



Fig. 3

电气说明:

电源 : 24Vac ±15% 50/60Hz
 承载电流: 200mA
 保险丝 : 800mA T (慢速保丝)

模拟量输入:

3个CAREL NTC温度传感器 (10KΩ在25°C)
 1个0-1Vdc / 4-20mA 的湿度传感器或温度传感器 (+V= 14 Vdc, 30mA max.)

开关量输入:

10路非光电隔离输入(与G0,24Vac相比)
 每1路的承载电流: 5mA

模拟量输出:

1路0-10 Vdc输出,非光电隔离, (与电源24Vac参考点G0间无光电隔离)
 最大负载: 10mA (1KΩ) (Y1)

1路PWM输出用于CAREL控制器,代码MCHRTF****

无负载电压: 4.8V ±10%,最小负载: 10mA (1KΩ) (Y2)

开关量输出:

5路可控硅开关量输出, 24Vac 1A 光电隔离 (输出1-5)
 2路继电器型, 250Vac 2A,根据VDE 0631,在85°C下能开关100000次(阻抗和感抗)
 继电器类型和三端双相可控硅开关动作类型 (微型开关)
 继电器与低压间的隔离: 增强型
 继电器与前面板间的隔离: 加强型
 2个继电器之间: 基本型

界面:

裸露在外的针脚用于光电隔离的RS485 串行板 MAC2SER000 (可选择的).
 串行输出与低压间的隔离:可操作的(<50V).
 连接器用于MAC2CLK000 时钟卡和可编程钥匙.

触点代码(适用于特殊的Molex™ 压线工具, 69008-0724)

触点Molex™代码	线缆横截面积
39-00-0077	AWG 16 (1,25 mm ²)
39-00-0038	AWG 18-24 (0,9- 0,35 mm ²)

一般说明:

工作范围: 温度传感器 -30-70°C - 湿度传感器 0-100 % rH
 测量精度: ±0.5°C (温度探测器), ±0.5%rH (湿度传感器)
 分辨率: 0.1°C
 运行环境: -10-54 (-10-54°C), 20-80% rH 无凝露
 储存条件: -10-70 (-10-70°C), 0-80% rH无凝露
 绝缘材料的PTI: 250V
 隔热和阻燃类别:D类 (自消耗)
 前面板-防护规格: IP55
 环境污染: 一般
 绝缘部件的电压作用时间: 长
 软件结构和类型: A
 防浪涌电压: II类

因电源和RS485串行输出之间的隔离是可运行的,电源的变压器必须是安全模式,由MAC2000A00, MAC2SER000, MAC2CLK000 and MCHRTF****0构成的系统代表着这样一种控制设备,它是被集成到I或II类应用中去的。防电子振荡的等级取决于生厂商把这种控制设备集成到哪一种机器上。

Fig. 4

Electrical specifications

Power: 24Vac ±15% 50/60Hz
 Current absorption: 200mA
 Fuse: 800mA T (slow-blow)

Analogue inputs:

3 for Carel NTC (10KΩ at 25°) temperature probes
 1 0-1Vdc / 4-20mA input for humidity or pressure probe (+V= 14 Vdc, 30mA max.)

Digital inputs:

10 non-optically insulated inputs, reference G0 at 24Vac, current absorbed by each input: 5mA

Analogue outputs:

1 output 0-10Vdc non-optically insulated, reference G0 maximum load: 10mA (1kΩ) (Y1)

1 PWM output for Carel controls, codes MCHRTF****

no-load voltage: 4.8V ±10% minimum load: 1kΩ (Y2)

Digital outputs:

5 1A x 24Vac, optically-insulated triac outputs (out 1+5)
 2 relay outputs with max. current of 2A at 250Vac (resistive and inductive) for 100,000 switching at 85°C (C 6÷7) according to VDE 0631
 Type of relay and triac action (micro-switching): 1C
 Insulation between the relays and the very low voltage parts: reinforced
 Insulation between the relays and the front panel: reinforced
 Insulation between the two relays: basic
 Interfaces:

Pin-strip for optically-insulated RS485 serial board MAC2SER000 (optional).
 Insulation between the very low voltage parts and the serial output: operational (<50V).
 Connectors for MAC2CLK000 clock board and programming key.
 Contact codes: (used for special Molex™ crimping tool, 69008-0724)

Molex™ code f or the contact	Cable cross-section
39-00-0077	AWG 16 (1.25 mm ²)
39-00-0038	AWG 18-24 (0.9+0.35 mm ²)

General specifications

Operating range: Temperature probes -30+70°C - Humidity probe 0+100 % rH
 Accuracy of measurement: ±0.5°C (temperature probe), ±0.5%rH (humidity probe)
 Resolution: 0.1°C
 Operating conditions: -10T54 (-10+54°C), 20+80% rH non-condensing
 Storage conditions: -10T70 (-10+70°C), 0+80% rH non-condensing
 PTI of the insulating materials: 250V
 Category of resistance to heat and fire: Category D (self-extinguishing)
 Front panel - Index of protection: IP55
 Environmental pollution: normal
 Period of electric stress across insulating parts: long period
 Software class and structure: A
 Immunity against voltage surges: Category II

As the insulation between the power supply and the RS485 serial output is operational only, the power transformer must be safety-type. The system made up of the MAC2000A00, MAC2SER000, MAC2CLK000 and MCHRTF****0 represents a control device to be incorporated into class I or II appliances. The classification relating to protection against electrical shock depends on the way in which the control device is integrated into the machine produced by the manufacturer.

安装模板 / Drilling template

