

EXPERT NANO

EXPERT NANO 3CF

The EXPERT NANO 3CF is 3 relays electronic thermoregulator designed to control refrigerated counters, display windows and static or ventilated refrigeration units with off-cycle or electrical defrosting. It is fitted with two analogue inputs for NTC/PTC temperature probes, one digital input, three relays for the compressor control, fans and defrosting function (the defrosting relay can be configured as light command) and buzzer. The regulator can be also configured for heat Application.

Available version for real time clock defrost.



APPLICATIONS

- Control of refrigerated counters, display windows and refrigeration units.

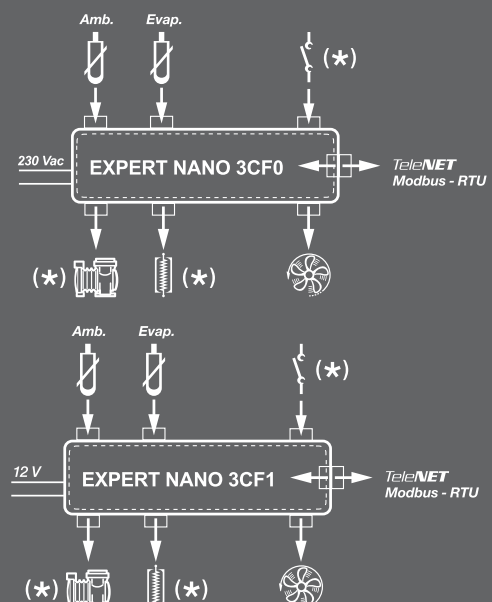
MAIN CHARACTERISTICS

- Can be configured for hot or cold applications.
- Defrosting can be configured for off-cycle, heating element or cycle inversion and frequency and duration can be set. End-of-defrosting can be based on time or temperature.
- Clock for programmed defrost (RTC) (on some models).
- Relay for controlling the compressor, evaporator fans and defrosting elements (defrost output can be configured like light output).
- Key operated manual START/STOP defrosting.
- Key operated ON/OFF.
- Cold room light ON/OFF switch with key or by means of door switch (if defrost output is configured like cold room light).
- Display/adjustment of temperature with decimal point.
- Internal buzzer for acoustic signals.
- Flat front surface for easy cleaning and keys of ample dimension which can be customized with various colours (on request).
- High brightness display with increased icons and figures.
- PEGO programming philosophy guaranteeing immediate start-up.

- IP65 front protection. Two-fold fastening options: clips / screws.
- RS485 serial connection with Modbus-RTU or Telenet protocol.
- Voltage, relay capacity and terminal type depending on model.
- External transformer for model 3CF11 (optional).

CONNECTION DIAGRAMS

(*) = Configurable function

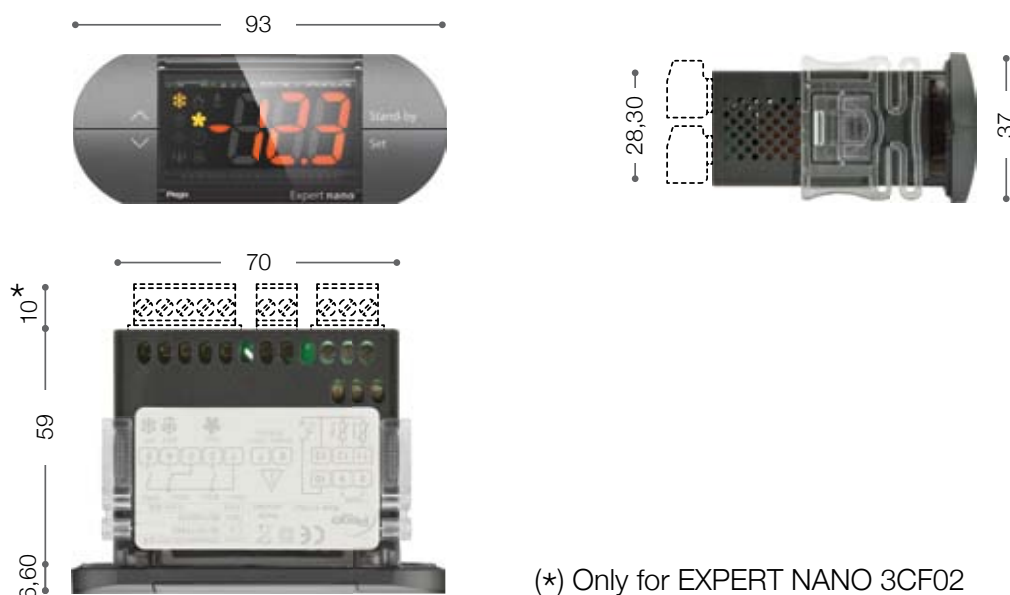




ACCESSORIES AVAILABLE

THERMOSTATS EXPERT NANO SERIES

10 | 11



(*) Only for EXPERT NANO 3CF02

TECHNICAL CHARACTERISTICS	EXPERT NANO 3CK01	EXPERT NANO 3CF01	EXPERT NANO 3CF02	EXPERT NANO 3CF11
DIMENSIONS	93 x 37 mm depth 59 mm			
DRILL HOLE TEMPLATE	71 x 29 mm (+0,2/-0,1 mm)			
INSTALLATION	In front of board by means of rear fastening clips or two front screws			
CASING	Plastic PC+ABS UL94 V-0 body, PC transparent front, Key panel PC or PC+ABS			
INSULATION TYPE	Class II			
FRONT PROTECTION RATING	IP65 with front board installation			
POWER SUPPLY	230 V AC~ +10/-15% 50-60 Hz			12V AC~ +10/-15% 50-60 Hz 12V DC +10/-15% class 2
ABSORBED POWER	3 VA max			
OPERATING TEMPERATURE	-5 ÷ 55 °C - humidity < 90% Rel. Hum. Not condensing			
STORAGE TEMPERATURE	-20 ÷ 70 °C - humidity < 90% Rel. Hum. Not condensing			
UNSUITABLE OPERATING ENVIRONMENTS	Environments with strong vibrations or impacts; aggressive, polluted or corrosive atmospheres, exposure to direct solar radiation, explosive atmospheres or flammable gas.			
DISPLAY	3-Digit with sign, decimal point and LED status indicators			
RESOLUTION	0,1 °C			
PROBE PRECISION (electronic)	±0,5 °C			
READING RANGE	-45 ÷ 99 °C			
CONNECTIONS	Screw fixed clamps	Screw fixed clamps	Screw removable clamps	Screw fixed clamps
SOFTWARE CLASS	A / Parameters saved on non-volatile memory (EEPROM)			
INPUTS				
ANALOGUE	2 inputs for NTC probes (10 kΩ 1% at 25°C)	2 inputs for NTC probes (10 kΩ 1% at 25 °C) / PTC		
DIGITAL	1 input (free voltage contact)			
OUTPUTS				
COMPRESSOR RELAY	(DO1) N.O. 16(6)A / 250V~			
HEATING ELEMENTS RELAY	(DO2) N.O. 8(3)A N.C. 6(3)A / 250V~			
FAN RELAY	(DO3) N.O. 8(3)A / 250V~			
BUZZER	PRESENT			
SUPERVISION SYSTEM	TELENET / MODBUS-RTU			
OPTIONS				
CLOCK (RTC)	Present	NO	NO	NO
ACCESSORIES				
ACCESSORIES AVAILABLE	NANO BOX NANO ADAPTER	NANO BOX NANO ADAPTER	NANO ADAPTER	NANO BOX NANO ADAPTER