

HVAC

Türkiye Distribütörü
SETCOMBT
AKILLI EV SİSTEMLERİ



Building Automation & HVAC Control



SAS803FCT

Digital Room Thermostat

- Operating voltage: AC230VAC or AC 24VAC
- Set point temperature range: 5°C to 35°C
- Output for 3-speed or 1-speed fan
- 2 SPDT On/Off output for valve of 2-pipe or 4-pipe FCU
- Room Key contact input available
- Remote control option
- Semi Flush mount: 88X88X15mm



SAS803PIT

Digital Room Thermostat

- Operating voltage: AC 24VAC
- Set point temperature range: 5°C to 35°C
- Output for 3-speed or 1-speed fan
- Two floating control output or two 0~10VDC modulating output
- Room Key contact input and external sensor input
- Auto heat/cool change over
- Wall mount: 88X88X24mm



SAS803XSLP

Digital Room Thermostat

- Operating voltage: AC 230VAC
- Set point temperature range: 5°C to 35°C
- Output for 3-speed or 1-speed fan
- 1 On/Off compressor output in DX type equipment
- Room Key contact input available
- Remote control option
- Semi Flush mount: 88X88X15mm



SAS806FCT

Mechanical Thermostat

- Operating voltage: AC230VAC
- Output for 3-speed or 1-speed fan, auto fan option
- Set point temperature range: 10°C to 30°C
- 2 output for valve of 2-pipe or 4-pipe FCU
- Wall mount: 135X80X38mm



SAS900MTW

Digital Room Thermostat

- Operating voltage: AC230VAC or AC 24VAC
- Set point temperature range: 5°C to 35°C
- Output for 3-speed or 1-speed fan
- 1-Stage compressor output or 2-Stage compressor output
- 2 SPDT On/Off output for valve of 2-pipe or 4-pipe FCU (SAS900FCT)
- Wall mount: 130X95X30mm



SAS900HLP

Digital Room Thermostat

- Operating voltage: AC230VAC
- Set point temperature range: 5°C to 35°C
- Output for 3-speed or 1-speed fan
- 1 compressor output and 1 reversing valve output
- Wall mount: 130X95X30mm



SAS908FCT

Digital Room Thermostat

- Operating voltage: AC230VAC or AC 24VAC
- Output for 3-speed or 1-speed fan
- 2 SPDT On/Off output for valve of 2-pipe or 4-pipe FCU
- 1 compressor output and 1 reversing valve output (SAS908HLP)
- Room Key contact input available
- Remote control option
- Semi Flush mount: 115X90X18mm
- Wall mount: 115X90X28mm



SAS908PIT

Digital Room Thermostat

- Operating voltage: AC 24VAC
- Output for 3-speed or 1-speed fan
- Two floating control output or Two 0~10VDC modulating output or One 0~10VDC output and One On/Off output for heating
- Room Key contact input and external sensor input
- Auto heat/cool change over
- Wall mount: 115X90X28mm



SAS3000FCT

Touch Screen Thermostat

- Operating voltage: AC230VAC or AC 24VAC
- Output for 3-speed or 1-speed fan
- 2 SPDT On/Off output for valve of 2-pipe or 4-pipe FCU
- 1 compressor output and 1 reversing valve output (SAS3000HLP)
- Semi Flush mount: 115X90X20mm
- Wall mount: 115X90X32mm

MOTORIZED VALVE



SV20

- Power Source: 220V/120V/24V, 50/60Hz
- Pressure: 2.0Mpa
- Two wires, Conical internal worm
- Two way / Three way
- Caliber: DN15; DN20; DN25
- Media Temperature: 2°C ~95°C



SV80

- Power Source: 220V/120V/24V, 50/60Hz
- Pressure: 2.0Mpa
- Three wires, Ball
- Two way / Three way
- Caliber: DN15; DN20; DN25
- Media Temperature: 1°C ~95°C



SV60

- Power Source: 220V/120V/24V, 50/60Hz
- Pressure: 1.8Mpa
- Two wires, thread
- Two way / Three way
- Caliber: DN15; DN20; DN25
- Media Temperature: 5°C ~90°C

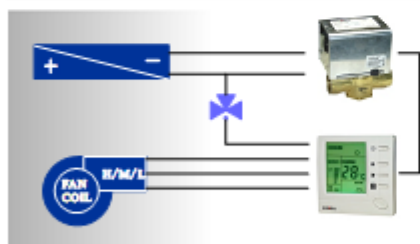


SV100

- Bi-directional floating proportional control
- Power Source: 220V/120V/24V, 50/60Hz
- Pressure: 2.10Mpa
- Four wires, thread
- Two way / Three way
- Caliber: DN15; DN25; DN32
- Media Temperature: 2°C ~94°C

FAN COIL CONTROL THEORY

FOR TWO PIPE

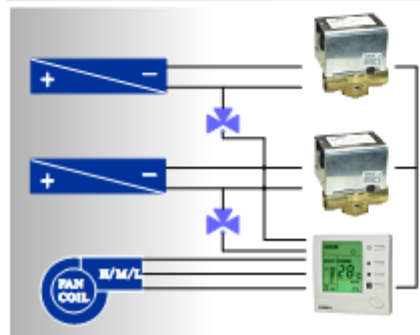


Type Option

Motorized Valve+Thermostat

- SV80220 + SAS803FCT/2;
- SV80220 + SAS803XFCT/2;
- SV80220 + SAS908FCT/2;
- SV80220 + SAS802FCT/2;
- SV80220 + SAS805FCT;
- SV80220 + SAS808FCT/2;
- SV80220 + SAS803FCT/2;
- SV80220 + SAS908FCT/2/A;
- SV20220 + SAS803FCT/2;
- SV80220 + SAS3000FCT/2/A.

FOR FOUR PIPE



Type Option

Motorized Valve+Thermostat

- SV80220 + SAS803FCT/4;
- SV80220 + SAS803XFCT/4;
- SV80220 + SAS908FCT/4;
- SV80220 + SAS802FCT/4;
- SV80220 + SAS808FCT/4;
- SV80220 + SAS803FCT/4;
- SV80220 + SAS908FCT/4/E;
- SV20220 + SAS803FCT/4;
- SV20220 + SAS803XFCT/4;
- SV80220 + SAS3000FCT/4/E.



SR500/SR1000 (NEW TYPE) 500N/1000N ACTUATOR

- Floating/Modulating optional
- Power: 24VAC/220VAC
- Input signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Output signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
-



SR1800/SR3000 (NEW TYPE) 1800N/3000N ACTUATOR

- Floating/Modulating optional
- Power: 24VAC / 220VAC
- Input signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Output signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
-



SR1800/SR3000 1800N/3000N ACTUATOR

- Floating/Modulating optional
- Power: 24VAC/220VAC
- Input signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Output signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Self-stroking function



SR8500/SR18000 8500N/18000N ACTUATOR

- Floating/Modulating optional
- Power: 220VAC
- Input signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Output signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA
- Self-stroking function



SL--DN15~65 (INNER THREAD) TWO WAY STAINLESS STEEL VALVE BODY

- Caliber range: DN15~DN65
- Media Temperature: 2~180°C (Chilled/Hot water)
- Permissible operating pressure: 1.6MPa, 2.5MPa;
- Valve body material: Foundry stainless steel
- Valve stem material: Stainless steel



SW--DN25~100 (OUTER THREAD) TWO WAY CAST STEEL VALVE BODY

- Caliber range: DN25~DN100
- Media Temperature: 2~180°C (Chilled/Hot water)
- Permissible operating pressure: 1.6MPa, 2.5MPa;
- Valve body material: Cast Steel
- Valve stem material: Stainless steel / Brass



SF--DN15~400 (NEW TYPE) TWO WAY FLANGED CAST STEEL VALVE BODY

- Caliber range: DN15...DN400
- Media Temperature: 2~180°C (Chilled/Hot water) 2~220°C (Steam)
- Permissible operating pressure: 1.6MPa\2.5MPa\4.0MPa
- Valve body material: Cast steel
- Valve stem material: Stainless steel/Brass



SF--DN15~400 TWO WAY FLANGED CAST STEEL VALVE BODY

- Caliber range: DN15...DN400
- Media Temperature: 2~170°C (Chilled/Hot water)
- Permissible operating pressure: 1.6MPa\4.0MPa\6.4MPa
- Valve body material: Cast Steel
- Valve stem material: Stainless steel / Brass



SF...DN15-400 Two way flanged stainless steel valve

- Media Temp.: 2~450°C (steam)
- Caliber range: DN15...DN400
- Permissible operating pressure: 1.8Mpa/4.0Mpa/8.4Mpa
- Valve body material: Forging brass, stainless brass
- Valve stem material: Stainless steel



SF...DN15-400 (New Type) Two way flanged stainless steel valve

- Media Temp.: 2~450°C (steam)
- Caliber range: DN15...DN400
- Permissible operating pressure: 1.8Mpa/4.0Mpa/8.4Mpa
- Valve body material: Forging brass, stainless brass
- Valve stem material: Stainless steel



SL...DN15-65 (INNER THREAD) Three way stainless steel valve

- Media Temp.: 2~180°C (chilled / hot water)
- Caliber range: DN15...DN65
- Permissible operating pressure: 1.8Mpa
- Valve body material: Foundry stainless steel
- Valve stem material: Brass



SW...DN25-100 (OUTER THREAD) THREE WAY CAST STEEL VALVE BODY

- Media Temp.: 2~180°C (chilled / hot water)
- Caliber range: DN25...DN100
- Permissible operating pressure: 1.8Mpa
- Valve body material: Cast Steel
- Valve stem material: Brass



SUPS... Fail-safe CONTROLLER

- Used with 500N/1800N/3000N actuator
- Alarm when the power off, shut down the motorized valve
- Power break off, automatically begin to converse work mode
- Electrical level display and reset self test button



SP74JA Differential pressure controller

- Media: chilled / hot water
- SPDT, totally enclosed non-snap acting penne switch
- Operating pressure differential: 14kPa, Fixed
- Electrical rating: 1A, 24VAC, 50/60Hz
- Scale range: 55 to 414kPa



SF13 (Modulating controller) LCD digital analogue thermostat

- Apply for modulating valve actuator control and heat exchanger unit control
- Temperature range: -40°C to 140°C
- 1 analogue output: (DC0~10V or 0~20mA)
- 1 float output, 24VAC/DC
- 1 analogue input (DC0~5V; 0~10V or 0~20mA)



SF16 (Floating controller) Knob control analogue thermostat

- Apply in HVAC control system, connecting and using with NTC10K thermistor
- Temperature range: 0°C to 40°C
- External sensor: NTC10K resistance
- Control method: 3 point Control (floating control)
- Output: 24VAC, 0.5A max
- Input: 24VAC

Center Air-conditioning Unit (Floating Control)

- Actuator: 500N/1000N 1800N/3000N 6500N/18000N
- Controller: SF 18 Knob control analogue controller
- Temperature sensor: NTC10K resistance (Model : SSW1000T)
- Transformer STR-24: 220VAC transfer to 24VAC
- Temperature sensor immersion well: Optional
- Control box SBOX-2: Optional
- Valve body: Brass / Stainless steel / Cast steel, Inner thread / Outer Thread / Flanged

Heat Exchange Unit (Modulating Control)

- Actuator: 500N/1000N 1800N/3000N 6500N/18000N
- Controller: SF13 digital modulating controller
- Temperature sensor: NTC10K resistance (Model : SSW1000T)
- Transformer STR-24: 220VAC transfer to 24VAC
- Temperature sensor immersion well: Optional
- Control box SBOX-2: Optional
- Valve body: Brass / Stainless steel / Cast steel, Inner thread / Outer Thread / Flanged

Cooling Plant Pressure Differential By-pass (Pressure Differential By-pass Valve Control)

- Actuator: 500N/1000N 1800N/3000N 6500N/18000N
- Differential Pressure Controller: SP74JA (balance pressure differential between water controller and water separator)
- Transformer STR-24: 220VAC transfer to 24VAC
- Control box SBOX-2: Optional
- Valve body: Brass / Stainless steel / Cast steel, Inner thread / Outer Thread / Flanged

SAS-STEP1**SAS-STEP1 Universal Direct Digital Controller**

- Apply for the standard Constant
- Universal Direct Digital Controller
- Can control multi environmental parameters, including: temperature/humidity/ air or water pressure/air or water flow/air speed/CO₂ density.
- Can automatically convert the operating mode of constant temperature and humidity unit.
- Suitable for many types of actuator, such as valve actuator, electric heater, electric humidifier, and so on.
- The average value control function.

Terminal Configuration:
 Analog voltage input: 4 loops
 Remote set point: 2 loops
 General purpose input: 4 loops
 Digital switch input: 8 loops
 Analog output: 4 loops
 Digital switch output: 8 loops

SAS-STEP2**SAS-STEP2 Design for single independent network controller**

Terminal Configuration:
 Analog voltage input: 2 loops
 General purpose input: 2 loops
 Digital switch input: 3 loops
 Analog output: 2 loops
 Digital switch output: 3 loops
 Communication option
 Single/Double loops option

SAS-STEP3**SAS-STEP3 Specialized building controller**

- STEP3 is for a central air-conditioning and building automation (BAS) Direct Digital Controller.
- Can control multi environmental parameters, including: temperature/humidity/ air or water pressure/air or water flow/air speed/CO₂ density.
- Second developed software, free programmable function
 Supports the on-line debugging and the programming.
- Can be downloaded on-line solidification of the DDC through the PC.

Terminal Configuration:
 Analog voltage input: 4 loops
 General purpose input: 4 loops
 Digital switch input: 8 loops
 Analog output: 4 loops
 Digital switch output: 8 loops
 Communication function option

SAS-STEP3**SAS-STEP3 Extension module**

Terminal Configuration:
 Analog voltage input: 4 loops
 General-purpose input: 4 loops
 Digital switch input: 8 loops
 Analog output: 4 loops
 Digital switch output: 8 loops
 Communication function option

SP33A Air pressure differential switch



- Used to center air conditioning auto-control and ventilation purification project
- Range ability:
SP33A-30: 30~300Pa
SP33A-50: 50~500Pa
SP33A-100: 100~1000Pa
- Max. differential pressure: 1000Pa

SASBD-1000 Duct Temperature & Humidity Sensor



- Apply for outdoor temperature & humidity
- Examination and auto-control system
- Output signal (DC) :
0~10V & 4~20mA
- PT100/PT1000 or NTC10K
- Temperature range :
-20~50°C, 0~100%RH
- Temperature / Humidity /
Temperature & Humidity
- Connection : TA 4 wires TB 3 wire

SASBR-2000 Duct Temperature & Humidity Sensor



- Apply for outdoor temperature & humidity
- Examination and auto-control system
- Output signal (DC) :
0~10V & 4~20mA
- PT100/PT1000 or NTC10K
- Temperature range :
-20~50°C, 0~100%RH
- Temperature / Humidity /
Temperature & Humidity
- Connection : TA 4 wires TB 3 wire

SASBW-1000 Temperature Sensor Transmitter



- Output signal (DC) :
0~10V & 4~20mA
- PT100/PT1000 or NTC10K
- Temperature range : -50°C~150°C
- Immersion well length :
50/100/150mm
- Sensor length : 100/150/200mm
- Connection : TA 3 wires TB 2 wires

SASBR-1000 Duct Temperature & Humidity Sensor



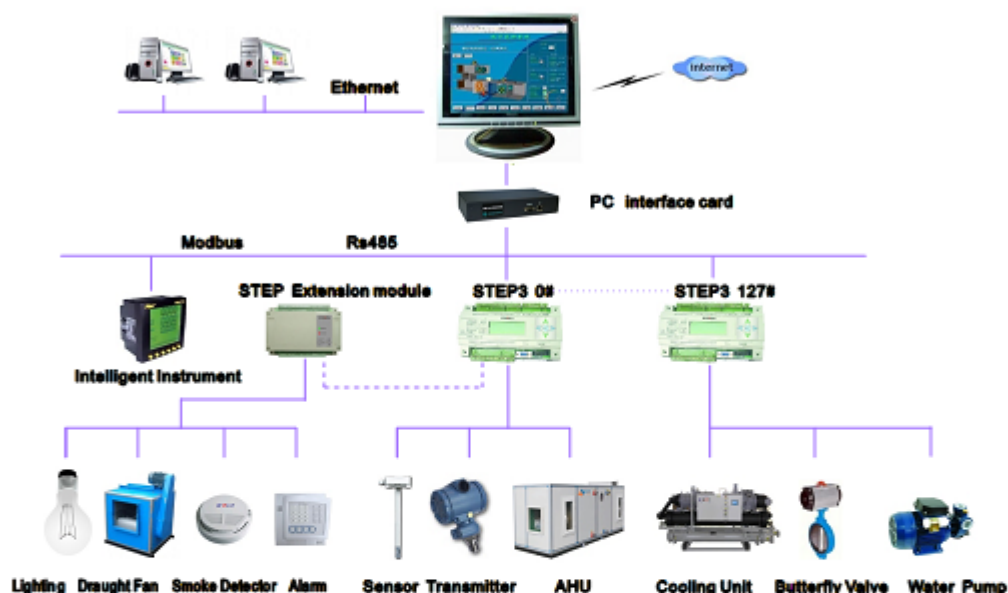
- Apply for outdoor temperature & humidity
- Examination and auto-control system
- Output signal (DC) :
0~10V & 4~20mA
- PT100/PT1000 or NTC10K
- Temperature range :
0~50°C, 0~100%RH
- Temperature / Humidity /
Temperature & Humidity
- Connection : TA 4 wires TB 3 wire

SASBP-800 Pressure transmitter



- Apply for industrial pressure control and level measurement
- Output signal (DC) : 4~20mA
- Measurement range: 0~1Mpa; 1.60Mpa
2.0Mpa; 2.5Mpa
- Pressure Interface : M20X1.5 outer
thread
- Digital LCD display , 4-digit number
optional

MODBUS + Ethernet Network



Brief Introduction

The flow chart above indicates the SASWELL STEP series DDC control system. The system will have a center control station, management software is Force Control PCAuto3.6. It is divided into two segment networks, one is controller, another is Center Control PC.

The management computer and controllers connect to MODBUS with the A53 communication exchanger; Controller (DDC) connects with the control components (Actuator, relay contact), sensor transmitter (temperature, pressure differential, flow rate and such sensor).

Center Control PC works with other system computers or control stations by connecting Ethernet. The communication speed is 10/100Mbps. The software PCAuto3.6 makes it possible that the system includes all-around equipment and agreement interfaces for integrated optics to choose, i.e. ODBC digital interface, NetWork API (for C, C++, FORTRAN), Advanced DDC Client, BACNet Client/Server, Microsoft Excel Data Exchange, OPC client and so on.

Control units include: cooling plant system, boiler system, Fresh Air Unit, Ventilation system, Electricity transformation and distribution system, intelligent lighting system, supply water and sewerage system, generator.

SASWELL SASRJ SERIES WIRELESS FAN COIL THERMOSTAT

SRJ02 series wireless control unit is used in central heat/cool air conditioning system. According detecting and comparing the set temperature and ambient temperature, the thermostat controls the active of heat/cool zone valve in central air-conditioner.


**SASRJ02
Receiver**

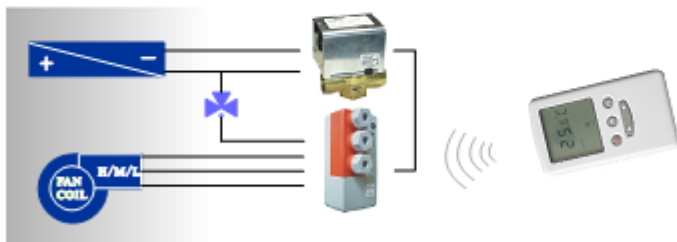
- 3-speed fan
- Apply for 2 pipe / 4 pipe fan coil system (Two two wires motorized valve)
- On/Off, Floating, Modulating input signal option
- Signal output overtime protection function
- Power Surge / Electric impulse protection
- RECEIVING FREQUENCY: 315MHz


**SASRW-02Y
Remote Controller**

- Battery power supply (3VDC)
- Transmit Frequency : 315MHZ
- Memorize function during power loss
- EFFECTIVE DISTANCE : <10m (without hindrance)
- Memorize function during power loss
- LCD display (Temp/Fan speed/mode)

SASWELL WIRELESS FAN COIL THERMOSTAT CONTROL THEORY CHART

FOR TWO PIPE



FOR FOUR PIPE

