Software and interfaces at a glance: These go together.

Which control software is suitable for which input device and how do their features differ?
The answer is easy to find in the clearly arranged direct comparison on this double-page spread.

The perfect match: supported interfaces and protocols

Software		**EC Control** (page 20)	**Fan Control** (page 22)	**Fan Clone** (page 23)	**EC Controller** (page 30)
Application		Service purpose and stationary system monitoring	Service purpose and mobile operation	Manufacturing – mobile operation, copy and archive settings	Stand-alone control device for refrigeration and air-conditioning technology
Hardware		**PC/laptop**	**PDA/smartphone**	**PDA/smartphone**	
Bluetooth adapter (page 24)		●	●	●	
USB adapter (page 26)		●			
Ethernet – RS485 interface converter (page 28)		●			
RS485 MODBUS RTU (page 30)		●	●	●	●

Performance features of the control software programs for PCs and PDAs

	EC Control	Fan Control	EC Controller
Query and modify parameters of one fan	•	•	(•)
Modify parameters for group/entire system	•	–	–
Group view/floors	•	(•)	–
Detailed error history when software runs for long periods	•	–	–
Mapping a system layout/floor plan	•	–	–
Searching for a fan with an unknown address	•	•	•
Setting parameters graphically	–	•	–
E-mail on error	•	–	–
Support for multiple languages*	•	•	•
Support for RS485 ebmBUS	•	•	–
Support for RS485 MODBUS RTU	•	•	•
Support of Ethernet and multiple subnets	•	–	–
Duty cycle display on fan symbol	•	–	–
Display of information below fan symbol	•	–	–
Illustration of the system in a tree structure	•	–	–
Support of multiple configurations in one installation	•	–	–
German and English user manual (PDF)	•	•	•
Timer	•	–	–
Integrated help system (English)	•	–	–

Key:

• = Performance feature present

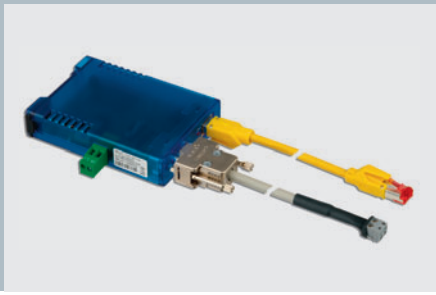
(•) = Possible in part/to a limited extent

– = Not present

*The supported languages differ for each product

Ethernet interface converter

RS485



This interface converter permits bi-directional connection of RS485 units and Ethernet-compatible computers or laptops using the EC Control software (Art. No. 25714-2-0199).

Nominal data

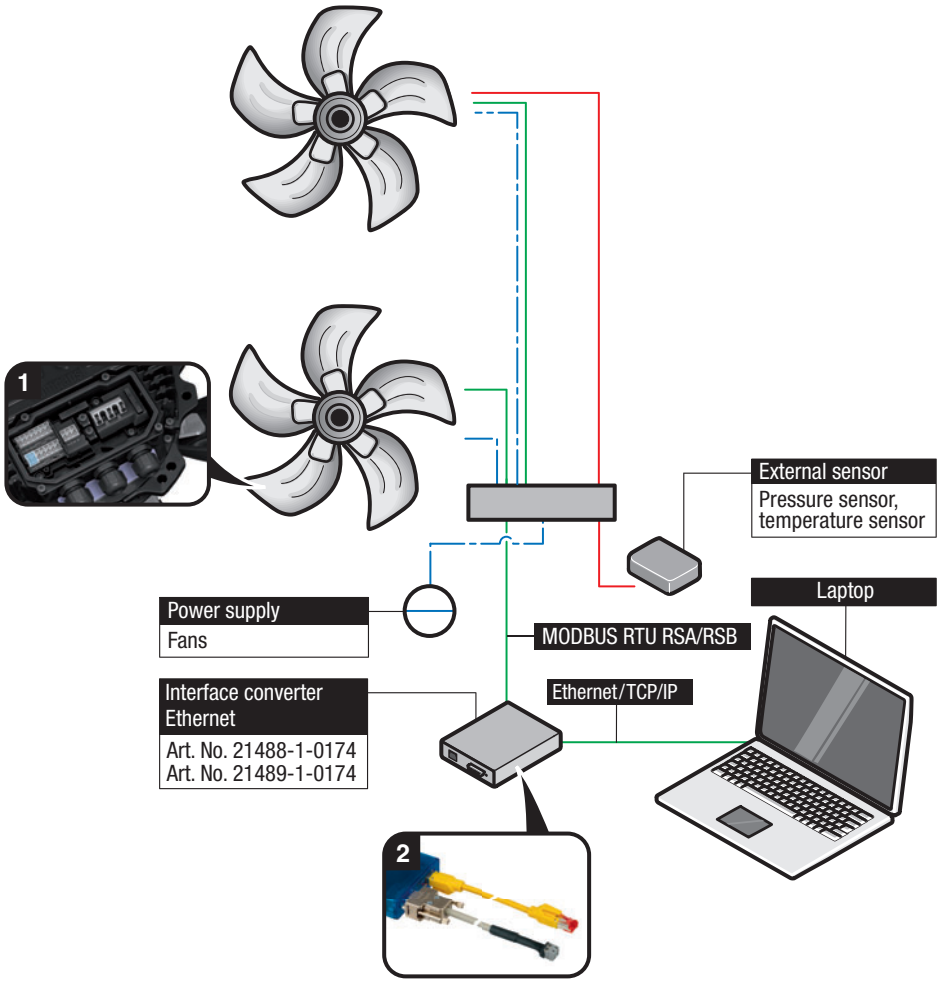
Type		21488-1-0174 / 21489-1-0174 (UL version)
Nominal voltage and plug-in supply unit	VAC	100–240
Power supply	VDC	12–48
Current draw	mA	85
Frequency	Hz	50/60
Ambient temperature (arranged in series)	°C	0 to +50
Ambient temperature (not arranged in series)	°C	0 to +60
Dimensions	mm	105 x 75 x 22

Operating mode	RS485, two-wire mode without echo, automatic switchover between send and receive
Safety	Electrical isolation between Ethernet and RS485
Electrical isolation	Min. 500 V
Ethernet connection	8-pole RJ45 socket 10/100 Mbps autosensing
RS485 connection	9-pole SUB-D plug
Protocols used	– TCP – Telnet
Status display	Via LEDs – Green (left): power supply – Green (right): data communication – Red: fault
Housing	Plastic housing
Type of protection	IP 10
Installation	Standard rail mounting in accordance with DIN EN 50022-35
Delivery scope	– Interface converter – Plug-in supply unit – RS485 cable, D-Sub to screw terminal – Network cable (crossover, Cat 5) – German and English product description

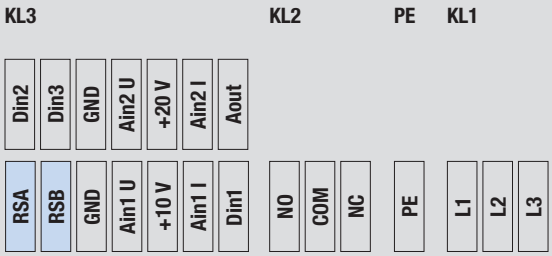
Connecting the interface converter (Ethernet) – example of a fan with MODBUS RTU compatibility

The Ethernet interface converter serves to integrate bus-compatible EC fans into existing computer networks. This increases the spatial independence of the control room and fans. Other than a power supply, all that is needed is a static IP address, which can be assigned easily using the EC Control software. Multiple Ethernet interface converters can be used without any problems. This allows, for example, larger systems to be divided up spatially to reduce latencies.

Note for large systems: *For 31 or more fans, an additional repeater is required, to which another 31 fans can be connected.*



1 **Example terminal assignment for fan**



2 **Interface converter connection**