

IWC 720

Compact temperature controllers



Description

IWC 720 controllers can be fitted on ventilated refrigerators operating at medium or low temperature. These controllers have two analogue inputs for NTC temperature probes (or alternatively PTC inputs) and two programmable relay outputs for the management of the compressor and defrost cycle. The outputs for the management of the fans of the evaporator, the alarm, lights, auxiliary output and ON/OFF features are selectable.

Defrost cycles can be stopped at a specific time or as soon as the end cycle temperature is reached (if the evaporator is equipped with a specific probe). The values measured by the probes are displayed with three digits and a minus sign. The decimal point can be set with a parameter. All models have TTL connections that enable the controllers to be used with Copy Card, the quick programming accessory. Removable terminals are supplied as standard, while the buzzer for the temperature alarm is optional. The range also includes a special version with a 2hp relay for the direct management of medium power compressors. Screw terminals or Faston connectors are available on request.

Relay output	Capacity
Compressor	16A
Defrosting	20A(2hp)

NOTE: the amperometric values of the devices vary according to the type of terminal used.

Technical Data

Front panel protection: IP65.

Casing: plastic, PC+ABS resin, UL94 V-0, polycarbonate window, keys in thermoplastic resin.

Dimensions: front panel 180x37 mm and depth 69 mm. (without terminals); **45 mm depth for short models.**

Mounting: panel-mounting, 150x31 mm drilling.

Template (+0.2/-0,1 mm

Operating temperature: -5...55°C.

Storage temperature: -30...85°C.

Operating and storage humidity: 10...90 % RH (non condensing).

Display: 3 digits and a half + sign.

Analogue inputs: 2 NTC/PTC (factory pre-set).

Digital inputs: 1 voltage free digital input from mains. (clean contact) configurable by means of a parameter.

Serial TTL output for Copy Card.

Digital outputs: 2 relay programmable outputs.

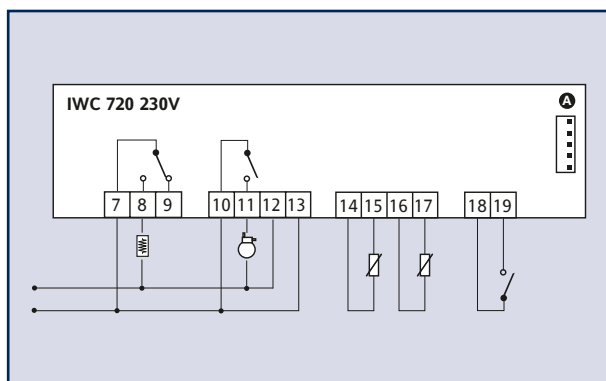
Accuracy: above 0.5% of the bottom scale +1 digit.

Resolution: 1 or 0.1°C.

Consumption: 6 VA.

Power supply: 230 V~/- ±10% 50/60 Hz.

Wiring Diagram



Description of Wiring Diagram

- 7 - 8 N.O. Defrosting relay output, configurable
- 7 - 9 N.C. Defrosting relay output, configurable
- 10 - 11 N.O. Compressor relay output, configurable
- 12 - 13 Power supply
- A TTL input for Copy Card
- 14 - 15 Probe input 1
- 16 - 17 Probe input 2
- 18 - 19 Digital input



IWC 730

Compact temperature controllers



Description

IWC 730 controllers can be fitted on ventilated refrigerators operating at medium or low temperature. These controllers have two analogue inputs for NTC temperature probes (or alternatively PTC inputs) and three programmable relay outputs for the management of the compressor, defrost cycle and evaporator. The outputs for the management of the fans of the evaporator, the alarm, lights, auxiliary outputs and ON/OFF features are selectable. Defrost cycles can be stopped at a specific time or as soon as the end cycle temperature is reached (if the evaporator is equipped with a specific probe). The values measured by the probes are displayed with three digits and a minus sign. The decimal point can be set with a parameter. All models have TTL connections that enable the controllers to be used with Copy Card, the quick programming accessory. Removable terminals are supplied as standard, while the buzzer for the temperature alarm is optional. The range also includes a special version with a 2hp relay for the direct management of medium power compressors. Screw terminals or Faston connectors are available on request.

Relay output	Capacity
Compressor	16A
Defrosting	20A(2hp)
Fans	8A.

NOTE: the amperometric values of the devices vary according to the type of terminal used.

Technical Data

Front panel protection: IP65.

Casing: plastic, PC+ABS resin, UL94 V-0, polycarbonate window, keys in thermoplastic resin.

Dimensions: front panel 180x37 mm and depth 69 mm. (without terminals); **45 mm depth for short models.**

Mounting: panel-mounting, 150x31 mm drilling.

Template (+0.2/-0.1 mm).

Operating temperature: -5...55°C.

Storage temperature: -30...85°C.

Operating and storage humidity: 10...90 % RH (non condensing).

Display: 3 digits and a half + sign.

Analogue inputs: 2 NTC/PTC (factory pre-set).

Digital inputs: 1 voltage free digital input (clean contact) configurable by means of a parameter.

Serial TTL output for Copy Card.

Digital outputs: 3 relay programmable outputs.

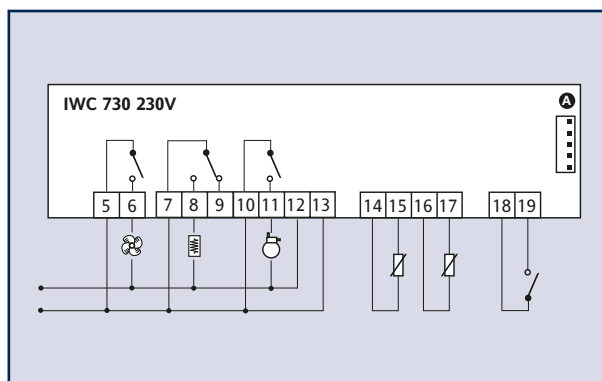
Accuracy: above 0.5% of the bottom scale +1 digit.

Resolution: 1 or 0.1°C.

Consumption: 6 VA.

Power supply: 230 V~/-/+10% 50/60 Hz.

Wiring Diagram



Description of Wiring Diagram

- 5 - 6 N.O. fan relay output, configurable
- 7 - 8 N.O. Defrosting relay output, configurable
- 7 - 9 N.C. Defrosting relay output, configurable
- 10 - 11 N.O. compressor relay output, configurable
- 12 - 13 Power supply
- A TTL input for Copy Card
- 14 - 15 Probe input 1
- 16 - 17 Probe input 2
- 18 - 19 Digital input



IWC 740

Compact temperature controllers



Description

IWC 740 controllers can be fitted on ventilated refrigerators operating at medium or low temperature. These controllers have two analogue inputs for NTC temperature probes (or alternatively PTC inputs) and four programmable relay outputs for the management of the compressor, defrost cycle and evaporator's fans. The outputs for the management of the alarms, auxiliary outputs and ON/OFF features are selectable.

Defrost cycles can be stopped at a specific time or as soon as the end cycle temperature is reached (if the evaporator is equipped with a specific probe). The values measured by the probes are displayed with three digits and a minus sign. The decimal point can be set with a parameter. All models have TTL connections that enable the controllers to be used with Copy Card, the quick programming accessory. Removable terminals are supplied as standard, while the buzzer for the temperature alarm is optional. The range also includes a special version with a 2hp relay for the direct management of medium power compressors. Screw terminals or Faston connectors are available on request.

Relay output	Capacity
Compressor	16A
Defrosting	20A(2hp)
Fans	8A.
Alarm	8A.

NOTE: the amperometric values of the devices vary according to the type of terminal used.

Technical Data

Front panel protection: IP65.

Casing: plastic, PC+ABS resin, UL94 V-0, polycarbonate window, keys in thermoplastic resin.

Dimensions: front panel 180x37 mm and depth 69 mm (without terminals).

Mounting: panel-mounting, 150x31 mm drilling.

Template (+0.2/-0.1 mm).

Operating temperature: -5...55°C.

Storage temperature: -30...85°C.

Operating and storage humidity:

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

Display: 3 digits and a half + sign.

Analogue inputs: 2 NTC inputs (factory pre-set).

Digital inputs: 1 voltage free digital input (clean contact) configurable by means of a parameter.

Serial TTL output for Copy Card.

Digital outputs: 4 relay programmable outputs.

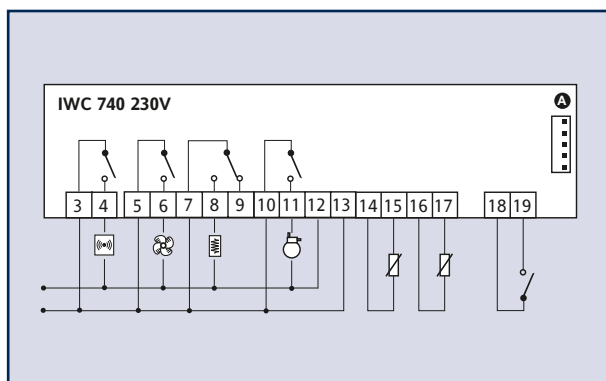
Accuracy: above 0.5% of the bottom scale +1 digit.

Resolution: 1 or 0.1°C.

Consumption: 6 VA.

Power supply: 230 V~/-/+10% 50/60 Hz.

Wiring Diagram



Description of Wiring Diagram

- 3 - 4 N.O. alarm relay output, configurable
- 5 - 6 N.O. fan relay output, configurable
- 7 - 8 N.O. Defrosting relay output, configurable
- 7 - 9 N.C. Defrosting relay output, configurable
- 10 - 11 N.O. compressor relay output, configurable
- 12 - 13 Power supply
- A TTL input for Copy Card
- 14 - 15 Probe input 1
- 16 - 17 Probe input 2
- 18 - 19 Digital input



IWC 750

Compact temperature controllers



Description

IWC 750 controllers can be fitted on ventilated refrigerators operating at medium or low temperature. These controllers have two analogue inputs for NTC temperature probes (or alternatively PTC inputs) and four programmable relay outputs for the management of the compressor, defrost cycle, lights, evaporator's fans and ON/OFF feature. The outputs for the management of the alarms and auxiliary outputs are selectable.

Defrost cycles can be stopped at a specific time or as soon as the end cycle temperature is reached (if the evaporator is equipped with a specific probe). The values measured by the probes are displayed with three digits and a minus sign. The decimal point can be set with a parameter. All models have TTL connections that enable the controllers to be used with Copy Card, the quick programming accessory. Removable terminals are supplied as standard, while the buzzer for the temperature alarm is optional. The range also includes a special version with a 2hp relay for the direct management of medium power compressors. Screw terminals or Faston connectors are available on request.

Relay output	Capacity
Compressor	16A
Defrosting	20A(2hp)
Fans	8A
Alarm	8A.
AUX/light	8A.

NOTE: the amperometric values of the devices vary according to the type of terminal used.

Technical Data

Front panel protection: IP65.

Casing: plastic, PC+ABS resin, UL94 V-0, polycarbonate window, keys in thermoplastic resin.

Dimensions: front panel 180x37 mm and depth 69 mm (without terminals).

Mounting: panel-mounting, 150x31 mm drilling.

Template (+0.2/-0.1 mm).

Operating temperature: -5...55°C.

Storage temperature: -30...85°C.

Operating and storage humidity: 10...90 % RH (non condensing).

Display: 3 digits and a half + sign.

Analogue inputs: 2 NTC inputs.

Digital inputs: 1 voltage free digital input (clean contact) configurable by means of a parameter.

Serial TTL output for Copy Card.

Digital outputs: 5 relay programmable outputs.

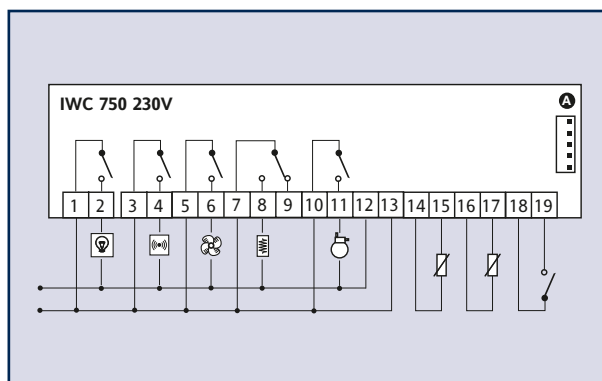
Precision: above 0.5% of the bottom scale +1 digit.

Resolution: 1 or 0.1°C.

Consumption: 6 VA.

Power supply: 230 V~ / $\pm$ 10% 50/60 Hz.

Wiring Diagram



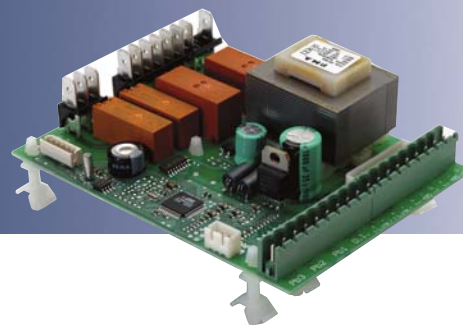
Description of Wiring Diagram

- 1 - 2 N.O. AUX-light relay output, configurable
- 3 - 4 N.O. alarm relay output, configurable
- 5 - 6 N.O. fan relay output, configurable
- 7 - 8 N.O. Defrosting relay output, configurable
- 7 - 9 N.C. Defrosting relay output, configurable
- 10 - 11 N.O. compressor relay output, configurable
- 12 - 13 Power supply
- A TTL input for Copy Card
- 14 - 15 Probe input 1
- 16 - 17 Probe input 2
- 18 - 19 Digital input



IWP 740

multifunctional electronic controller
for ventilated refrigerating units



Description

Controller for monoblocs and cabinets with channels

A full range of special electronic controllers for the management of all applications related to monoblocs and refrigerated cabinets with channels, formed by a power unit and remote keyboard.

Controllers are able to manage up to 6 fully configurable relays with powers up to 2 hp, up to 4 analogue inputs for temperature probes and up to 4 digital inputs that can also be fully configured by users.

A special algorithm enables all the controllers to connect to the Link network to synchronize the sequence of defrost cycles and start the compressors of all the refrigerating units connected to the master unit. These features significantly reduce the consumption of energy of the whole system.

The possibility of connecting the unit to Televis and the compliance with HACCP requirements guarantees the quality and correct preservation of fresh and frozen food, while enhancing the performance of refrigerating plants.

Models can be supplied in a sealed plastic casing (167x158x53 mm) or in open configuration in standard DIN size (107.5x178.5).

Keyboards are available in open configuration without plastic casing, which can be mounted on the rear of the panel-mounting.

Models are available with powers of 230 V~ and 115 V~.



IWP 740

Electronic controller for 4 relay refrigerating units with powers up to 1 hp, 3 NTC temperature probes (factory pre-set PTC probes are also available on request), 1 digital input configurable by means of a parameter.

All models have TTL connections that enable the controllers to be used with Copy Card, the quick programming accessory, and Televis.

The power base is available only for models with open configuration and sizes of 92x121 mm. These controllers can be connected to the Link network for the synchronization of the defrost cycles and compressors.

The supply voltage is 230 V~.

The module with RS485 serial output for the direct connection of the controller to Televis is optional.

Basic technical specifications

- Dimensions: open, 92x121
- Connections for signal inputs: on terminal block for <2.5 mm² leads
- Connections for power and supply outputs: on terminal block with 6.3 mm Faston connectors
- Operating temperature: -5...55°C
- Storage temperature: -30...85 °C
- Working and storage humidity: 10...90% RH (non condensing).
- Analogue inputs: 3 inputs for NTC temperature probes (factory pre-set PTC temperature probes available on request)
- Digital inputs: 1 free from voltage inputs
- Digital outputs: see table
- Serial connection: TTL output (RS485 optional module)
- Power supply: 230 V~ ±10%, 50/60 Hz.

Technical specifications of keyboard

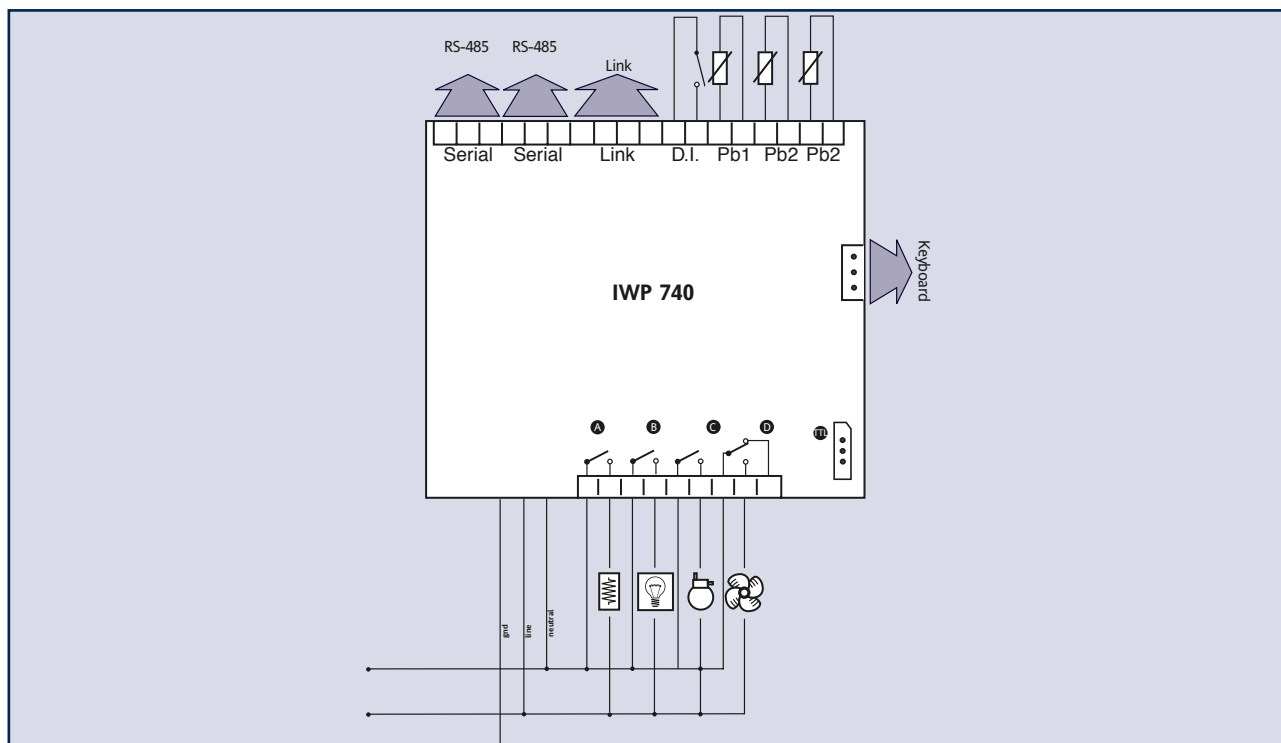
- Dimensions: 68.5x124.5, mounting on panel-mounting rear
- Display: 3 digits and a half + sign.
- Resolution: 1 °C or 0.1 °C
- Precision: above 0.5% of the bottom scale.
- Power supply: directly from power base.

IWP 740 LX HACCP

The range also includes models that are able to manage and store the alarms, in compliance with the HACCP requirements.

Relay output	Capacity (amp)	Configuration	Power (hp)
Defrost	16	SPST	1
Auxiliary	16	SPST	1
Compressor	8	SPST	1/2
Fans	8	SPDT	1/2

Wiring Diagram



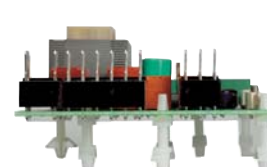
Description of Wiring Diagram

Common:

Serial	RS-485 Serial output for the connection to TelevisSystem (GND, 485-, 485+)
Link	Link
D.I. connection	Digital input
Pb1	Probe input 1
Pb2	Probe input 2
Pb3	Probe input 3
Keyboard	Connection to DATA keyboard, GND, 12V

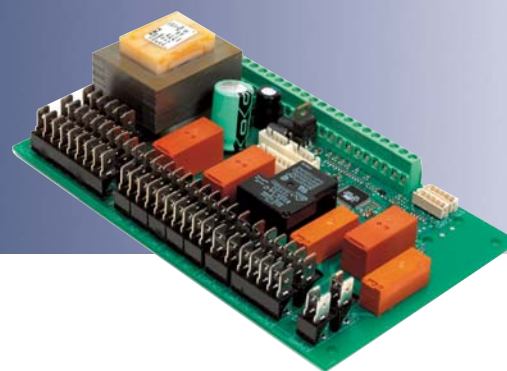
A	N.O. Defrosting relay output
B	N.O. AUX/light relay output
C	N.O. compressor relay output
D	N.O. fans relay output
D	N.C. fans relay output

TTL	Serial TTL output for the connection to the Copy Card.
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IWP 750 LX, 760 LX

multifunctional electronic controller
for ventilated refrigerating units



Description

IWP 750

Electronic controller for 5-relay refrigerating units with powers up to 2 hp, 3 NTC/PTC temperature probes configurable by means of a parameter and 4 digital inputs configurable by means of a parameter. All versions have a TTL connector for the connection of the quick programming card "Copy Card" and Televis supervision system. The power base is available for models with open configuration (107.5x160). Models differ depending on the distance between the base and keyboard: for distances above 10 meters (model LONG DISTANCE), wiring is carried out with an opto-insulated RS485 serial line. If the distance is below 10 meters (model SHORT DISTANCE), wiring is carried out by means of a powered serial line. The supply voltage is 230 V~.

The module with serial RS485 output for the direct connection to Televis system and the Link module, required to synchronize the defrosting cycles and compressors, are optional.

Basic technical specifications

- Dimensions: open configuration, (107.5x160), DIN standard
- Connections for signal inputs: on terminal block for <2.5 mm² leads
- Connections for power and supply outputs: on terminal block with 6.3 mm Faston connectors
- Operating temperature: -5...55°C
- Storage temperature: -30...85°C
- Operating humidity: 10...90% RH (non condensing)
- Storage humidity: 10...90% RH (non condensing)
- Analogue inputs: 3 inputs for PTC/NTC temperature probes configurable by means of a parameter
- Digital inputs: 4 free from voltage inputs
- Digital outputs: see table
- Serial connection: TTL output (RS485 optional module)
- Power supply: 230 V~ ±10%, 50/60 Hz

Technical specifications of keyboard

- Dimensions: 68.5x124.5, for mounting on panel-mounting rear
- Display: 3 digits and a half + sign
- Resolution: 1°C or 0.1°C
- Precision: above 0.5% of bottom scale
- Power supply: directly from power base

IWP 750 LX HACCP

The range also includes models that are able to manage and store the alarms, in compliance with the HACCP requirements.

Relay output	Capacity (amp)	Configuration	Power (hp)
Compressor	20	SPST	2
Defrosting	16	SPDT	1
Evaporator fan	20	SPST	2
Alarm	8	SPST	1/2
Light	16	SPDT	1

IWP 760

Electronic controller for 6-relay refrigerating units with powers up to 2 hp, 3 NTC/PTC temperature probes configurable by means of a parameter and 4 digital inputs configurable by means of a parameter. All versions have a TTL connector for the connection of the quick programming card "Copy Card" and Televis supervision system. The power base is available for models with open configuration (107.5x160). Models differ depending on the distance between the base and keyboard: for distances above 10 meters (model LONG DISTANCE), wiring is carried out with an opto-insulated RS485 serial line. If the distance is below 10 meters (model SHORT DISTANCE), wiring is carried out by means of a powered serial line. The supply voltage is 230 V~.

The module with serial RS485 output for the direct connection to TelevisSystem and the Link module, required to synchronize the defrosting cycles and compressors, are optional.

Basic technical specifications

- Dimensions: open configuration (107.5x178.5), DIN standard
- Connections for signal inputs: on terminal block for <2.5 mm² leads
- Connections for power and supply outputs: on terminal block with 6.3 mm Faston connectors
- Operating temperature: -5...55°C
- Storage temperature: -30...85°C
- Operating humidity: 10...90% RH (non condensing)
- Storage humidity: 10...90% RH (non condensing)
- Analogue inputs: 3 inputs for PTC/NTC temperature probes configurable by means of a parameter
- Digital inputs: 4 free from voltage inputs
- Digital outputs: see table
- Serial connection: TTL output (RS485 optional module)
- Power supply: 230 V~±10%, 50/60 Hz

Technical specifications of keyboard

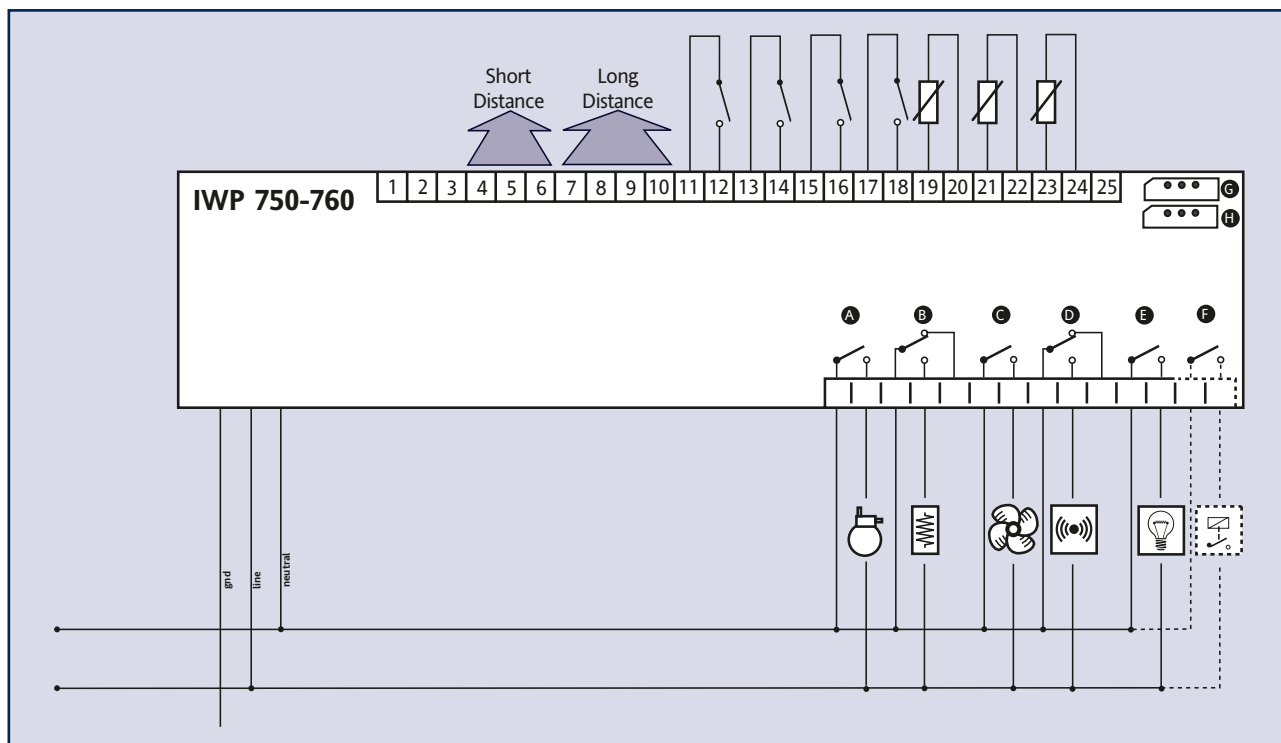
- Dimensions: 68.5x124.5, for mounting on panel-mounting rear
- Display: 3 digits and a half + sign
- Resolution: 1°C or 0.1°C
- Precision: above 0.5% of bottom scale
- Power supply: directly from power base.

IWP 740 LX HACCP

The range also includes models that are able to manage and store the alarms, in compliance with the HACCP requirements.

Relay output	Capacity (amp)	Configuration	Power (hp)
Compressor	20	SPST	2
Defrosting	16	SPDT	1
Evaporator fan	20	SPST	2
Alarm	8	SPST	1/2
Light	16	SPDT	1
Standby	8	SPST	1/2

Wiring Diagram



Description of Wiring Diagram

Common:

- 11 - 12 Digital input 1
- 13 - 14 Digital input 2
- 15 -16 Digital input 3
- 17 -18 Digital input 4
- 19 -20 Probe input 1
- 21 -22 Probe input 2
- 23 -24 Probe input 3
- A Relay output A
- B Relay output B
- C Relay output C
- D Relay output D

- E Relay output E
- G Serial TTL input for Copy Card

IWP 760

- F Relay output F

IWP 750-760 LX

- 1 - 2 - 3 RS485 serial input for the connection to TelevisSystem
- H TTL serial input for the connection to TelevisSystem

