

Prime



CX: 32x74mm

IP65



CX
line

PRIME CX SERIES: NT, MT AND LT APPLICATIONS – SERIAL OUTPUT

- Innovative digital controllers dedicated to heat and M.T. – LT. refrigeration
- Easy and intuitive programming mode
- Display with icons and integrated measurement units
- On/off key
- Plastic front frame with "cut out" "WING" compatible
- Up to 2 light switches
- Energy saving cycles through digital input
- Fast freezing with dedicated set point
- Regulation stop through auxiliary probe
- Regulation restart with door open alarm
- Temperature or HACCP Max and Min functions
- Configurable digital input also as probe
- Virtual probe management
- Condenser temperature management to prevent critical plant situations
- Hot Key connector for a quick and easy programming
- Serial line connection to monitoring systems
- Connection for X-REP remote display (alternative to TTL output)
- 3VA max power absorption
- Display with red LED (10,5mm high) and icons

HOW TO ORDER

PRIME CX X R C X - A B C D E

 For blue display please contact Dixell

| A | | B | | C | | | D | | | E | |
|--------------|----------------------------------|--------|--------------------------------|--------------------------------------|------------------------------|-----|-------------------|-------------|--|---|--|
| Power supply | Inputs | Buzzer | X-REP (excludes TTL output) | RS485 output (only for XR35/75CX) | Measurement unit | RTC | Compressor output | Connections | | | |
| 0 = 12Vac/dc | P = PTC | 0 No | No | No | C °C | No | 0 8A | Screw | | | |
| 1 = 24Vac/dc | N = NTC | 1 Yes | No | No | F °F | No | 1 20A | Screw | | | |
| 2 = 24Vac | S = Pt1000 only for XR35/75CX | 2 No | Yes | No | H °C Heating only for XR10CX | No | 3 16A | Screw | | | |
| 3 = 9÷40Vdc | | 3 Yes | Yes | No | L °F Heating only for XR10CX | No | 6 8A | Faston | | | |
| 4 = 110Vac | | 4 No | No | Yes | I °C | Yes | 7 20A | Faston | | | |
| 5 = 230Vac | | 5 Yes | No | Yes | M °F | Yes | 8 16A | Faston | | | |
| | | 6 No | Yes | Yes | | | | | | | |
| | | 7 Yes | Yes | Yes | | | | | | | |

PRIME CX

THERMOSTAT and CONTROLLERS with "OFF CYCLE" DEFROST for NORMAL, MEDIUM and LOW TEMPERATURE



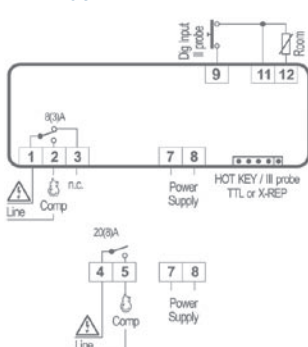
CX: 32x74mm

| | |
|---------------|---|
| XR10CX | Digital thermostat with heating or cooling action |
| XR20CX | Digital controller for N.T. with "off cycle" defrost |
| XR30CX | Digital controller for N.T. with "off cycle" defrost and additional configurable relay |
| XR35CX | Digital controller for N.T. with "off cycle" defrost, additional configurable relay and RS485 |
| XR36CX | 2 set point digital controller for N.T. with "off cycle" defrost |

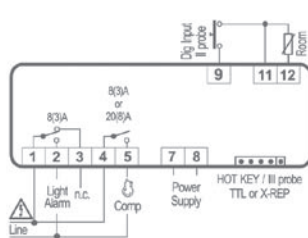
| FEATURES | XR10CX | XR20CX | XR30CX | XR35CX | XR36CX |
|---|--|--|--|-----------------|--|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 24, 110, 230Vac | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * |
| Probe inputs | | | | | |
| Thermostat | NTC/PTC | NTC/PTC | NTC/PTC | PTC/Pt1000 | NTC/PTC |
| Thermostat 2 | | | | | NTC/PTC |
| Defrost | | | | PTC/Pt1000 | |
| Defrost 2 | | | | | |
| Condenser | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | PTC/Pt1000 | NTC/PTC on HOT KEY |
| Digital inputs | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | config | |
| Relay outputs | | | | | |
| Compressor | 8A, 20A opt | 8A, 20A opt | 8A, 20A opt | 8A, 16A opt | 8A, 20A opt |
| Compressor 2 | | | | | |
| Thermostat 2 | | | | | 8A |
| Defrost | | | | | |
| Defrost 2 | | | | | |
| Fans | | | | | |
| Light or alarm | | | 8A | | |
| Anti-sweat | | | | 8A | |
| Other | | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres |
| Remote display output | X-REP opt | X-REP opt | X-REP opt | X-REP opt | X-REP opt |
| Serial output | TTL | TTL | TTL | TTL/RS485 opt | TTL |
| Buzzer | opt | opt | opt | opt | opt |
| Real time clock | | | opt | opt | |

*: only for models with compressor = 8A

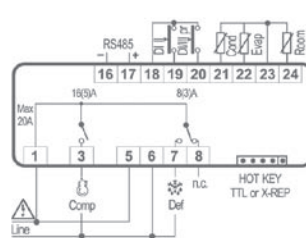
**XR10CX
XR20CX**



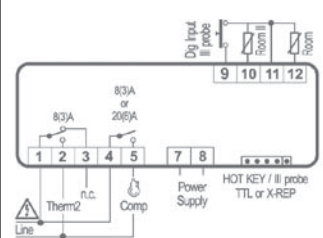
XR30CX



XR35CX



XR36CX



PRIME CX

CONTROLLERS for NORMAL, MEDIUM and LOW TEMPERATURE



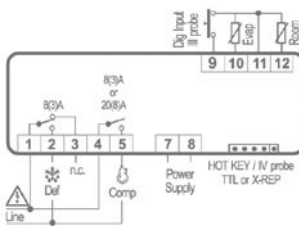
CX: 32x74mm

| | |
|---------------|---|
| XR40CX | Digital controller for M.T. and L.T. with electrical or hot gas defrost |
| XR50CX | Digital controller for M.T. and L.T. with electrical or hot gas defrost and auxiliary relay |
| XR56CX | 2 set point digital controller for M.T. and L.T. with electrical or hot gas defrost and auxiliary relay |

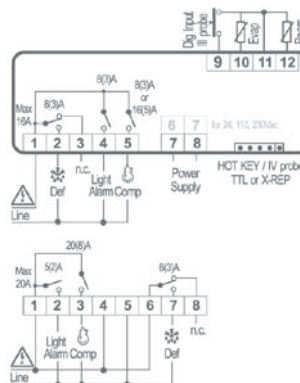
| FEATURES | XR40CX | XR50CX | XR56CX |
|---|--|--|--|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * |
| Probe inputs | | | |
| Thermostat | NTC/PTC | NTC/PTC | NTC/PTC |
| Thermostat 2 | | | NTC/PTC |
| Defrost | NTC/PTC | NTC/PTC | NTC/PTC |
| Defrost 2 | | | |
| Condenser | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY |
| Digital inputs | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | |
| Relay outputs | | | |
| Compressor | 8A, 20A opt | 8A, 16A opt | 8A, 16A opt |
| Compressor 2 | | | |
| Thermostat 2 | | | 8A |
| Defrost | 8A | 8A | 8A |
| Defrost 2 | | | |
| Fans | | | |
| Light or alarm | | 8A | 8A |
| Anti-sweat | | | |
| Other | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres |
| Remote display output | X-REP opt | X-REP opt | X-REP opt |
| Serial output | TTL | TTL | TTL |
| Buzzer | opt | opt | opt |
| Real time clock | | | |

*: only for models with compressor = 8A

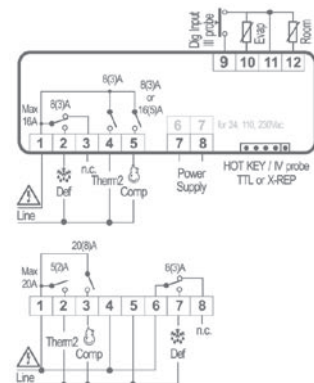
XR40CX



XR50CX



XR56CX



PRIME CX

CONTROLLERS for MEDIUM and LOW TEMPERATURE



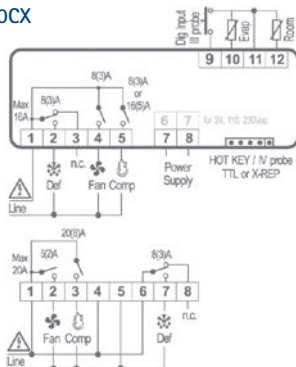
CX: 32x74mm

| | |
|---------------|--|
| XR60CX | Digital controller for M.T. and L.T. ventilated applications with dual humidity function |
| XR64CX | Digital controller for M.T. and L.T. ventilated applications with dual evaporator |
| XR70CX | Digital controller for M.T. and L.T. ventilated applications with auxiliary relay and dual humidity function |

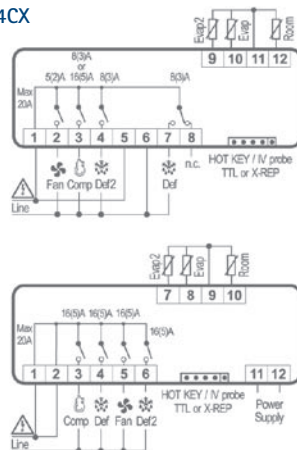
| FEATURES | XR60CX | | XR64CX | | XR70CX | |
|---|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 12, 24Vac/dc 24, 110, 230Vac 9÷40Vdc * | 24, 110, 230Vac | 24, 110, 230Vac | 12Vac/dc | 24, 110, 230Vac | 12Vac/dc |
| Probe inputs | | | | | | |
| Thermostat | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC |
| Thermostat 2 | | | | | | |
| Defrost | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC |
| Defrost 2 | | | NTC/PTC | NTC/PTC | | |
| Condenser | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY |
| Digital inputs | | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | | | |
| Relay outputs | | | | | | |
| Compressor | 8A, 16A opt | 20A | 8A, 16A opt | 16A | 8A, 16A opt | 16A |
| Compressor 2 | | | | | | |
| Thermostat 2 | | | | | | |
| Defrost | 8A | 8A | 8A | 16A | 8A | 16A |
| Defrost 2 | | | 8A | 16A | | |
| Fans | 8A | 5A | 5A | 16A | 5A | 16A |
| Light or alarm | | | | | 8A | |
| Anti-sweat | | | | | | |
| Other | | | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres | pres |
| Remote display output | X-REP opt | X-REP opt | X-REP opt | X-REP opt | X-REP opt | X-REP opt |
| Serial output | TTL | TTL | TTL | TTL | TTL | TTL |
| Buzzer | opt | opt | opt | opt | opt | opt |
| Real time clock | | | | | | |

*: only for models with compressor = 8A

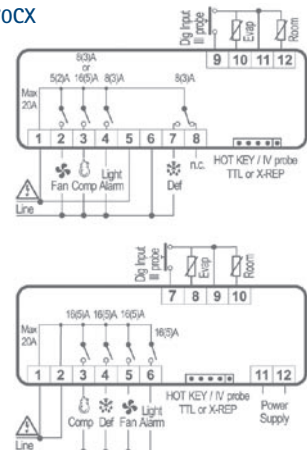
XR60CX



XR64CX



XR70CX



PRIME CX

CONTROLLERS for MEDIUM and LOW TEMPERATURE

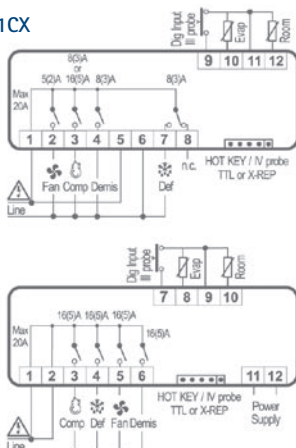


CX: 32x74mm

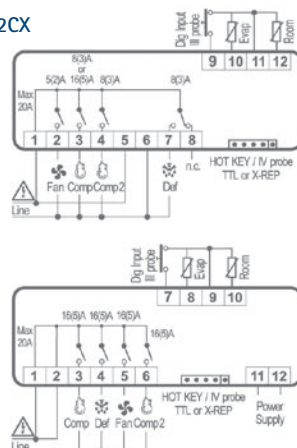
| | |
|---------------|---|
| XR71CX | Digital controller for M.T. and L.T. ventilated applications with anti-sweat heaters management |
| XR72CX | Digital controller for M.T. and L.T. ventilated applications with dual compressor management |
| XR75CX | Digital controller for M.T. and L.T. ventilated applications with auxiliary relay, dual humidity function and RS485 |

| FEATURES | XR71CX | | XR72CX | | XR75CX |
|--|--------------------|--------------------|--------------------|--------------------|-----------------|
| Display: n° digits | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. | ± 3 d.p. |
| Power supply | 24, 110, 230Vac | 12Vac/dc | 24, 110, 230Vac | 12Vac/dc | 24, 110, 230Vac |
| Probe inputs | | | | | |
| Thermostat | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | PTC/Pt1000 |
| Thermostat 2 | | | | | |
| Defrost | NTC/PTC | NTC/PTC | NTC/PTC | NTC/PTC | PTC/Pt1000 |
| Defrost 2 | | | | | |
| Condenser | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | NTC/PTC on HOT KEY | PTC/Pt1000 |
| Digital inputs | | | | | |
| Alarm, start defrost, AUX, door switch, pressure switch, probe | config | config | config | config | config |
| Alarm, start defrost, AUX, door switch, pressure switch | | | | | config |
| Relay outputs | | | | | |
| Compressor | 8A, 16A opt | 16A | 8A, 16A opt | 16A | 8A, 16A opt |
| Compressor 2 | | | 8A | 16A | |
| Thermostat 2 | | | | | |
| Defrost | 8A | 16A | 8A | 16A | 8A |
| Defrost 2 | | | | | |
| Fans | 5A | 16A | 5A | 16A | 5A |
| Light or alarm | | | | | 8A |
| Anti-sweat | 8A | 16A | | | |
| Other | | | | | |
| Hot Key/Prog Tool Kit output | pres | pres | pres | pres | pres |
| Remote display output | X-REP opt | X-REP opt | X-REP opt | X-REP opt | X-REP opt |
| Serial output | TTL | TTL | TTL | TTL | TTL/RS485 opt |
| Buzzer | opt | opt | opt | opt | opt |
| Real time clock | | | | | opt |

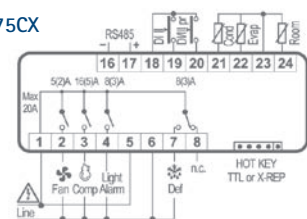
XR71CX



XR72CX



XR75CX





XT100 SERIES: NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V MULTI-PROBE CONTROLLERS – SERIAL OUTPUT

- Universal controllers to manage temperature, humidity and pressure in both the industrial and commercial applications
- Stock optimization: thanks to the multi-probe inputs
- 1 or 2 stage ON/OFF or PID with direct or reverse action
- Temperature inputs: PTC, NTC, Pt100; thermocouple J, K or S by selecting the parameters
- Pressure or humidity inputs: 4÷20mA, 0÷1V or 0÷10V by selecting the parameters
- Direct line power supply. No external transformer required
- Display with integrated measurement unit (°C / °F / RH / bar / PSI)
- Standard communication protocol ModBUS-RTU
- Hot key or Prog tool kit connector for a quick and easy programming
- 3VA max power absorption
- Display with red LED (10,5 mm high) and 5 icons

HOW TO ORDER

XA100 [X][A][1][0][0][C][][-][A][B][0][D][U]

XT100 [X][T][1][][][][-][A][B][C][D][U]



For blue display please contact Dixell

| A | B | C | D |
|---|---|--------------------------------|--|
| Power supply | Measurement unit | Buzzer | SSR |
| 0 = 12Vac/dc 1 = 24Vac/dc 2 = 24Vac 4 = 110Vac 5 = 230Vac | C = °C F = °F B = Bar P = PSI H = %RH N = No unit of measurement | 0 No 1 Yes 2 No 3 Yes | No No Yes Yes SSR = 4÷20mA for D and R formats |
| | | | Input |
| | | | P = PTC (NTC) T = PTC (NTC, Pt100, TcJ, TcK, TcS) A = 4÷20mA, 0÷1V, 0÷10V B = PP07 (-0.5÷7bar) C = PP30 (0÷30bar) D = PP11 (-0.5÷11bar) H = XH10/20P |

XT100

INDICATOR and 1 STAGE DIGITAL CONTROLLERS



C: 32x74mm

D: 4 DIN Rail

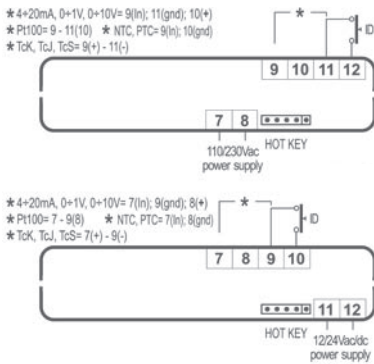
R: 72x72mm

| | |
|-------------------------------------|--|
| XA100C | Configurable digital indicator |
| XT110C XT110D | ON/OFF configurable digital 1 stage controllers |
| XT111C XT111D XT111R | ON/OFF configurable digital 1 stage controllers with alarm relay |

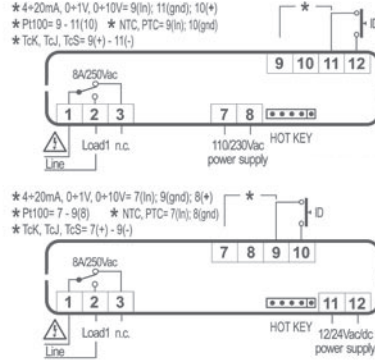
| FEATURES | XA100C | XT110C | XT110D | XT111C | XT111D | XT111R |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config | config | config |
| Relay outputs | | | | | | |
| Stage 1 | | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | 8A |
| Stage 2 | | | | | | |
| Stage 3 | | | | | | |
| Stage 4 | | | | | | |
| Alarm | | | | 8A | no 8A / nc 5A | 8A |
| Other | | | | | | |
| Digital input | pres | pres | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres | pres* | pres | pres* | pres | pres |
| Serial output | TTL | TTL* | TTL | TTL* | TTL | TTL |
| Analog output | | | 4÷20mA opt | | 4÷20mA opt | 4÷20mA opt |
| Buzzer | opt | opt | opt | opt | opt | opt |

*: Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

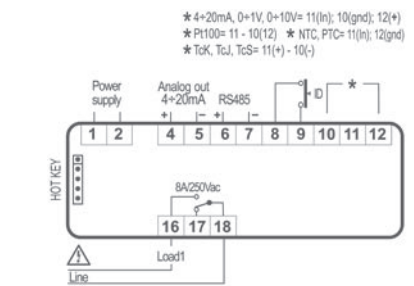
XA100C



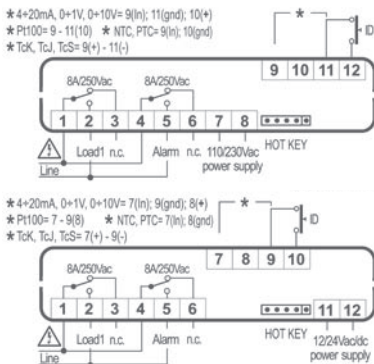
XT110C



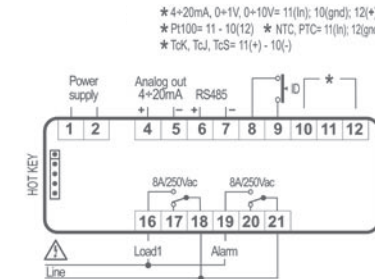
XT110D



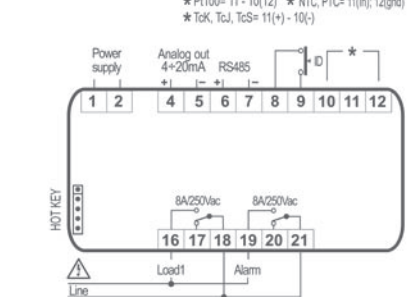
XT111C



XT111D



XT111R



XT100

2 STAGE DIGITAL CONTROLLERS



XT120C
XT120D

ON/OFF configurable digital 2 stage controllers

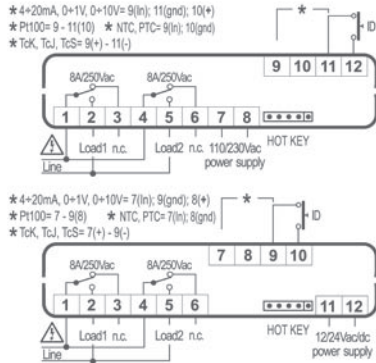
XT121C
XT121D
XT121R

ON/OFF configurable digital 2 stage controllers with alarm relay

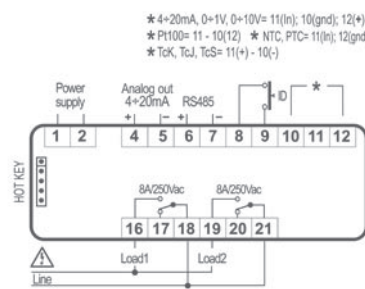
| FEATURES | XT120C | XT120D | XT121C | XT121D | XT121R |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | config | config | config | config | config |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | | | | | |
| Relay outputs | | | | | |
| Stage 1 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | 8A |
| Stage 2 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | 8A |
| Stage 3 | | | | | |
| Stage 4 | | | | | |
| Alarm | | | 8A | no 8A / nc 5A | 8A |
| Other | | | | | |
| Digital input | pres | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres* | pres | pres |
| Serial output | TTL* | TTL | TTL* | TTL | TTL |
| Analog output | | 4÷20mA opt | | 4÷20mA opt | 4÷20mA opt |
| Buzzer | opt | opt | opt | opt | opt |

*: Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

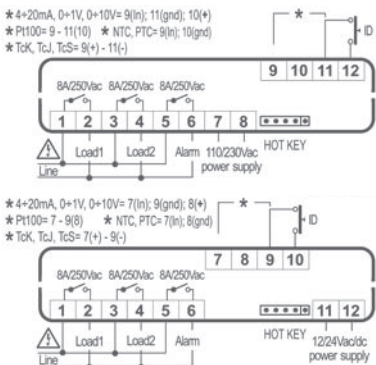
XT120C



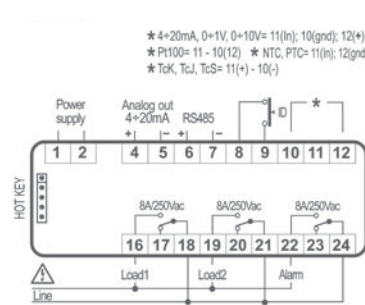
XT120D



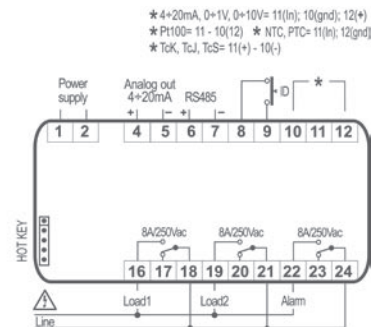
XT121C



XT121D



XT121R



XT100

NEUTRAL ZONE DIGITAL CONTROLLERS



C: 32x74mm

D: 4 DIN Rail

R: 72x72mm

XT130C
XT130D

ON/OFF configurable digital neutral zone controllers

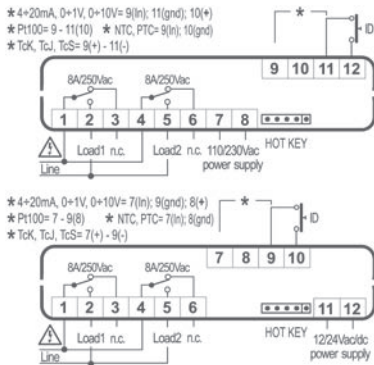
XT131C
XT131D
XT131R

ON/OFF configurable digital neutral zone controllers with alarm relay

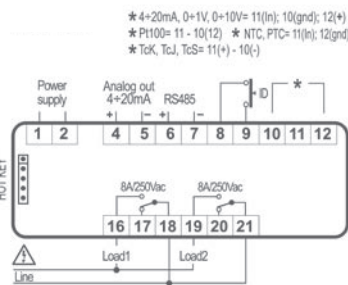
| FEATURES | XT130C | XT130D | XT131C | XT131D | XT131R |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config | config |
| Relay outputs | | | | | |
| Stage 1 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | 8A |
| Stage 2 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | 8A |
| Stage 3 | | | | | |
| Stage 4 | | | | | |
| Alarm | | | 8A | no 8A / nc 5A | 8A |
| Other | | | | | |
| Digital input | pres | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres* | pres | pres |
| Serial output | TTL* | TTL | TTL* | TTL | TTL |
| Analog output | | 4÷20mA opt | | 4÷20mA opt | 4÷20mA opt |
| Buzzer | opt | opt | opt | opt | opt |

*: Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

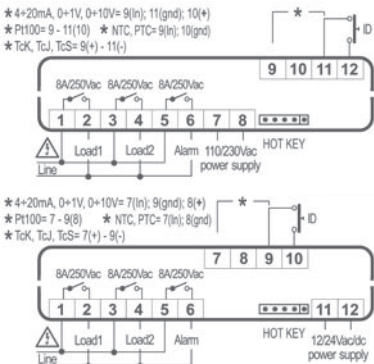
XT130C



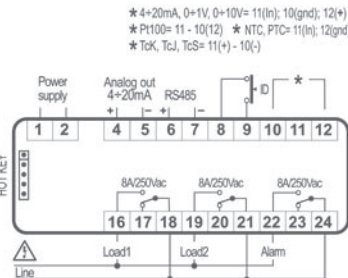
XT130D



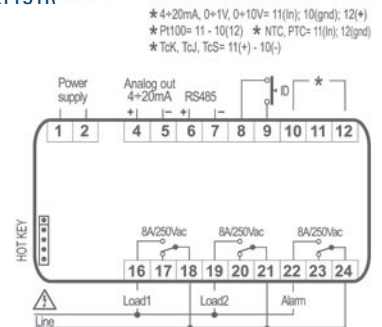
XT131C



XT131D



XT131R



XT100

2 STAGE PID and 4 STAGE DIGITAL CONTROLLERS



C: 32x74mm

D: 4 DIN Rail

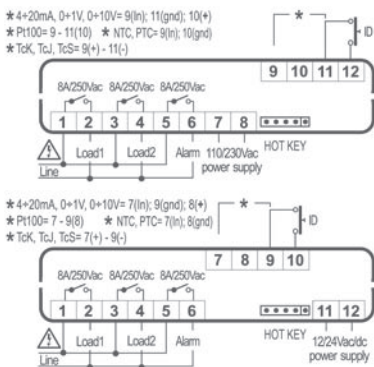
R: 72x72mm

| | |
|---|---|
| XT141C XT141D XT141R | PID configurable digital 2 stage controllers with alarm relay |
| XT151D | ON/OFF configurable digital 3 stage controller with alarm relay |
| XT160D | ON/OFF configurable digital 4 stage controller |

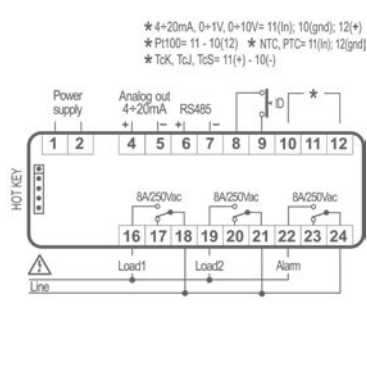
| FEATURES | XT141C | XT141D | XT141R | XT151D | XT160D |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Display: n° digits | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. | ± 3½ d.p. |
| Power supply | 12, 24Vac/dc 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac | 24Vac/dc 24, 110, 230Vac |
| Probe inputs | | | | | |
| NTC, PTC, Pt100, TcJ, TcK, TcS, 4÷20mA, 0÷1V, 0÷10V | config | config | config | config | config |
| Relay outputs | | | | | |
| Stage 1 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | no 8A / nc 5A |
| Stage 2 | 8A | no 8A / nc 5A | 8A | no 8A / nc 5A | no 8A / nc 5A |
| Stage 3 | | | | no 8A / nc 5A | no 8A / nc 5A |
| Stage 4 | | | | | 8A |
| Alarm | 8A | no 8A / nc 5A | 8A | 8A | |
| Other | | | | | |
| Digital input | pres | pres | pres | pres | pres |
| Hot Key/Prog Tool Kit output | pres* | pres | pres | pres | pres |
| Serial output | TTL* | TTL | TTL | TTL | TTL |
| Analog output | | 4÷20mA opt | 4÷20mA opt | 4÷20mA opt | 4÷20mA opt |
| Buzzer | opt | opt | opt | opt | opt |

*: Prog Tool Kit output and serial output only for models with 12/24Vac/dc probe supply

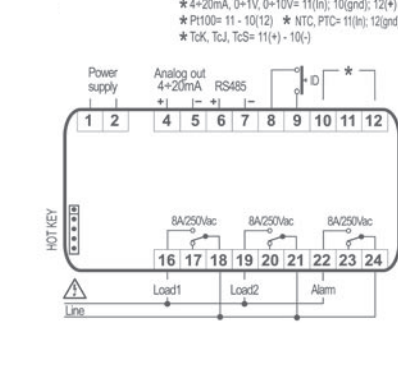
XT141C



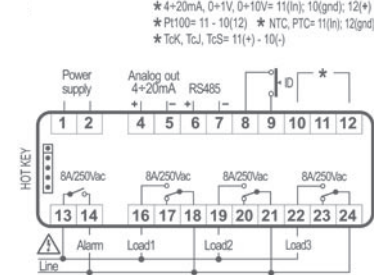
XT141D



XT141R



XT151D



XT160D

