

DESCRIPTION

REF-BERI-ExR is a compact controller that controls heating elements (bain marie). It is ideal for heavy industrial environment with high current and humidity. It controls one PTC sensor in range of $-19\pm+99^{\circ}\text{C}$ ($-2.2\pm+210^{\circ}\text{F}$). It has 2 relays: one **external heater relay (30A)** and one **internal ON-OFF relay (12A)** for the cabinet's lamp. The external relay is held from a mounting frame on the controller. Also, it has an OFF state, in which all relays are OFF and oF is displayed.

INDICATIONS AND BUTTON OPERATIONS

Indications	
	heater ON

button	Operations		
	pressed once	pressed more than 3 sec	pressed together
	SET POINT indication confirm new value	-	-
	-	ON/OFF controller	enter parameter's menu
	-	-	
SET	cancel new parameter value	-	

PROGRAMMING THE PARAMETERS

By pressing at the same time [SET] and [▲], [▼] we access the parameters menu.

The first parameter "SP" is displayed and with [▲], [▼] we scroll into the parameters with the order they appear to parameters table below .

By pressing [SET] the value of the parameter is displayed and with the [▲], [▼] we change the value.

By pressing [←] we **confirm** the new value and the name of the parameter is displayed.

By pressing [SET] we **cancel** the new value and the name of the parameter is displayed.

By pressing [←] we **exit** the parameters menu.

SWITCHING ON/OFF THE DEVICE

By pressing **more than 3 sec** the button [▼] we **switch ON or OFF** the device.

TECHNICAL SPECIFICATIONS

Power supply: 230VAC 50/60Hz / Maximum power consumption: 3W

It is recommended to use a power supply safety switch: fuse 0,5A (not included)

Cabinet's temperature sensor PTC 1K 25°C / Accuracy: 0.5°C

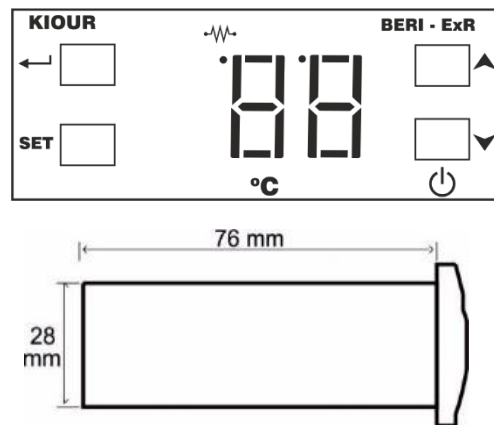
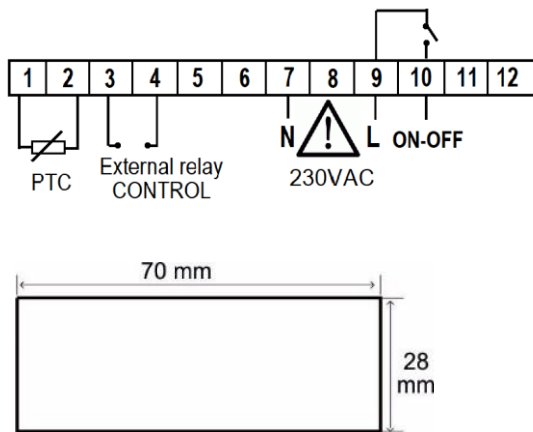
External relay for heater 250VAC 30A resistive load 2HP

Internal relay for the cabinet lamp or fan ON/OFF 250VAC 10A

Operating temperature: $-15\pm+55^{\circ}\text{C}$ / Storage temperature: $-20\pm+80^{\circ}\text{C}$

The device is mounted through panel hole 29x71mm and is restrained with two plastic side brackets / Connection with terminal blocks 18A

CONNECTIONS - DIMENSIONS



PARAMETER TABLE

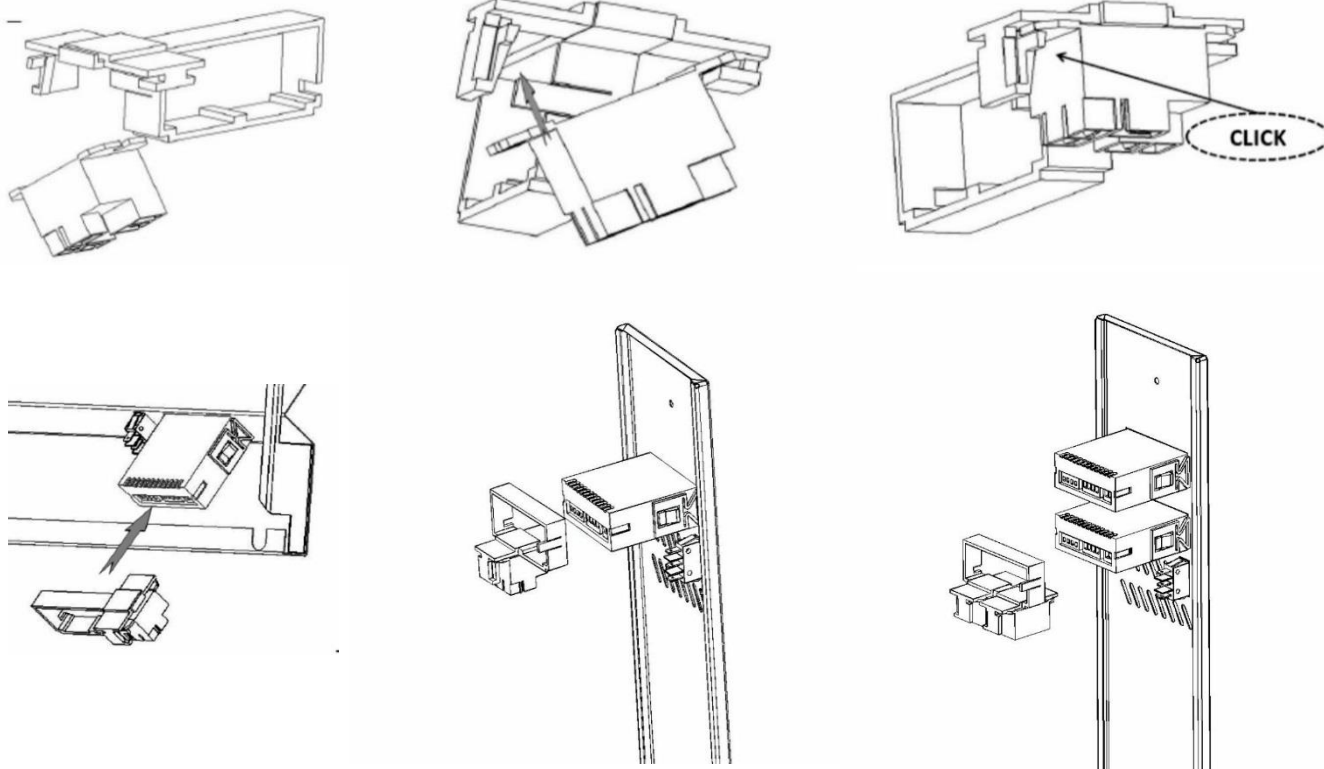
#		description	min	max	REF-BERI-ExR	UOM
1	SP	SET POINT: temperature control of the cabinet	SL	SH	75	°C
2	SL	minimum temperature limit of SP	-18	+25	25	°C
3	SH	maximum temperature limit of SP	0	98	90	°C
4	di	differential relay function	1	8	5	°C
5	AJ	zero adjustment of temperature sensor	-9	10	0	°C

ALARM TABLE

1	F1	cabinet sensor malfunction
The alarms are automatically deactivated when the cause of the alarm disappears.		

HOLDER OF THE EXTERNAL RELAY

The holder of the relay consists of a frame and a base restraint. Each frame can hold up to three relays, while each relay requires its own base restraint. The relay is secured over the frame with the help of the restraint and then the frame is secured over the controller's shell. The connections of the relay should be facing down to be protected from falling liquid, as in the following pictures.



Made in Greece.



ATTENTION according to safety standards, the device must be properly positioned and protected from any contact with electrical parts. All parts that provide protection must be fastened in such a way that they cannot be removed without the use of tools. **ATTENTION:** disconnect the power supply of the device before proceeding to any kind of maintenance. **ATTENTION:** do not place the device near heat sources, equipment containing strong magnets, in areas affected by direct sunlight or rain. **ATTENTION:** prevent electrostatic discharges at the side slots of the device and sharp objects from being inserted. **ATTENTION:** separate the signal's cables from the power supply's cables to prevent electromagnetic disorders. Signal cables must never be in the same pipe with the power supply cables. **Use the device only as described in this document, not to use itself as a security device. The device must be disposed of in accordance with local standards for the collection of electrical and electronic equipment. Read and keep these instructions.** The device is under two year's guarantee of good operation. The guarantee is valid only if the manual instructions have been applied. The control and service of the device must be done by an authorized technician. The guarantee covers only the replacement or the service of the device.

KIOUR preserves the right to adjust its products without further notice.