

# Technical Standard Specification

Series: ATT N1-180-36

Medium: Water up to 180 °C

maximum external volume: 4 ltr

max. system pressure: 14 bar + max. pump pressure

## Functional equipment hydraulic

- Temperature control unit with heating circuit and cooling circuit, for connection to valve station, for quick commutation between hot circuit and cold circuit
- Temperature-controlled supply of water from process
- Level controlling with automatic level regulation
- Dirt trap in cooling water supply and in return line of circulating system
- Separate automatic filling with dirt trap
- Flow metering according to principle of pressure difference in both circuits
- Monitoring of surface of heating rods by temperature sensor
- System pressure control with pressure booster, connection for compressed air required: 6 to 8 bar
- Booster pump type DS 360 for refilling
- Corrosion resistant components (VA, MS)
- Unit on rollers and ready for connection



## Functional equipment electrical

- SPS controller with touch screen
- Heating with Incolloy stainless steel tubular heaters
- Heating control by solid-state-relay
- Control cabinet IP54 fan-ventilated
- Electrical wiring to series terminal strips
- Potential-free input for signal for commutation cold/hot (front door)
- Potential-free contact for collective alarm on 3-pin plug (front door)

## Optional equipment

- System EcoTemp for intermittent operation
- Connection for ext. temp. sensor PT100 or type J/K
- Remote touch screen with 15 m cable

	Hot circuit	Cold circuit
<b>Heating capacity</b>	36 kW	6 kW
<b>Cooling capacity</b>	35 kW	150 kW
- at 80°C temperature to process	tube bundle heat exchanger	plate heat exchanger
- 15°C cooling water temperature	with solenoid valve	with solenoid valve
- 3 bar cooling water diff. pressure		
<b>Pump</b>	CRN 3-11 (slide ring seal)	CRI 3-11 (slide ring seal)
Output rate (max.)	75 ltr/min	75 ltr/min
Pressure (max.)	7.3 bar	7.3 bar
Motor capacity	1.1 kW	1.1 kW
Construction type	multi-stage centrifugal pump	multi-stage centrifugal pump

## Dimensions/weight/colours

Dimensions L/W/H: 1,200 mm x 633 mm x 1,120 mm  
(w/o connections)

Weight: approx. 240 kg

Colour: case: RAL 7035 light grey  
front door: RAL 7016 anthracite grey

## Connections

Circulating medium	AD 22-L (DIN EN ISO 8434-1)
Separate filling	hose nipple 14 mm
Cooling water	hose nipple 21 mm
Compressed air	hose nipple 14 mm

**Accessories** 4 pieces corrugated metal hose NW 20, length 3 m, connection precision pipe AD 22-L (part No. 20975)  
1 piece compressed air hose R 3/8, 4 m (part No. 03644)

- Subject to technical changes; latest update: April 25th, 2016; changed by F.Spork -

*This unit complies with the European Directives. Other directives and standards are met only if they listed in the order confirmation. This technical specification represents the standard equipment. For non-standard specifications upon customer's request see quotations or O/Cs. In case of contradictory information the quotation or O/C applies.*

