YK-1044 UI:10 BO:4 AO:4

Overview

YK-1044 is a fully programmable controller with two programming methods: block drag-and-drop programming and JavaScript programming. It supports BACnet IP, Modbus, MQTT, Web and other protocols, and can be used with our three self-developed HT series expansion modules.



Applications

YK-1044 is suitable for controlling medium-sized devices or complete equipment sets with different I/O quantities, such as multi-zone reheat units, small air handling units, small boilers or chillers. As a fully programmable controller, YK-1044 can realize required control applications by creating and modifying BACnet objects and programs.

Features

- Equipped with quad-core 1.5GHz chip, 1G memory, 8G storage, power consumption 5W
- Two programming modes: block drag-and-drop and JavaScript
- Two built-in Modbus RTU communication ports; the total number of expansion modules connected to the two ports shall not exceed 5
- Built-in battery for real-time clock and time recording
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- Built-in isolated power supply and built-in communication protection
- BO output follows supply voltage: outputs AC 24V when powered by AC24V, outputs DC24V when powered by DC24V
- Supports Chinese tag naming; controllers of the same model share identical point mapping, one-click modification of point names takes effect synchronously in programs
- Compatible with third-party nodes including KNX, OPC UA, Modbus RTU, etc.
- Easy-to-open cover with jumper pins for input signal configuration
- Onboard reset button for IP address recovery
- Supports BACnet objects including AI, AO, BI, BO, AV, BV, MV, SCH, CAL, TL, EV, ECV, and more.

Yuncol controls

Power Supply

24V(AC/DC)

Device Address

Configured via software

Input Signals

0-10V
2-10V
0-20ma
4-20ma
temperature NTC-10K
dry contact

Output Signal Types

AO: 0-10V DC (0~100 full scale)
BO: AC24V / DC24V relay output

Dimensions

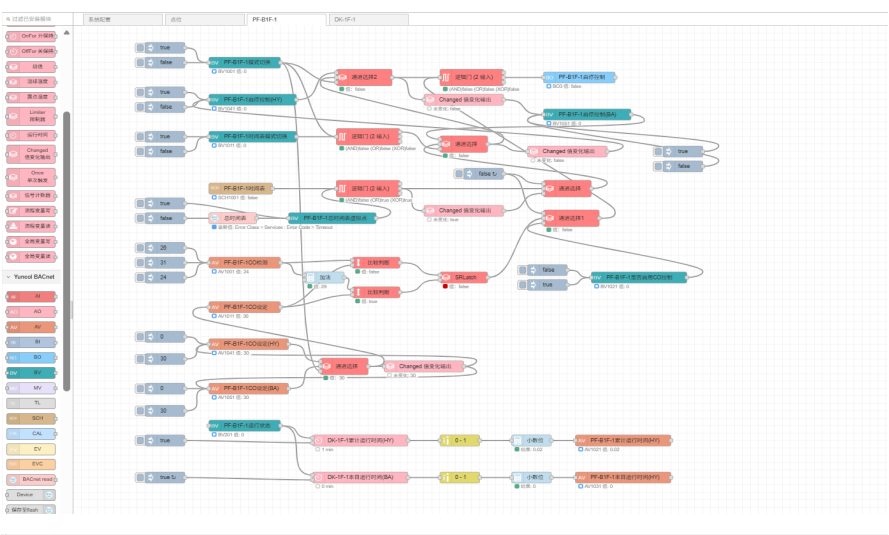
190*110*51.5(L*W*H)

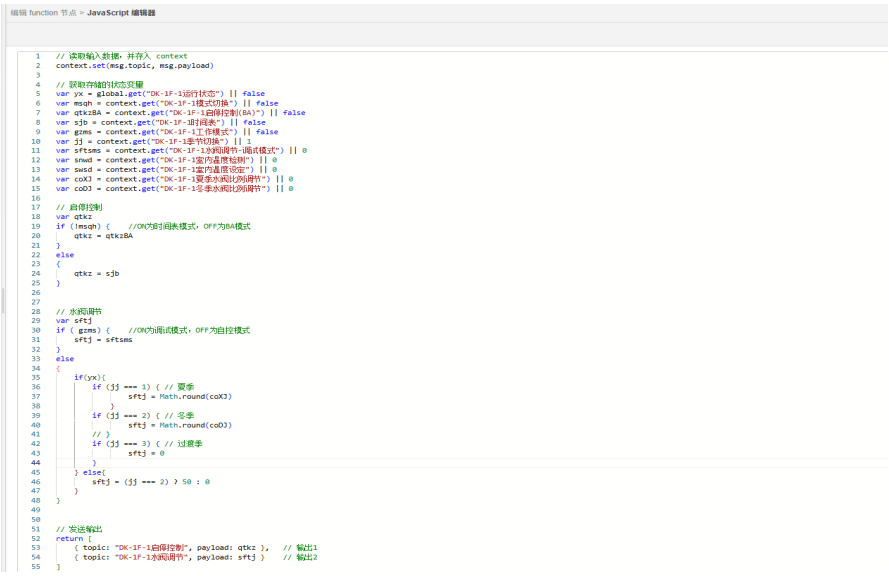
Flame-retardant ABS Housing Material

Mounting

35mm DIN rail mounting

YK-1044 Programming Cases





```
// 读取输入数据，并存入 context
context.set(msg.topic, msg.payload)

// 获取存储的状态变量
var yx = global.get("DK-1F-1运行状态") || false
var msqh = context.get("DK-1F-1模式切换") || false
var qtkzBA = context.get("DK-1F-1启停控制(BA)") || false
var sjb = context.get("DK-1F-1时间表") || false
var gzms = context.get("DK-1F-1工作模式") || false
var jj = context.get("DK-1F-1季节切换") || 1
var sftsms = context.get("DK-1F-1水阀调节-调试模式") || 0
var snwd = context.get("DK-1F-1室内温度检测") || 0
var swsd = context.get("DK-1F-1室内温度设定") || 0
var coXJ = context.get("DK-1F-1夏季水阀比例调节") || 0
var coDJ = context.get("DK-1F-1冬季水阀比例调节") || 0

// 启停控制
var qtkz
if (!msqh) {    //ON为时间表模式，OFF为BA模式
    qtkz = qtkzBA
}
else
{
    qtkz = sjb
}


// 水阀调节
var sftj
if ( gzms) {    //ON为调试模式，OFF为自控模式
    sftj = sftsms
}
else
{
    if(yx){
        if (jj === 1) { // 夏季
                sftj = Math.round(coXJ)
            }
        if (jj === 2) { // 冬季
                sftj = Math.round(coDJ)
        // }
        if (jj === 3) { // 过渡季
                sftj = 0
        }
    } else{
        sftj = (jj === 2) ? 50 : 0
    }
}


// 发送输出
return [
    { topic: "DK-1F-1启停控制", payload: qtkz },   // 输出1
    { topic: "DK-1F-1水阀调节", payload: sftj }    // 输出2
]
```

YK-1044 can be extended with HT-U1600, HT-UD808 and HT-U808 modules. Input signal type, address code and baud rate can be conveniently configured as shown in the corresponding diagrams.

YK-1044 Expansion Specifications

YK-1044 can be extended with HT-U1600, HT-UD808, and HT-U808 modules. Input signal type, address code, and baud rate can be conveniently configured as shown in the corresponding diagrams. When used with our expansion modules, function block configuration is also very simple and straightforward.

HT-U1600: 16 universal input points, supports 0-10V, NTC-10K, dry contact

HT-UD808: 8 universal input points (0-10V / NTC-10K / dry contact) + 8 BO relay outputs (output voltage matches input power AC24V/DC24V)

HT-U808: 8 universal input points (0-10V / NTC-10K / dry contact) + 8 AO analog outputs (0-10V DC)