



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: -25~60°C
- Storage temperature: -30~60°C
- 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

ELECTRONIC EXPANSION VALVE CONTROLLER



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(N2O), R32, R245fa, R23, R407A, R407F, R124, R717, R407H, R454C, R455A.

All the models get a RS485 port for communication.

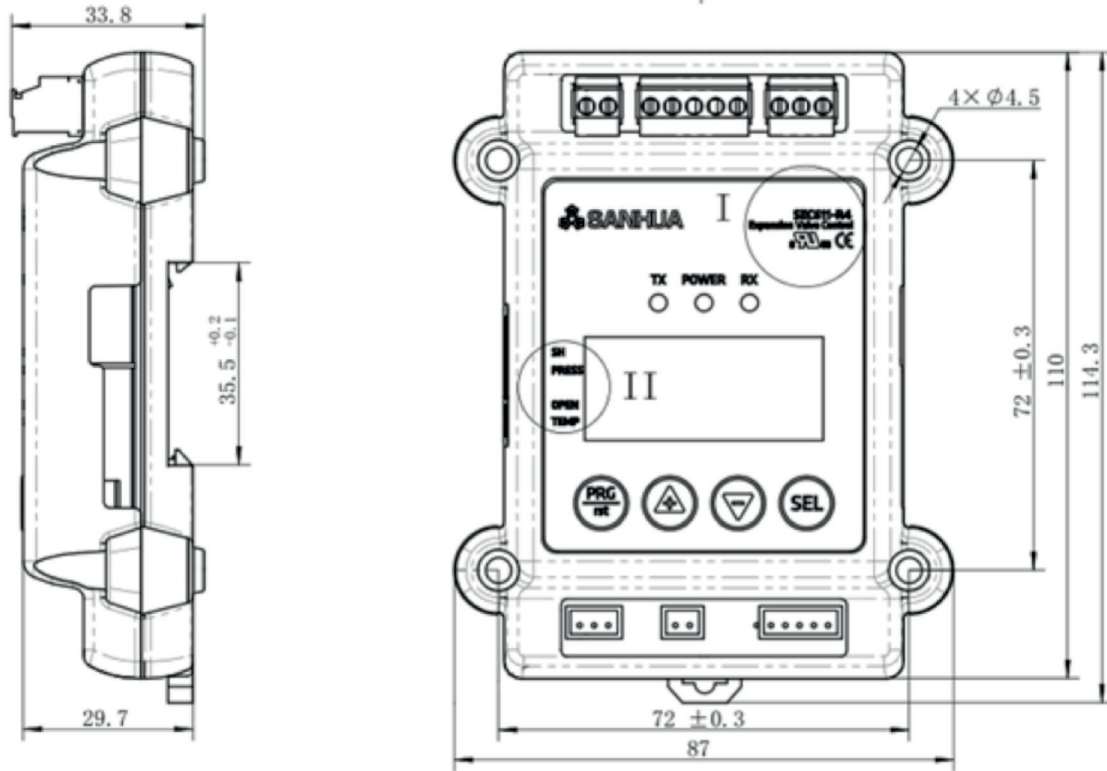
NO.	Item	Model	Part Number	Details		
				Item	Qty.	
1	Controller Package ¹⁾	SEC611-R4	10680001002	Voltage pressure sensor	°C/Bar	1
		SEC613-R4	10680001202		°F/Psi	1
		SEC612-R4	10680001102	Current pressure sensor	°C/Bar	1
		SEC614-R4	10680001302		°F/Psi	1
2	Temp. Sensor ²⁾	NTC2A1	10665000102	2m Temp. 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.

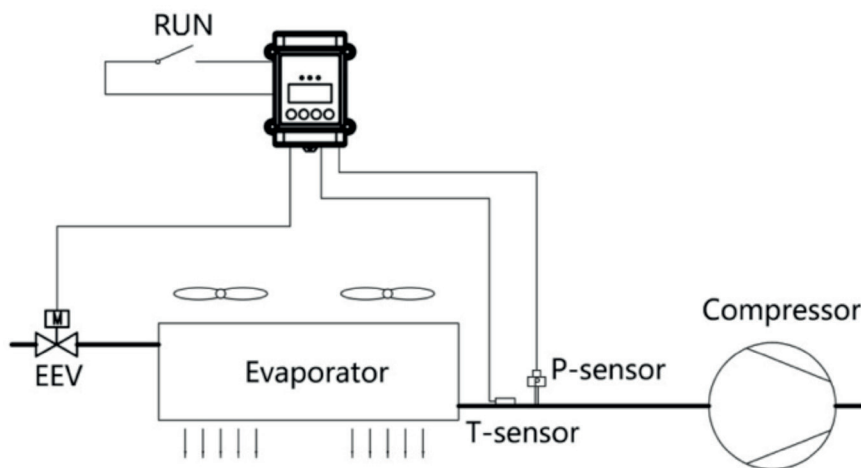
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DIMENSIONS AND INSTALLATION



INSTALLATION DIAGRAM





ACCESSORIES

Transformer

Item	Description		
Transformer	Supply Voltage	100 ~ 240 VAC	
	Output Voltage	From 21.6 to 29V, Set at 24 VDC	
	Output current	0.63 A for TM01 1.5 A for TM02	
	Operating Temperature	-30 ~ +70°C	
	Mounting	DIN 35mm	

Model	Part Number	Output current	Code reported on the product label
TM01	20680008002	0.63 A	HDR 15
TM02	20680008102	1.5 A	HDR 30



Ultracapacitor

Item		Description	
Ultracapacitor	Power supply	24Vac +10%/-15%, 50/60Hz 24Vdc+10%/-10%, Class II	
	Protection Level	IP20	
	Mounting	DIN 35mm	

Model	Part Number
SP01	20680008302

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