







The <code>DeltaSol®</code> A, AX and AX HE controllers are the simplest solution for all differential controls. The version <code>DeltaSol®</code> A is equipped with an adjustable temperature difference and an antifreeze function.

The DeltaSol® AX presents an extended version which is additionally equipped with an adjustable target temperature for minimum or maximum temperature limitation.

Equipped with an electromechanical relay and a PWM output, the  $DeltaSol^{\otimes}$  AX HE controller manages the speed control of a high-efficiency pump.

The enclosed silicone sealing cord guarantees a protection against dripping water.

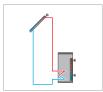
# Differential temperature controller for solar, heating & air conditioning systems

- $\blacksquare$  Adjustable temperature difference 2 ... 16 K, hysteresis 1.6 K
- Antifreeze function adjustable by jumper / DIP switch
- Maximum or minimum temperature limitations adjustable by DIP switches (DeltaSol® AX/AX HE)
- Protection against dripping water
- Speed control of a high-efficiency pump with adjustable minimum speed (DeltaSol® AX HE)

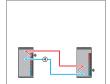
Also available as  $12 \, \text{V} \sim$ ,  $12 \, \text{V} \longrightarrow$ ,  $24 \, \text{V} \longrightarrow$  and  $115 \, \text{V} \sim$  versions!

Article no.	Article	Price bracket
115 211 23	DeltaSol® A – Differential temperature controller	Α
115 211 33	DeltaSol® A – Full kit » incl. 2 Pt1000 sensors (1 x FKP6, 1 x FRP6)	A
115 211 73	DeltaSol® AX – Differential temperature controller	Α
115 211 83	DeltaSol® AX – Full kit » incl. 2 Pt1000 sensors (1 x FKP6, 1 x FRP6)	Α
115 213 43	DeltaSol® AX HE – Differential temperature controller	A
115 213 53	DeltaSol® AX HE – Full kit » incl. 2 Pt1000 sensors (1 x FKP6, 1 x FRP6)	A

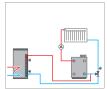
#### **EXAMPLES**







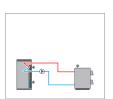
Heat exchange control



Heating circuit return



preheating



Solid fuel boiler (DeltaSol® AX/AX HE)

## TECHNICAL DATA

Inputs: 2 Pt1000 temperature sensors

#### **Outputs:**

1 electromechanical relay (changeover), 1 PWM output (DeltaSol® AX HE)

PWM frequency: 1000 Hz (DeltaSol® AX HE)

PWM voltage: 11.0 V (DeltaSol® AX HE)

#### Switching capacity:

4 (1) A 240 V~ (electromechanical relay)

Total switching capacity: 4 A 240 V~

#### Power supply:

 $220-240 \,\text{V} \sim (50-60 \,\text{Hz}),$ 

100-240 V~ (50-60 Hz) (DeltaSol® AX HE)

Supply connection: type X attachment

#### Standby:

1.35 W (DeltaSol® A), 1.36 W (DeltaSol® AX), 0.39 W (DeltaSol® AX HE)

Mode of operation: type 1.B action Rated impulse voltage: 2.5 kV

Functions: antifreeze function, DeltaSol® AX/AX HE additionally with maximum or minimum temperature limitation

Housing: plastic, PC-ABS and PMMA

Mounting: wall mounting

Display: 1 operating control LED

#### **Operation:**

potentiometre and 1 jumper (DeltaSol® A), 2 potentiometres and 4 DIP switches (DeltaSol® AX), 3 potentiometres, 4 DIP switches

and 1 jumper (DeltaSol® AX HE)

Ingress protection: IP 20/EN 60529 (with IP 22 seal)

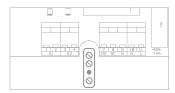
Protection class: ||

Ambient temperature: 0 ... 40 °C

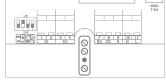
Degree of pollution: 2

Dimensions: Ø 139 mm, depth 45 mm

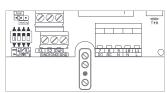
### **ELECTRICAL CONNECTION**



DeltaSol® A



DeltaSol® AX



DeltaSol® AX HE

#### **ACCESSORIES**



Single-phase, suitable for all **RESOL** controllers

#### HR230/3 Auxiliary relay



Three-phase, suitable for all **RESOL** controllers

#### HRG2 Housing



For up to 2 HR230 Auxiliary relays

#### **HRG3** Housing



For 1 HR230/3 Auxiliary relay



Sensor overvoltage protection