

IS 972LX-IS 974LX

ID 983-985LX

The IS 972LX-IS974LX controller is suited for application on normal or low temperature refrigeration units with fans and is composed of a master unit and slave power base connected by a quick coupling multipolar cable connection.

- **IS 972LX:** The power base is equipped with 2 inputs for temperature sensor type NTC (PTC software setting) and three output relays for compressor, defrost and evaporator fan control.
- **IS 974LX:** The power base is equipped with 2 inputs for temperature sensors type NTC (PTC software settings) and four output relays for compressor, defrost, evaporator fan and alarm control, the later can be programmed to manage an auxiliary charge such as, for example, lights.

The defrosting cycle can be stopped at a set time or, thanks to the sensor on the evaporator, when the cycle completion temperature is reached.

The master unit, equipped with 1 programmable digital input, displays the value read by the sensor using three digits and the minus sign. Decimal point readings can be set with a parameter. The Buzzer is optional.

All models include TTL type connections to enable the "Copy Card" fast setting accessory and for Televis connection.

The best electronic devices optimized for use in supermarket refrigeration systems, guaranteeing quality and safety in preserving fresh and deep-frozen food, along with the best performance and energy preservation. The standard Eliwell format 32x74 makes it suitable to any refrigerating system.

ID 985LX is provided with three analogue inputs for NTC temperature probes (PTC can be selected by parameter) to manage refrigerating room and defrost, and to display an additional temperature value. Four relay digital outputs, which are voltage-free, are suitable for managing compressor, defrost, fans, evaporator, and alarm; the alarm relay can also be configured to manage an auxiliary charge, such as lights. The two digital inputs can be set to work as microports, or for remote activation of defrosting cycle, reduced set, auxiliary charge, and an alarm signal. The defrosting cycle can be stopped at a set time, or a defined end cycle temperature using the appropriate probe placed on the evaporator.

The value read by the sensor is displayed using three digits and the minus sign. Decimal point reading can be set by parameter. The Buzzer is optional.

All models include TTL type connections to enable the "Copy Card" fast setting accessory and for Televis connection.

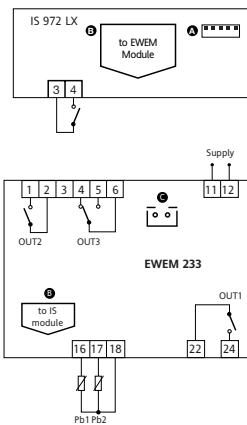
Compatibility and replacement: • **IS 972LX:** EWPC 972 EWPX 172
• EWDS 231 • **IS 974LX:** EWPX 172AR • EWDS 241

Compatibility and replacement:
EWPX 185



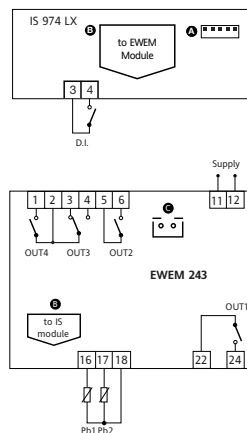
IS 972LX-EWEM 233

TERMINALS IS 972LX	
3-4	Digital input
A	TTL serial input for Copy Card and connection to TelevisSystem
TERMINALS EWEM 233	
1-2	Relay output N.O.
4-6	Relay output N.C.
5-6	Relay output N.O.
11-12	Power supply
16-18	Probe input (thermostat)
17-18	Probe input (evaporator)
22-24	Relay output N.A.
B	IS 972LX- EWEM 233 connection
C	Serial input RS-485



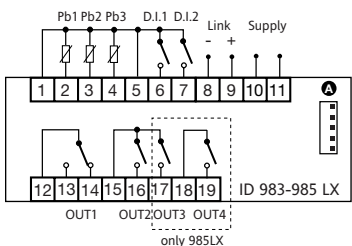
IS 974LX-EWEM 243

TERMINALS IS 974LX	
3-4	Digital input
A	TTL serial input for Copy Card and connection to TelevisSystem
TERMINALS EWEM 243	
1-2	Relay output N.O.
2-3	Relay output N.O.
2-4	Relay output N.C.
5-6	Relay output N.O.
11-12	Power supply
16-18	Probe input 1 (thermostat)
17-18	Probe input 2 (evaporator)
22-24	Relay output N.A.
B	IS 974LX- EWEM 243 connection
C	Serial input RS-485



ID 983-985LX

TERMINALS	
1-2	Probe input 1 (thermostat)
1-3	Probe input 2 (evaporator)
1-4	Probe input 3
5-6	Digital input
5-7	Digital input
8	Link - connection
9	Link + connection
10-11	Power supply
12-13	Defrost relay N.O.
12-14	Defrost relay N.C.
15-16	Compressor relay output
15-17	Fan relay output
18-19	Alarm relay output
A	TTL input for Copy Card and connection to TelevisSystem



Selection Guide

	IO 961	ID 961A	ID 961LX	ID 970	ID 970 LX	ID 971	ID 971LX	ID 974	ID 974LX	ID 975LX	IS 972LX	IS 974LX	ID 983LX	ID 985LX
ANALOGUE INPUTS	1	1	1	1	1	2	2	2	2	2	2	2	3	3
1 Temperature NTC sensor	S	S	D	S	D	-	-	-	-	-	-	-	-	-
1 Temperature PTC sensor	D	D	S	D	S	-	-	-	-	-	-	-	-	-
2 Temperature NTC sensor	-	-	-	-	-	S	D	S	D	D	D	-	-	-
2 Temperature PTC sensor	-	-	-	-	-	D	S	D	S	S	S	-	-	-
3 Temperature NTC sensor	-	-	-	-	-	-	-	-	-	-	-	D	D	D
3 Temperature PTC sensor	-	-	-	-	-	-	-	-	-	-	-	S	S	S
RELAYS OUTPUTS	1	2	1	2	2	2	2	3	3	4	3	4	2	4
Compressor	D	D	D	D	D	D	D	D	D	D	D	D	D	D
Defrost	-	-	-	D	D	D	D	D	D	D	D	D	D	D
Evaporator Fans	-	-	-	-	X	-	X	-	D	D	D	D	-	D
Alarm	-	D	-	-	X	-	X	-	X	-	X	D	-	D
Auxiliary output	-	-	-	-	X	-	X	-	X	X	X	-	X	X
DIGITAL INPUTS														
1 Programmable Input	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 Programmable Inputs	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FUNCTIONS														
Removable Connectors (1)	X	X	X	X	X	X	X	X	X	X	-	-	X	X
Relay 1 hp	X	X	X	X	X	X	X	X	X	-	-	-	-	-
Relay 2 hp	X	X	X	X	X	X	X	-	-	-	D	D	-	-
Buzzer	X	X	X	X	X	X	X	D	X	X	X	X	X	X
Televis	-	-	D	-	D	-	D	-	D	D	D	D	D	D
Copy Card	D	D	D	D	D	D	D	D	D	D	D	D	D	D
HACCP	-	-	X	-	-	-	-	-	X	-	-	-	-	X
LINK	-	-	-	-	-	-	-	-	-	-	-	-	D	D
RTC	-	-	-	-	-	-	-	-	-	-	-	-	D	D
ModBUS	-	-	-	-	-	-	-	-	-	-	-	-	X	X
POWER SUPPLY														
230 V~	X	X	X	X	X	X	X	X	X	-	X	X	-	-
115 V~	X	X	X	X	X	X	X	X	X	-	X	X	-	-
12 V~/m	D	D	D	D	D	D	D	D	D	D	D	D	X	X
12...24 V~, 12...36 Vm	X	X	X	X	X	X	X	-	-	-	-	-	-	-

LEGENDA

- D** default
- X** available
- S** selectable
- not available

(1) only male



For more information please contact:

Eliwell & Controlli s.r.l.
Via dell'Industria, 15 Zona Industriale Paludi
32010 Pieve d'Alpago (BL) ITALY
Telephone +39 0437 986111
Facsimile +39 0437 989066
Internet <http://www.eliwell.it>

Climate Controls Europe
An Invensys Company



rel. 2/2004
cod. CT122578



Digifrost Line

The new line of controllers that unites the entire range for commercial refrigeration



ID 961(A)-961LX

The ID 961 controller is suited for normal temperature refrigeration units. It has an input for temperature sensor type PTC (NTC software setting) and an output relay for compressor control. The defrosting cycles are controlled by stopping the compressor for a set time. The temperature sensor value is displayed using two digits and the minus sign. TTL connections to enable the "Copy Card" fast parameters transfer option is available as standard. The following options are available: 16A compressor relay, Buzzer.

The LX model, for NTC sensor as standard, are provided with the Televis connection option, the 3 digit display, the plus/minus sign, the decimal point is selectable, and a programmable digital input is available.

Compatibility and replacement:
EWPC 961/961N • EWDC 112 • EWPX 161 • EWDB 111



ID 970-970LX

The ID 970 controller is suited for normal or low temperature refrigeration units. It has an input for temperature sensor type PTC (NTC software setting) and two output relays for compressor and defrost control. The defrosting cycles are controlled by stopping the compressor for a set time. The temperature sensor value is displayed using three digits and the minus sign. The decimal point display can be selected with a parameter. TTL connections to enable the "Copy Card" fast parameters transfer option is available as standard. The following options are available: 16A compressor relay, Buzzer.

The LX model, for NTC sensor as standard, are provided with the Televis connection option, and a programmable digital input is available.

Compatibility and replacement:
EWPC 970 • EWPX 170 • EWDC 122



ID 971-971LX

The controller ID 971 is suited for normal or low temperature refrigeration units. It has two inputs for temperature sensor type PTC (NTC software setting) and two output relays for compressor and defrost control. The defrosting cycles are controlled by stopping the compressor for a set time or by using the temperature sensor on the evaporator. The temperature sensor value is displayed using three digits and the minus sign. The decimal point display can be selected with a parameter. TTL connections to enable the "Copy Card" fast parameters transfer option is available as standard. The following options are available: 16A compressor relay and Buzzer.

The LX models, for NTC sensor as standard, are provided with the Televis connection option, and a programmable digital input is available.

Compatibility and replacement:
EWPC 971 • EWPX 971 • EWDC 222



ID 974-974LX

The ID 974 controller is suited for normal or low temperature refrigeration units with fans. It has two inputs for temperature sensor type PTC (NTC software setting) and three output relays for compressor, defrost and evaporator fans control. The defrosting cycles are controlled by stopping the compressor for a set time or by using the temperature sensor on the evaporator. The temperature sensor value is displayed using three digits and the minus sign. The decimal point display can be selected with a parameter. Audible temperature alarms are available as standard. TTL connections to enable the "Copy Card" fast parameters transfer option is available as standard.

The LX models, for NTC sensor as standard, are provided with the Televis connection option, and a programmable digital input is available.

Compatibility and replacement:
EWPC 974 • EWPX 174 • EWDC 232 • EWDB 231



ID 975LX

The ID 975LX controller is suited for applications on normal or low temperature refrigeration units with fans. It is equipped with 2 inputs for temperature sensors type NTC (PTC software setting) and four output relays for compressor, defrost, evaporator fan and alarm control; in addition the alarm relay can be programmed to manage an auxiliary charge such as, for example, lights. The buzzer is optional. The defrosting cycle can be stopped at a set time or, thanks to the sensor on the evaporator, when the cycle completion temperature is reached. The value read by the sensor is displayed using three digits and the minus sign. Decimal point readings can be set with a parameter. All models include TTL type connections to enable the "Copy Card" fast setting accessory and for Televis connection.

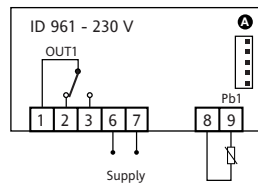
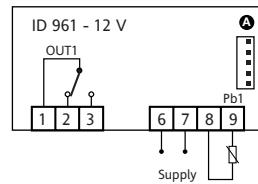
Compatibility and replacement:
EWPX 174AR • EWPX 174AX



ID 961

TERMINALS

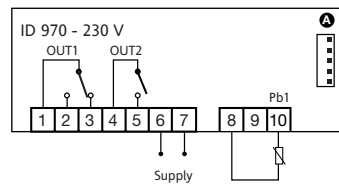
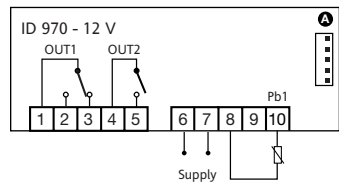
1 - 2	N.C. compressor relay output
1 - 3	N.O. compressor relay output
6 - 7	Power supply
8 - 9	Probe input (thermostat)
A	TTL input for Copy Card



ID 970

TERMINALS

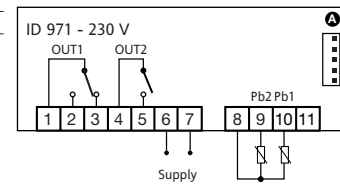
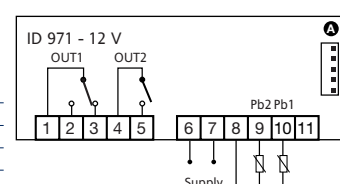
1	Defrost relay output common
2	N.O. defrost relay output
3	N.C. defrost relay output
4 - 5	Compressor relay output
6 - 7	Power supply
8 - 10	Probe input (thermostat)
A	TTL input for Copy Card



ID 971

TERMINALS

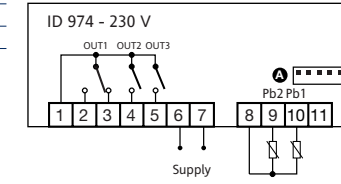
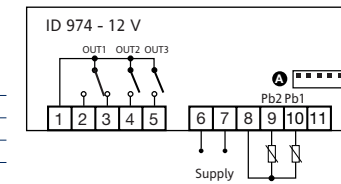
1	Defrost relay output common
2	N.O. defrost relay output
3	N.C. defrost relay output
4 - 5	Compressor relay output
6 - 7	Power supply
8 - 9	Probe input 2 (evaporator)
8 - 10	Probe input 1 (thermostat)
A	TTL input for Copy Card



ID 974

TERMINALS

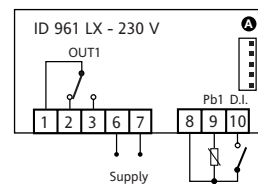
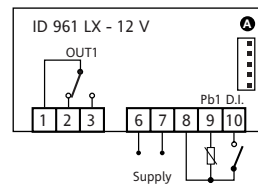
1	Relay outputs common
2	N.O. defrost relay output
3	N.C. defrost relay output
4	Compressor relay output
5	Fans relay output
6 - 7	Power supply
8 - 9	Probe input 2 (evaporator)
8 - 10	Probe input 1 (thermostat)
A	TTL input for Copy Card



ID 961LX

TERMINALS

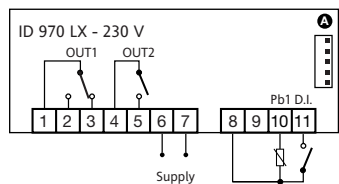
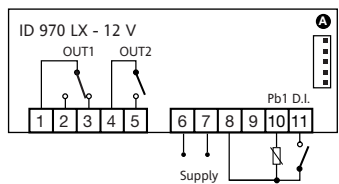
1 - 2	N.C. compressor relay output
1 - 3	N.O. compressor relay output
6 - 7	Power supply
8 - 9	Probe input (thermostat)
8 - 10	Digital input
A	TTL input for Copy Card and for connection to TelevisSystem



ID 970LX

TERMINALS

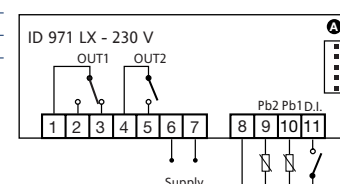
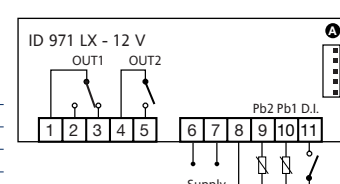
1	Defrost relay output common
2	N.O. defrost relay output
3	N.C. defrost relay output
4 - 5	Compressor relay output
6 - 7	Power supply
8 - 10	Probe input (thermostat)
8 - 11	Digital input
A	TTL input for Copy Card and for connection to TelevisSystem



ID 971LX

TERMINALS

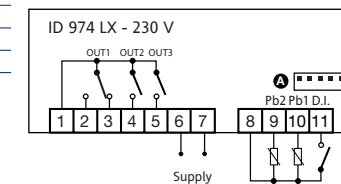
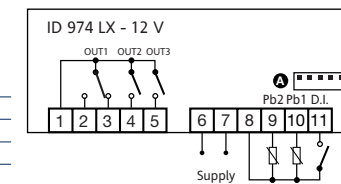
1	Defrost relay output common
2	N.O. defrost relay output
3	N.C. defrost relay output
4 - 5	Compressor relay output
6 - 7	Power supply
8 - 9	Probe input 2 (evaporator)
8 - 10	Probe input 1 (thermostat)
8 - 11	Digital input
A	TTL input for Copy Card and for connection to Televis System



ID 974LX

TERMINALS

1	Relay outputs common
2	N.O. defrost relay output
3	N.C. defrost relay output
4	Compressor relay output
5	Fans relay output
6 - 7	Power supply
8 - 9	Probe input 2 (evaporator)
8 - 10	Probe input 1 (thermostat)
8 - 11	Digital input
A	TTL input for Copy Card and for connection to TelevisSystem



ID 975LX

TERMINALS

1-2-3	Defrost relay output
1-2-4	Compressor relay output
1-2-5	Fan relay output
1-2-6	Alarm relay output
7-8	Power supply
9-10	Probe input 2 (evaporator)
9-11	Probe input 1 (thermostat)
A:	TTL input for Copy Card and connection to TelevisSystem

