SAUTER RDT940F902 - Configurable controllers

| GB ENGLISH | | To install the devices again press the DIN rail clips to the end | | - according to the safety legislation, the protection against | NC7 normally closed contact digital output 7 |
|--|--|---|--|---|--|
| IMPORTANT Read this document carefully before installing and using the de | wice and follow all the additional information: keen this | first. 3.3 Additional information for the installation | ers, hot air ducts, etc.), devices having big magnetos (big speakers, etc.), locations subject to direct sunlight, | possible contacts with the electrical parts must be en- sured by a correct installation of the device; all the parts | CO8 common digital output 8 NO8 normally open contact digital output 8 |
| document close to the device for future consultations. | where and follow all the additional information, keep this | make sure the working conditions of the device (operat- | rain, humidity, dust, mechanical vibrations or bumps | which ensure the protection must be fixed so that you | according to the model: |
| For further information consult the hardware manual. | | ing temperature, operating humidity, etc.) are in the limits | | can not remove them if not by using a tool. | - 3 res. A @ 250 VAC electromechanical relay |
| The device must be disposed according to the local leg equipment. | distation about the collection for electrical and electronic | indicated; look at chapter "TECHNICAL DATA" | | | 24 VAC/DC, 600 mA max. command for solid state relay |
| | | 4 ELECTRICAL CONNECTION | CO9 common digital output 9 | | |
| 1 INTRODUCTION 1.1 Introduction | | 4.1 Connectors The following drawing shows the connectors of the devices. | NO9 normally open contact digital output 9 according to the model: | | |
| RDT940F901 is a range of configurable controllers for applications in refrigeration and air conditioning sectors. | | The following drawing shows the connectors of the devices. | - 3 res. A @ 250 VAC electromechanical relay | | |
| The controllers have a considerable number of inputs and outputs | | 5011/50 CA11/50 CA1 | 24 VAC/DC, 600 mA max. command for solid | | |
| control devices network. The variety of available communication communication protocols make easier the integration of the device | | AC/+ AC/- CAN+ CAN- GND A1/+ B1/- A2/+ | B2/- 3 2 III AIA AIA | A02 A03 D11 D12 D13 D14 D15 COM | C010 common digital outputs 10 |
| communication protocol please consult the PICS. | | | | | NO10 normally open contact digital output 10 (3 res. A |
| The actual version implements a BACnet® standardized device profi | ile B-ASC, which doesn't require the managing of Scheduler | | | | @ 250 VAC electromechanical relay) CO11 common digital output 11 |
| and Calendar objects, instead required for the B-AAC profile. | in broch mich doesn't require the managing of Scheduler | | | | NO11 normally open contact digital output 11 (3 res. A |
| 2 DESCRIPTION | | | | | @ 250 VAC electromechanical relay) NC11 normally closed contact digital output 11 |
| Description | The following chart shows the meaning of the parts of | ANALOG INPUTS / OUT | PUTS DIGITAL INPUTS | | |
| The following drawing shows the aspect of the devices. | the devices. Part Meaning | GND AL7 A18 A19 A110 GND | A04 A05 A06 COM1 D16 D17 D18 D19 D110 D111 D112 D113 COM1 | | CAN/RS-485 |
| 13 12 11 10 9 8 7 | 1 digital outputs K1 and K2 | | | | MODBUS slave RS-485 port, MODBUS master/slave RS-485 port and CAN CANBUS port. |
| <u> </u> | 2 digital outputs K3, K4, K5 and K6 | | | | Part Meaning |
| | 3 digital output K7 4 MODBUS TCP, Web Server Ethernet port | | | | CAN+ positive pole CANBUS CAN port CAN- negative pole CANBUS CAN port |
| 888888888888888888888888888888888888888 | 5 digital output K11 | RDT940F902 | | | GND ground MODBUS slave RS-485 port, MODBUS |
| 15- | 6 display and keyboard (not available in the blind versions) | | | | master/slave RS-485 port and CAN CANBUS port A1/+ positive pole MODBUS master/slave RS-485 port |
| | 7 digital inputs 1 5 | | | | B1/- hegative pole MODBUS master/slave RS-485 port |
| | 8 analog outputs 1 3 | | | | A2/+ positive pole MODBUS slave RS-485 port |
| 16-6 | 9 USB port 10 analog inputs 1 6 | | | | B2/- negative pole MODBUS slave RS-485 port |
| | 11 micro-switch to plug in the CANBUS CAN port | DIGITAL OUTPUTS DIGITAL | DUTPUTS DIGITAL OUTPUTS | | USB |
| | line termination, the MODBUS master/slave RS-485 port line termination and the MODBUS | K1 K2 K3 K4 K5 | K6 K7 | | USB port. |
| 17 | slave RS-485 port line termination | | | | ETHERNET |
| | 12 MODBUS slave RS-485 port, MODBUS master/ slave RS-485 port and CANBUS CAN port | | | | MODBUS TCP, Web Server Ethernet port. |
| | 13 power supply | | | | 4.3 Plugging in the CANBUS CAN port line termi- |
| | 14 analog outputs 7 10 and analog outputs 4 6 | C01 N01 C02 N02 C03-6 N03 N04 N05 | ND6 C07 N07 NC7 | | nation To plug in the CANBUS CAN port line termination, position |
| 1 2 3 4 | 15 digital inputs 6 13 | 4.2 Meaning of connectors | VS power supply 0-20 mA, 4-20 mA and 0-10 V trans- | ANALOG INPUTS / OUTPUTS | micro-switch 3 on position ON. |
| 17 digital outputs K8 and K9 18 digital output K10 | 16 signalling LEDs | The following charts show the meaning of the connectors of the devices. | ducers (12 VDC) | Analog inputs and outputs. | ON |
| 18 Jugitai output K10 | | For further information look at chapter "TECHNICAL DATA". | DIGITAL INPUTS | Part Meaning GND ground analog inputs and outputs | 3 2 1t |
| 3 SIZE AND INSTALLATION | | | Digital inputs. | AI7 analog input 7, which can be set via configuration | |
| 3.1 Size The following drawing shows the size of the devices (8 DIN modul | les); size is in mm (in). | POWER Power supply device (24 VAC/DC not isolated). | Part Meaning DI1 digital input 1 (24 VAC/DC, 50/60 Hz or 2 KHz | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | 4.4 Plugging in the MODBUS master/slave RS- |
| | 555555 55555 555555 | If the device is powered in direct current, it will be necessary | optoisolated) | AI8 analog input 8, which can be set via configuration | 485 port line termination |
| | | to respect the polarity of the power supply voltage. If the device is connected to a devices network, it will be | DI2 digital input 2 (24 VAC/DC, 50/60 Hz or 2 KHz optoisolated) | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | To plug in the MODBUS master/slave RS-485 port line ter- mination, position micro-switch 2 on position ON. |
| 8080000000 80000000 | | necessary: | DI3 digital input 3 (24 VAC/DC, 50/60 Hz optoisolated) | AI9 analog input 9, which can be set via configuration | |
| | | the power supply of the devices making the network is galvanically isolated one another | DI4 digital input 4 (24 VAC/DC, 50/60 Hz optoisolated) DI5 digital input 5 (24 VAC/DC, 50/60 Hz optoisolated) | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | ON 3 2 1t |
| | | the phase supplying the device is the same supplying all | COM common digital inputs | AI10 analog input 4, which can be set via configuration | |
| | 0.39 | the devices making the network. Part Meaning | DIGITAL INPUTS | parameter for PTC, NTC, Pt 1000 or Ni 1000 probes GND ground analog inputs and outputs | 4.5 Plugging in the MODBUS slave RS-485 port |
| | S. | AC/+ power supply device: | Digital inputs. | A04 analog output 4, which can be set via configuration | line termination |
| | | if the device is powered in alternate current, | Part Meaning | parameter for 0-20 mA, 4-20 mA or 0-10 V | To plug in the MODBUS slave RS-485 port line termination, |
| | | connect the phase if the device is powered in direct current, con- | COM1 common digital inputs DI6 digital input 6 (24 VAC/DC, 50/60 Hz optoisolated) | AO5 analog output 5, for 0-10 V AO6 analog output 6, for 0-10 V | position micro-switch 1 on position ON. |
| | | nect the positive pole | DI7 digital input 7 (24 VAC/DC, 50/60 Hz optoisolated) | | ON |
| | | AC/- power supply device: if the device is powered in alternate current, | DI8 digital input 8 (24 VAC/DC, 50/60 Hz optoisolated) DI9 digital input 9 (24 VAC/DC, 50/60 Hz optoisolated) | DIGITAL OUTPUTS Digital outputs. | 3 2 1f |
| | | connect the neutral | DI10 digital input 10 (24 VAC/DC, 50/60 Hz optoisolated) | Part Meaning | |
| | | if the device is powered in direct current, con- next the powerbing pole | DI11 digital input 11 (24 VAC/DC, 50/60 Hz optoisolated) | CO1 common digital output 1 | 4.6 Polarizing the MODBUS master/slave RS-485 |
| ← 60.0 (2.362) → ↓ | 44.0 (5.669) | nect the negative pole | DI12 digital input 12 (24 VAC/DC, 50/60 Hz optoisolated) DI13 digital input 13 (24 VAC/DC, 50/60 Hz optoisolated) | NO1 normally open contact digital output 1 according to the model: | The polarization of the MODBUS master/slave RS-485 port |
| 3.2 Installation | | ANALOG INPUTS | COM common digital inputs | 3 res. A @ 250 VAC electromechanical relay | can be set via configuration parameter. |
| | remove the devices remove possible extractable screw ter- nal blocks plugged at the bottom first, then operate on the | Analog inputs. Part Meaning | ANALOG OUTPUTS | 24 VAC/DC, 600 mA max. command for solid state relay | 4.7 Polarizing the MODBUS slave RS-485 port The devices are not able to polarize the MODBUS slave |
| | I rail clips with a screwdriver as shown in the following | GND ground analog inputs | Analog outputs. | CO2 common digital output 2 | RS-485 port; the polarization must be done by another |
| To install the devices operate as shown in the following draw | wing. | AI1 analog input 1, which can be set via configuration | Part Meaning | NO2 normally open contact digital output 2 according to the model: | device. |
| drawing. | 2 | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | GND ground analog outputs AO1 analog output 1, which can be set via configuration | - 3 res. A @ 250 VAC electromechanical relay | 4.8 Additional information for electrical connec- tion |
| | 3 4 | AI2 analog input 2, which can be set via configuration | parameter for PWM or 0-10 V | 24 VAC/DC, 600 mA max. command for solid | do not operate on the terminal blocks of the device |
| | | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | AO2 analog output 2, which can be set via configuration parameter for PWM or 0-10 V | CO3-6 common digital outputs 3 6 | using electrical or pneumatic screwers if the device has been moved from a cold location to a |
| | | AI3 analog input 3, which can be set via configuration | AO3 analog output 3, which can be set via configuration | NO3 normally open contact digital output 3 (3 res. A @ | warm one, the humidity could condense on the in- |
| | | parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V rat. or 0-10 V transducers | parameter for 0-20 mA, 4-20 mA or 0-10 V | 250 VAC electromechanical relay) NO4 normally open contact digital output 4 (3 res. A @ | side; wait about an hour before supplying it - make sure the power supply voltage, the electrical |
| | | AI4 analog input 4, which can be set via configuration | | 250 VAC electromechanical relay) | frequency and the electrical power of the device cor- |
| | | parameter for PTC, NTC, Pt 1000 or Ni 1000 probes | | NO5 normally open contact digital output 5 (3 res. A @ | respond to those of the local power supply; look at |
| | | AI5 analog input 5, which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes | | 250 VAC electromechanical relay) NO6 normally open contact digital output 6 (3 res. A @ | chapter "TECHNICAL DATA" disconnect the power supply of the device before serv- |
| | | AI6 analog input 6, which can be set via configuration | | 250 VAC electromechanical relay) | icing it |
| | | parameter for PTC, NTC, Pt 1000 or Ni 1000 probes | | CO7 common digital output 7 | |

- GND ground analog inputs +5V power supply 0-5 V ratiometric transducers (5 VDC)

 NO7
 normally open contact digital output 7 (3 res. A @

 250 VAC electromechanical relay)

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Code | Page 2 of 2 |

| | nnect the device to a RS-485 devices network using | - digital inputs: 100 m (328 ft) | NTC analog inputs (|
|---|---|--|--|
| a twisted pair | | - PWM analog outputs: 1 m (3.280 ft) | Kind of sensor: |
| connect the device to a CAN devices network using a twisted pair | | 0-20 mA, 4-20 mA and 0-10 V analog outputs: 100 m (328 ft) | Working range: |
| - po | sition the power cables as far away as possible from e signal cables | digital outputs (electromechanical relays): 100 m (328 ft) | Accuracy: |
| | not use the device as safety device | - digital outputs (command for solid state relays): | |
| | r the repairs and for information about the device | 100 m (328 ft) | |
| ple | ease contact the Sauter sales network. | - MODBUS slave RS-485 port and MODBUS master/slave | Resolution: |
| | SIGNALINGS | RS-485 port: 1,000 m (3,280 ft); also look at MODBUS specifications and implementation guides manual avail- | Conversion time: Protection: |
| 5 5.1 | Signalings | able on http://www.modbus.org/specs.php | NTC analog inputs (|
| LED | | - CANBUS CAN port: | Kind of sensor: |
| ON | LED power supply | 1,000 m (3,280 ft) with baud rate 20,000 baud | Working range: |
| | if it is lit, the device will be powered | 500 m (1,640 ft) with baud rate 50,000 baud | |
| RUN | if it is out, the device will not be powered | 250 m (820 ft) with baud rate 125,000 baud | Accuracy: |
| RUN | LED run if it is lit, the application software will be com- | 50 m (164 ft) with baud rate 500,000 baud according to the factory setting the device automatically | Resolution: Conversion time: |
| | piled and running in <i>release</i> modality | detects the baud rate of the other elements making the | Protection: |
| | if it flashes slowly, the application software will | network, on condition that it is one of those listed be- | NTC analog inputs (|
| | be compiled and running in debug modality | fore; on afterwards set manually the baud rate to the | Kind of sensor: |
| | if it flashes quickly, the application software will | same value of that of the other elements | Working range: |
| | be compiled, running in <i>debug</i> modality and | - USB port: 1 m (3.280 ft). | |
| | stopped in a breakpoint if it is out: | To wire the device one suggests using the connecting kit CJAV35 (to order separately): only female removable screw | Accuracy: Resolution: |
| | the device will not be compatible with the | connection terminal blocks with pitch 3.5 mm (0.137 in) for | Conversion time: |
| | application software | conductors up to 1.5 mm ² (0.0028 in ²) and only female re- | Protection: |
| | - the device will not be enabled to work with | movable screw connection terminal blocks with pitch 5.0 mm | Pt 1000 analog inpu |
| | the special ABL (Application Block Libraries) | (0.196 in) for conductors up to 2.5 mm ² | Working range: |
| ₫ | LED system alarm | (0.0038 in ²). | |
| | if it is lit, an alarm system not resettable via ap- | To program the device one suggests using the connecting ca- bles 0810500018 or 0810500020 (to order separately): the | Accuracy: |
| | plication software will be running if it flashes slowly, a system alarm with auto- | cable 0810500018 is 2.0 m (6.561 ft) long, the cable | |
| | matic reset will be running | 0810500020 is 0.5 m (1.640 ft) long. | Resolution: |
| | if it flashes very slowly, an access to the external | Operating temperature: | Conversion time: |
| | FLASH memory will be running | from -10 to 55 °C (from 14 to 131 °F) for the built-in | Protection: |
| | if it flashes quickly, a system alarm with manual | versions | Ni 1000 analog inpu |
| | reset will be running if it is out, no alarm system will be running | from -20 to 55 °C (from -4 to 131 °F) for the blind ver- sions. | Working range: |
| CAN | | Storage temperature: from -25 to 70 °C (from -13 to | Accuracy: |
| | if it is lit, the device will be configured to commu- | 158 °F). | , |
| | nicate via CANBUS CAN with another device but | Operating humidity: from 10 to 90% of relative humidity | Resolution: |
| | the communication will not have been set up | not condensing. | Conversion time: |
| | if it flashes slowly, the CANBUS CAN communica- tion will have been set up but it will not be com- | Control pollution situation: 2. Environmental conformity: | Protection: 0-20 mA and 4-20 r |
| | pletely correct | - RoHS 2011/65/CE | Input resistance: |
| | if it flashes quickly, the CANBUS CAN communi- | - WEEE 2012/19/EU | Accuracy: |
| | cation will have been set up and will be correct | REACH regulation (CE) n. 1907/2006. | Resolution: |
| | | | |
| | if it is out, no CANBUS CAN communication will | EMC conformity: | Conversion time: |
| -11 | be running | EMC conformity: - EN 60730-1 | |
| L1 | be running | EMC conformity: - EN 60730-1 - IEC 60730-1. | Conversion time: Protection: |
| L1 | be running | EMC conformity: - EN 60730-1 | Conversion time: Protection: |
| -11 | be running | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: | Conversion time: Protection: 0-5 V ratiometric an |
| 6 | be running LED auxiliary TECHNICAL DATA | EMC conformity: - EN 60730-1. Power supply: - - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - - 20 40 VDC, 12 W max. not isolated | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: |
| 6 6.1 | be running LED auxillary TECHNICAL DATA Technical data | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 2040 VDC, 12 W max. not isolated supplied by a class 2 circuit. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: |
| 6 6.1 Purpos | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - - 2.0 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: |
| 6 6.1 Purpos Constr | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 |
| 6 6.1 Purpos Constr Box: s | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - - 2.0 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC |
| 6 6.1 Purpos Constr Box: S Heat a Size: 1 | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. eff-extinguishing grey. nd fire resistance category: D. 44.0 x 128.0 × 60.0 mm (5.669 x 5.039 x 2.362 in; | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/D - 11 at 24 VAC/D 24 VAC/DC, 50/60 H |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 2040 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC - 11 at 24 VAC/D |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H Size re | be running LED auxiliary TECHNICAL DATA Technical data se of control: incorporated electronic device. uction of control: incorporated electronic device. elf-extinguishing grey. ind fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/D - 11 at 24 VAC/D 24 VAC/DC, 50/60 H |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H Size re nal bloo | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. eff-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- cks properly plugged. | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 2040 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Rael time clock: incorporated (with likium primary battery). Battery range in absence of power supply: 5 years @ 25 °C | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC - 11 at 24 VAC/DC - 11 at 24 VAC/D Power supply: |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size re nal bloo Metho | be running LED auxiliary TECHNICAL DATA Technical data se of control: incorporated electronic device. uction of control: incorporated electronic device. elf-extinguishing grey. ind fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/D - 11 at 24 VAC/D 24 VAC/DC, 50/60 h |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size rei nal bloo Methoo (1.377 | be running LED auxiliary TECHNICAL DATA Technical data se of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D): 8 DIN modules. fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/D - 11 at 24 VAC/D <u>24 VAC/DC, 50/60 F</u> Power supply: Input resistance: Protection: |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size re nal bloo Metho (1.377 Degree - IP: | be running LED auxiliary TECHNICAL DATA Technical data se of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIX modules. fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole | EMC conformity: - EN 60730-1 - IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (\pm 3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Drift: \leq 30 s/month @ 25 °C (77 °F). Analog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/D - 11 at 24 VAC/D <u>24 VAC/DC, 50/60 F</u> Power supply: Input resistance: Protection: |
| 6 6.1 Purpos Constr s Heat a Size: 1 W x H : Size rei nal blor Methor (1.377 Degree - IP: - IP: | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. eff-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fars to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. | EMC conformity: EN 60730-1 IEC 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Drift: 30 s/month @ 25 °C (77 °F). Analog inputs: 10 inputs: 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Digital inputs: 13 - 2 at 24 VAC/DC - 11 at 24 VAC/D 24 VAC/DC, 50/60 F Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz cf |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size re nal blow Metho (1.377 Degree - IP - IP Conne | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. eff-extinguishing grey. md fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: | EMC conformity: EN 60730-1 Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: • which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes • 6 which can be set via configuration parameter for PTC, | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 <u>1</u> 2 at 24 VAC/DC <u>24 VAC/DC, 50/60 H</u> Power supply: Input resistance: Protection: <u>24 VAC/DC, 2 KHz c</u> Power supply: |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size re nal bloo Metho (1.377 Degree - IP: - IP: - IP: - Onne Conne | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 × 60.0 nm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- tics property plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm o.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: ly male removable screw connection terminal blocks | EMC conformity: - IEC 60730-1. Power supply: - - 24 VAC (+10% -15%), 50/60 Hz (\pm 3 Hz), 20 VA max. not isolated - 2040 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Drift: 30 s/month @ 25 °C (77 °F). Analog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes, 0-20 mA, 4-20 mA, 0-5 V | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: <u>0 at 24 VAC/DC</u> <u>24 VAC/DC</u> , <u>50/60 F</u> Power supply: Input resistance: Protection: <u>24 VAC/DC, 2 KHz c</u> Power supply: Input resistance: |
| 6 6.1 Purpos Constr Box: s Heat a Size 1 W x H : Size re nal bloo Metho (1.377 Degree - IP: - IP: - IP: - Onne - on without a state of the state of | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x 0); 8 DIN modules. fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: ly male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to | EMC conformity: EN 60730-1 Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: • which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes • 6 which can be set via configuration parameter for PTC, | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: Input resistance: Protection: |
| 6 6.1 Purpos Constr Box: s Heat a Size: 1 W x H : Size rei nal bloo Methoo (1.377 Degree - IP: - IP: - Onne - On without - One - | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, jual inputs, analog outputs, MODBUS slave RS-485 | EMC conformity: EN 60730-1 JEC 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-7 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 rN i1000 probes, 0-20 mA, 4-20 mA, 0-5 V ratiometric transducers. Power supply 0-5 V ratiometric transducers. Power supply 0-5 V ratiometric transducers. | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: Input resistance: Protection: |
| 6 6.1 Purpos Constr Box: s Size: 1 W x H :: Size re nal bloo (1.377 Degree - Onne - | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 & 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, pital inputs, analog outputs, MODBUS slave RS-485 pital inputs, analog outputs, MODBUS slave | EMC conformity: - EN 60730-1 - IEC 60730-1 - Power supply: - 24 VAC (+10% -15%), 50/60 Hz (\pm 3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). - Manlog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes. - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. - 8 were supply 0-5 V ratiometric transducers. Power supply 0-5 V ratiometric transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 | Conversion time: Protection: 0-5 V ratiometric ar Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 I Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: Analog outputs: 6 - 2 for 0-10 V - 2 which can be |
| 6 6.1 Purpo: Constr Box: s Heat a Size: 1 W x H : Size rei nal bloo Metho (1.377 Degree - IP: Conset Degree - IP: Conset II: II: II: II: II: II: II: II | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. eff-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- tics properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: b) male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm² (0.0028 in²): power supply, analog inputs, gital inputs, analog outputs, MODBUS slave RS-485 pt, MODBUS master/slave RS-485 port and CANBUS W port | EMC conformity: EN 60730-1 IEC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes. - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes. Power supply 0-5V ratiometric transducers: 5 VDC (+0 %, -12 %), 60 mA max. Power supply 0-5V natiometric transducers: 5 VDC (+0 %, -12 %), 50 mA max. | Conversion time: Protection: <u>0-5 V ratiometric an</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: <u>0 at 24 VAC/DC</u> <u>24 VAC/DC</u> , <u>20/60 F</u> Power supply: Input resistance: Protection: <u>24 VAC/DC, 2 KHz c</u> Power supply: Input resistance: Protection: <u>24 VAC/DC, 2 KHz c</u> Power supply: Input resistance: Protection: <u>24 VAC/DC, 2 KHz c</u> Power supply: Input resistance: Protection: <u>24 or 0-10 V</u> - 2 which can be or 0-10 V |
| 6 6.1 Purpo: Constr Box: s Heat a Size: 1 Size: 1 Size: 1 Size: 1 Size: 1 Netho (1.377) Degree - 0n wi 1.1 dig po 0 CA - 0n - 0n - 1 Purpo: - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x 0); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. Ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²); power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 rt, MODBUS master/slave RS-485 port and CANBUS N port Ily male removable screw connection terminal blocks | EMC conformity: EN 60730-1 IEC 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. Power supply 0-5 V ratiometric transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 VDC (±10 %), 120 mA max. | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: Analog outputs: 6 - 2 for 0-10 V - 2 which can be or 0-10 V - 2 which can be |
| 6 6.1 Purpo: Constr Box: s Heat a Size: 1 Size: 1 Size re nal blo Metho (1.377 Degree - IP: Conse - On wii 1.1.3 Generation - On wii | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 × 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- tics property plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ³): power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 prot mol CANBUS N port Ily male removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to | EMC conformity: EN 60730-1 IEC 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes. 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. 9 wers supply 0-5V ratiometric transducers: 5 VDC (+0 %, -12 %), 60 mA max. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 VDC (±10 %), 120 mA max. The maximum current which can be set value for MC (+10 %), -12 %), 60 mA max. | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 for 0-10 V - 2 which can be or 0-10 V - 2 which can be 0-20 mA, 4-20 |
| 6 6.1 Purpo: Constr Box: s Size 1 W x H : Size rail Size rail W x H : Size rail W x H : Size rail Netho (1.377 Degree - 0 nn with 1.1.1 dig go CA Canto - 0 no with 2.1 Conto - 0 no to - 0 no - 0 no to - 0 n t - 0 n t - 0 n | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x 0); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. Ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²); power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 rt, MODBUS master/slave RS-485 port and CANBUS N port Ily male removable screw connection terminal blocks | EMC conformity: EN 60730-1 IEC 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. Power supply 0-5 V ratiometric transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 VDC (±10 %), 120 mA max. | Conversion time: Protection: <u>0-5 V ratiometric ar</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: <u>0 at 24 VAC/DC</u> , <u>24 VAC/DC</u> , <u>50/60 1</u> Power supply: Input resistance: Protection: <u>24 VAC/DC</u> , <u>2 KHz c</u> Power supply: Input resistance: Protection: <u>24 VAC/DC</u> , <u>2 KHz c</u> Power supply: Input resistance: Protection: <u>24 for 0-10 V</u> <u>2 which can be</u> or 0-10 V <u>2 which can b</u> 0-20 mA, 4-20 |
| 6 6.1 Purpo: Constr Box: s Size 1 Size 1 Size re nal bloi (1.377 Degree - IP. Conne - IP. Conne - IP. Conne - On with dig po po CA - On vita - On on vita - On vita - On vi - On vi On vi - On vi On vi On vi On vi On O | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ity male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, rt, MODBUS master/slave RS-485 port and CANBUS Wi port Ity male removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to 5 mm ² (0.0036 in ²): digital uotputs | EMC conformity: ENG conformity: ENG 60730-1. Power supply: 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Realtime clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 probes. 6 which can be set via configuration parameter for PTC, NTC, NT 1000, probes. Power supply 0-5 V ratiometric transducers: 5 VDC (+0 %, -12 %), 60 m max. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 VDC (±10 %), 120 mA max. The maximum current which can be supplied on the whole from the two power supply is 120 mA. | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: Analog outputs: 6 - 2 for 0-10 V - 2 which can be o-20 mA, 4-20 DVM analog outputs: |
| 6 6.1 Purpo: Constr Box:s 5 Size: 1 W x H 3 Size: 1 W x H 3 Size: 1 N x H 2 Degree - 0 0 with dig Degree - 0 0 with dig Degree - 0 0 with dig 2.2 - 0 0 0 c 2 - 0 0 0 c 2 - 0 0 0 c 2 - 0 0 0 c 2 - 0 0 c 2 - 0 0 0 c 2 - 0 - 0 0 c 2 - 0 - 0 0 c 2 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 & 60.0 mm (5.669 x 5.039 x 2.362 in; x D): 8 DIN modules. fers to the device with the extractable screw termi- ticks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 th pitch 5.0 mm (0.136 in) for conductors up to 5 mm ² (0.0038 in ²): digital outputs thy male removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to 5 mm ² (0.0038 in ²): digital outputs type USB connector: USB port 45 Ftelephone connector: MODBUS TCP, Web Server hernet port. | EMC conformity: EN 60730-1 Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated - 20 40 VDC, 12 W max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-T 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: 0 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. Power supply 0-5V ratiometric transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers. Power supply 0-20 mA, 25 °C, 77 °F) Kind of sensor: KTY 81-121. Working range: from -50 to 150 °C (from -58 to 302 °F). | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: Analog outputs: 6 - 2 for 0-10 V - 2 which can be or 0-10 V - 2 which can be - 2 w |
| 6 6.1 Purpot Constr Box: s Size r1 W x H + Size r2 Net Degree - IP, Constr Methoo Degree - IP, Constr Methoo CA CA Constr Methoo CA CA Constr Methoo CA CA Constr Methoo CA CA Constr Methoo CA CA Constr Methoo CA CA Constr Methoo CA CA CA CA CA CA CA CA CA CA CA CA CA | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. uction of control: incorporated electronic device. elf-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 × 60.0 nm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- tics properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm 0.295 in jor 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily male removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²); power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 pr, MODBUS master/slave RS-485 port and CANBUS N port Ily male removable screw connection terminal blocks th pitch 3.0 mm (0.196 in) for conductors up to 5 mm ² (0.0038 in ²); digital outputs type USB connector: USB port 45 F telephone connector: MODBUS TCP, Web Server hermet port. aximum lengths allowed for the connecting cables | EMC conformity: | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 - 2 at 24 VAC/DC 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 JAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 JAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Input resistance: Protection: 24 VAC/DC, 2 KHz c Power supply: Frequency: Duty: |
| 6 6.1 Purpeo: Constr Box: s Size: 1 W x H 3 Size: r nal blou Methoo Constr Degree - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. eff-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ity maler removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, rt, MODBUS master/slave RS-485 port and CANBUS W port Ity maler removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to 5 mm ² (0.0038 in ²): digital uotputs Stype USB connector: USB port 45 F telephone connector: MODBUS STCP, Web Server hernet port. aximum lengths allowed for the connecting cables i following: | EMC conformity: - | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 j - 2 at 24 VAC/DC 24 VAC/DC, 50/60 F Power supply: Input resistance: Protection: Analog outputs: 6 - 2 for 0-10 V - 2 which can be or 0-10 V - 2 which can be - 2 which can be or 0-10 V - 2 which can be - 2 which can |
| 6 6.1 Purpeo: Constr Box: s Heat a Size: 1 N × H Size re nal bloid (1.377 Degree 1.7 Conne Metho (1.377 Degree - on wi 1.1 - IP. Conne Constr - on wi 1.2 - on wi 2.2 - on wi - on wi 2.2 - on wi - on - on wi - on - on wi - on - on wi - on - on - on wi - on - on | be running LED auxiliary TECHNICAL DATA Technical data se of control: operating control device. eff-extinguishing grey. Ind fire resistance category: D. 44.0 x 128.0 & 60.0 nm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in 0 v 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ily maler removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm² (0.0028 in²): power supply, analog inputs, jital inputs, analog outputs, MODBUS slave RS-485 5 mm² (0.0028 in²): digital outputs W port by maler removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to 5 mm² (0.0038 in²): jower supply, analog inputs, yital inputs, analog outputs, MODBUS slave RS-485 to pitch 5.0 mm (0.196 in) for conductors up to 5 mm² (0.0038 in²): jower by port 45 Ftelephone connector: MDDBUS TCP, Web Server hernet port. aximum lengths allowed for the connecting cables if following: wer supply: 100 m (328 ft) | EMC conformity: - - IEC 60730-1. Power supply: - 1EC 60730-1. Power supply: - 24 VAC (+10% -15%), 50/60 Hz (±3 Hz), 20 VA max. not isolated supplied by a class 2 circuit. Protect the power supply with a 2 A-7 250 V fuse. If the device is powered in direct current, it will be necessary to respect the polarity of the power supply voltage. Rated impulse voltage: 4 KV. Overvoltage category: III. Class and structure of software: A. Real time clock: incorporated (with lithium primary battery). Battery range in absence of power supply: 5 years @ 25 °C (77 °F). Analog inputs: 10 inputs: - 4 which can be set via configuration parameter for PTC, NTC, Pt 1000 or Ni 1000 probes - 6 which can be set via configuration parameter for PTC, NTC, Pt 1000, Ni 1000 probes. Power supply 0-5 V ratiometric transducers: 5 VDC (+0 %, -12 %), 60 mA max. Power supply 0-20 mA, 4-20 mA and 0-10 V transducers: 12 VDC (±10 %), 120 mA max. Proc analog inputs (990 Q @ 25 °C, 77 °F) Kind of sensor: KTY 81-121. Working range: from -50 to 150 °C (from -58 to $302 °F$). Accuracy: ± 0.5 % of the full scale. | Conversion time: Protection: 0-5 V ratiometric an Input resistance: Accuracy: Resolution: Conversion time: Protection: Digital inputs: 13 i - 2 at 24 VAC/DC - 11 at 24 VAC/D 24 VAC/DC, 50/60 H Power supply: Input resistance: Protection: 24 VAC/DC, 2 KH2 c Power supply: Frequency: Duty: |
| 6 6.1 Purpo: Constr Box: s Heat a Size: 1 Size for Nethor Degree - IP: - | be running LED auxiliary Technical data se of control: operating control device. ruction of control: incorporated electronic device. eff-extinguishing grey. and fire resistance category: D. 44.0 x 128.0 x 60.0 mm (5.669 x 5.039 x 2.362 in; x D); 8 DIN modules. Fers to the device with the extractable screw termi- cks properly plugged. d of mounting control: on DIN rail 35.0 x 7.5 mm x 0.295 in) or 35.0 x 15.0 mm (1.377 x 0.590 in). e of protection: 20 on the whole 40 the front. ctions: Ity maler removable screw connection terminal blocks th pitch 3.5 mm (0.137 in) for conductors up to 5 mm ² (0.0028 in ²): power supply, analog inputs, rt, MODBUS master/slave RS-485 port and CANBUS W port Ity maler removable screw connection terminal blocks th pitch 5.0 mm (0.196 in) for conductors up to 5 mm ² (0.0038 in ²): digital uotputs Stype USB connector: USB port 45 F telephone connector: MODBUS STCP, Web Server hernet port. aximum lengths allowed for the connecting cables i following: | EMC conformity: - | Conversion time: Protection: <u>0-5 V ratiometric ar</u> Input resistance: Accuracy: Resolution: Conversion time: Protection: <u>0 at 24 VAC/DC</u> , <u>24 VAC/DC</u> , <u>50/60 1</u> Power supply: Input resistance: Protection: <u>24 VAC/DC</u> , <u>2 KHz (7</u> Power supply: Frequency: Duty: |

| inputs (10 KΩ | @ 25 °C, 77 °F) | 0-20 mA and 4-20 mA and | alog outputs | |
|--|--|--|---|--|
| or: | ß3435. | Input resistance: | 40 300 Ω. | |
| ge: | from -40 to 120 °C (from -58 to | Accuracy: | ±3 % of the full scale. | |
| | 248 °F). - ±0.5 % of the full scale | Resolution: Conversion time: | 0.05 mA. 1 s. | |
| | from -40 to 100 °C | Protection: | none. | |
| | - ±1 °C from -50 to -40 °C | | | |
| | and from 100 to 120 °C. | 0-10 V analog outputs | | |
| | 0.1 °C. | Input resistance: | 1 ΚΩ. | |
| time: | 100 ms. | Accuracy: | ±3 % of the full scale. | |
| inpute (10 KO | none. @ 25 °C, 77 °F) | Resolution: | +2 %, -5 % of the full scale for loads having impedance | |
| or: | NTC type 2. | | from 1 to 5 KQ | |
| ge: | from -40 to 86 °C (from -40 to | | - ±2 % of the full scale for | |
| | 186 °F). | | loads having impedance | |
| | ±1 °C. | | > 5 KΩ. | |
| time: | 0.1 °C. 100 ms. | Digital outputs: 11 output | | |
| ime: | none. | according to the mode nine 3 res A @ | 250 VAC SPST electromechanical | |
| inputs (10 KΩ | @ 25 °C, 77 °F) | relays (K1 K6 a | | |
| or: | NTC type 3. | | 600 mA max. commands for solid | |
| ge: | from -40 to 86 °C (from -40 to | | K2, K8 and K9) and five 3 res. A @ | |
| | 186 °F). | | electromechanical relays (K3 K6 | |
| | ±1 °C | and K10) | | |
| time: | 0.1 °C. 100 ms. | | VAC SPDT electromechanical relay | |
| une. | none. | (K7 and K11). The device ensures a doub | ble insulation among each connec- | |
| log inputs (1 K | Ω @ 0 °C, 32 °F) | tor of the digital outputs and the remaining parts of the de- | | |
| ge: | from -100 to 400 °C (from -148 | vice. | | |
| | to 752 °F). | Type 1 or type 2 actions | | |
| | ±0.5 % of the full scale | | ype 1 or type 2 action: C. | |
| | from -100 to 200 °C | Displays: according to the | e model: | |
| | ±2 °C from 200 to -400 °C. 0.1 °C. | none (blind version) 4+4 digits sustain dis | splay (built-in LED version) | |
| time: | 100 ms. | | colour LCD graphic display (built-in | |
| | none. | LCD version). | | |
| log inputs (1 K | <u>Ω @ 0 °C, 32 °F)</u> | Communication ports: 5 | | |
| ge: | from -50 to 260 °C (from -50 to | | IODBUS slave communication pro- | |
| | 500 °F). | tocol | | |
| | ±0.5 % of the full scale from -50 to 250 °C. | 1 RS-485 port with M TP communication pro | ODBUS master/slave, BACnet MS/ | |
| | 0.1 °C. | | BUS communication protocol | |
| time: | 100 ms. | 1 USB port | sos communication protocor | |
| | none. | | MODBUS TCP, Web Server, BACnet | |
| d 4-20 mA ana | log inputs | IP communication pro | | |
| ance: | ≤ 200 Ω. | | | |
| | ±0.5 % of the full scale. 0.01 mA. | | | |
| time: | 0.01 mA. 100 ms. | | nents a BACnet® standardized de- doesn't require the managing of | |
| lime: | none; the maximum current al- | | bjects, instead required for the B- | |
| | lowed on each input is 25 mA. | AAC profile. | bjects, instead required for the B | |
| etric and 0-10 | V analog inputs | | | |
| ince: | ≥ 10 KΩ. | | | |
| | ±0.5 % of the full scale. | | | |
| time: | 0.01 V. 100 ms. | | | |
| time: | 100 ms. none. | | | |
| Its: 13 inputs: | | | | |
| | 0 Hz or 2 KHz optoisolated | | | |
| 4 VAC/DC, 50/ | 60 Hz. | | | |
| 50/60 Hz digit | | | | |
| y: | - 24 VAC (±15 %), 50/60 Hz | | | |
| | (±3 Hz) | | | |
| ince: | 24 VDC (+66 %, -16 %). ≥ 10 KΩ. | | | |
| nice. | none. | | | |
| 2 KHz digital i | nputs | | | |
| y: | 24 VAC (±15 %), 50/60 Hz | | | |
| | (±3 Hz) | | | |
| | - 24 VDC (+66 %, -16 %). | | | |
| ince: | ≥ 10 KΩ. | | | |
| puts: 6 output | none. | | | |
| 10 V | | | | |
| | configuration parameter for PWM | | | |
| V | | | | |
| n can be set via configuration parameter for | | | | |
| A, 4-20 mA or | 0-10 V. | | | |
| outputs | 10 VDC (116 W 25 W) 10 | | | |
| y: | 10 VDC (+16 %, -25 %), 10 mA max. | | | |
| | 0 2 KHz. | | | |
| | 0 100 %. | | | |
| | none. | | | |
| | | | | |

<u>1 outputs</u> 0... 300 Ω.

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