

# 1 Specifications ETAMATIC

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Offer no.:

Technical Consultant:

Phone.:

Plant:

Type no.:

Offer no.:

Configure like serial no.<sup>1)</sup>:

Configure like LAMTEC order no.<sup>1)</sup>:

<b>Firing-rate</b>	<input type="checkbox"/> 0...20 mA <input type="checkbox"/> 4...20 mA
	<input type="checkbox"/> TPS <input type="checkbox"/> potentiometer <input type="checkbox"/> integrated burner firing-rate controller (to define in the options)

Safety periods: 1. oil \_\_\_\_\_s,    2. oil \_\_\_\_\_s,    1. gas \_\_\_\_\_s,    2. gas \_\_\_\_\_s  
 (without choice safety periods get standard settings → 1.oil 4s, 2. oil 4s, 1. gas 3s, 2. gas 3s)

Channel	Function	Output	Feedback	Correction
<b>Channel 1</b>	<input type="checkbox"/> OFF	<input type="checkbox"/> TPS <sup>2)</sup>	<input type="checkbox"/> potentiometer	<input type="checkbox"/> 0...20mA
	<input type="checkbox"/> recirculation	<input type="checkbox"/> 0...20 mA	<input type="checkbox"/> 0...20 mA	<input type="checkbox"/> 4...20mA
	<input type="checkbox"/> fuel _____	<input type="checkbox"/> 4...20 mA	<input type="checkbox"/> 4...20 mA	
	<input type="checkbox"/> air: _____		<input type="checkbox"/> r.p.m. sensor	<input type="checkbox"/> internal O <sub>2</sub> controller (option at extra cost, if no LAMTEC measuring system is in use)
	<input type="checkbox"/> fan: _____		<input type="checkbox"/> 2-wire (Namur)	
	<input type="checkbox"/> flue gas <sup>5)</sup>		<input type="checkbox"/> 3-wire	<input type="checkbox"/> internal CO controller (option at extra cost)
	<input type="checkbox"/> mechanical compound		r.p.m. survey range :	
<input type="checkbox"/> steam <sup>6)</sup>		<input type="checkbox"/> 300 - 3600 pulse/Min <sup>3)</sup>		
		<input type="checkbox"/> 600 - 7200 pulse/Min <sup>4)</sup>		
		<input type="checkbox"/> 30 - 300 pulse/Min		
		<input type="checkbox"/> 60 - 600 pulse/Min		
		<input type="checkbox"/> 175 - 4200 pulse/Min		
		<input type="checkbox"/> 355 - 8430 pulse/Min		
		<input type="checkbox"/> 15 - 440 pulse/Min		
		<input type="checkbox"/> 45 - 1320 pulse/Min		

<sup>1)</sup> with this information you must not complete the form. The required information will be found in the above mentioned serial number or LAMTEC order number.

<sup>2)</sup> only potentiometer feedback available with output TPS

<sup>3)</sup> recommended for 1 pulse/revs

<sup>4)</sup> recommended for 2 pulses/revs

<sup>5)</sup> channel opens completely with start of the burner and remains at this position while ignition is completed

<sup>6)</sup> functioning same as fuel channel; but remains closed during pre-ventilation

# 1 Specifications ETAMATIC

Channel	Function	Output	Feedback	Correction
<b>Channel 2</b>	<input type="checkbox"/> OFF	<input type="checkbox"/> TPS <sup>2)</sup>	<input type="checkbox"/> potentiometer	<input type="checkbox"/> internal O <sub>2</sub> controller (option at extra cost, if no LAMTEC measuring system is in use)  <input type="checkbox"/> internal CO controller (option at extra cost)
	<input type="checkbox"/> recirculation	<input type="checkbox"/> 0...20 mA <sup>7) 8)</sup>		
	<input type="checkbox"/> fuel_____	<input type="checkbox"/> 4...20 mA <sup>7) 8)</sup>		
	<input type="checkbox"/> air:_____			
	<input type="checkbox"/> fan:_____			
	<input type="checkbox"/> flue gas <sup>5)</sup>			
	<input type="checkbox"/> mechanical compound			
	<input type="checkbox"/> steam <sup>6)</sup>			

<sup>2)</sup> only potentiometer feedback available with output TPS

<sup>5)</sup> channel opens completely with start of the burner and remains at this position while ignition is completed

<sup>6)</sup> functioning same as fuel channel; but remains closed during pre-ventilation

<sup>7)</sup> is controlled via additional LSB-module, feedback with resistor wiring

<sup>8)</sup> at actuators with electronic controlling 4...20 mA the integrated signal 4...20 mA for the position feedback, in conjunction with ETAMATIC/FMS/VMS, cannot be used as an independent and fail-safe position feedback in according to EN12067-2. In conjunction with ETAMATIC FMS/VMS these actuators will be only delivered with additional position feedback „POTENTIOMETER 5 kOhm (CONDUCTIVE PLASTIC), TÜV approved“.

During system planning the following points must be considered:

In conjunction with ETAMATIC only channel 2 can be used for controlling of the actuator. Therefore an additional continuous output for channel 2 via LSB-module (order no. 663R4029) and a LSB-connecting cable (order no. 663R0421N – 2M) will be necessary. There the setpoint of channel 2 (4...20 mA–signal) will be used for controlling the actuator. The POTENTIOMETER-feedback of channel 2 will be used as position feedback.

Channel	Function	Output	Feedback	Correction
<b>Channel 3</b>	<input type="checkbox"/> OFF	<input type="checkbox"/> TPS <sup>2)</sup>	<input type="checkbox"/> potentiometer	<input type="checkbox"/> internal O <sub>2</sub> controller (option at extra cost, if no LAMTEC measuring system is in use)  <input type="checkbox"/> internal CO controller (option at extra cost)
	<input type="checkbox"/> recirculation			
	<input type="checkbox"/> fuel_____			
	<input type="checkbox"/> air:_____			
	<input type="checkbox"/> fan:_____			
	<input type="checkbox"/> flue gas <sup>5)</sup>			
	<input type="checkbox"/> mechanical compound			
	<input type="checkbox"/> steam <sup>6)</sup>			

<sup>2)</sup> only potentiometer feedback available with output TPS

<sup>5)</sup> channel opens completely with start of the burner and remains at this position while ignition is completed

<sup>6)</sup> functioning same as fuel channel; but remains closed during pre-ventilation

# 1 Specifications ETAMATIC

Channel	Functions	Output	Feedback	Correction
Channel 4	<input type="checkbox"/> OFF <input type="checkbox"/> recirculation <input type="checkbox"/> fuel _____ <input type="checkbox"/> air: _____ <input type="checkbox"/> fan: _____ <input type="checkbox"/> flue gas <sup>5)</sup> <input type="checkbox"/> mechanical compound <input type="checkbox"/> steam <sup>6)</sup>	<input type="checkbox"/> TPS <sup>2)</sup>	<input type="checkbox"/> potentiometer	<input type="checkbox"/> internal O <sub>2</sub> controller (option at extra cost, if no LAMTEC measuring system is in use)  <input type="checkbox"/> internal CO controller (option at extra cost)

<sup>2)</sup> only potentiometer feedback available with output TPS

<sup>5)</sup> channel opens completely with start of the burner and remains at this position while ignition is completed

<sup>6)</sup> functioning same as fuel channel; but remains closed during pre-ventilation

## Options:

(Completion on demand)

- integral flame monitoring
  
- burner firing-rate controller active:  PT100 \_\_\_\_\_ up to 320°C  
 (PT100)  pressure \_\_\_\_\_ bar is equal to 4....20mA  
 (current)  pressure \_\_\_\_\_ bar is equal to 4....20mA
  
- input "controlled by atmospheric conditions" :  0...20mA  Pt100  potentiometer  
 (available with active firing-rate controller only)  
 (option at extra cost)
  
- Standby operation:  activation via internal firing-rate controller  
 (option at extra cost)  activation via LSB-module  
 activation via fieldbus

(This option activates the pilot burner and switches off the main burner. When you switch from standby to normal operation, the main burner will start without pre-ventilation.)

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language: \_\_\_\_\_ German (standard), English, French, Italian, Swedish, Spanish, Dutch, Slovak, Danish, Portuguese, Polish, Turkish, Croatian, Slovenian, Czech

Output "Internal firing-rate":  0...20mA - analogue output (available for ETAMATIC with 4xDPS only)  
(option at extra cost)

Output on LSB-Modul FAA4:  0...10 V  2...10 V  0...20 mA  4...20 mA  
(option at extra cost)

multistage operation:  oil  gas  
 2 stage  3 stage  4 stage

(without selection = modulated operation, n-staged operation = n load stages are used)

BUS connection:  PROFIBUS  Modbus  Ethernet  Interbus  CANOpen  
(option at extra cost)

mains frequency:  50 Hz  60 Hz

curve selection (FAT-mode)  standard curve setting 1 = oil / curve setting 2 = gas  2 x oil  2 x gas

function terminal 54:  ignition flame signal  recirculation switched on

## Other:

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\_\_\_\_\_

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Person responsible for documentation:

S. Vischer

Document number:

DLT1102-12-aEN-006