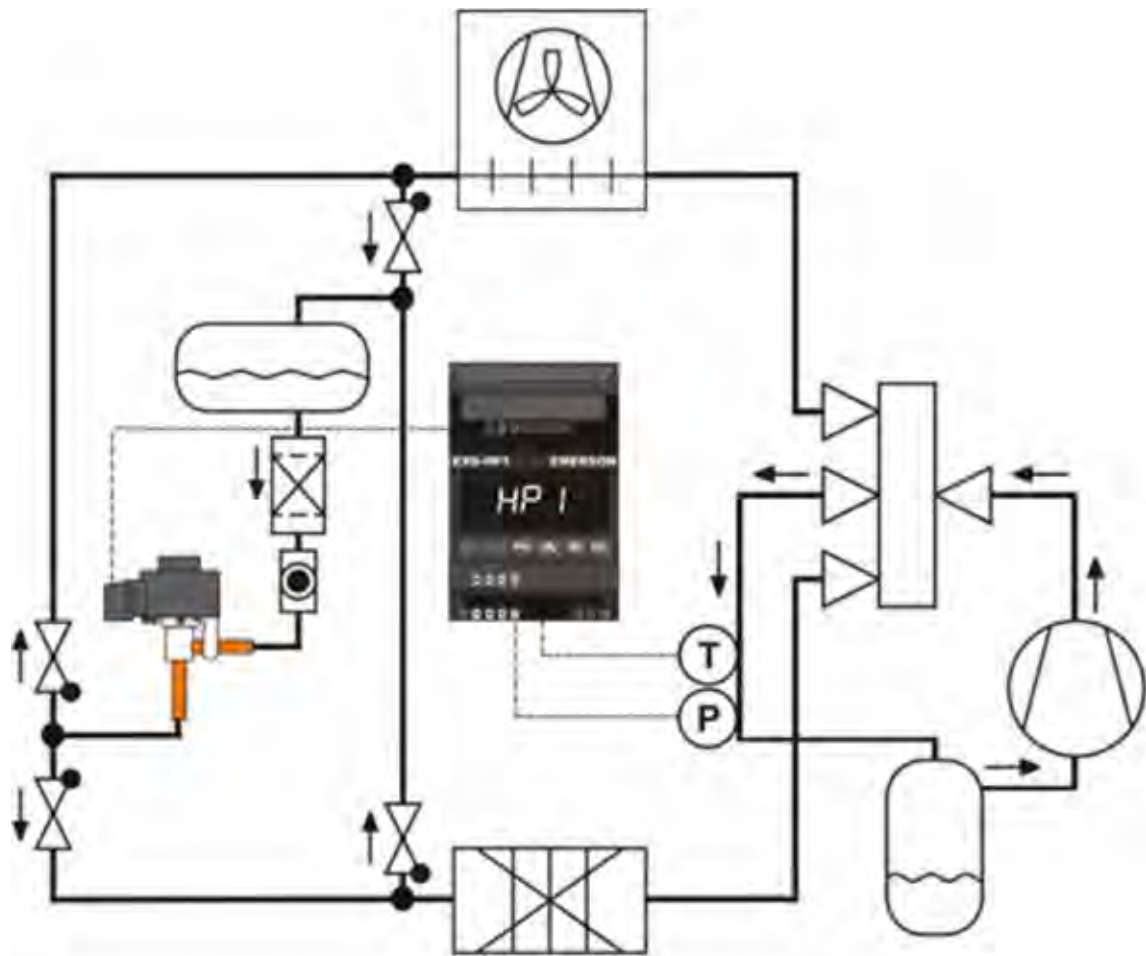


EXD-HP2

### Selection Table

Type	Description	Part No.	
		Multipack (20 pieces)	Single pack
<b>Controllers</b>			
EXD-HP1	with 1 EXV output	807836M	807836 - HP1
EXD-HP2	with 2 EXV outputs	807837M	807837 - HP2
<b>Valves / Coils</b>			
EXM-B0A	Electronic expansion valve	800399M	-
EXM-B0B		800400M	-
EXM-B0D		800401M	-
EXM-B0E		800402M	-
EXM-125	Coil 12 VDC	800403M	-
EXL-B1F	Electronic expansion valve	800405M	-
EXL-B1G		800406M	-
EXL-125	Coil 12 VDC	800407M	-
<b>Temperature sensor</b>			
ECP-P30	Temperature sensor with 3 m cable	-	804495
<b>Pressure sensors Suction pressure (Refrigerant)</b>			
PT5-07M/PT5-07T	-0.8...7 bar (R22, R134a, R407C)	802350M / 802370M	802350 / 802370
PT5-18M/PT5-18T	0 ... 18 bar (R410A, R32 /suction pressure)	802351M / 802371M	802351 / 802371
PT5-30M/PT5-30T	0 ...30 bar (R410A, R32 / Intermediate pressure)	802352M / 802382M	802352 / 802382
<b>Plug and cable assembly for pressure sensors</b>			
PT4-M15	1.5 m cable length	804803M	804803
PT4-0	3.0 m cable length	804804M	804804
ECT-323	Transformer 25VA	-	804424

## Application as Air to Water Heat Pumps: Heating and Cooling



### Technical Data

<b>Supply voltage</b>	24 VAC/DC $\pm 10\%$
<b>Power consumption</b>	EXD-HP1: Max. 15 VA EXD-HP2: Max. 20 VA
<b>Digital inputs</b>	EXD-HP1: Two, each potential free EXD-HP2: Three each potential free
<b>Relay output</b>	SPDT contacts, AgSnO Inductive (AC15) 24 VAC : 1 A Resistive: 24 VAC/DC: 4 A
<b>Plug-in connector size</b>	Removable screw version wire size 0.14...1.5 mm <sup>2</sup>
<b>Protection Class</b>	IP 20
<b>Mounting</b>	DIN Rail Mounted
<b>Marking</b>	CE

### Input Sensors, Output Valves

Description	Specification
Temperature Input	ECP-P30 (3 meter cable length) Range: -30°C...+150°C
Pressure Sensor Input	PT5 Signal: 4 ... 20 mA