

# **Electronic controllers solution** for refrigeration cabinets



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### Sanhua REVO cabinet controller

REVO is a range of controller for Refrigerated cabinet capable to manage a complete system including most advanced features on the market such as Electronic Expansion valve, variable speed drive in addition to the core features of cabinets which is to maintain fresh food for long time.



### One REVO for every application

Product family	Items	Revo SE	Revo SE	Revo SE	Revo	Revo+	Revo Pulse
Sanhua Model	Basic Information	SECR06-S1	SECR06-S2	SECR06-S3	SECR03-R2	SECR04-R0	SECR05-P1
Description		Thermostat for cooler	Thermostat for freezer	Inverter system <sup>3)</sup>	Standard	Inverter system <sup>3)</sup>	Standard PWM
Typical Application		Remote/Plug-in	Remote/Plug-in	Remote/Semi Plug-in	Remote	Remote/Semi Plug-in	Remote
Power Supply		110~220 Vac	110~220 Vac	110~220 Vac	AC/DC 24V	AC/DC 24V	110~220 Vac
Cooling <sup>1)</sup>	Output Signal	J	<b>v</b>	<b>√</b>	<b>v</b>	J	✓
EEV		x	×	×	Step Motor	Step Motor	PWM
Evaporative fan		x	√	<b>√</b>	✓	J	√
Defrosting		x	√	<b>√</b>	✓	<b>v</b>	√
Real Time Clock		x	√	<b>√</b>	✓	<b>v</b>	√
Non-condensing/Alarm		x	×	×	✓	<b>v</b>	√
Lighting		×	√	<b>v</b>	✓	<b>√</b>	<b>v</b>
Digital Input (DI)	Input Signal	×	√	<b>v</b>	2x	1x	2x
Outlet Air Temp.		<b>√</b>	√	<b>√</b>	✓	<b>v</b>	√
Auxiliary Air Temp. <sup>2)</sup>		×	√	<b>v</b>	✓	<b>v</b>	√
Suction Temp.		×	×	x	✓	√	√
Defrosting Temp.		×	√	√	✓	√	√
TTL/PWM	Communication	x	x	✓	x	x	x
Modbus		x	<b>v</b>	<b>v</b>	<b>v</b>	<b>v</b>	✓

For remote systems, it mainly controls the liquid line solenoid valve. For fixed-speed plug-in systems, it mainly controls the compressor. For inverter (semi-)
Plug-in systems, the start and stop of the compressor are controlled by the inverter, therefore it can also be configured to control the condenser fan or the liquid
line solenoid valve (in case of water-cooled condenser).

 For remote systems, it can be configured to control the inlet air temperature. For Plug-in systems, it can be configured to control the discharge temperature or the condensing temperature as high-pressure control and protection.

3) SECR04 is mainly used for rotary inverter compressors with an external inverter, and control is achieved through Modbus communication with the inverter. SECR06-S3 is mainly used for hermetic piston inverter compressor systems, where the compressor usually has an integrated inverter drive and communicates with the controller through TTL or PWM.

### Focused on what matters most!

By selecting the right model for your application, you can avoid paying for unnecessary features. REVO ensures right value for your money.

## SANHUA

### **Product focus**

#### **REVO** se

Application: simple thermostat with natural or electrical defrost using thermostatic expansion valve. Version for compressor speed control PWM or TTL Compatible with Sanhua RFGC



#### **REVO+**

Application: Standard evaporator controller with Electronic Expansion Valve and inverter control. Compatible with Sanhua SD2 inverter and LPF-T - DPF Electronic Expansion Valve.



### **Complementary products**

#### REVO

Application: Standard evaporator controller with Electronic Expansion Valve control. Compatible with Sanhua LPF-T and DPF Electronic Expansion Valve.



#### **REVO Pulse**

Application: Standard evaporator controller with pulse expansion valve control. Compatible with Sanhua PEV Pulse Expansion Valve.



#### **Sanhua Witness** Sanhua RFGC/RFKH Sanhua PEV Sanhua Sanhua monitoring Thermostatic **LPF-T EEV Pulse Expansion SD2 Variable Speed Drive** system expansion valve Valves • Design pressure: 90 bar and MOPD up to 50 bar • Up to 64 devices • Design refrigerant: R290 • Design for Refrigerant: • Design refrigerant: Refrigerant temperature R744, HFCF, HFC HFC, HFO, HC and R744 connected • Design pressure: 35 bar range: -40°C-70°C User friendly interface Cooling capacity: and HFO Dedicated for BLDC • Snap-on coil connection 0.49-14.3 kW (for R290) • Design pressure: 90 bar with remote access compressors for easier installation Wireless data transmission Ambient temperature Connection sizes: Pollution degree III design • Uni-polar step motor with 4G network min./max.: -35/+55°C 3/8 "/ 1/2 " and (A3 refrigerants) with total 500 steps • Control, Monitoring and Medium temperature 10 mm /12 mm Self-diagnostic system for accuracy control Optimization of the TS min./max.: • Min. 50 million life cycles with boot loader function • Connection sizes: -40°C / +70°C • Cooling: Horizontal or thanks to soft-landing system operation 1/4 "-1/2 " and 6-12 mm · Fully stainless steel vertical heatsink, flat plate • Local data storage: seat design 14 days or \*up to 2 years body and bi-metal • Tight like a solenoid • Tested with: Highly, (\*optional) connections valve SIAM, Panasonic • Available in Europe • Spare Part Kits available and other... in 2025 TUV CE certification **REVO** se J J REVO J J J **REVO+** J J **REVO Pulse** J J

## SANHUA

### **Cost-effictive and efficient!**

With accurate control REVO solutions provide fast temperature pull down and precise temperature control. The solution is ready for efficient systems operating with higher evaporating temperature such as flooded evaporator.



Temperature

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