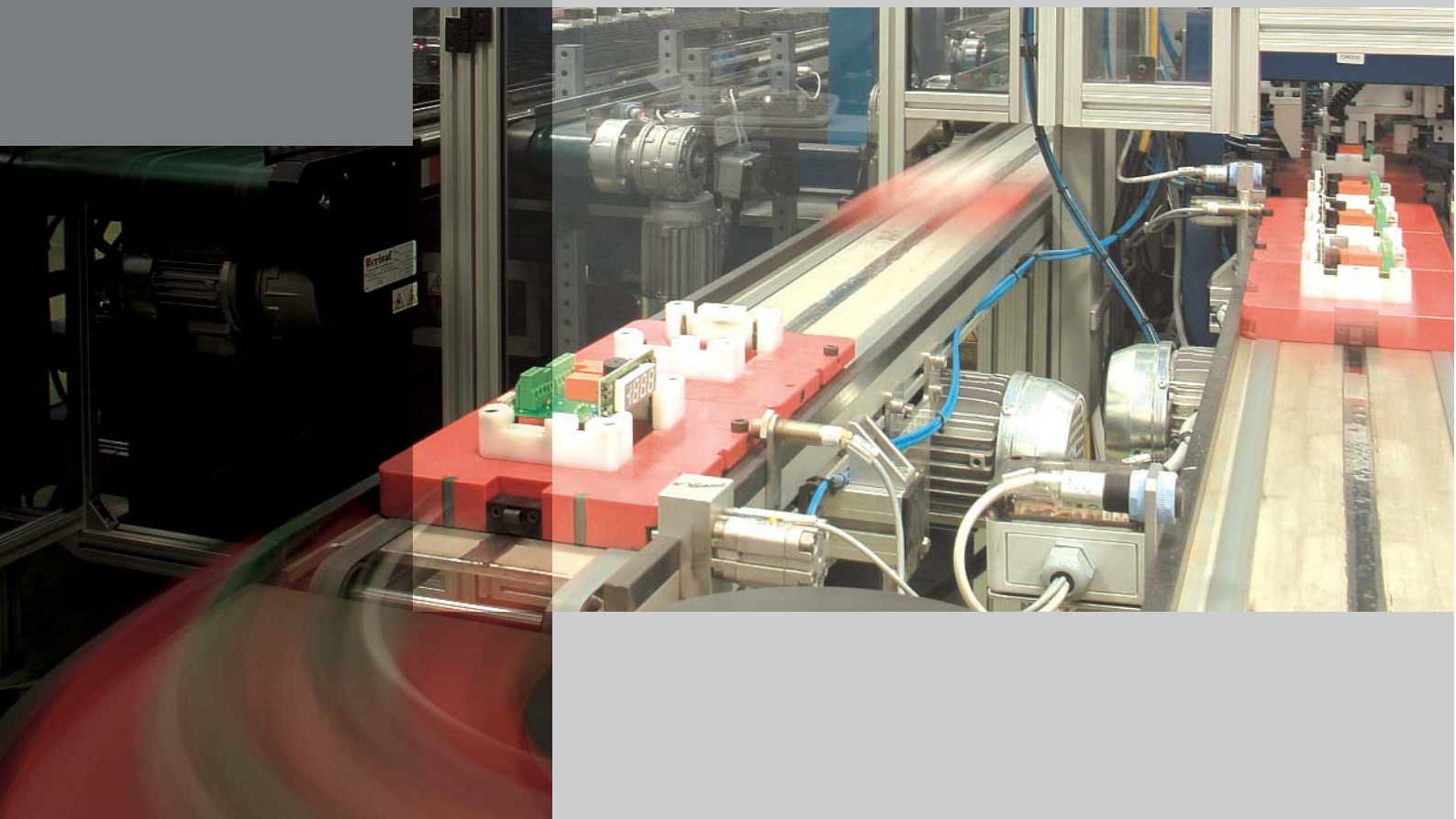


Industrial processes

The Eliwell universal controller series is the ideal solution for the measurement of all the measurable quantities in commercial refrigeration and light industry. The new Eliwell products are ideal for all industrial applications requiring high precision temperature control, including the moulding of plastic materials, packaging and process control in the transformation of raw materials. The product line is able to satisfy all demands, from the simplest applications - which still, however, require the precision, reliability and economical installation benefits offered by electronics - to the most complex, which require auxiliary functions and advanced management features. Reliability and versatility are the factors that provide the right answers to all application needs. The new Eliwell thermoregulators have made flexibility their strong point: the extensive range of possible applications meets a wide variety of requirements, with regard to power supply, signals and connections and Eliwell's experience in thermoregulation has resulted in the development of an extremely configurable product.



EW4820	... C2
EW4821	... C2
EW4822	... C2
EW7220	... C3
EW7221	... C3
EW 7222	... C3
DR4010	... C4
DR4020	... C4
DR4021	... C5
DR4022	... C5
IC 901 (/A)	... C6
IC 902 (/A)	... C7
IC 912	... C8
IC 912 LX	... C9
IC 915	... C10
IC 915 LX	... C11
IC 917(LX)	... C12
IC 961	... C13
IC 974(LX)	... C13
EWTN 970	... C14
EWTN 980	... C14
EWTS 950LX	... C15
EWTS 990LX	... C15
IE 103(LX)	... C16
IE 203 (LX)	... C16
IE 123(LX)	... C17
IE 303(LX)	... C17
EWMETER 900	... C18



MODBUS-RTU

Modbus is a serial communication protocol that allows communication between different devices connected to the same network. Modbus is often used to connect a supervisor computer to a remote terminal unit (RTU) in monitoring control and data acquisition systems.



RS-485

This is the standard that describes the communication interface for serial connection between a network of devices and the computer. The network, normally 3-wire, makes it possible to cover much longer distances than the RS232 standard. The protocol used for the communication can either be Eliwell, i.e. created according to Eliwell specifications, or Modbus.



LINK

The Link function makes it possible to connect a master and a number of slave and echo devices in a network and allows the sharing of network functions in order to maximise management of small control systems.



COPY CARD

The Copy Card is an accessory that connects to a TTL type serial port and allows the rapid programming of instrument parameters.



TELEVISSYSTEM

TelevisSystem is a remote management and monitoring system for industrial and commercial systems, ideal for supermarkets and hypermarkets and also for viewing the history of the recordings made. Data can either be printed or extracted and downloaded in a form compatible with the most commonly used office IT softwares. The monitoring system can be accessed remotely via a web browser, using any PC or handheld device connected to the network.



RTC

Internal clock (Real Time Clock) for managing programmable functions at preset times.

A product with an RTC has a function that can give the current time of day, together with the day of the week. This function is used, for example, to set the defrosting start time or setpoint changes at times preset by the user. A set of dedicated parameters makes this important function easy to manage. In Eliwell instruments, the clock continues to operate in the event of power cuts without the use of batteries such as the Nickel-Cadmium type, which are well known for having memory storage and general recharging problems. Autonomy is guaranteed for over 6 hours with a recharging time of about 1 minute.



HACCP

This is a sophisticated diagnostics system capable of detecting all temperature and black-out events that occur in the monitored refrigerated environment, recording them internally in the device in a non-volatile memory. This system was devised to meet the most exacting demands of the market with regard to the temperature control of preserved food in compliance with the 93/43/EU Directives.



TEMPERATURE PROBES

Thanks to the different materials used in the different models, the temperature probes are capable of covering a very wide temperature range; the sensors used are PTC, NTC, thermocouple, Pt100 and Pt1000. Depending on the kind of sensor, the protective casing (usually cylindrical) can be made of either ABS, Aisi 304/316 stainless steel or Inconel; for additional sensor protection, special materials are used (e.g. resins) between sensor and casing. The cable that transmits the signal to the instrument is made of either PVC, Silicone or Vetrotex and is available in different lengths. The range of use depends on the materials used, as well as on the type of sensor.



HUMIDITY PROBES

The EWHS series of probes are specially made for connection to humidity measurement instruments. EWHS 280 and EWHS 300 probes have one current output (4...20 mA) proportional to the relative humidity. EWHS 310 probes have two current outputs (0...20 mA), one for humidity and one for temperature.



PRESSURE PROBES

The EWPA series of probes are pressure reading devices; they have one 4...20 mA current output for transferring the signal to the measuring instrument. The EWPA 007 probes have an operating range up to 7 bar, whereas the EWPA 030 probes operate up to 30 bar.



PID

The PID function is an alternative to the on-off control for use in situations requiring greater precision and reduced oscillations with regard to the setpoint, in both 'hot' and 'cold' applications. Controllers with the PID function have a further option known as autotuning, which automatically calculates the parameters necessary for better process control.



SWITCHING POWER SUPPLY

The switching power supply, that switches from either 95...240V~ or from 12...24V~/12...36V~ gives the installer the possibility of covering most areas of application, thus reducing the number of models that would be necessary if a transformer-type power supply was used.



Applications

The new Eliwell thermoregulators in the Universal Controller series are ideal for all industrial applications requiring high precision temperature control, including the moulding of plastic materials, packaging and process control in the transformation of raw materials.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, switch keys with adhesive polycarbonate film

Dimensions: front panel 48x48mm, depth 113mm

Installation: panel mounting with 45x45mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

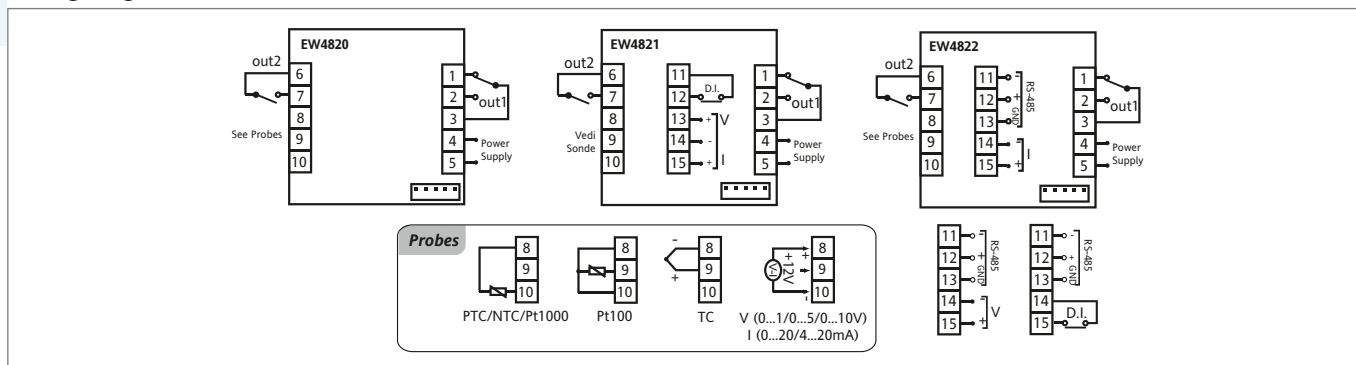
Storage temperature: -20...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	EW 4820	EW 4821	EW 4822
Display	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign
Analogue inputs	1 input*(see Analogue Inputs table)	1 input * (see Analogue Inputs table)	1 input*(see Analogue Inputs table)
Digital inputs:	not available	1 clean contact at safety extra low voltage	1 clean contact at safety extra low voltage
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card	TTL for connection to Copy Card + internal RS-485 for connection to TelevisSystem or systems with Modbus protocol
Digital outputs:	1 SPDT 3A 250V~ + 1 SPST 2A 250V~	1 SPDT 3A 250V~ + 1 SPST 2A 250V~	1 SPDT 3A 250V~ + 1 SPST 2A 250V~
Analogue output:	not available	V-I: 0...1V, 0...5V, 0...10V / 0...20mA, 4...20mA	V: 0...1V, 0...5V, 0...10V I: 0...20mA, 4...20mA
Measurement range:	according to probe used	according to probe used	according to probe used
Accuracy:	according to probe used	according to probe used	according to probe used
Resolution:	according to probe used	according to probe used	according to probe used
Consumption:	• 2.45W for 12...24V~model/12...36V~ • 2.40W for 95...240V~ model	• 2.80W for 12...24V~model/12...36V~ • 2.60W for 95...240V~ model	• 2.45W for 12...24V~model/12...36V~ • 2.40W for 95...240V~ model
Power supply:	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz

*(selectable by parameter).

Wiring diagram



Codes

p/n	description	Probe
E481BPOXBH700	EW4820 Universal	Pt100
E481BIOXBH700	EW4820 Universal	4...20mA
E481BPAXBH700	EW4821 Universal	Pt100

Codes

p/n	description	Probe
E481BPISBH700	EW4822 Universal	Pt100
E481BIVSBH700	EW4822 Universal	4...20mA



Applications

The new Eliwell thermoregulators in the Universal Controller series are ideal for all industrial applications requiring high precision temperature control, including the moulding of plastic materials, packaging and process control in the transformation of raw materials.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, switch keys with adhesive polycarbonate film

Dimensions: front panel 72x72mm, depth 80mm

Installation: panel mounting with 67x67mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

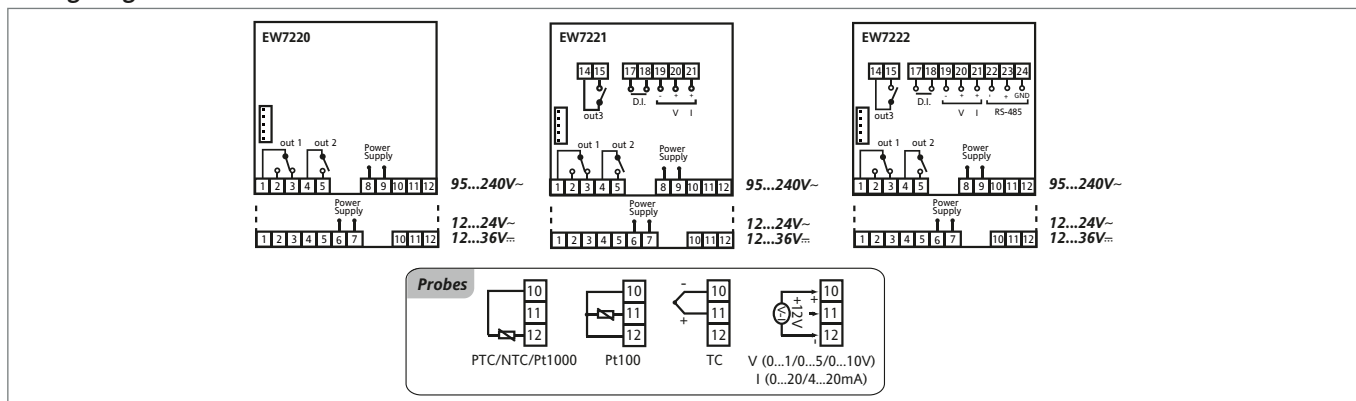
Storage temperature: -20...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	EW7220	EW7221	EW7222
Display	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign
Analogue inputs	1 input*(see Analogue Inputs table)	1 input * (see Analogue Inputs table)	1 input*(see Analogue Inputs table)
Digital inputs:	not available	1 clean contact at safety extra low voltage	1 clean contact at safety extra low voltage
Serial ports:	TTL for connection to Copy Card, TelevisSystem or systems with Modbus protocol	TTL for connection to Copy Card, TelevisSystem or systems with Modbus protocol	TTL and internal RS-485 for connection to Copy Card, TelevisSystem or systems with Modbus protocol
Digital outputs:	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~ + 1 SPST 5A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~ + 1 SPST 5A 250V~
Analogue output:	not available	V-I: 0...1V, 0...5V, 0...10V / 0...20mA, 4...20mA	V-I: 0...1V, 0...5V, 0...10V / 0...20mA, 4...20mA
Measurement range:	according to probe used	according to probe used	according to probe used
Accuracy:	according to probe used	according to probe used	according to probe used
Resolution:	according to probe used	according to probe used	according to probe used
Consumption:	3W max	3W max	3W max
Power supply:	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz	• 12...24V~/12...36V~ ±10% 50/60Hz • 95...240V~ ±10% 50/60Hz

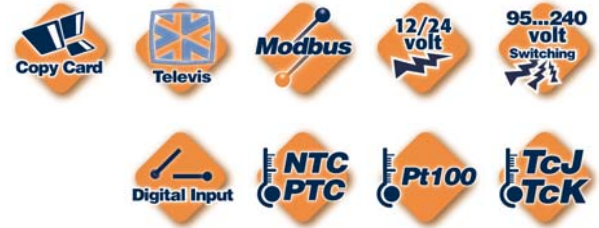
*(selectable by parameter).

Wiring diagrams



Codes

p/n	descr.	Probe	Codes	descr.	Probe
E7212P0XBH700	EW7220 Universal	Pt100	E7213PAXBD700	EW7221 Universal	Pt100
E7212E0XBH700	EW7220	Pt100	E7213IAXBH700	EW7221	4...20mA
E7212A0XBD700	EW7220	TC	E7213PASBH700	EW7222 Universal-RS485	Pt100



Applications

The new Universal Controller series of Eliwell thermoregulators are ideal for all industrial applications requiring high precision temperature control, ranging from the molding of plastic materials and packaging to the control of raw materials transformation processes.

Common features

Front panel: IP65

Container: plastic casing 4 DIN modules

Dimensions: front panel 70x85mm, depth 61mm

Installation: on DIN rail (Omega 3) or panel mounting, with 70x45mm (+0.2/-0.1mm) drilling template

Use temperature: -5...55°C

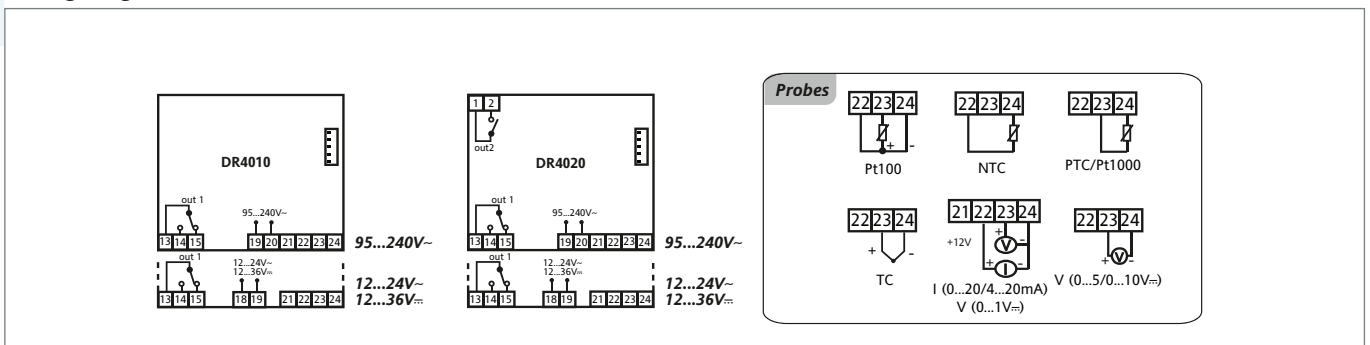
Storage temperature: -20...85°C

Ambient humidity for use and storage:
10...90% RH (non-condensing)

General features	DR4010	DR4020
Display	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign
Analogue inputs	1 input * (see Probes table)	1 input * (see Probes table)
Digital inputs:	not available	not available
Serial ports:	TTL for connection to Copy Card, TelevisSystem and systems based on Modbus protocol	TTL for connection to Copy Card, TelevisSystem and systems based on Modbus protocol
Digital outputs:	1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~
Analogue output:	not available	not available
Measurement range:	according to probe used	according to probe used
Accuracy:	according to probe used	according to probe used
Resolution:	according to probe used	according to probe used
Consumption:	4W max	4W max
Power supply:	<ul style="list-style-type: none"> 12...24V~/12...36V~ ±10% 50/60Hz 95...240V~ ±10% 50/60Hz 	<ul style="list-style-type: none"> 12...24V~/12...36V~ ±10% 50/60Hz 95...240V~ ±10% 50/60Hz

*(selectable by parameter).

Wiring diagram



Codes

p/n	description	Probe
E4D1110XHN700	DR4010	4...20mA
E4D1110XHH700	DR4010 NTC	NTC
E4D1110XHN700	DR4010	4...20mA
E4D1110XHH700	DR4010	NTC

Codes

p/n	description	Probe
E4D12E0XBH700	DR4020	Pt100
E4D12A0XBD700	DR4020	TCJ
E4D12I0XBN700	DR4020	4...20mA



Applications

The new Universal Controller series of Eliwell thermoregulators are ideal for all industrial applications requiring high precision temperature control, ranging from the molding of plastic materials and packaging to the control of raw materials transformation processes.

Common features

Front panel: IP65

Container: plastic casing 4 DIN modules

Dimensions: front panel 70x85mm, depth 61mm

Installation: on DIN rail (Omega 3) or panel mounting, with 70x45mm (+0.2/-0.1mm) drilling template

Use temperature: -5...55°C

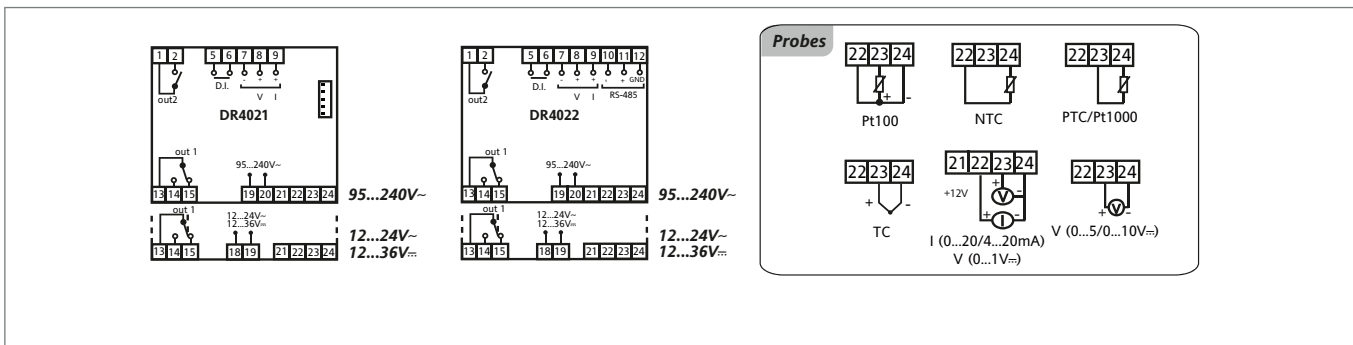
Storage temperature: -20...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	DR4021	DR4022
Display	no decimal point * 2 4-digit displays + sign	no decimal point * 2 4-digit displays + sign
Analogue inputs	1 input * (see Probes table)	1 input * (see Probes table)
Digital inputs:	1 clean contact at safety extra low voltage	1 clean contact at safety extra low voltage
Serial ports:	TTL for connection to Copy Card, TelevisSystem and systems based on Modbus protocol	TTL and internal RS-485 for connection to Copy Card, TelevisSystem and systems based on Modbus protocol
Digital outputs:	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~
Analogue output:	V-I: 0...1V, 0...5V, 0...10V / 0...20mA, 4...20mA	V-I: 0...1V, 0...5V, 0...10V / 0...20mA, 4...20mA
Measurement range:	according to probe used	according to probe used
Accuracy:	according to probe used	according to probe used
Resolution:	according to probe used	according to probe used
Consumption:	4W max	4W max
Power supply:	<ul style="list-style-type: none"> 12...24V~/12...36V~ ±10% 50/60Hz 95...240V~ ±10% 50/60Hz 	<ul style="list-style-type: none"> 12...24V~/12...36V~ ±10% 50/60Hz 95...240V~ ±10% 50/60Hz

*(selectable by parameter).

Wiring diagram



Codes

p/n	descr.	Probe
E4D12EAXBH700	DR4021	Pt100
E4D12EASBH700	DR4022	Pt100

Codes

p/n	descr.	Probe
E4D12NASBH700	DR4022	NTC
E4D12AASBD700	DR4022	TCJ



Applications

IC 901 controllers are one-step devices capable of working for both hot and cold applications.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

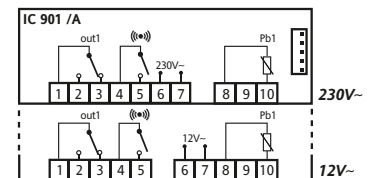
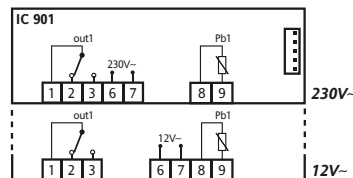
Storage temperature: -30...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	IC 901	IC 901/A
Display range:	<ul style="list-style-type: none"> • NTC probe: -50...99°C • PTC probe: -50...99°C 	<ul style="list-style-type: none"> • NTC probe: -50...99°C • PTC probe: -50...99°C
Display:	no decimal point * 2 digits + sign	no decimal point * 2 digits + sign
Analogue inputs	1 PTC or NTC *	1 PTC or NTC *
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 250V~ or 1 SPDT 16A 250V~	1 SPDT 8(3)A 250V~ 1 SPST 8(3)A 250V~ or 1 SPDT 15A 1HP 250V~
Measurement range:	from -50 to 99°C	from -50 to 99°C
Accuracy:	better than 0.5% of end of scale +1 digit	better than 0.5% of end of scale +1 digit
Resolution:	0.1 or 1°C	0.1 or 1°C
Consumption:	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> • 12V~, 12/24V~/±10% 50/60Hz • 230V~ ±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~ ±10% 50/60Hz • 230V~ ±10% 50/60Hz
Alarm	Not available	Present

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Relay	Probe	Power supply
IC11C00TCA700	IC901 Cooling	8A	PTC	230V
IC11C00THA700	IC901 Heating	8A	PTC	230V
IC16C00TCA700	IC901 Cooling	16A	PTC	230V
IC16C00THA700	IC901 Heating	16A	PTC	230V

Codes

p/n	description	Relay	Probe	Power supply
IC11C00TCA400	IC901 Cooling	8A	PTC	12/24V~/±10%
IC1BC00TCA700	IC901 Cooling	8/15A	PTC	230V



Applications

IC 902 controllers are one-step devices capable of working for both hot and cold applications.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

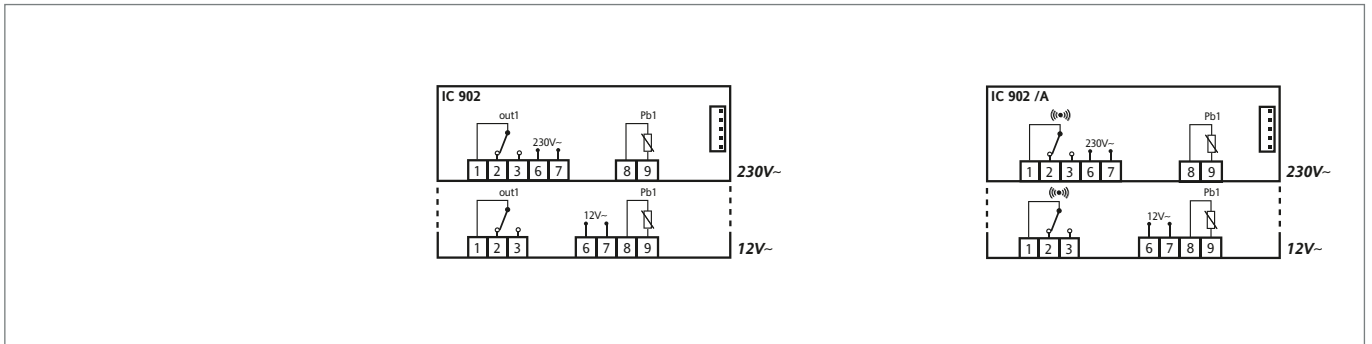
Storage temperature: -30...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	IC 902	IC 902/A
Display range:	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C 	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs	1 PTC or NTC *	1 PTC or NTC *
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~
Measurement range:	from -50 to 140°C	from -50 to 99°C
Accuracy:	better than 0.5% of end of scale +1 digit	better than 0.5% of end of scale +1 digit
Resolution:	0.1 or 1°C	0.1 or 1°C
Consumption:	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> • 12V~, 12/24V~/~ ±10% 50/60Hz • 230V~ ±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~ ±10% 50/60Hz • 230V~ ±10% 50/60Hz
Alarm	Not available	Present

*(selectable by parameter)

Wiring diagram



Codes p/n	description	Relay	Probe	Power supply	Codes p/n	description	Relay	Probe	Power supply
IC11C00TCD700	IC902 Cooling	8A	PTC	230V	IC11C00TCD400	IC902 Cooling	8A	PTC	12/24V~/~
IC11C00THD700	IC902 Heating	8A	PTC	230V					



Applications

IC 912 controllers are one-step devices, used for the control of temperature, relative humidity and pressure.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

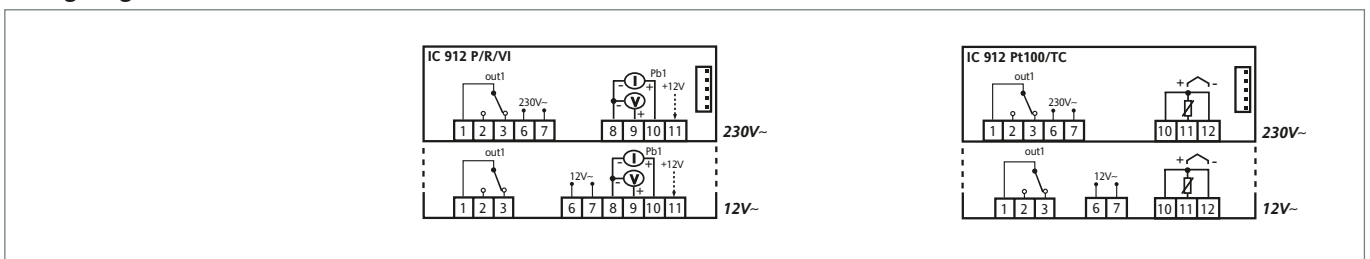
Storage temperature: -30...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	IC 912 P/R/V-I	IC 912 TC/Pt100
Display range:	<ul style="list-style-type: none"> -99...100 * -99.9...100.0 * 999...1000 * 	<ul style="list-style-type: none"> Pt100 probe: -150...650°C TcJ probe: -40...750°C TcK probe: -40...1350°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs	1 V-I (0...1V, 0...5V, 0...10V, 0...20mA, 4...20mA)*	1 Pt100 or 1 TcJ/TcK (according to model)
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~
Measurement range:	from -999 to 1000	from -150 to 1350°C
Accuracy:	better than 0.5% of end of scale + 1 digit	Pt100: 0.5% for whole scale + 1 digit, 0.2% from -150 to 300°C TcJ: 0.4% for whole scale + 1 digit TcK: 0.5% for whole scale + 1 digit, 0.3% from -40 to 800°C
Resolution:	0.1 or 1°C *	Pt100: 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over TcJ: 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over TcK: 0.1°C (0.1°F)
Consumption:	<ul style="list-style-type: none"> 1.5W for 12V~ model 3W for 230V~ model 	<ul style="list-style-type: none"> 1.5W for 12V~ model 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> 12V~ / 12...24V~/= / 24V~ ±10% 50/60Hz 110...115V~ / 220...230V~±10% 50/60Hz 	<ul style="list-style-type: none"> 12V~ ±10% 50/60Hz 230V~ ±10% 50/60Hz
Alarm	Optional	Present

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Probe	Power supply	Codes p/n	description	Probe	Power supply
IC11J00THD700	IC912 temperature	TC/Pt100	230V~	IP11A00TRD700	IC912 pressure	EWPA 007	230V~
IC11J00THD400	IC912 temperature	TC/Pt100	12...24V~	IP11B00TRD700	IC912 pressure	EWPA 030	230V~
IR11I00TUD700	IC912 humidity	4...20mA	230V~	IC11I00TRN700	IC912 neutral	4...20mA	230V~
				IC11I00TRN400	IC912 neutral	4...20mA	12...24V~



Applications

IC 912 LX controllers are one-step devices, used for the control of temperature, relative humidity and pressure and compatible with TelevisSystem and monitoring systems with Modbus protocol.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template (+0.2/-0.1mm)

Use temperature: -5...55°C

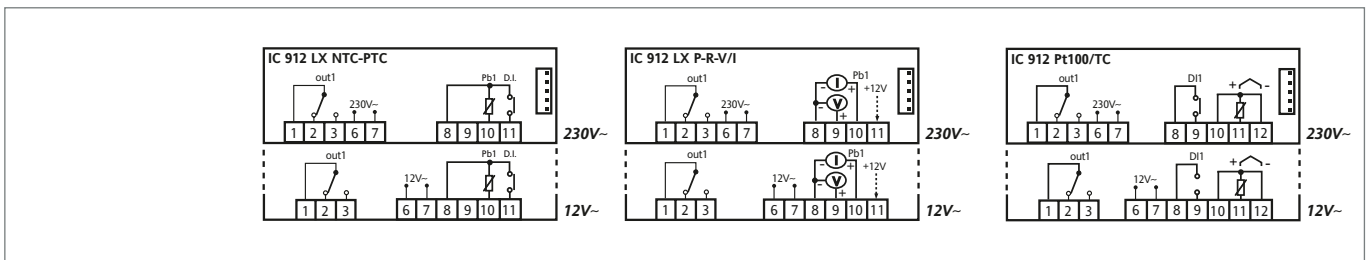
Storage temperature: -30...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	IC 912 LX NTC/PTC	IC 912 LX P/R-V-I	IC 912 LX TC/Pt100
Display range:	• NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C	• -99...100 * • -99.9...100.0 * • 999...1000 *	• Pt100 probe: -150...650°C • TcJ probe: -40...750°C • TcK probe: -40...1350°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs	1 PTC or NTC *	1 V-I (0...1V,0...5V,0...10V,0...20mA,4...20mA)*	1 Pt100 or 1 TcJ/TcK
Digital inputs:	1 clean contact at safety extra low voltage	not available	1 clean contact at safety extra low voltage
Serial ports:	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol
Digital outputs:	1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~
Measurement range:	from -50 to 140	from -999 to 1000	from -150 to 1350
Accuracy:	better than 0.5% of end of scale+1 digit	better than 0.5% of end of scale+1 digit	<u>Pt100</u> : 0.5% for whole scale + 1 digit, 0.2% from -150 to 300°C <u>TcJ</u> : 0.4% for whole scale + 1 digit <u>TcK</u> : 0.5% for whole scale + 1 digit, 0.3% from -40 to 800°C
Resolution:	0.1 or 1°C *	0.1 or 1°C *	<u>Pt100</u> : 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over <u>TcJ</u> : 0.1°C (0.1°F) up to 199.9°C, (1°F) over <u>TcK</u> : 0.1°C (0.1°F)
Consumption:	• 1.5W for 12V~ model • 3W for 230V~ model	• 1.5W for 12V~ model • 3W for 230V~ model	• 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	• 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz	• 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz	• 12V~ ±10% 50/60Hz • 230V~ ±10% 50/60Hz

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Probe	Power supply
IC11J10XHD700	IC912LX temperature	TC/Pt100	230V~
IC11C10XHD700	IC912LX temperature	PTC	230V~
IR11100XUD700	IC912LX humidity	4...20mA	230V~

Codes

p/n	description	Probe	Power supply
IP11100XRD700	IC912LX pressure	4...20mA	230V~
IC11100XRN700	IC912LX neutral	4...20mA	230V~



Applications

IC 915 controllers are electronic two-step devices, either dependent or independent or with neutral zone, used for the control of temperature, relative humidity and pressure.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template

(+0.2/-0.1mm)

Use temperature: -5...55°C

Storage temperature: -30...85°C

Ambient humidity for use and storage:

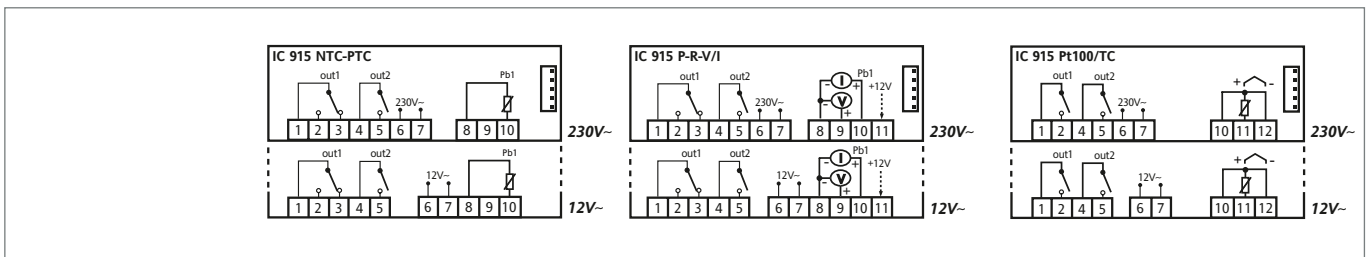
10...90% RH (non-condensing)

Soft Start function and Autotuning function present

General features	IC 915 NTC/PTC	IC 912 LX P/R/V-I	IC 912 LX TC/Pt100
Display range:	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C 	<ul style="list-style-type: none"> • -99...100 * • -99.9...100.0 * • 999...1000 * 	<ul style="list-style-type: none"> • Pt100 probe: -150...650°C • TcJ probe: -40...750°C • TcK probe: -40...1350°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs	1 PTC or NTC *	1 V-I (0...1V, 0...5V, 0...10V, 0...20mA, 4...20mA)*	1 Pt100 or 1 TcJ/TcK
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPST 8(3)A 250V~
Measurement range:	from -50 to 140	from -999 to 1000	from -150 to 1350
Accuracy:	better than 0.5% of end of scale+1 digit	better than 0.5% of end of scale+1 digit	<u>Pt100</u> : 0.5% for whole scale + 1 digit, 0.2% from -150 to 300°C <u>TcJ</u> : 0.4% for whole scale + 1 digit <u>TcK</u> : 0.5% for whole scale + 1 digit, 0.3% from -40 to 800°C
Resolution:	0.1 °C	0.1 or 1°C *	<u>Pt100</u> : 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over <u>TcJ</u> : 0.1°C (0.1°F) up to 199.9°C, (1°F) over <u>TcK</u> : 0.1°C (0.1°F)
Consumption:	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz
Alarm:	optional	optional	optional

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Probe	Power supply	Codes p/n	description	Probe	Power supply
IC12C00TCH700	IC915 temperature	NTC/PTC	230V~	IR12100TBD700	IC915 humidity	4...20mA	230V~
IC12C00TCD400	IC915 temperature	NTC/PTC	12...24V~	IP12A00TRD700	IC915 pressure	EWPA 007	230V~
IC12J00THD700	IC915 temperature	TC/Pt100	230V~	IP12B00TRD700	IC915 pressure	EWPA 030	230V~
IC12J00THD400	IC915 temperature	TC/Pt100	12...24V~	IC12100TRN700	IC915 neutral	4...20mA	230V~



Applications

IC 915 LX controllers are electronic two-step devices, either dependent or independent or with neutral zone, used for the control of temperature, relative humidity and pressure and compatible with TelevisSystem and monitoring systems with Modbus protocol.

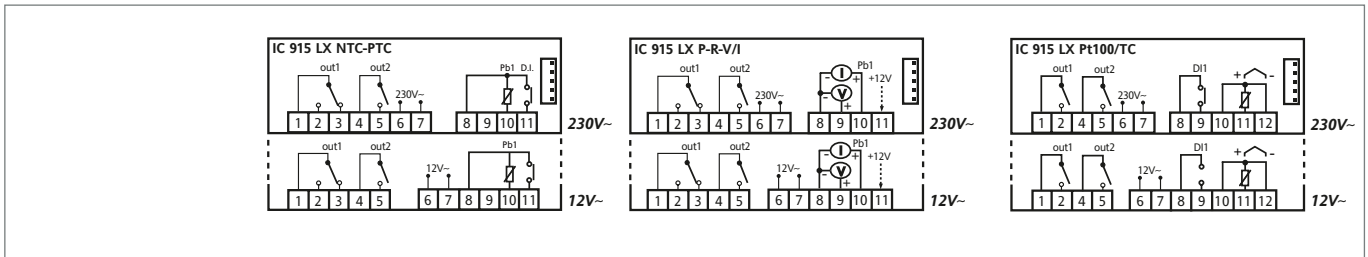
Common features

- Front panel: IP65
- Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys
- Dimensions: front panel 74x32mm, depth 59mm
- Installation: panel mounting with 71x29mm drilling template
- (+0.2/-0.1mm)
- Use temperature: -5...55°C
- Storage temperature: -30...85°C
- Ambient humidity for use and storage: 10...90% RH (non-condensing)
- Soft Start function and Autotuning function present

General features	IC 915 LX NTC/PTC	IC 915 LX P/R/V-I	IC 915 LX TC/Pt100
Display range:	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C 	<ul style="list-style-type: none"> • -99...100 * • -99.9...100.0 * • 999...1000 * 	<ul style="list-style-type: none"> • Pt100 probe: -150...650°C • TcJ probe: -40...750°C • TcK probe: -40...1350°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs:	1 PTC or NTC *	1 V-I (0...1V,0...5V,0...10V,0...20mA,4...20mA)*	1 Pt100 or 1 TcJ/TcK
Digital inputs:	1 clean contact at safety extra low voltage	not available	1 clean contact at safety extra low voltage
Serial ports:	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol	TTL for connection to Copy Card, TelevisSystem and systems with Modbus protocol
Digital outputs:	1 SPDT 8(3)A 250V~ + 1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPDT 8(3)A 250V~	1 SPDT 8(3)A 250V~ + 1 SPDT 8(3)A 250V~
Measurement range:	from -50 to 140	from -999 to 1000	from -150 to 1350
Accuracy:	better than 0.5% of end of scale+1 digit	better than 0.5% of end of scale+1 digit	Pt100: 0.5% for whole scale + 1 digit, 0.2% from -150 to 300°C TcJ: 0.4% for whole scale + 1 digit TcK: 0.5% for whole scale + 1 digit, 0.3% from -40 to 800°C
Resolution:	0.1 or 1°C *	0.1 or 1°C *	Pt100: 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over TcJ: 0.1°C (0.1°F) up to 199.9°C, (1°F) over TcK: 0.1°C (0.1°F)
Consumption:	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~/12...24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Probe	Power supply	p/n	description	Probe	Power supply
IC12J10XHD700	IC915LX temperature	TC/Pt100	230V~	IP12100XRD700	IC915LX pressure	4...20mA	230V~
IC12C10XCD700	IC915LX temperature	NTC/PTC	230V~	IC12100XRN700	IC915LX neutral	4...20mA	230V~
IR12100XBD700	IC915LX humidity	4...20mA	230V~				



Applications

IC 917 controllers are electronic two-step devices, either dependent or independent, ON/OFF action, PD, PID, Soft Start function and Autotuning.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template

(+0.2/-0.1mm)

Use temperature: -5...55°C

Storage temperature: -30...85°C

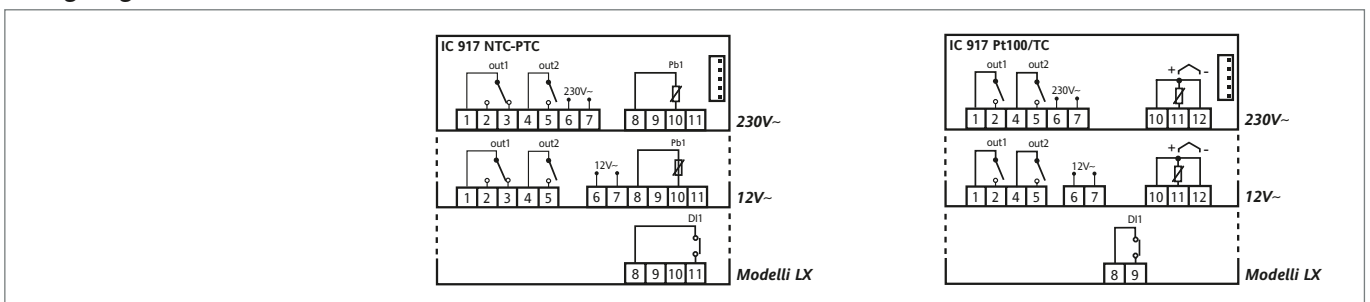
Ambient humidity for use and storage:
10...90% RH (non-condensing)

Soft Start function and Autotuning function present

General features	IC 917(LX) NTC/PTC	IC 917(LX) TC/Pt100
Display range:	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C 	<ul style="list-style-type: none"> • Pt100 probe: -150...650°C • TcJ probe: -40...750°C • TcK probe: -40...1350°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs	1 PTC or NTC *	1 Pt100 or 1 TcJ/TcK
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 1/2HP 250V~ + 1 SPST 8(3)A 1/2HP 250V~	1 SPDT 8(3)A 1/2HP 250V~ + 1 SPST 8(3)A 1/2HP 250V~
Measurement range:	from -55 a 140	from -150 to 1350
Accuracy:	better than 0.5% of end of scale+1 digit	Pt100: 0.5% for whole scale + 1 digit, 0.2% from -150 to 300°C TcJ: 0.4% for whole scale + 1 digit TcK: 0.5% for whole scale + 1 digit, 0.3% from -40 to 800°C
Resolution:	0.1 °C or 1°C	Pt100: 0.1°C (0.1°F) up to 199.9°C, 1°C (1°F) over TcJ: 0.1°C (0.1°F) up to 199.9°C, (1°F) over TcK: 0.1°C (0.1°F)
Consumption:	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model 	<ul style="list-style-type: none"> • 1.5W for 12V~ model • 3W for 230V~ model
Power supply:	<ul style="list-style-type: none"> • 12..24V~ ±10% 50/60Hz • 230V~±10% 50/60Hz 	<ul style="list-style-type: none"> • 12V~/12..24V~/24V~ ±10% 50/60Hz • 110...115V~/220...230V~±10% 50/60Hz
Alarm:	optional	optional
LX models		
serial outputs:	TTL for connection to Televis System	TTL for connection to Televis System
Digital inputs:	1 clean contact at safety extra low voltage	1 clean contact at safety extra low voltage

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Probe	Power supply	Codes p/n	description	Probe	Power supply
IC12D00TPD700	IC917	NTC/PTC	230V~	IC12DI0XPD700	IC917LX	NTC/PTC	230V~
IC12Z00TPD700	IC917	TC/Pt100	230V~	IC12ZI0XPD700	IC917LX	TC/Pt100	230V~



Applications

IC 961 controllers are electronic two-step devices with defrosting functions.

IC 974(LX) are designed for the management of cold room interior heating and cooling functions, defrosting functions and evaporator fan control functions.

Common features

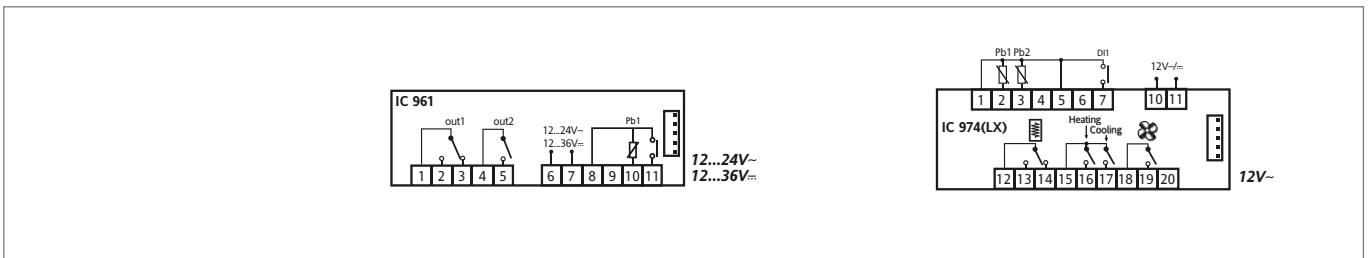
Front panel: IP65
 Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys
 Dimensions: front panel 74x32mm, depth 59mm
 Installation: panel mounting with 71x29mm drilling template

(+0.2/-0.1mm)
 Use temperature: -5...55°C
 Storage temperature: -30...85°C
 Ambient humidity for use and storage: 10...90% RH (non-condensing)
 Soft Start function and Autotuning function present

General features	IC 961	IC 974(LX)
Display range:	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C 	<ul style="list-style-type: none"> • NTC probe: -50.0...110.0°C • PTC probe: -55.0...140.0°C
Display:	no decimal point * 3 and a half digits + sign	no decimal point * 3 and a half digits + sign
Analogue inputs:	1 PTC or NTC *	1 PTC or NTC *
Digital inputs:	1 voltage-free input *	1 voltage-free input *
Serial ports:	TTL for connection to Copy Card	TTL for connection to Copy Card
Digital outputs:	1 SPDT 8(3)A 1/2HP 250V~ + 1 SPST 8(3)A 1/2HP 250V~	1 SPDT 8(3)A 1/2HP 250V~ + 2 SPST 8(3)A 1/2HP 250V~ + 1 SPST 5(3)A 1/4HP 250V~
Measurement range:	from -55 to 140°C	from -55 to 140°C
Accuracy:	better than 0.5% of end of scale +1 digit	better than 0.5% of end of scale +1 digit
Resolution:	0.1 °C or 1°C	0.1 °C
Consumption:	3W max	1.5W max
Power supply:	<ul style="list-style-type: none"> • 12V~/~, 12...24V~/~, 12...36V~ ±10% 50/60Hz 	12V~/~ ±10% 50/60Hz
LX models		
serial outputs:	-	TTL for connection to TelevisSystem
Digital inputs:	-	1 clean contact at safety extra low voltage

*(selectable by parameter)

Wiring diagram



Codes p/n	description	Probe	Power supply	Codes p/n	description	Probe	Power supply
IC12DI0TAD480	IC961	PTC/NTC	12...24V~/~	IC24DI0TAD300	IC974	PTC/NTC	12V~/~
				IC24DI0XAD300	IC974LX	PTC/NTC	12V~/~



Applications

The EWTN 970 and EWTN 980 controllers are one-step devices with ON/OFF or PID action, for applications in hot sector.

Common features

Front panel: IP65

Container: flame retardant ABS plastic casing

Dimensions: front panel 48x96mm, depth 100mm

Installation: on panel, fixed with brackets, with drilling template 45x92mm

Use temperature: 0...55°C

Storage temperature: -10...60°C

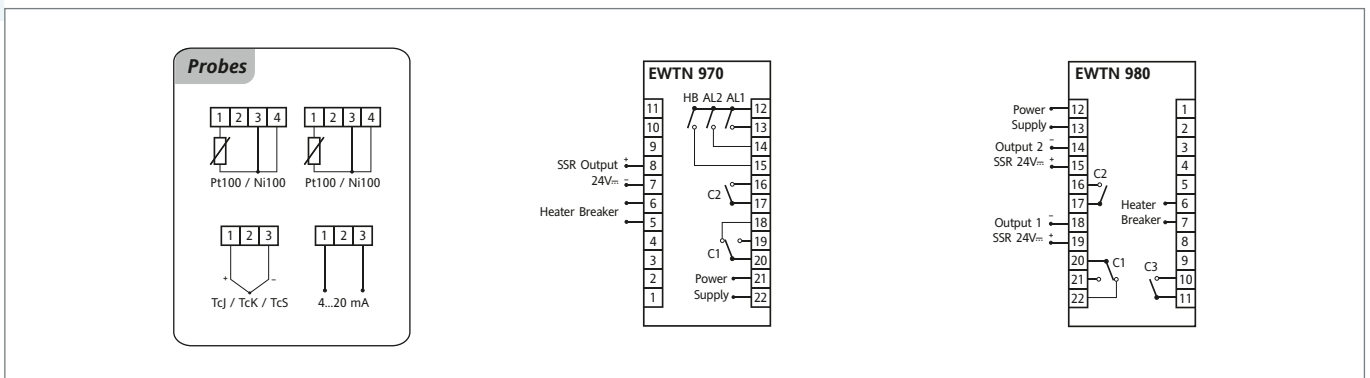
Ambient humidity for use and storage:
30...95% RH (non-condensing)

Connections: on Faston terminal block 6.3mm

General features	EWTN 970	EWTN 980
Display:	no decimal point * 2 3 and a half-digit displays	no decimal point * 2 3-digit displays
Commands:	on front panel	on front panel
Data storage:	on non-volatile memory	on non-volatile memory
Output C1:	1 SPDT 6(2)A 250V~ or 1 output SSR 0...24V~/25mA	1 SPDT 6(2)A 250V~ or 1 output SSR 0...24V~/25mA
Output C2:	1 SPDT 6(2)A 250V~ or 1 output SSR 0...24V~/25mA	1 SPDT 6(2)A 250V~ or 1 output SSR 0...24V~/25mA 1
Output C3:	1 SPST 6(2)A 250V~ or 1 output SSR 0...24V~/25mA	SPST 6(2)A 250V~ or 1 output SSR 0...24V~/25mA
Alarms:	2 SPST 6(2)A 250V~ or 2 outputs SSR 0...24V~/25mA	-
Inputs:	1 input for probes: Pt100, TC / 0...20mA, 4...20mA *	1 input for probes: Pt100, TC *
Heater breaker input:	T.A. 100A / 200mA (TAG00101)	T.A. 100A / 200mA (TAG00101)
Accuracy:	0.5% (RTD) or 0.7% (Tc) of end of scale	0.2% end of scale + 1 digit at 25°C of ambient temperature
Consumption:	-	6VA
Power supply:	<ul style="list-style-type: none"> 95...240V~ 24V~/= ±10% 50/60Hz 	<ul style="list-style-type: none"> 100...240V~, 24V~/= ±10% 50/60Hz

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Outputs	Probe	Power supply
T8C1B10600	EWTN 970	1 relay	TC/Pt100	90...240V~
T8C1B20600	EWTN 970	2 relays	TC/Pt100	90...240V~

Codes

p/n	description	Outputs	Probe	Power supply
ETMX431103	EWTN 980	1 relay	TC/Pt100	110...240V~
ETMX431113	EWTN 980	2 relays	TC/Pt100	110...240V~



Applications

The Eliwell series of digital timers is the ideal measuring solution for all measurable quantities in commercial refrigeration and light industry. The range, made up of 2 different models, is used in all applications requiring precision control of processing stages and the management of functions linked to preset time intervals.

Common features

Front panel: IP65

Container: PC+ABS plastic resin casing, UL94 V-0, polycarbonate window, thermoplastic resin keys

Dimensions: front panel 74x32mm, depth 59mm

Installation: panel mounting with 71x29mm drilling template (+0.2/-0.1mm)

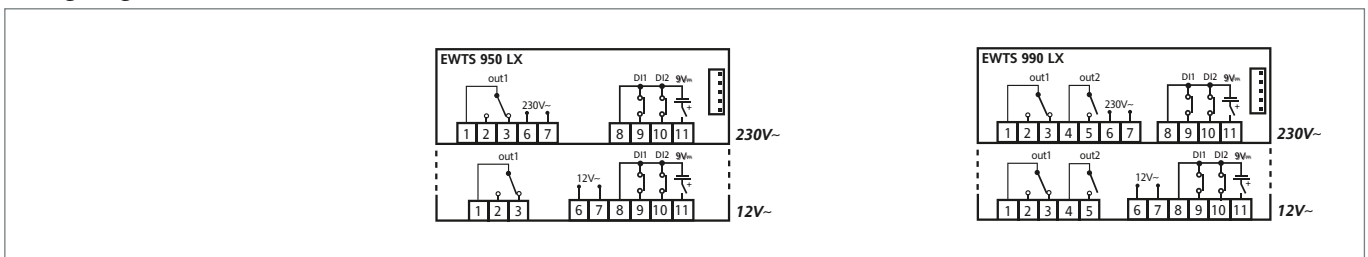
Use temperature: -5...55°C

Storage temperature: -30...85°C

Ambient humidity for use and storage: 10...90% RH (non-condensing)

General features	EWTS 950 LX	EWTS 990 LX
Display range:	9999 hours / 99 hours and 59 minutes / 99 minutes and 59 seconds / 99 seconds and 99 hundredths of a second	9999 hours / 99 hours and 59 minutes / 99 minutes and 59 seconds / 99 seconds and 99 hundredths of a second
Display:	no decimal point * 4 digits + sign	no decimal point * 4 digits + sign
Digital inputs:	2 clean contacts at safety extra low voltage	2 clean contacts at safety extra low voltage
Serial ports:	TTL for connection to Copy Card and to TelevisSystem	TTL for connection to Copy Card and to TelevisSystem
Digital outputs:	1 SPDT 8(3)A 1/2HP 250V~	1 SPDT 8(3)A 1/2HP 250V~ + 1 SPST 8(3)A 1/2HP 250V~
Accuracy:	3.6 sec/h	3.6 sec/h
Consumption:	3VA max	3VA max
Power supply:	12V~/= or 230V~ ±10% 50/60Hz	12V~/= or 230V~ ±10% 50/60Hz
External battery:	<ul style="list-style-type: none"> power supply 9V= battery life: according to model - with 9V=/10mA/h battery, life1h instrument input with power supply from 10mA battery 	<ul style="list-style-type: none"> power supply 9V= battery life: according to model - with 9V=/10mA/h battery, life1h instrument input with power supply from 10mA battery

Wiring diagram



Codes

p/n	description	Power supply
ET01010XTT700	EWTS950LX	230V~

Codes

p/n	description	Power supply
ET02010XTT700	EWTS990LX	230V~



Applications

The Electric family is a series of new-generation digital instruments for the measurement and control of electrical quantities, with one or two switching thresholds.

The IE 103(LX) is an AC multimeter for voltage, current and frequency with indirect/indirect measurement.

The IE 203(LX) is an AC multimeter for voltage, current and frequency with direct measurement.

Common features

Front panel: IP40

Container: 3 DIN module box

Installation: on DIN Omega rail

Use temperature: 0...60°C

Storage temperature: -30...75°C

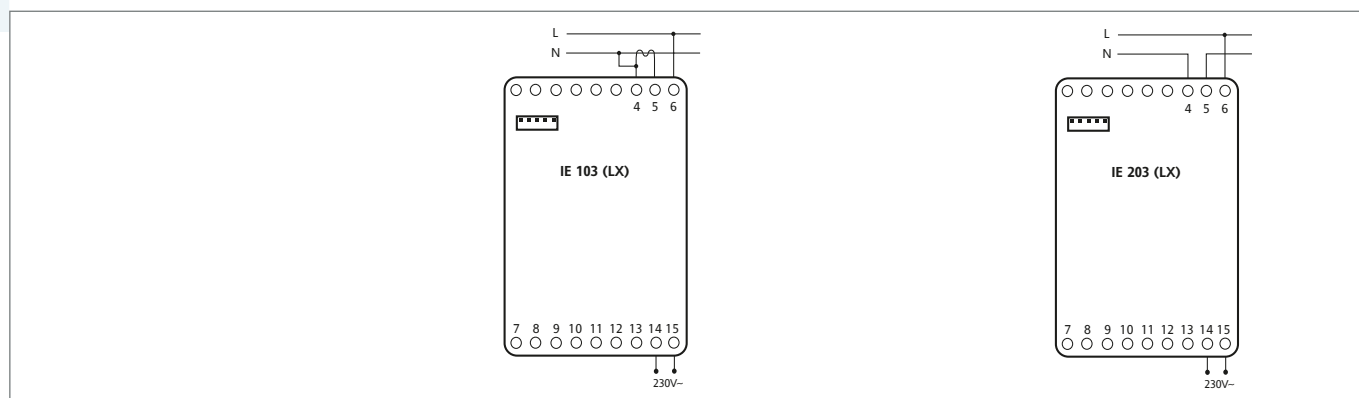
Storage environment humidity:
30...95% RH (non-condensing)

Use environment humidity: 0...90% RH (non-condensing)

Current measurement in tenths of an ampere on scale 0...5A

General features	IE 103(LX)	IE 203(LX)
Display range:	<ul style="list-style-type: none"> with decimal point up to 199.9 no decimal point over 200 	<ul style="list-style-type: none"> with decimal point up to 199.9 no decimal point over 200
Measurement range:	<ul style="list-style-type: none"> voltage: 0...500V~ current: 0...5A 	<ul style="list-style-type: none"> voltage: 0...500V~ current: 0...10A
Resolution:	up to 0.2 (according to ammeter transformer used)	up to 0.2
Harmonic content:	up to 30% third harmonic, up to 10% seventh harmonic	up to 30% third harmonic, up to 10% seventh harmonic
Insulation class:	2	2
Accuracy:	±1%	±1%
Crest factor:	<ul style="list-style-type: none"> voltage: 1.43 current: 2 	<ul style="list-style-type: none"> voltage: 1.43 current: 2
Consumption:	1.5VA	1.5VA
Power supply:	230V~ ±10% 50/60Hz	230V~ ±10% 50/60Hz
LX models		
Serial ports:	TTL for connection to Televis System and Modbus protocol	TTL for connection to Televis System and Modbus protocol
*(selectable by parameter)		

Wiring diagram



Codes

p/n	description	Power supply
IE22R00M03700	IE103	230V~
IE22R00X03700	IE103LX	230V~

Codes

p/n	description	Power supply
IE21R00M03700	IE203	230V~
IE21R00X03700	IE203LX	230V~



Applications

The Electric family is a series of new-generation digital instruments for the measurement and control of electrical quantities, with one or two switching thresholds.

The IE 123(LX) is an AC multimeter for voltage, current and frequency with indirect measurement and 2 switching points.

The IE 303(LX) is a DC multimeter for voltage and current.

Common features

Front panel: IP40

Container: 3 DIN module box

Installation: on DIN Omega rail

Use temperature: 0...60°C

Storage temperature: -30...75°C

Storage environment humidity:
30...95% RH (non-condensing)

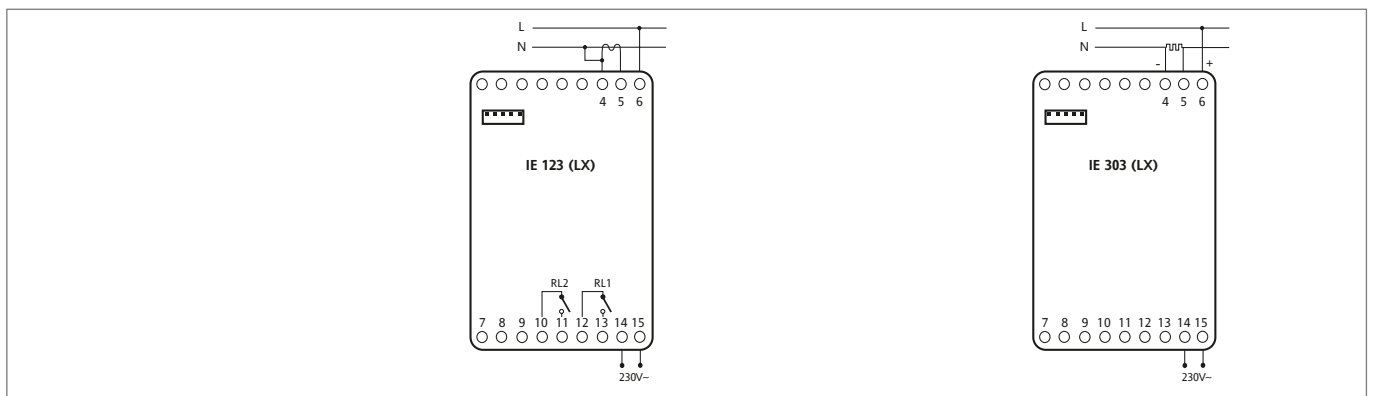
Use environment humidity: 0...90% RH (non-condensing)

Current measurement in tenths of an ampere on scale 0...5A

General features	IE 123(LX)	IE 303(LX)
Display range:	<ul style="list-style-type: none"> with decimal point up to 199.9 no decimal point over 200 	<ul style="list-style-type: none"> with decimal point up to 199.9 no decimal point over 200
Digital outputs:	2 SPST 5(2)A 250V~	-
Measurement range:	<ul style="list-style-type: none"> voltage: 12V~/ ∞ current: 0...5A~ 	<ul style="list-style-type: none"> voltage: 12V~/ ∞ current: 0...5A~
Resolution:	up to 0.2 (according to ammeter transformer used)	up to 0.2 (according to ammeter transformer used)
Harmonic content:	up to 30% third harmonic, up to 10% seventh harmonic	up to 30% third harmonic, up to 10% seventh harmonic
Insulation class:	2	2
Accuracy:	±1%	±1%
Crest factor:	<ul style="list-style-type: none"> voltage: 1.43 current: 2 	<ul style="list-style-type: none"> voltage: 1.43 current: 2
Consumption:	1.5VA	1.5VA
Power supply:	230V~ ±10% 50/60Hz	230V~ ±10% 50/60Hz
LX models		
serial outputs:	TTL for connection to Televis System and Modbus protocol	TTL for connection to Televis System and Modbus protocol

*(selectable by parameter)

Wiring diagram



Codes

p/n	description	Power supply
IE22R02M03700	IE123	230V~
IE22R02X03700	IE123LX	230V~

Codes

p/n	description	Power supply
IE43000M03700	IE303	230V~
IE43000X03700	IE303LX	230V~



Applications

The EWMETER 900 devices are electronic indicators used for measuring temperature, humidity and pressure

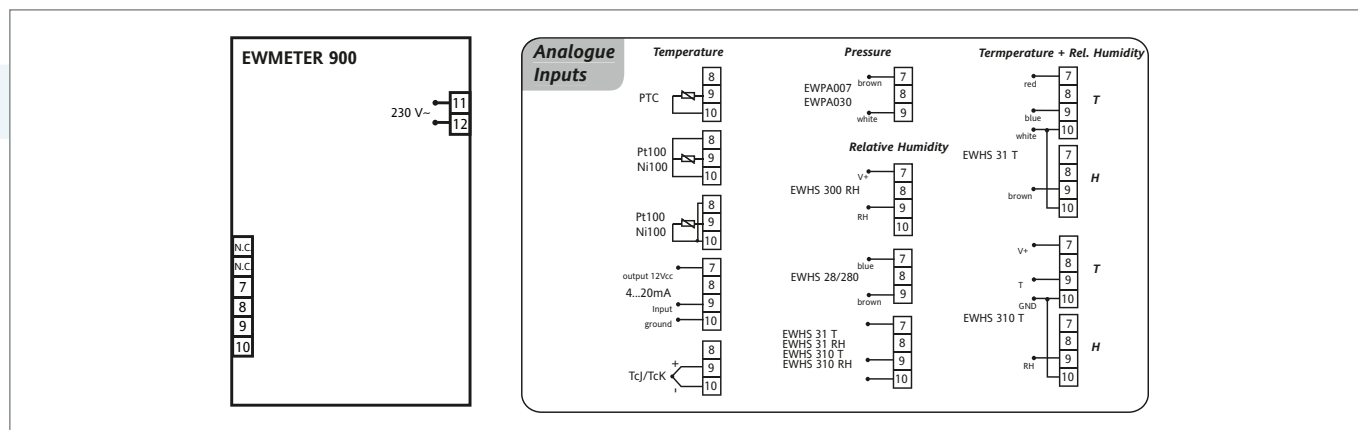
Common features

Container: flame retardant ABS plastic casing
 Dimensions: front panel 72x72mm, depth 102mm (terminals excluded)

Display: according to probe used
 Storage temperature: -30...75°C
 Ambient and storage humidity: 10...90% (non condensing)

General features	EWMETER Temperature	EWMETER Pressure	EWMETER Humidity
Display	3 figures + sign	3 figures + sign	3 figures + sign
Ambient temperature:	-5...60°C	-5...60°C	-5...65°C
Connections:	on screw-on terminal block for wires of cross-section 4mm	on screw-on terminal block for wires of cross-section 4mm	on screw-on terminal block for wires of cross-section 4mm
Analogue inputs:	<ul style="list-style-type: none"> • PTC • RDT (Ni100, Pt100) • Tc (TcJ, TcK) • current (4...20mA) 	<ul style="list-style-type: none"> • EWPA 007 • EWPA 030 	<ul style="list-style-type: none"> • EWHs 280/300/310 • current (4...20mA)
Measurement range	according to probe	according to probe	according to probe
Resolution:	1 or 0.1°C/ 0.1% RH/ 1 or 0.1Bar	1 or 0.1°C/ 0.1% RH/ 1 or 0.1Bar	1 or 0.1°C/ 0.1% RH/ 1 or 0.1Bar
Accuracy:	better than 0.5% of end of scale	better than 0.5% of end of scale	better than 0.5% of end of scale
Consumption	5VA max	5VA max	5VA max
Power supply:	230V~ ±10% 50/60Hz	230V~ ±10% 50/60Hz	230V~ ±10% 50/60Hz

Wiring diagrams



Codes

p/n	descr.
T04PM70000	EWMETER 900 Temperature
T00IM70000	EWMETER 900 Pressure

Codes

p/n	descr.
T00EM70000	EWMETER 900 Humidity