

# Technical Data BurnerTronic BT300

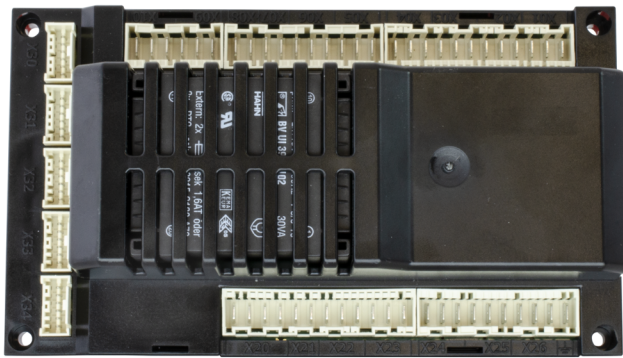


Fig. 1 BurnerTronic BT300

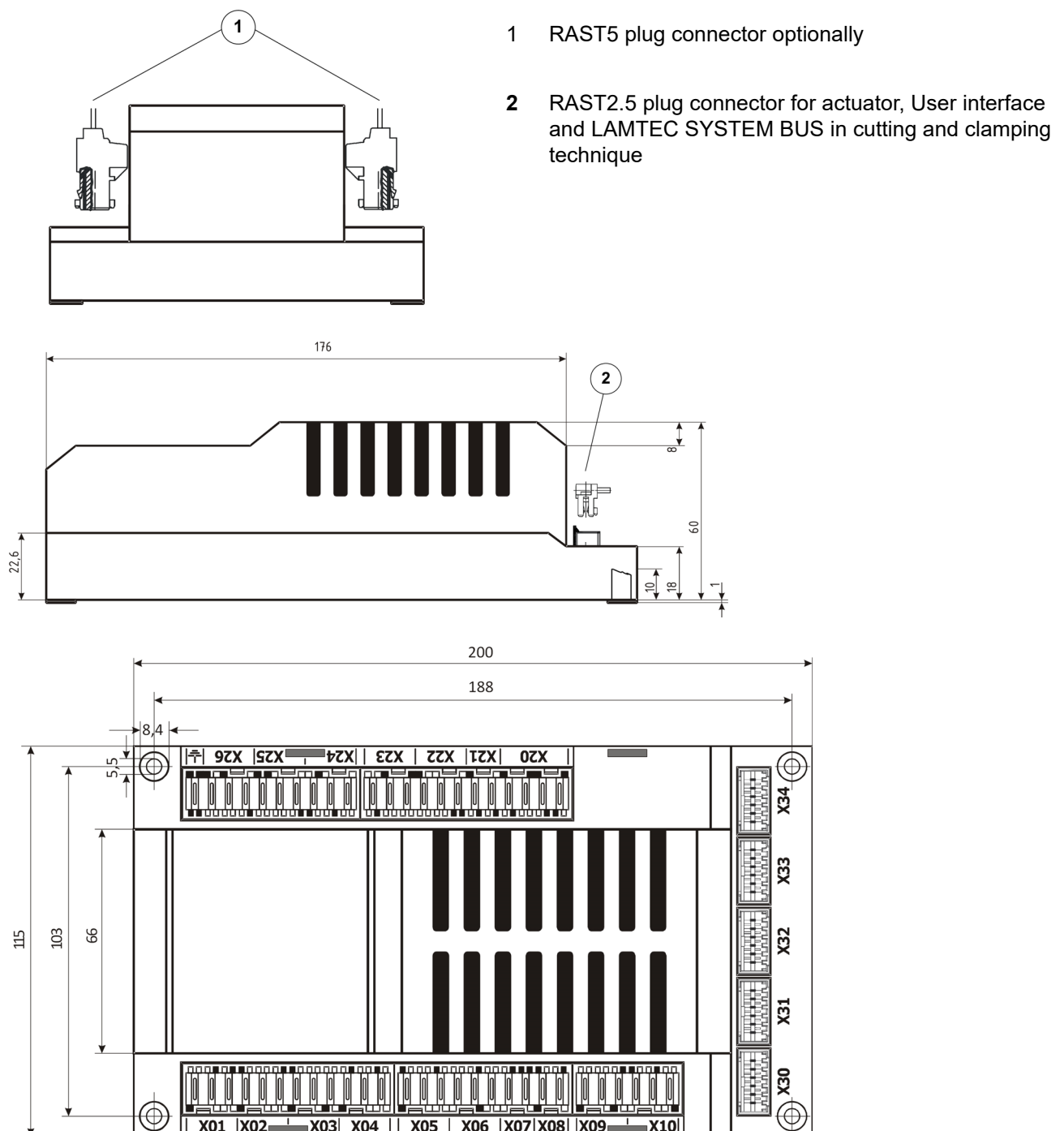


Fig. 2 Dimensions BT320 ... 341 (terminal assignment BT330/BT341 only)

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| Function                                  |                                                                                                                                                                                                                                       |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply                              | 230 V +10/-15 % 47-63 Hz<br>120 V +10/-15 % 47-63 Hz (on request)                                                                                                                                                                     |
| Maximum backup-fuse                       | 10 A slow-blow                                                                                                                                                                                                                        |
|                                           | <b>To be used only in a grounded power line network!</b>                                                                                                                                                                              |
| Power consumption                         | max. 30 VA                                                                                                                                                                                                                            |
| Switching threshold of ionisation current | 1 $\mu$ A                                                                                                                                                                                                                             |
| Digital signal inputs                     | max. line length 10 m   33 ft<br>max. line length 20 m   66 ft for the following signals:<br>firing rate+ / firing rate-<br>boiler safety interlock chain (SIC)<br>burner ON<br>reset<br>el selection DFM                             |
| Digital outputs                           | 3 fuel valves max. 1 A cos $\varphi$ 0,4<br>VL fan max. 2 A cos $\varphi$ 0,4<br>oil pump/operational report max. 2 A cos $\varphi$ 0,4<br>ignition transformer max. 2 A cos $\varphi$ 0,2<br>alarm output max. 1 A cos $\varphi$ 0,3 |
| Resolution                                | 999 digit, 10 bit                                                                                                                                                                                                                     |
| Number of curve sets                      | BT320/330/331: 1 curve set (oil or gas)<br>BT335: 2 curve sets (oil/gas switchable without DFM300)<br>BT34x: 2 curve sets (oil/gas or gas/gas switchable; DFM300/<br>LCM100 required                                                  |
| Number of programs                        | unlimited (EEPROM)                                                                                                                                                                                                                    |
| Field bus-coupling (optional)             | PROFIBUS DP<br>Modbus TCP<br>PROFINET<br>LEM100 or LCM100 always required                                                                                                                                                             |
| Housing                                   | polycarbonate + ABS                                                                                                                                                                                                                   |
| Dimensions (H x W x D)                    | 200 x 115 x 61 mm   7.87 x 4.53 x 2.4" in                                                                                                                                                                                             |
| Weight                                    | 1.0 kg   2.20 lb                                                                                                                                                                                                                      |
| Flammability                              | UL-94 V0                                                                                                                                                                                                                              |

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### Operating conditions

#### Altitude above sea level

|                         |                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ≤ 2000 m NHN            | without restriction                                                                                                                                                                                                                                                                                                                                                                                          |
| 2000 m < z ≤ 5000 m NHN | use possible with the following restrictions: <ul style="list-style-type: none"><li>– reduction of the maximum ambient temperature according to the diagram 'Temperature derating BT300 for operation &gt;2000m NHN'</li><li>– power supply 120 VAC</li><li>– units for 230 VAC not approved for use &gt; 2000 m</li></ul> <b>ATTENTION:</b><br><b>Different temperature ranges for DFM300 (see DLT1212)</b> |

### Environmental Conditions

|                               |                               |                                                           |                                      |
|-------------------------------|-------------------------------|-----------------------------------------------------------|--------------------------------------|
| <b>Operation</b>              | permissible temperature range | -20 ... +60 °C   -4 ... +140 °F (condensation prohibited) |                                      |
|                               | permissible ambient humidity  | 5 ... 95 % relative humidity                              |                                      |
| <b>Transport/<br/>Storage</b> | permissible temperature range | -20 ... +70 °C   -4 ... +158 °F (condensation prohibited) |                                      |
|                               | permissible ambient humidity  | 5 ... 95 % relative humidity                              |                                      |
| <b>Degree of protection</b>   | DIN EN 60529                  | BT300                                                     | IP00 (housing)                       |
|                               |                               |                                                           | IP20 (terminals covered)             |
|                               |                               | UI300-V2 Front                                            | IP40 (clamped)                       |
|                               |                               |                                                           | IP54 (glued)                         |
|                               |                               |                                                           | IP65 (with additional cover)         |
|                               |                               | UI300-LSB                                                 | IP20 (if all terminals are occupied) |

### EU Declaration of Conformity

|               |                                              |
|---------------|----------------------------------------------|
| 2014/35/EU    | Low Voltage Directive                        |
| 2014/30/EU    | EMC Directive                                |
| 2014/68/EU    | Pressure Equipment Directive Kat. 4 Mod. B+D |
| (EU) 2016/426 | Gas Appliance Regulation (GAR)               |
| 2011/65/EU    | RoHS                                         |

### NOTICE

The limits of the technical data must be strictly adhered to.

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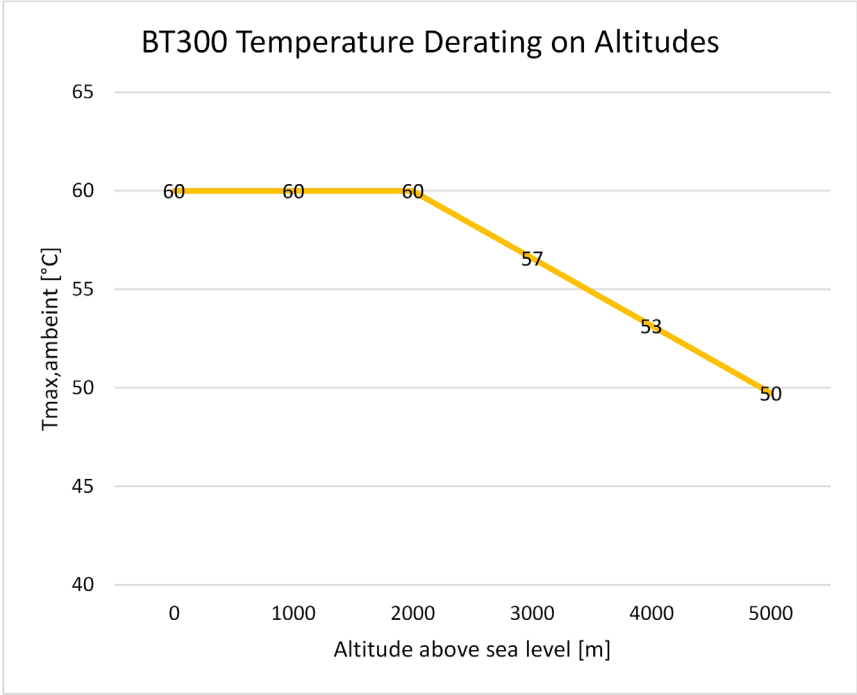


Fig. 3 Temperature derating BT300 for operation >2000 m NHN

# Technical Data BurnerTronic BT300

## Order Information

| Description/Type                                                                                                                                     | Order-No.  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| BT320 (up to 2 actuators, intermittent operation only, 230 VAC)                                                                                      | 667R1320-1 |
| BT330 (up to 3 actuators, permanent operation, 230 VAC)                                                                                              | 667R1330-1 |
| BT330 (up to 3 actuators, permanent operation, 120 VAC)                                                                                              | 667R1331-1 |
| BT331 (up to 3 actuators, permanent operation, 230 VAC, with SIL Confirmation)                                                                       | 667R1330-2 |
| BT331 (up to 3 actuators, permanent operation, 120 VAC, with SIL Confirmation)                                                                       | 667R1331-2 |
| BT335 (up to 3 actuators, permanent operation, for dual fuel burners without DFM, 230 VAC)                                                           | 667R1335-1 |
| BT335 (up to 3 actuators, permanent operation, for dual fuel burners without DFM, 115 VAC)                                                           | 667R1335-2 |
| BT340 (up to 3 actuators, permanent operation, 2 fuels, switchable, for dual fuel burners 230 VAC, in connection with DFM300)                        | 667R1340-1 |
| BT340 (up to 3 actuators, permanent operation, 2 fuels, switchable, for dual fuel burners 120 VAC, in connection with DFM300)                        | 667R1341-1 |
| BT341 (up to 3 actuators, permanent operation, 2 fuels, switchable, for dual fuel burners 230 VAC, in connection with DFM300 with SIL Confirmation)  | 667R1340-2 |
| BT341 (up to 3 actuators, permanent operation, 2 fuels, switchable, for dual fuel burners 120 VAC, in connection with DFM300, with SIL Confirmation) | 667R1341-2 |

| Description/Type                                                                                                                                                                     | Order-No.  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>Software:</b><br>PC Remote Software for BT300, incl. LSB service adapter, USB/CAN module and connecting cable                                                                     | 667R0300-1 |
| <b>Plug:</b><br>complete connector set for BT300, filament proof to IEC60335-1, unassembled, screw connection, connectable conductor cross-section max. 2,5 mm <sup>2</sup> (13 AWG) | 667R0900-2 |

## Approvals



only for  
120 VAC

The information in this publication is subject to technical changes.



### LAMTEC GmbH & Co. KG

Josef-Reiert-Straße 26

69190 Walldorf

GERMANY

Telefon: +49 (0) 6227 6052-0

Telefax: +49 (0) 6227 6052-57

[info@lamtec.de](mailto:info@lamtec.de)  
[www.lamtec.de](http://www.lamtec.de)

