

## CONTROL SYSTEM FOR 3 ... 24 BOILER SEQUENCING

The system consists of:

- 1 compensator for sequencing boilers DTC 648.
- 1, 2 or 3 relay control modules ISC 648

Electronic devices	Boilers with isolation valves 1-stage burners	Boilers without isolation valves 1-stage burners	Boilers with isolation valves 2-stage burners	Boilers without isolation valves 2-stage burners
1 DTC 648 + 1 ISC 648	up to 4	up to 4	up to 4	up to 4
1 DTC 648 + 2 ISC 648	up to 8	up to 8	up to 8	up to 8
1 DTC 648 + 3 ISC 648	up to 12	up to 24	up to 12	up to 12

## COMPENSATOR FOR BOILER SEQUENCING

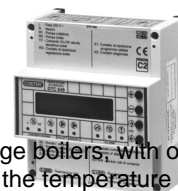
### DTC 648

#### APPLICATION

- In combination with 1,2 or 3 relay control modules ISC 648, DTC 648 can sequence two or more one- or two-stage boilers, with or without shut-off valves, for the control of the primary manifold or flow temperature in a heating plant, and control the temperature of a DHW plant.
- C-Bus compatible.
- C-Ring compatible.
- Essential accessories: 1 detector on manifold or heating flow.
- Optional accessories: 1 outside detector, 1 DHW detector.

#### Features

- Power supply: 230 V ~; Consumption: 5 VA; DIN 105 x 115 modular enclosure; Protection: IP 40.
- Digital programming by means of four operating keys and alphanumeric display.
- Setting dates for heating season and automatic switching GMT- BST.
- Seven 24-hour programmes, two 7-day programmes, 25 holiday periods and one special period with date setting.
- Control temperature primary manifold or heating plant flow:
  - Fixed point;
  - Variable in relation to outside temperature or to temperature requested by heating zones with min. and max. flow temperature.
- Timed On-Off control of primary manifold or heating plant pump.
- Minimum and maximum limits flow temperature.
- Manual correction heating curve origin to compensate for seasonal weather changes.
- Eco Off function.
- Summer plant exercise.
- Sequence: Manual inversion from display or timed automatic.
- Control calorifier for production DHW: – On-Off control calorifier pump with timed events programmes independent of heating.
  - Antibacteria function: once a week at 70 °C for 90 minutes.
- One On-Off alarm input, one measurement input 4 ... 20 mA (with ASA 420).
- Alarms for controller fault and for short or open detector circuits.



Code	Description	Data Sheet
<b>DTC 648</b>	Compensator for boiler sequencing.	A 410

## SENSORS AND ACCESSORIES

Code	Description	Application range	Sensing element	Data Sheet
<b>SIH 010</b>	Immersion temperature sensors	0 ... 99 °C	NTC 10 kΩ	N 140
<b>STH 001</b>	Immersion high temperature sensor	0 ... 300 °C	Pt 1 kΩ	N 140
<b>SAE 001</b>	Outside temperature sensor	–40 ... 40 °C	NTC 1 kΩ	N 120
<b>ASA 420</b>	Accessory for connection active sensor 4...20 mA	–	–	–