

One thing is of primary importance for modern firing installations: efficiency. That applies to the operation of the equipment as well as to its erection and commissioning.

**LAMTEC has the right solution:
the Burner Control FA1**

Its compact form contains everything needed for complete burner control. The burner sequencer and the compound can be parameterised to adapt them to very different firing tasks. Separate settings can be made for oil and gas with and without a pilot burner. The integrated leakage test can

optionally be made before ignition or after switch-off. Start-up without pre-ventilation with gas in accordance with EN676 is possible.

Operating and error messages are displayed in plain text in the appropriate language. An operating hours counter is integrated, and also counts the burner operating hours with gas and oil. The start-ups for gas and oil are also separately counted.

If desired, the Burner Control FA1 can also perform output regulation of the burner. It is possible to switch between 2 set values, e.g. for reduced night-time power or heat holding operation. External set value adjustment (weather response) and start-up control can be used.

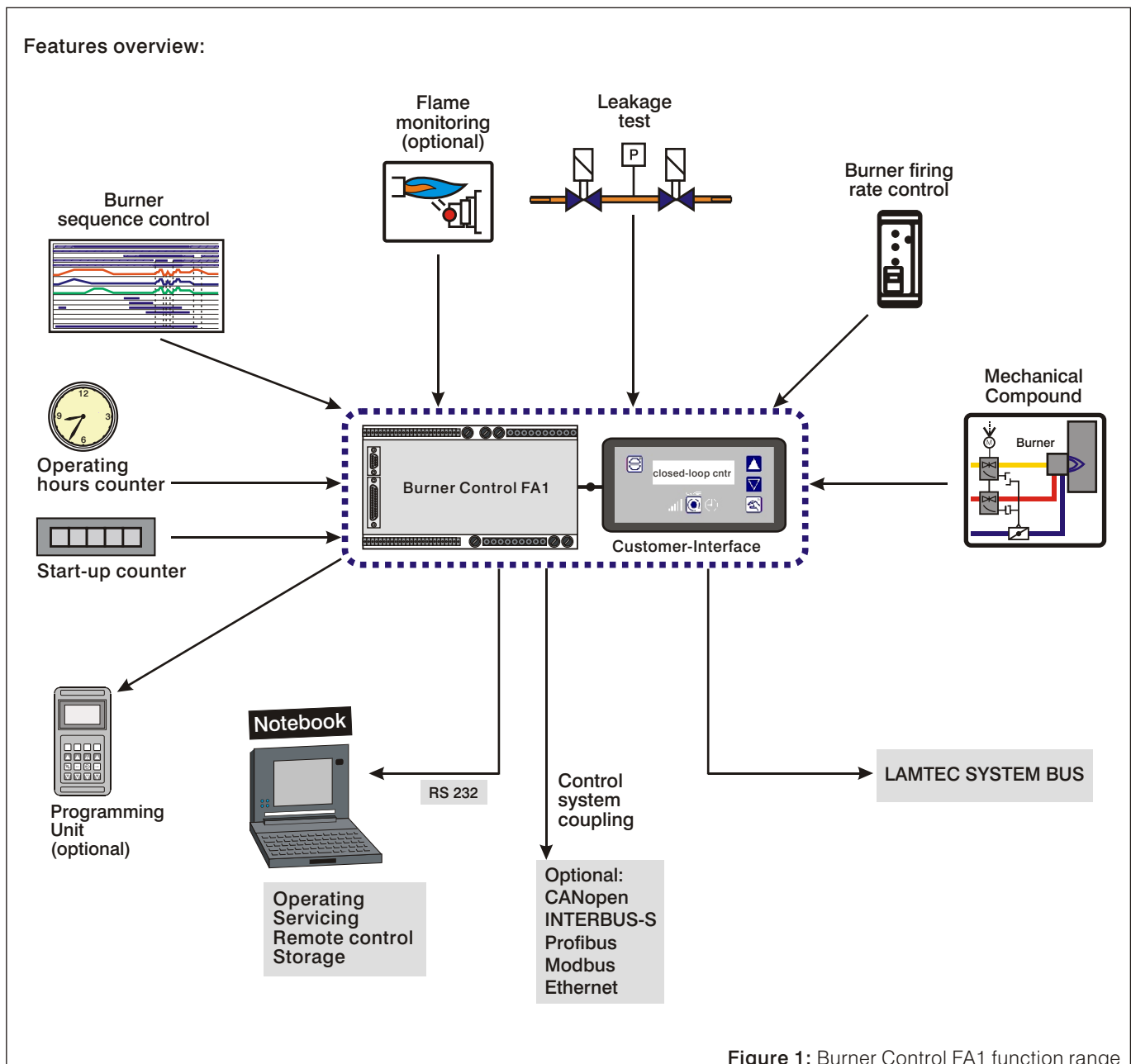
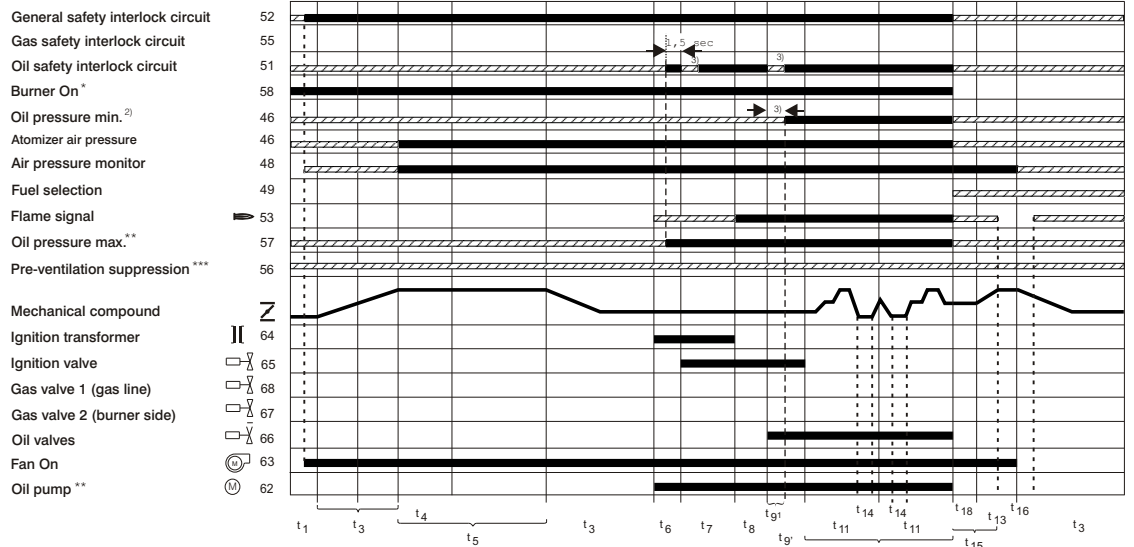


Figure 1: Burner Control FA1 function range

Figure 2:

Process sequence chart: oil with pilot burner



An Burner Control FA1 always has a LAMTEC SYSTEM BUS connection on board. The LAMTEC SYSTEM BUS links LAMTEC devices together. Fast, easy and with less wiring effort!

The Burner Control FA1 can be effectively combined with existing control system. It "speaks" the language of almost every conventional fieldbus.

The Burner Control FA1 has been tested by TÜV, and satisfies both the relevant European Standards (EN) and the requirements of TRD 604 for continuous operation.

An additional PC interface provides valuable assistance for the work of commissioning the Burner Control FA1. A laptop can be used to control the device remotely, and both the set configuration and the curve data can be archived. If it should ever be necessary, a replacement unit can be prepared for operation within seconds: the stored data is simply read in.

The Burner Control FA1 can even be interrogated from your office if an industrial modem is used. If a malfunction should occur, the cause can be detected without having to be on site.

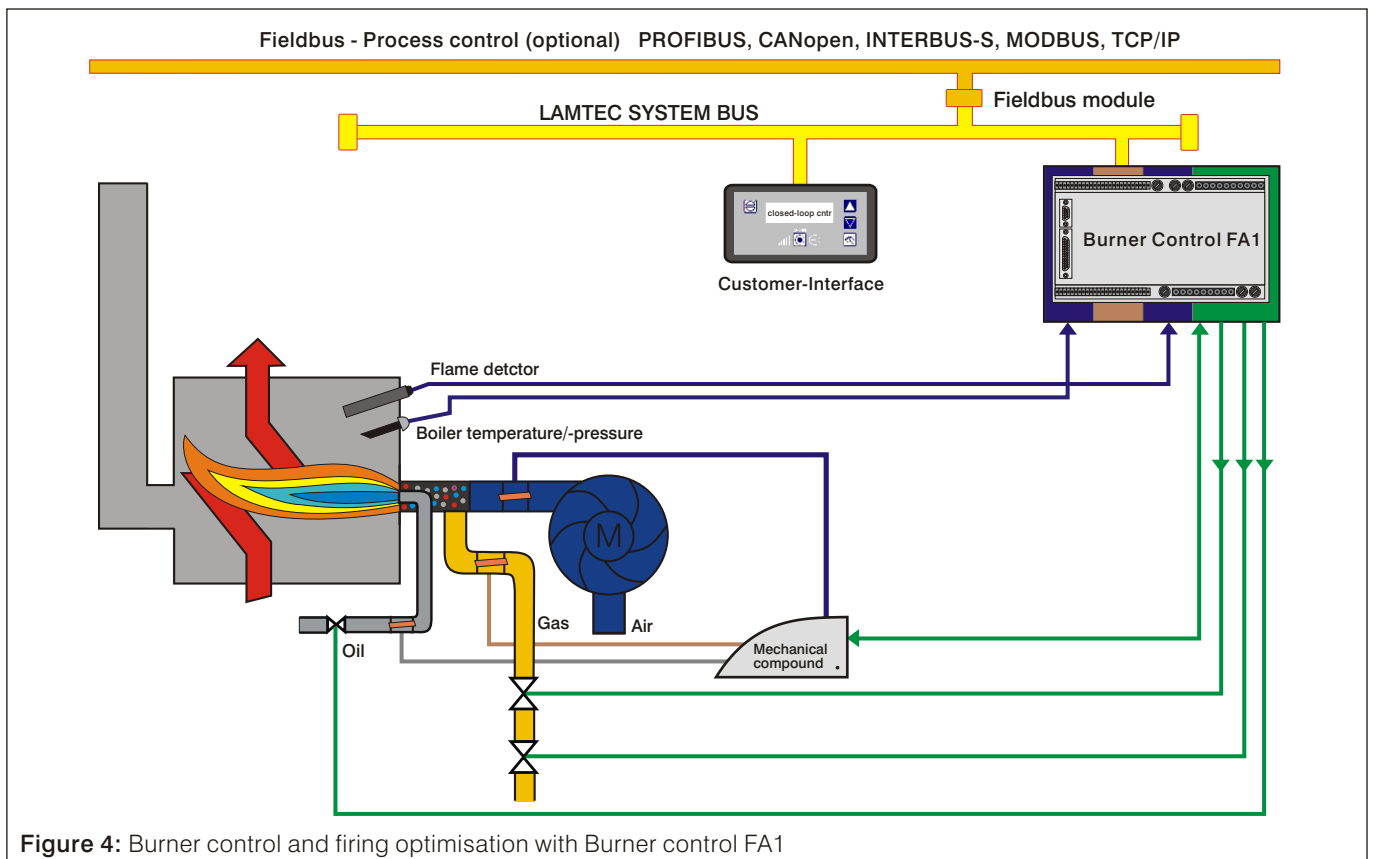


Figure 4: Burner control and firing optimisation with Burner control FA1

Electrical power supply	from 115 V -15 % to 230 V +10 % 50/60 Hz	Resolution	999 digits, 10 bits per analog input
Power consumption	approx. 50 VA	Three-state-step	Recommended run time of the positioning drive:
Ambient temperature	Operation: +0 °C... + 60° C Transport and storage -25 °C... + 60° C		30 s...60 s distance max. 10 m max. current 50 mA
Customer interface	Alphanumeric display, 2 x 16 characters can display load value, status, O ₂ -value, flame Intensity, running text display	Digital outputs	gas valve 1 and 2 oil valve fan on oil pump ignition valves
Programming Unit	4 x 16 characters can display with softkeys and setup-assistent	Storage of the set values and variable data	in EEPROM, up to 20 (type 11) points per curve with linear interpolation
Permiss. ambient humidity	Class F, DIN 40 040	Number of programmings	Unlimited (EEPROM)
Inputs and outputs	14 digital inputs, 24V 10 digital outputs, 230V 3 analog inputs	Interfaces	1 serial interface on 25-pole sub-D socket only addressable with adapter RS 232 (standard setting 19200 baud, no parity, 8 data bits, 1 stop bit) and LAMTEC SYSTEM BUS (length max. 500 m)
Digital signal inputs	The Burner Control FA1 self-tests will not allow the parasitic capacitance on the lines connected to the digital inputs to exceed 2.2 µF. The length of the cables should not exceed 10 m	BUS coupling	Via LSB adapter BUS card optional for these systems: Interbus-S (Phoenix) Profibus Modbus CAN-BUS Ethernet (Modbus TCP)
Load preset	Selectable potentiometer 1 - 5 k , (0/4...20mA) current signal or three-state-step positioning output, direct PT 100 actuation (if the load regulator is used)		
Analog inputs	Selectable potentiometer 1 - 5 k or 0/4...20 mA current signal.		

Dimensional drawings

