

# CPU iSCU th S 20

Ref. 27EV000022



## TECHNICAL SPECIFICATIONS

GENERAL		
Technology	Patent pending	
Maximum load	≤22W (Stand-by ≤1W) *(1)	
Rated Impulse voltage	12 V DC	
Ingress Protection Rating	IP53	
Hydraulic connections	1/2" & 3/8" M-GAS, John Guest	
Weight	0.4 kg	
TEMPERATURE	MINIMUM	MAXIMUM
Recommended input hot water range	48 °C	65 °C
Recommended input cold water range	5 °C	28 °C
Maximum inlet temperature	65 °C *(2)	
Minimum inlet temperature	>0 °C	
Mixed range	Full Cold – 44 °C *(3)	
PRESSURE		
Maximum dynamic	5 bar (0.5Mpa)	
Minimum dynamic	1 bar (0.1Mpa)	
Recommended dynamic	3 bar (0.3Mpa)	
Maximum differential supply	4.5 bar (0.45Mpa)	
Burst	>35 bar (3.5Mpa)	
FLOW RATE (3 bar, DN13)	MINIMUM	MAXIMUM
Mixed water free flow	4 L/min	24 L/min
Full Cold or Full Hot water free flow	4 L/min	13.3 L/min
Mixed free flow + diverter	4 L/min	22.3 L/min
Full Cold or Full Hot free flow + diverter	4 L/min	13.1 L/min

\*(1) Without deviator. With Sedal deviator ≤22 W (Stand-by ≤1W)

\*(2) Up to 80 °C less than 20 min

\*(3) Configurable up to Full Hot on OEM demand

TDS27EV000022 VER: 3 LANG: EN DATE: 2023-09-25

## DESCRIPTION

Smart electronic device with digital reading and accurate, stable, thermostatic regulation of water temperature and flow rate at the point of use. Designed to be integrated in showers with 2 outlets. The device can control 2 NC valves as electronic diverter.

## FEATURING

- Thermostatic control
- Flow static control
- Automatic start-up
- Pause
- Eco shower mode
- 3 users memory
- Control Up to 2 outlets
- Shower parameters setup
  - Max. Min. water temperature
  - Max. Min. flow rate
  - Time of use
  - Time of pause
- Special functions
  - Warmup shower
  - Child Shower
  - User configurable programs
  - Intelligent Bath fill mode
- Maintenance functions
  - Thermal disinfection
  - Impurity cleaning process
- Consumption parameters Reading and control
  - Hot and cold temperature (inlets) & mixed (outlet)
  - Hot and cold flow rate (inlets) & mixed (outlet)
  - Water volume (cold, hot, mixed)
  - Time of use
- Maintenance alarms and error diagnosis
  - Cold and hot water leakage
  - Cold and hot water failure
  - Hot water temperature low
  - Cold water temperature high
  - Sensor malfunction
  - Special function error
  - Maintenance function error

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## STANDARDS

### ELECTRIC STANDARDS

EMC: EN 55014-1, EN 55014-2  
SAFETY: EN 60335-1  
RoHS: IEC 63000

### HYDRAULIC STANDARD

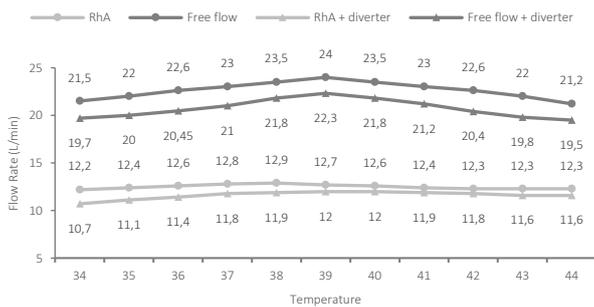
QB2806-2017  
EN-817  
EN-1111  
ASME #112.18.1  
ASSE #1016-T,-P\*

### SANITARY STANDARDS

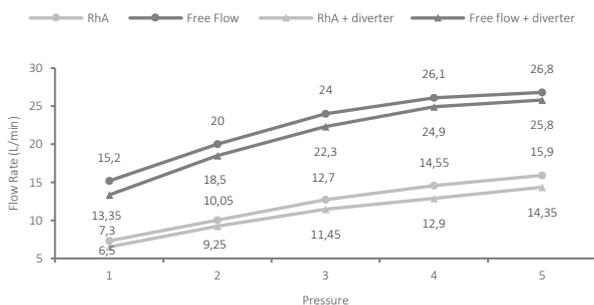
ACS  
KTW/W270  
WRAS  
NSF61

## FLOW RATE DETAIL

### MAX FLOW RATE vs TEMPERATURE (3 BAR DN13)



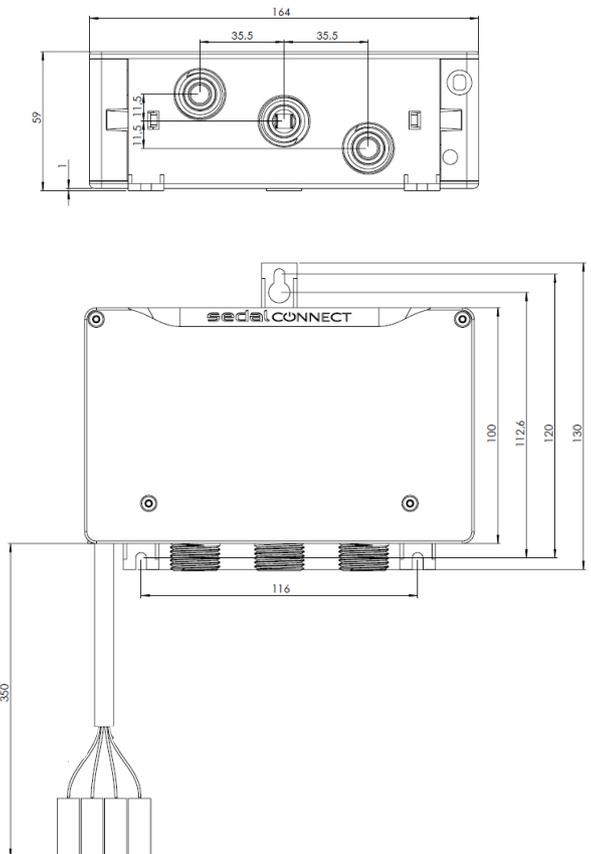
### MIX FLOW RATE vs PRESSURE (DN13)



## CONNECTIVITY

RS485 Modbus RTU standard with open memory map registers to control the device.

## TECHNICAL DIMENTIONS



## INSTALLATION REQUIREMENTS

Installation of filters Mesh 80 in the hydraulic line. Position, size and type of filter must be mounted upstream of the mixer and acc. to EN817/ASME 112.18.1M