



ENGELTHYROTEMP®

Temperature Control Cabinets TRS technical specification



conforms with the requirements of
- EMC standards (2004 / 108 / EG)
- LVD standards (2006/95/EG)



ENGELTHYROTEMP®-Control Cabinet for constant air supply temperature control for HVAC in combination with electric air heaters concerning the safety measures acc. to VDE 0100 / DIN 57100. All Control Cabinets TRS are completely equipped for direct electrical connection on site. Wiring of temperature monitor and airflow monitor to the cabinet is necessary. The programmable microprocessor controller pulses the full load On/Off and utilises time-proportional control. The ratio between On-time and Off-time is varied to fit the prevailing heating requirement. The current is switched at zero phase angle to eliminate network disturbance.

General technical data

Cabinet:	Rittal AE
Coating:	RAL 7035
Ambient conditions:	298 K with no condensation
Humidity:	75% RH maximum
Form of protection:	IP 50
Control voltage	220-230 V AC 50 Hz
Directions:	acc. to VDE 0100 / DIN 57100

Type TRS 400 / 12

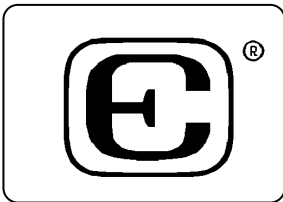
Supply voltage:	400 Volt AC 50-60 Hz 3-Phase/N/PE, maximum current 22 A/phase
Max. power output:	12 kW
Dimensions:	600 x 600 x 210 mm, weight ca. 32 kg
Cable inlet:	preperforated plastic plate

Type TRS 400 / 20

Supply voltage:	400 Volt AC 50-60 Hz 3-Phase/N/PE, maximum current 35 A/phase
Max. Power output:	20 kW
Dimensions:	600 x 600 x 210 mm, weight ca. 32 kg
Cable inlet:	preperforated plastic plate

Type TRS 400 / 30

Supply voltage:	400 Volt AC 50-60 Hz 3-Phase/N/PE, maximum current 50 A/phase
Max. Power output:	30 kW
Dimensions:	600 x 600 x 350 mm, weight ca. 40 kg
Cable inlet:	preperforated plastic plate



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Type TRS 400 / 60

Supply voltage: 400 Volt AC 50-60 Hz 3-Phase/N/PE, maximum current 97 A/phase
 Max. Power output: 60 kW
 Dimensions: 760 x 760 x 300 mm, weight ca. 60 kg
 Cable inlet: perforated plastic plate

Equipment

Type TRS 400/12 – 400/60

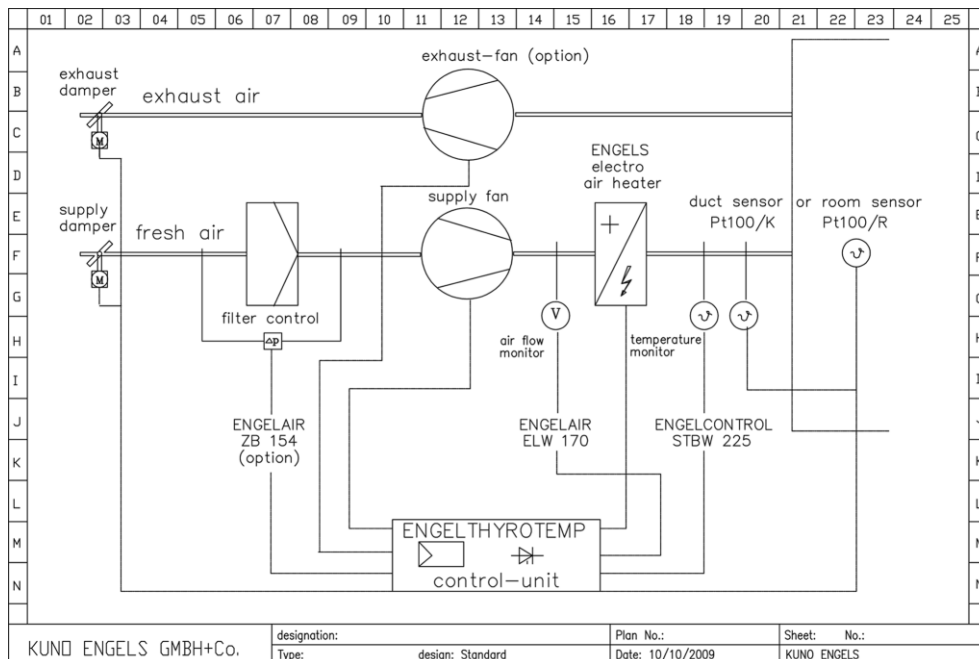
Programmable microprocessor controller with LED-display type Elotech R 1100-20-00-1 built in frontdoor, DIN size 96 x 96 mm, supply voltage 230 V AC, output 18 VDC. Main-switch on side of cabinet.
 2x Thyristors with semiconductor fuses. 2x output for multileaf dampers.
 Motor protection device for air supply fan control (On / Off). All switching devices by Moeller.
 Electronic airflow monitor ELW 170 inclusive. Phoenix terminal strip with filter-condensators.
 Programmable easy open-loop control type 719-AC-RC with display, additional functions via memory stick.
 Type TRS 400 / 30 and TRS 400 / 60 with forced ventilation.

Options

Motor protection device for exhaust fan. Additional filter control via ENGELAIR airflow monitor type ZB 154.
 Other power supply voltages up to 500 V.

Accessories

1x thermocouple Pt 100 / K for duct installation (length 150 mm). Alternatively room sensor type Pt 100 / R.
 3x or 6x spare semiconductor fuses Ultra-Rapid 25, 32, 50, 63 or 80 A depending on heater load.
 Airflow sensor for ELW 170.



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