

QBK: System operating unit

Used for the centralised remote control and monitoring of heating systems that are fitted with one or more equitherm M500 controllers.

Housing of flame-resistant, pure-white (RAL 9010) thermoplastic; keys for entering the data; LCD with pictograms and numerical field for indicating the condition of the system; Ni sensor for measuring the room temperature; suitable for fitting onto walls or onto recessed junction boxes; conversion kit enables it to be used as a desk-top model; separate mains power unit (available as an accessory) for panel fitting; light-grey, standard housing as per DIN 43880 for fitting onto top-hat rail as per EN 50022.

Type	Features	Weight kg
QBK 101 F001	programming, indicating	0,2
System operating unit: Data exchange island bus ¹⁾ Power supply via island bus ²⁾ Temperature sensor Ni1000 (DIN 43760) Permissible amb. temp. 0...40 °C Permissible amb. humidity 5...95 %rh Degree of protection IP 30 (EN 60529) Protection class II (IEC 60730)		
Power supply unit: (accessory) Power supply 230 V~ +10 / -15%, 50 Hz Power consumption approx. 3 VA Supply to island bus any polarity Permissible ambient temp. 0...40 °C Degree of protection at front IP 20 (EN 60529) Protection class ⁴⁾ IP 40 II (IEC 60730)		
Connect. diagram for QBK 101	A04561	For power supply unit:
Dimension drawing for QBK 101	M390006	Connection diagram A07223
Fitting instructions for QBK 101	MV 505349	Dimension drawing M10014
Fitting instructions for island bus	MV 505157	Fitting instructions MV 505365
Operating instructions	see QRK 151	
Abridged operating instructions ³⁾	BA 505211	

Accessories

- 0228301 001*** Power supply unit 230 V~ for QBK 101
0368962 001 Terminal cover, complete (for power supply unit)
0303124 000* Recessed junction box (for system operating unit)
0369801 001* Desk plinth (conversion kit)

*) Dimension drawing or wiring diagram are available under the same number

- 1) Token passing with twisted two-wire cable (= 0.5 mm²) up to 500 m, any polarity.
 2) Power supply (12...40 V-), via island bus by separate power supply unit (accessory).
 3) Supplied with each unit in German, French and English.
 4) Applies when fitted on walls, using standard rail of 7.5 mm and terminal cover.

Operation

Keys for entering the controller address and for retrieving or changing specific values in the system. LCD for indicating the system's condition using graphic symbols. Portrayal of the control values, parameters and switching program via the numerical field.

The communication system enables the system to be monitored from a central location. Using the system operating unit, the operating mode, clock program and user parameters can be changed from a remote, centralised location, and the control values can be retrieved.

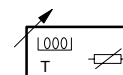
Engineering and fitting notes

The system operating unit and its power supply unit both have an integrated, potentially-active bus terminations. For this reason, these two devices are usually located at the ends of the bus. Otherwise, the controllers can be fitted with bus terminations as per the fitting instructions.

The *equitherm M500* controller and the system operating unit should be permanently connected to the power supply (because of the communication system, clock, frost-protection facility and pump anti-jamming protection). The power supply unit for the system operating unit should be ordered separately. The system operating unit has 1,5 mm² terminals as bus connections. The bus connection can be switched on via a coding bridge. The power supply unit (accessory), for supplying up to two remote-control units via the bus, has 1,5 mm² terminals. The bus connection can be switched on by wiring accordingly. There can be up to two system operating units on the island bus. If the lines between the system operating unit and the power supply unit are short (up to 20 m), three system operating units can be connected.



T04415



Y04433



T04410



T05211

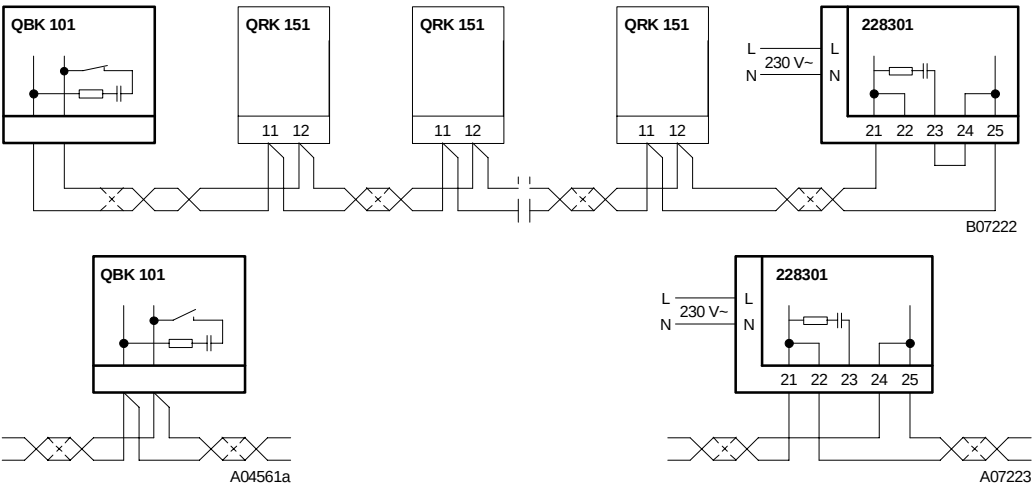
Table-top model

Additional technical specifications

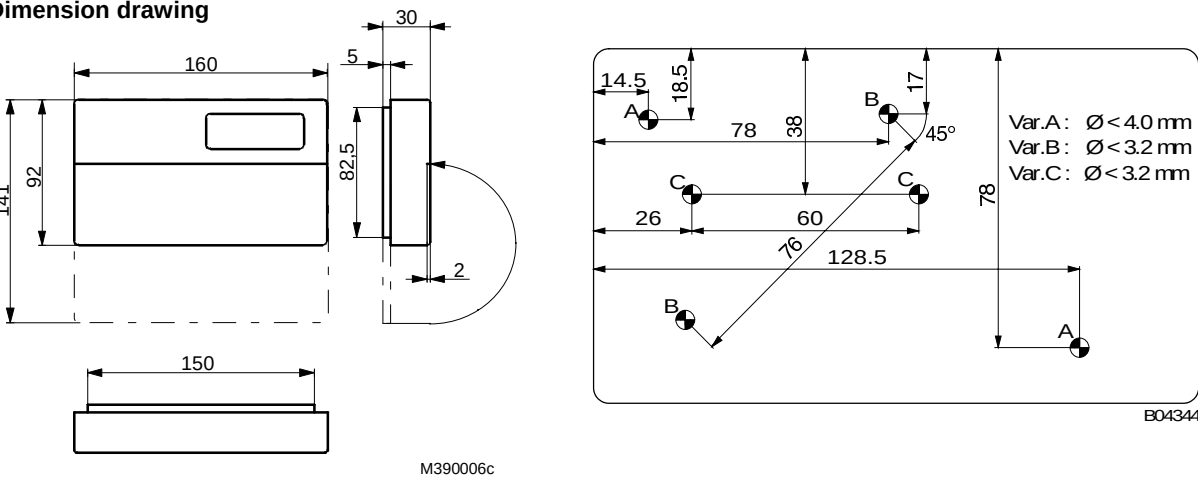
Depending on the configuration of the addressed controller, the following values can be shown:-

Controller address		Actual value of boiler temperature
Year, month, day	YY MM.dd	Setpoint of boiler temperature
Weekday and time	d hh:mm	Actual value of return temperature
Outside temperature		Setpoint of return-temperature limitation
Actual value of room temperature		Setpoints for heat management
Setpoint of room temperature		Intensity of sun/wind
Actual value of domestic hot water (upper part of boiler)		Primary flow, actual value
Setpoint of domestic hot water		Primary flow, setpoint for minimum limitation
Actual value of domestic hot water (lower part of boiler)		Primary flow, setpoint for maximum limitation
Actual value of flow temperature		Quantity meter
Setpoint of flow temperature		Error messages
		Sensor failure or short circuit
		Complies with:-
		Directive 2006/95/EC
		EN 60730-1/ EN 60730-2-9
		EMC directive 2004/108/EC
		EN 61000-6-1/ EN 61000-6-2
		EN 61000-6-3/ EN 61000-6-4

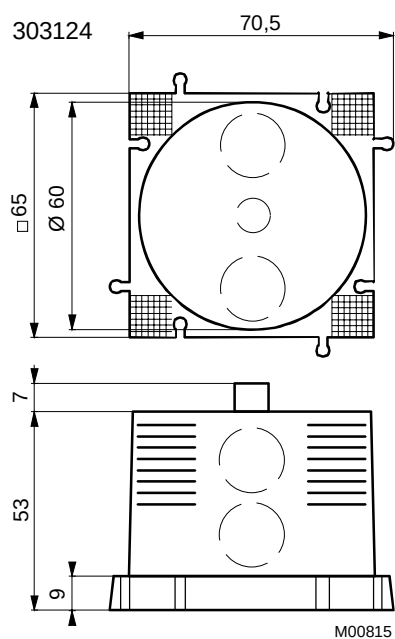
Connenction diagram



Dimension drawing

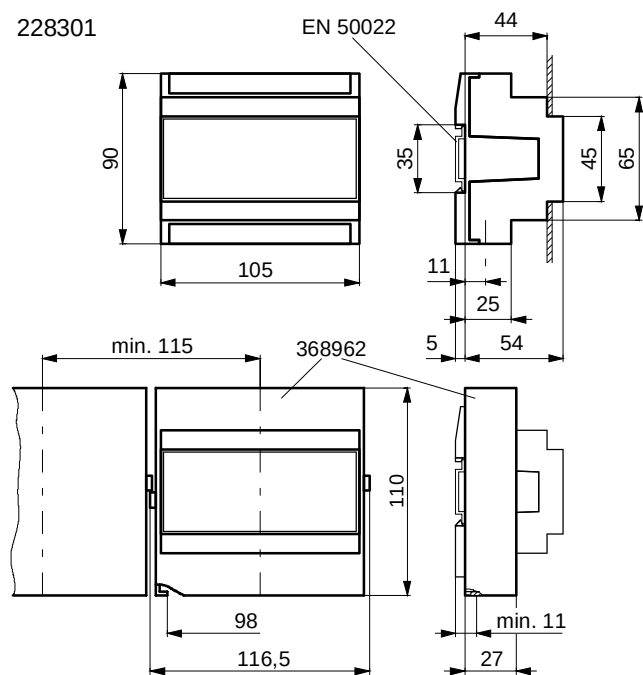


Accessories



228301

EN 50022



369801

