

- Heat regulators with LED display with 3 digits, 7 segments and decimal point with relay intervention signalling LED
- Display range: $-99 \div +999$ °C (depending on the probe connected)
- Display resolution: 0.1 °C ($-9.9 \div +99.9$ °C) and 1 °C (< -9.9 °C and $> +99.9$ °C)
- Precision: ± 0.5 % of the full scale value ± 1 digit
- Possibility to select the type of probe between Thermocouples, Thermo-resistance and Linear sensors
- Password to protect the setting
- Parameter setting with digital mode:
 - Set-point
 - Differential
 - Neutral zone
 - Output triggering timing
 - Digital input delay time and function
 - Alarm delay time
 - Probe gauging OFFSET
 - Resolution displayed
 - Temperature unit of measurement
 - Measurement display filter (updating speed)
 - Probe input type

Operating modes (regulation):

- Heating or cooling ON/OFF (with or without Neutral Zone)
- Direct action, Reverse and Neutral Zone PWM
- ALARM
- Refrigeration mode
- Special mode
- Output: 1 or 2 relays with change-over contact 8 A / 250 V AC1
- Digital input: 1 with configurable function: external alarm, ON/OFF regulation, probe display selection, Set-point switching, Direct/Reverse switching
- Visual and acoustic alarm signalling for: external alarm (from digital input), probe alarm (fault), minimum or maximum alarm
- Analog output: $0 \div 10$ V, $4 \div 20$ mA, $0 \div 20$ mA
- Output for the optoisolated RS 485 serial communication (MODBUS communication protocol)
- Infrared receiver with RC-5 protocol (excluding version FHT NTC-2DA) for Remote control unit (accessory available separately for remote programming)

TECHNICAL INFORMATION

GENERAL CHARACTERISTICS

Model		FHT - ..P3D FHT NTC -2P3D	FHT - ..DA FHT NTC -2DA
Dimensions		Rear-panel 33x75 mm	4 DIN Modular
Power supply voltage in AC	A 50/60 Hz V	12 ÷ 24	24 / 230
Power supply voltage in DC	V	12 ÷ 24	-
Power supply voltage tolerance	%	± 10	± 10
Power consumption	VA	3	4,5
Relay outputs (change-over contact) capacity	at 250 V AC1 A	8	8
maximum breakaway starting current	A	10	10
maximum switchable power in AC	VA	2000	2000
maximum switchable resistive load	at 230 V W	1760	1760
single-phase motor capacity	HP	1/4	1/4
maximum switchable voltage	V	250	250
Precision	at ambient temperature = 23 °C	± 0.5 % of the full scale value ± 1 digit	± 0.5 % of the full scale value ± 1 digit
Display range		$-99 + 999$ °C*	$-99 + 999$ °C*
Display resolution		0.1 °C ($-9.9 \div +99.9$ °C) 1 °C (< -9.9 °C and $> +99.9$ °C)	0.1 °C ($-9.9 \div +99.9$ °C) 1 °C (< -9.9 °C and $> +99.9$ °C)
Sampling time	s	0.5	0.5

* Depending on the selected probe

FHT



FHT NTC



HEAT REGULATION

TECHNICAL INFORMATION

GENERAL CHARACTERISTICS

Model	FHT - ..P3D FHT NTC -2P3D	FHT - ..DA FHT NTC -2DA
Front protection degree	IP54	IP40
Terminal protection degree	IP20	IP20
Display	3 digits LED 7 segments and dec. point	3 digits LED 7 segments and dec. point
Active probe power supply	in DC V 9 (max30 mA) (1)	9 (max30 mA) (1)
Probe alarm signalling buzzer	■	■
Infrared receiver for remote control unit	■	■ (2)
Digital input	■	■
Analog output	■ (1)	■ (1)
Serial interface output	■	■
Operating temperature	°C 0 ÷ +50	0 ÷ +50
Operating humidity	RH < 80%	< 80%
Storage temperature	°C -10 ÷ +70	-10 ÷ +70

(1) excluding FHT NTC-... (2) excluding FHT NTC-2DA

REFERENCE STANDARDS

Compliance with Community Directives: 73/23/EEC mod. from 93/68/EEC (Low Voltage) 89/336/EEC mod. from 92/31/EEC and 93/68/EEC (E.M.C.) is declared with reference to the following standards: • For safety: EN 60730-2-9 • For E.M. compatibility: EN 55014-1 / EN 55014-2 / EN 61000-6-2 / EN 61000-6-4