READ AND SAVE
THESE INSTRUCTIONS

Dimensions (mm)
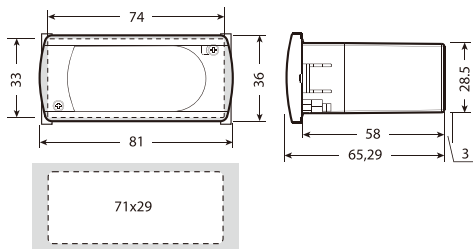

71x29

Fig. 1

Panel mounting
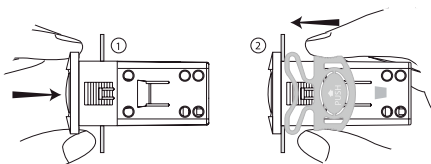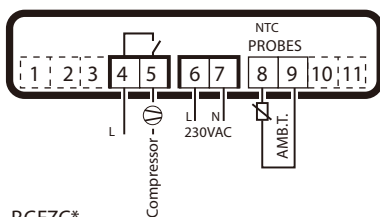
Rear (with 2 quick-fit side brackets)

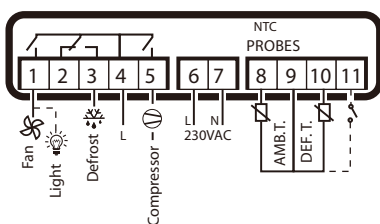Fig. 2

Electrical connections

RCEZS*

RCEZC*

Fig. 3

Disposal of the product

The appliance (or the product) must be disposed of separately in accordance with the local waste disposal legislation in force.

Technical specifications

power supply	230 Vac +10 /-15% 50/60 Hz
rated power	3.5 VA
inputs	NTC or PTC probes 1 or 2 inputs. Digital input as alternative to third probe
relay outputs	2 Hp relay 12 A Res. 12 FLA 72 LRA - 250 Vac(RCEZS*), 12 A Res. 10 FLA 60 LRA - 250 Vac(RCEZC*) 8 A relay 8 A Res. 2 FLA 12 LRA - 250 Vac
type of probe	Std CAREL NTC 10 K at 25 癈
connections	Screw terminals for cables with cross-sect. from 0.5 mm^2 to 1.5 mm^2 Plug-in terminals for screw blocks or with crimped contact Rated maximum current per terminal 12 A.
assembly	Screws with rear brackets.
display	3 digit LED display with sign (-199 to 999) and decimal point; six status LEDs
operating conditions	-10T50 癈 - humidity <90% rH non-condensing
storage conditions	-20T70 癈 - humidity <90% rH non-condensing
range of measurement	-50T90 癈 - resolution 0.1 癈
front panel index of protection	panel installation with IP65 type 1 gasket
case	plastic terminal, 81x26x65 mm
classification according to protection against electric shock	Class II when suitably integrated
environmental pollution	normal
PTI of the insulating material	250 V
period of stress across the insulating parts	long
category of resistance to heat and fire	category D (UL94 - V2)
immunity against voltage surges	category 1
type of action and disconnection	1C relay contacts
no. of relay automatic operating cycles	100,000 operations
software class and structure	Class A
cleaning the instrument	Only use neutral detergents and water.
cable max. lenght	probes: 30 m relay: 10 m

WARNING:

do not run the power cable less than 3 cm from the bottom part of the device or from the probes; for the connections only use copper wires.

IMPORTANT WARNINGS:

The CAREL product is a state-of-the-art device, whose operation is specified in the technical documentation supplied with the product or can be downloaded, even prior to purchase, from the website www.carel.com.

The customer (manufacturer, developer or installer of the final equipment) accepts all liability and risk relating to the configuration of the product in order to reach the expected results in relation to the specific final installation and/or equipment. The failure to complete such phase, which is required/indicated in the user manual, may cause the final product to malfunction; CAREL accepts no liability in such cases. The customer must use the product only in the manner described in the documentation relating to the product. The liability of CAREL in relation to its products is specified in the CAREL general contract conditions, available on the website www.carel.com and/or by specific agreements with customers.

Table of parameters

	parameter		Min.	Max.	Def.	UOM
PS	password	F	0	200	22	-
/C1	Probe 1 calibration	F	-12.7	12.7	0	癈
/C2	Probe 2 calibration	F	-12.7	12.7	0	癈
St	Control temperature	F	-50.0	90	4.0	癈
rd	Control differential (hysteresis)	F	0	19.0	2.0	癈
c0	Comp. and fan start delay after start-up	C	0	100	0	min
d0	Type of defrost (0= heater; 1= hot gas; 2= heater by time; 3= hot gas by time; 4= heater by time with temp. cont.)	C	0	4	0	-
dl	Interval between two defrosts	C	0	199	8	h
dt	End defrost temperature	C	-50	127	12	癈
dP	Max. or effective defrost duration	C	1	199	30	min
dd	Dripping time after defrost	C	0	15	2	min
A0	Alarm and fan differential	C	-20.0	20.0	-2.0	癈
AL	Low temperature alarm threshold/ deviation (AL= -50; alarm disabled)	C	-50	150	-50	癈
AH	High temperature alarm threshold/ deviation (AH=150; alarm disabled)	C	-50	150	150	癈
Ad	Low and high temperature alarm delay	C	0	199	0	min
F0	Fan management	C	0	1	0	-
F1	Fans shutdown temperature	F	-50	127	5.0	癈
F2	Fans off when compressor off	C	0	1	1	-
F3	Fans off during defrost 0= fan ON; 1= fan OFF	C	0	1	1	-
Fd	Off for post-dripping	C	0	15	0	min
EZY	Select Easy Set (simplified configuration)	C	0	3	0	-

* F： General parameter, no need password;

* C： Configuration parameter, need password.

EZY =1: Fan control separately
EZY =2: Fan off when door open, fan on when door close
EZY =3: Light on when door open, light off when door close

Table of alarms

Alarm code	LED	Description	Parameters involved
E0	ON	probe 1 error= control	-
E1	ON	probe 2 error= defrost	[d0 = 0 / 1]
dOr	ON	open door alarm	
LO	ON	low temperature alarm	[AL] [Ad]
HI	ON	high temperature alarm	[AH] [Ad]
EE	ON	unit parameter error	-
EF	ON	operating parameter error	-
Ed	ON	defrost ended by timeout	[dP] [dt]

Setting the set point (desired temperature)

- press SET for 1 s, the set value will start flashing after a few moments;
- increase or decrease the value using UP or DOWN;
- press SET to confirm the new value.

Switching the device ON/OFF

Press UP for more than 3 s. The control and defrost algorithms are now disabled and the instrument displays the message 摀FF?alternating with the temperature read by the set probe.

Manual defrost

Press for DOWN more than 3 s (the defrost starts only the temperature conditions are valid).

Show Temp of probe

Press UP and DOWN together (only for C)

Access and setting type F (frequent) and type C (conguration)parameters

1. press SET for 3 s (the display will show 揚S?;
2. • to access the type F and C parameter menu, enter the password ?2?using UP/DOWN;
   • to access the F parameter menu only, press SET (without entering the password);
   scroll inside the parameter menu using UP/DOWN;

To display/set the values of the parameter displayed, press SET, then UP/DOWN and finally SET to confirm the changes (returning to the parameter menu).

To save all the new values and exit the parameter menu, press SET for 3 s;

To exit the menu without saving the changed values (exit by timeout) do not press any button for at least 60 s.

Display and functions

During normal operation, the controller displays the value of the probe set using parameter In addition, the display has LEDs that indicate the activation of the control functions (see Table 1), while the 3 buttons can be used to activate/deactivate some of the functions (see Table 2).

LEDs and associated functions

icon	function	normal operation			start up
		ON	OFF	blink	
⊖	compressor	ON	OFF	request	ON
❄	fan	ON	OFF	request	ON
❄	defrost	ON	OFF	request	ON
AUX	aux	outputon	output off	-	ON
🔔	alarm	all	no alarm	-	ON

Tab. 1

Table of functions activated by the buttons

button	normal operation		start up	
	pressing the button alone	pressed together		
▲ ON/OFF	more than 3 s: toggleON/OFF	Pressed togerther show temp of probe	-	
Defrost	more than 3 s: start/ stop defrost		Pressed together start para-meter reset procedure	for 1 s display firmware vers. code
SET	-1 s.: display/set the set point - more than 3 s:access parameter setting menu (enter password ?2?	-		for 1 s RESET current EZY set

Tab. 2