

**Device description**

**FBR6 Field Bus Regulator**

**Application**

The field bus regulator FBR6 is installed within the DDC3000 system for single-room control (heating or ventilation). Zone valves are controlled in sequence (heating/cooling) for room temperature control with their two switching outputs (3-point or 2-point).

The data communication to the DDC3000 Central Control Units DDC3002, DDC3003, DDC3200 or DDC3300 occurs over the field bus.

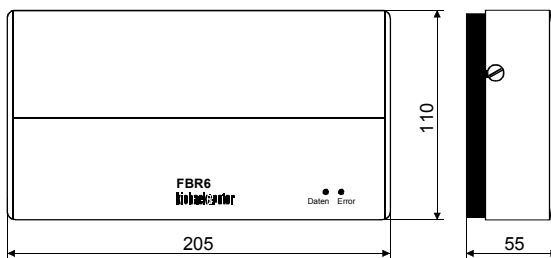
**Type**

FBR6 Field bus regulator for single-room control with two outputs for sequential control (heating/cooling). Outputs parameterizable as two 3-point switching outputs or as two 2-point-outputs for pulse operation.



**Technical data**

Operating voltage	12 V DC ± 20%, 2.8 VA or 24 V AC/DC ± 20%, 4 VA	
Inputs	– 5 analog inputs B1..B5	B1 and B2: parameterizable as sensor input KP10 or 0..10 V DC (Ri = 300 kΩ),
		B3 and B4: sensor input KP10 (2.73 V at 0°C, TK 10 mV/K)
	– 4 digital inputs K1..K4	B5: 10 kΩ for setpoint remote setter, range parameterizable for zero-voltage contacts, invertable, parameterizable, e.g. as malfunction or plant process message, presence detector, window contact, light ON/OFF for two servodrives for sequence control
Outputs	– 4 Triac outputs K9..K12	24 V AC, 630 mA (for two outputs: maximum 0.8 A, fuses). outputs parameterizable as two 3-point switching outputs or two 2-point outputs for pulse operation.
	– 3 relay outputs K6..K8	zero-voltage changeover switch for 230 V AC, 6 (3) A, parameterizable
Bus connection	field bus, maximum 2000 m	
Address switch	addressing 01..63 by 2 rotary switches in the housing	
Displays	LED data blinks during field bus data transmission	
	LED Error lit up at field bus error	
Housing	plastic housing, color RAL 9010 (pure white)	
Degree of enclosure protection	IP20	
Ambient temperature	0..45°C	
Mounting	wall mounted, see section Mounting	
Measurements		



**Installation**



Warning

**The device may be electrically installed and connected only by qualified specialists.**

The VDE regulations as well as all the local ordinances must be observed.

- Power supply lines and field bus are to be laid in a common insulated cable, cable type at least JY(St)Y 2x2x0.8 Lg. Power supply lines must be in twisted pairs. Field bus lines must be in twisted pairs. At the end of the field bus (furthest point from the Central Control Unit, max. 2000 m), both connection lines from the field bus must be provided with a terminating resistor of approx. 180 Ω (terminating resistor delivered with the Central Control Unit as accessory pack).
- The field bus regulator FBR6 can be supplied with an operating voltage of 24 V AC or 24 V DC as an alternative to the operating voltage (12 V DC).
- Only the commissioning technician may switch on the mains after setting the devices!

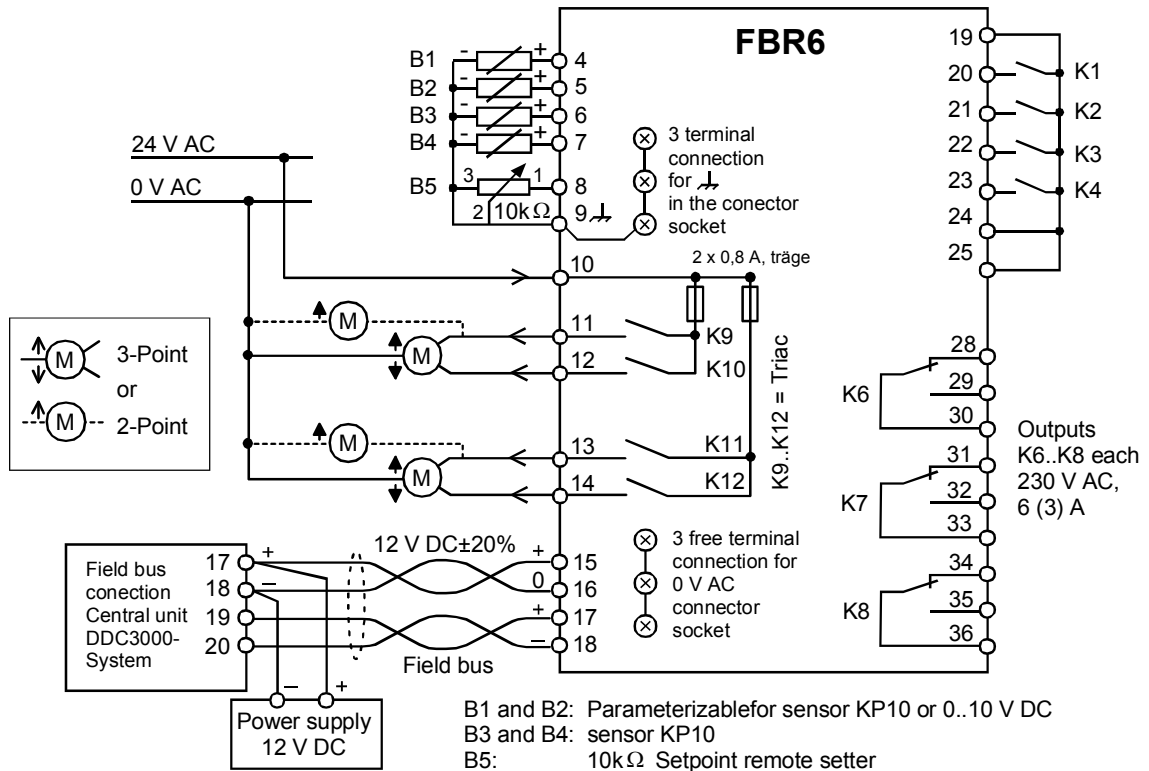
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**Connection**

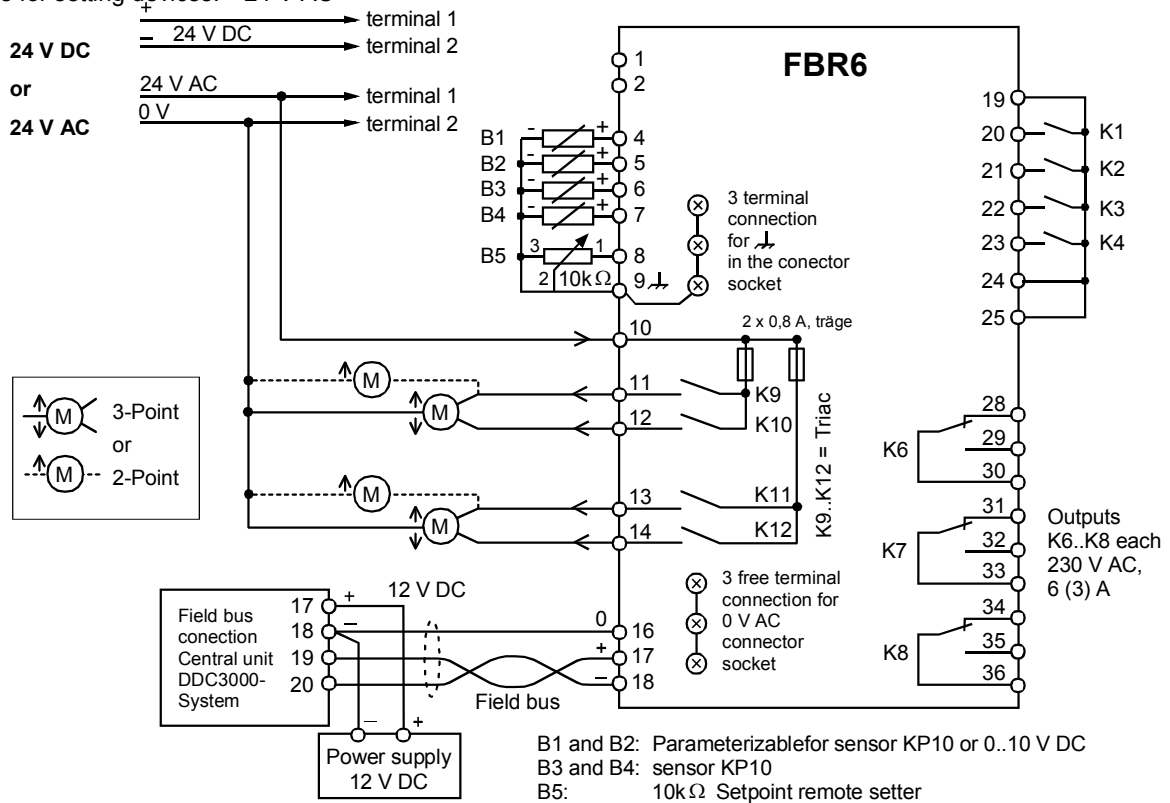
Operating voltage for FBR6: 12 V DC  
 Operating voltage for setting devices: 24 V AC



**Alternative**

• **Operating voltage for FBR6: 24 V DC or 24 V AC**

operating voltage for setting devices: 24 V AC



Mounting



- Device connection may be carried out only by qualified personnel!
- Only the commissioning technician may switch on the mains after setting the devices!

