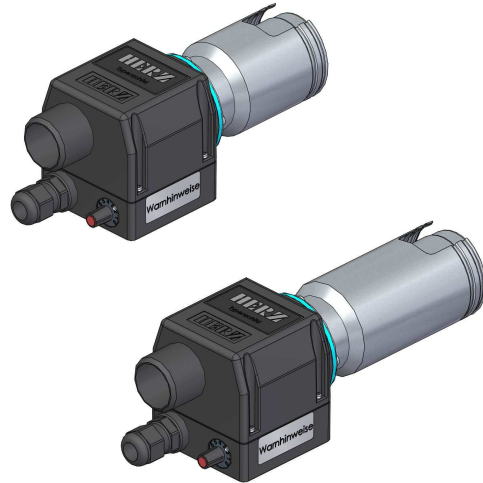


## Air heater type M50 / M50L 2,2 to 6,1 KW



**Function:** Air heater with external air supply by means of fan or compressed air.  
CAUTION !!! Device is not pressure-resistant !!!

**Configuration:** Default: Temperature control with potentiometer (1 – 8)  
 - alternatively with external potentiometer (cable length 5 meter) or  
 - external control by control unit or SPS (cable length 5 meter)  
 Device is equipped with a reliable heating element protection. The integrated device protection turns off the device when tripped and resets automatically after cooling down. A reset is not required.

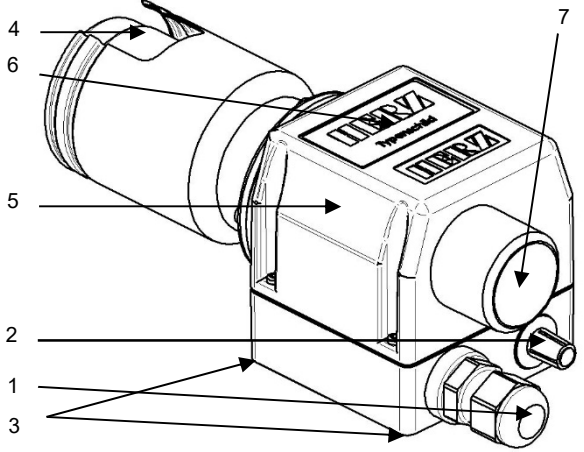
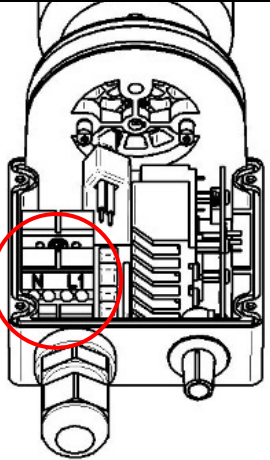
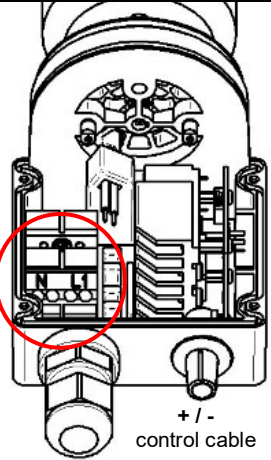
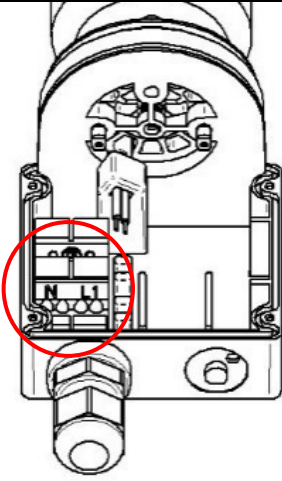
**Features:** Special designs with internal thermocouple (cable length 1 or 5 meter)  
 - for devices with electronic equipment max. supply air temperature 50°C  
 - the unit is available without electronics (without heating element and device protection)  
 - for devices without electronic equipment max. supply air temperature 80°C

**Power:** 2,2 KW – 6,1 KW  
**Voltages:** 230 VAC; 400-440 VAC (2Ph)

### Technical data:

Item number		5101795	5101801	5101796	5101806	5101810	5112686	5112688	
<b>Voltage</b>	VAC	120	230		400 (2Ph)	440 (2Ph)	400 – 440 (2 Ph)		
<b>Frequency</b>	Hz	50 / 60							
<b>Power</b>	KW	2,2		3,7	4,5	4,1	4,6 – 5,57	6,1 – 7,4	
<b>Current</b>	A	18,3	9,6	16,2	11,2	9,2	11,5 – 12,7	15,3 – 16,8	
<b>Max. temperature</b>	°C	650							
<b>Min. air volume</b>	l/min	250		360	490	440	830	600	
<b>Weight</b>	kg	0,8						0,9	
<b>Air intake</b>	Ø mm	38							
<b>Air outlet</b>	Ø mm	30							
<b>Heater tube</b>	Ø mm	50 / 65							
<b>Dimensions</b>	mm (L x W x H)	240 x 85 x 90					279 x 85 x 90		
<b>Conformity mark</b>		CE							
<b>Protection class II</b>		<input type="checkbox"/>							

## Ait heater type M50 / M50L 2,2 to 6,1 KW

Product description:	Connection scheme:		
		<p><b>Default with potentiometer</b></p> <p>N, L1 or L1, L2 = Main connection according to data plate</p>	 <p><b>External control</b></p> <p>N, L1 or L1, L2 = Main connection according to data plate</p> <p>Digital signal (PWM max. 0,5Hz) 10-24VDC + = brown - = white</p>
<ol style="list-style-type: none"> <li>1. Cable fitting mains supply</li> <li>2. Potentiometer 0-8 (control cable für ext. control); (no Potentiometer for devices without electronic)</li> <li>3. Mounting on bottom of housing M 4 (screw depth 7 mm)</li> <li>4. Heatin element pipe Ø50mm</li> <li>5. Cover</li> <li>6. Data plate</li> <li>7. Air intake Ø38mm</li> </ol>		<p><b>Version without electronics</b></p> <p>N, L1 or L1, L2 or L1, L2, L3 = Main connection according to data plate</p>	

### Ait heater type M50 / M50L 2,2 to 6,1 KW

#### Available versions:

Item No.	Description
<b>5101795</b>	<b>Luftherhitzer M50 120 VAC 2,2 KW mit Potentiometer</b>
<b>5101801</b>	<b>Luftherhitzer M50 230 VAC 2,2 KW mit Potentiometer</b>
5101804	Luftherhitzer M50 230 VAC 2,2 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101803	Luftherhitzer M50 230 VAC 2,2 KW without electronics
<b>5101796</b>	<b>Luftherhitzer M50 230 VAC 3,7 KW mit Potentiometer</b>
5108931	Luftherhitzer M50 230 VAC 3,7 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101802	Luftherhitzer M50 230 VAC 3,7 KW without electronics
<b>5101810</b>	<b>Luftherhitzer M50 440 VAC 2Ph 4,0 KW mit Potentiometer</b>
5101815	Luftherhitzer M50 440 VAC 2Ph 4,0 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101832	Luftherhitzer M50 440 VAC 2Ph 4,0 KW without electronics
<b>5101812</b>	<b>Luftherhitzer M50 480 VAC 2PH 4,4 KW mit Potentiometer</b>
5101834	Luftherhitzer M50 480 VAC 2PH 4,4 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101813	Luftherhitzer M50 480 VAC 2Ph 4,4 KW without electronics
<b>5101806</b>	<b>Luftherhitzer M50 400 VAC 2Ph 4,5 KW mit Potentiometer</b>
5113724	Luftherhitzer M50 400 VAC 2Ph 4,5 kW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101809	Luftherhitzer M50 400 VAC 2Ph 4,5 KW without electronics
<b>5112685</b>	<b>Luftherhitzer M50L 230 VAC 4,5 KW mit Potentiometer</b>
5112682	Luftherhitzer M50L 230 VAC 4,5 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5112683	Luftherhitzer M50L 230 VAC 4,5 KW without electronics
<b>5112686</b>	<b>Luftherhitzer M50L 400-440-480 VAC 2Ph 4,6-5,6-6,6KW mit Potentiometer</b>
5101837	Luftherhitzer M50L 400-440-480 VAC 2Ph 4,6-5,6-6,6 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5101839	Luftherhitzer M50L 400-440-480 VAC 2Ph 4,6-5,6-6,6 KW without electronics
<b>5112688</b>	<b>Luftherhitzer M50L 400-480 VAC 2Ph 6,1-8,8 KW mit Potentiometer</b>
5101843	Luftherhitzer M50L 400-480 VAC 2Ph 6,1-8,8 KW externally controllable (PWM 12-24 VDC, 1 Hz) with 5.0m control cable (2-pin)
5112689	Luftherhitzer M50L 400-480 VAC 2Ph 6,1-8,8 KW without electronics







**Ait heater type M50 / M50L 2,2 to 6,1 KW****Available modifications:**

(By the following modifications, for example, an internal PID control is possible)

- S01** - external heating control via PWM signal (12-24VDC, maximum cycle time 1Hz) incl. 5 meter 2-pole. control line (only necessary for types COMPACT and PN10);
- S02** - external potentiometer for heating incl. 5 meter 3-pole. Control cable and rotary knob (red);
- S04** - external control of fan speed incl. 5m 3-pole. Control line (only for type COMPACT)  
- control signal analogue: 0-10VDC; Control signal digital: PWM 12-24VDC; 1-10kHz; I<sub>max.</sub> 10mA
- S05** - internal PID control of the temperature without visualization for basic units with potentiometer (type 1 basis)
- S06** - internal thermocouple for all three basic versions with 2 meter compensation line;
- S07** - separate connection option for heating and fan with type COMPACT (230VAC);
- S08** - Fixed blower speed for type COMPACT;
- S09** - Built-in digital controller with 2-line display for target and actual temperature and internal thermocouple (only type COMPACT);
- S10** - additional handle, mounted on the back (only type COMPACT);
- S11** - separate connection option for heating and fan; without connection cable (only with type COMPACT 400VAC (230VAC blower / 400VAC heating));
- S12** - Compressed air connection with push-in nipple 8 / 6mm for type S;
- S13** - Connection for hose 6 / 4mm for pressure monitoring in types S and M without electronics;
- S15** - Compressed air connection with push-in nipple 8 / 6mm for type M;
- S16** - M32 cable gland for mains connection cables up to Ø19mm for types L and XL;
- S17** - Power cable made of silicone, firmly soldered for blow-in air temperatures up to 100 ° C for types L and XL without electronics;
- S18** - funnel-shaped outlet opening without anti-kink spiral for mains connection cable (only for type COMPACT without handle);
- S20** - External control of the load relay (SSR) by a PWM signal 12-24VDC for types L and XL without electronics;
- S21** - Evaluation of fan speed with 5 meter control line; Interface OpenCollector - 2 pulses / revolution - max. 10mA for counter with 5000 input pulses / minute (only COMPACT type);
- S23** - Heating element tube without protective tube for all air heaters and COMPACT
- S24** - fixed heating power (only COMPACT type)
- S29** - external potentiometer incl. 5 meter control cable and rotary knob (blue) for blower speed (only type COMPACT)

## Ait heater type M50 / M50L 2,2 to 6,1 KW

**Accessories:**

Item no.	Description
5107254	 Flange connector
5107256	 Angles nozzle $\varnothing$ 50 mm length 160 x 100mm
5107255	 Extension tube 36,5 x 160mm
5107258	 Wide slot nozzle 70 x 10mm
5107274	 Wide slot nozzle 130 x 17mm
5107270	 Wide slot nozzle 150 x 12mm

## Ait heater type M50 / M50L 2,2 to 6,1 KW

### Combination possibilities for devices WITH electronic \*:

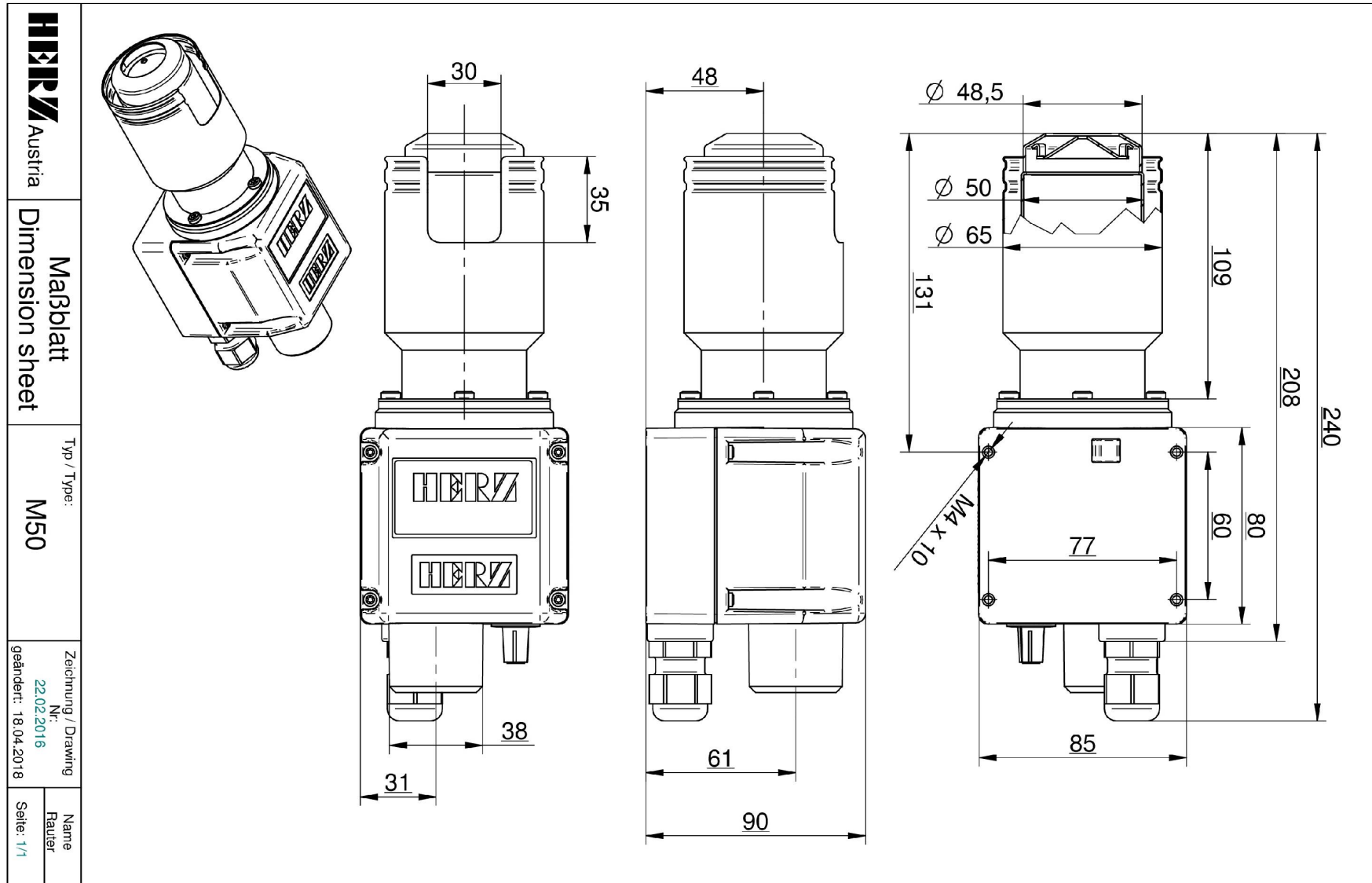
**Measuring point:** 3.0 mm after the air outlet pipe adapter – without nozzle, measured at the hottest point  
**Hose length:** 1,0 m  
**Air supply:** Blower 400 Volt, 50 Hz (HD = High pressure blower, MD = Medium pressure blower)  
**Air flow:** NI / min = standard liters per minute according to DIN 1343

**CAUTION:** Air flow and temperature are indicative which can change due to external influences and changes air hose diameter and length!

Blower type	Quantity, air heater type, voltage, power	Air flow at 50 Hz with heating [NI / min.]	Maximum temperature at 50 Hz [°C]
HD140	1 x M50; 230VAC; 3,7KW	950	310
	2 x M50; 230VAC; 3,7KW	2 x 630	450
	4 x M50; 230VAC; 3,7KW	4 x 360	580
HD240	4 x M50; 230VAC; 3,7KW	4 x 870	330
	8 x M50; 230VAC; 3,7KW	8 x 490	510
MD10	2 x M50; 230VAC; 3,7KW	2 x 300	600
MD14	2 x M50; 230VAC; 3,7KW	2 x 350	580
HD140	1 x M50; 400VAC(2Ph); 4,5KW	970	370
	2 x M50; 400VAC(2Ph); 4,5KW	2 x 630	540
MD14	4 x M50; 400VAC(2Ph); 4,5KW	2 x 320	650
	8 x M50; 400VAC(2Ph); 4,5KW	8 x 310	650
HD140	1 x M50L; 400VAC(2Ph); 6,1KW	780	560
HD240	1 x M50L; 400VAC(2Ph); 6,1KW	1440	350
	2 x M50L; 400VAC(2Ph); 6,1KW	2 x 1110	410
	4 x M50L; 400VAC(2Ph); 6,1KW	4 x 770	540

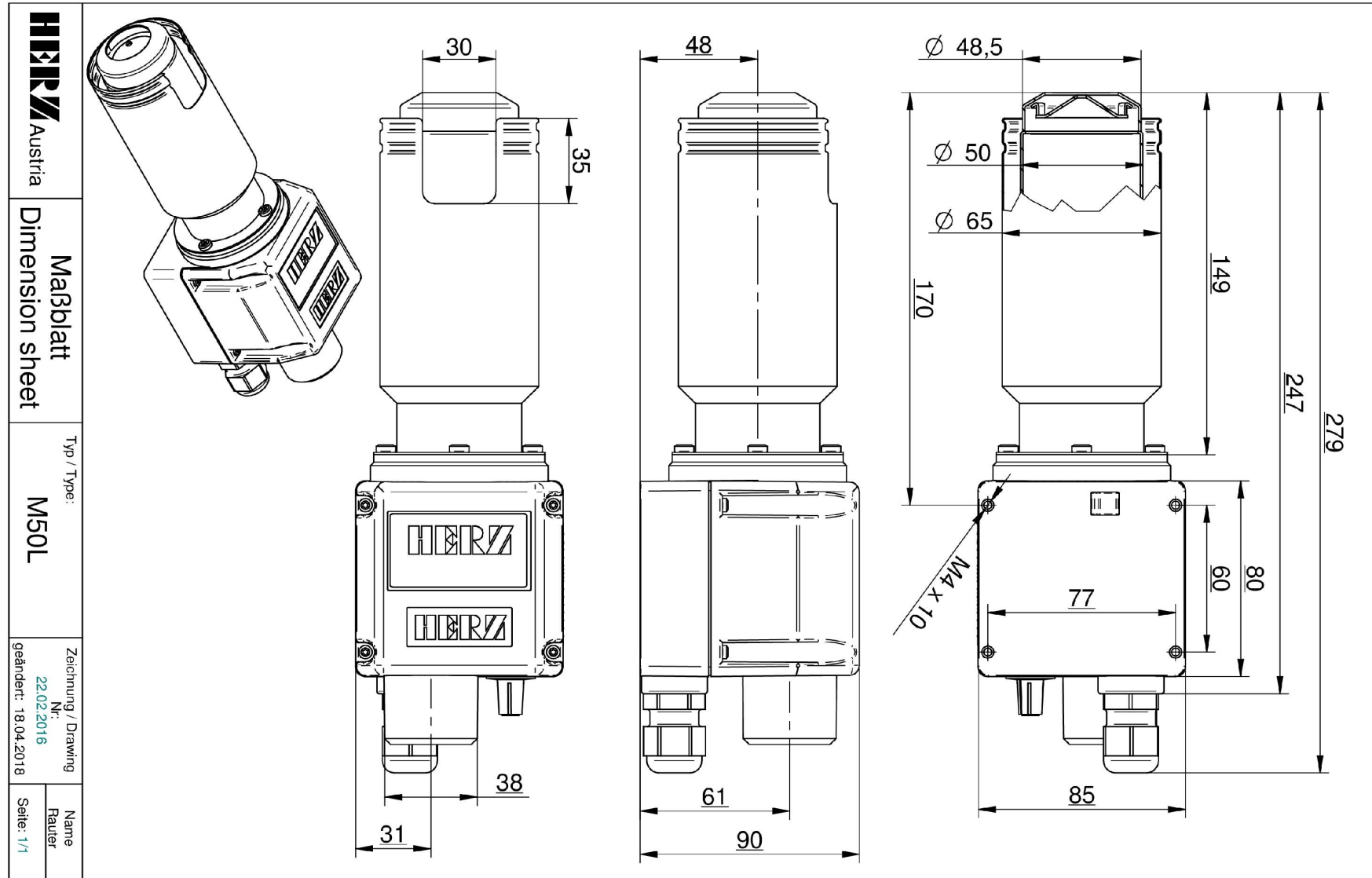
\*Data without guarantee

Ait heater type M50 / M50L 2,2 to 6,1 KW



Änderungen vorbehalten / Changes reserved

Air heater type M50 / M50L 2,2 to 6,1 KW



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