SEC611 SERIES

ELECTRONIC EXPANSION VALVE CONTROLLER

Electronic Expansion Valve Controller SEC611 series is the controller with enhanced features for the refrigeration applications, A/C and HP applications.

FEATURES

- ADVANCED PID ALGORITHM TO ENSURE ACCURATE AUTOMATIC ADJUSTMENT OF SUPERHEAT;

- QUICK-SAFE PREVENTION OF LOW AND HIGH SUPERHEAT TO ENSURE THE SYSTEM OPERATING WELL AT ANY CONDITIONS;

- SMALL SIZE, RAIL MOUNTING DESIGN, EASY TO INSTALL;

- ENERGY EFFICIENT, ACHIEVING THE MOST EFFICIENT USE OF THE EVAPORATOR.

GENERAL SPECIFICATIONS

- Applicable for various refrigerants
- Operating temperature: -25~60ºC
- Storage temperature: -30~60ºC
- Relative humidity: ≤95%RH
- Certification: UL, CE Declaration according to EMC
- Installation method: DIN railsnap-in or wall mounting with screws
- Compatible with Sanhua DPF and LPF valves

ELECTRICAL PARAMETERS

- Power supply: 24Vac/24Vdc (+10%/-15%, 50/60Hz)
- Requested transformer: ≥ 15VA
- Inputs: 1 Pressure sensor input
  1 Temperature sensor input
  1 Communicationinput (RS485 Modbus)
- Output: 1 Auxiliary relay output (30Vdc/5A)
  1 EEV output (12V DC±10%), rectangular wave

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info@sanhuaeurope.com

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MODEL DESIGNATION LEGEND

	NO.			Model Designation Legend
1	**2**	**3**	**4**	
SEC	6	11	R4	SANHUA electronic Expansion valve Controller
SEC	**6**	11	R4	Digital means the sixth-generation product
SEC	6	**11**	R4	Odd means voltageP-sensor, even means current type
SEC	6	11	**R4**	R4 means with RS485 modbus communication

ORDERING METHOD

All the models are compatible with the main refrigerants on the market :

R22, R404A, R410A, R134a, R407C, R507, R1234ze, R1234yf, R290, R450A, R513A, R448A, R449A, R452A, R744(CO2), R744(N20), R32, R245fa, R23, R407A, R407F, R124, R717, R407H, R454C, R455A.

All the models get a RS485 port for communication.

NO.	Item	Model	Part Number	Details		
				Item		Qty.
1	Controller Package[1]	SEC611-R4 SEC613-R4	10680001002 10680001202	**Voltage** pressure sensor	**°C/Bar**	1
					°F/Psi	1
		SEC612-R4 SEC614-R4	10680001102 10680001302	**Current** pressure sensor	**°C/Bar**	1
					°F/Psi	1
2	Temp. Sensor[2]	NTC2A1	10665000102	2m Temp. Sensor		
3		NTC5A1	10665000202	5m Temp. Sensor		
4		NTC9A1	10665000402	9m Temp. Sensor		
6	Pressure Sensor[3]	YCQB02H01-1	10185001502	**Ratio** with **Solder** connection, **2m** cable length		
7		YCQB02L12-1	10185015502	**Ratio** with **Thread** connection, **2m** cable length		
8		YCQB02H18-1	10185015402	**Ratio** with **Solder** connection, **4.9m** cable length		
9		YCQB02L28-1	10185015602	**Ratio** with **Thread** connection, **4.9m** cable length		
10		YCQC02L18	10185017102	**Current** with **Thread** connection, **Packard** connection		
11	Packard cable	YCQB02-013054	20185016702	For YCQC02L18with **6m** cable length		
12		YCQB02-013055	20185016802	For YCQC02L18with **9m** cable length		

Note: The temperature & pressure sensors should be ordered separately.

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TEMPERATURE SENSOR

Item	Description	
Temperature Sensor	Type	NTC 5KΩ
	Wire	2C×0.5mm²
	Protection class	IP 67
	Accuracy	±0.3ºC (below25ºC)
	Temperature Range	-50 ~50ºC
	Electrical connector	JST-XHP connector

PRESSURE SENSORS

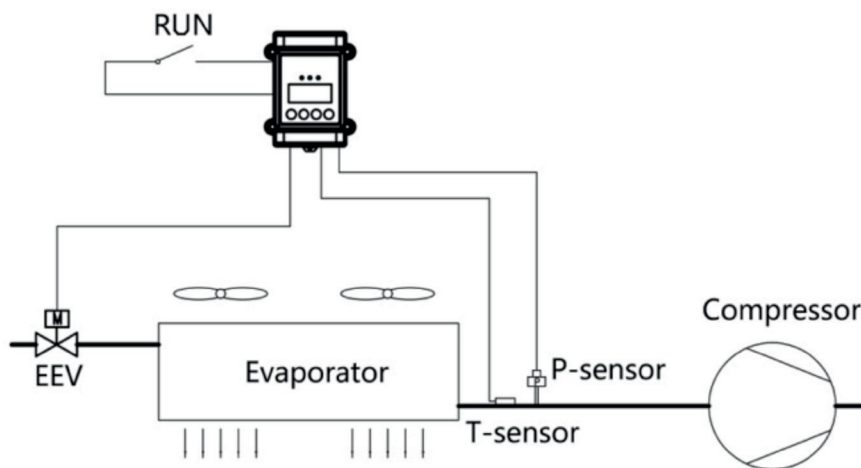| Item	Description	
Pressure sensor	Voltage supply	YCQB: 5±0.25 Vdc YCQC: 10-30 Vdc
	Output	YCQB: 0.5~3.5 Vdc YCQC: 4-20mA
	Pressure range	0~20 Bar -1~12 Bar
	Test Pressure	52.5Bar
	Accuracy	±0.8% F.S.(-40~40ºC)
	Protection class	IP 67
	Connection Type	Solder 1/4" Thread SAE - 1/4" 7/16-20UNF
	Wire	black, white, red
	Electrical connector	JST-XHP connector Packard connector

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DIMENSIONS AND INSTALLATION
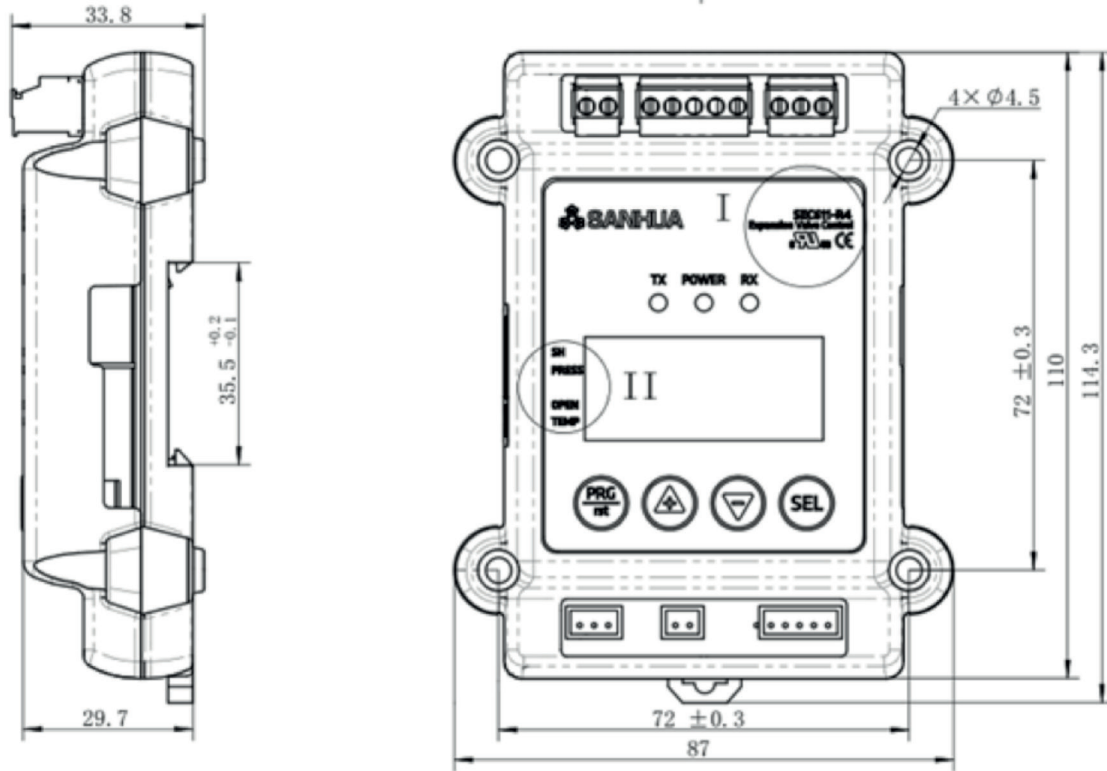
INSTALLATION DIAGRAM

For complete product family information please visit us at
www.sanhuaeurope.com and download the full range of datasheet at TECHNICAL INFORMATION LINK.

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