

|  | operation when directly connected to chimney |                   | operation when connected accumulation mass |                 |
|--|--|-------------------|--|-----------------|
|  | cupola                                       | hot air exchanger | cupola                                     | adaptor         |
| Energy label   | <b>A</b>                                     | <b>A</b>          | <b>A</b>                                   | <b>A</b>        |
| <b>Operating data</b>  |  |                   |  |                 |
| Nominal heat power   | 9 kW   | 12 kW             | ----                                       | ----            |
| Efficiency   | > 80 %                                       | > 80 %            | ----                                       | ----            |
| Consumption of wood  | 2,5 kg/h                                     | 3,6 kg/h          | 5,5 kg                                     | 5,5 kg          |
| Total heat output of the burning chamber   | ----   | ----              | 22 kW                                      | 22 kW           |
| Mass flow of flue gas  | 8 g/s  | 10 g/s            | 20 g/s                                     | 20 g/s          |
| Required chimney pressure  | 12 Pa  | 12 Pa             | 12 Pa                                      | 15 Pa           |
| Required amount of combustion air  | 20 m³/h                                      | 40 m³/h           | 60 m³/h                                    | 60 m³/h         |
| <b>Average flue gas temperature</b>  |  |                   |  |                 |
| on the output  | 270 °C                                       | 334 °C            | 396 °C                                     | 410 °C          |
| past 3,6 m of ceramic accumulation system KMS 300 <sup>1</sup>                     | ----   | ----              | 190 °C                                     | ----            |
| past accumulation rings (5x acc. ring Ø440mm)                                      | ----   | ----              | ----                                       | 240 °C          |
| <b>Heat distribution</b>   |  |                   |  |                 |
| fireplace insert   | 62–81 %                                      | 62–81 %           | 45 %                                       | 40 %            |
| door glass (single / double)   | 38 / 19 %                                    | 38 / 19 %         | 38 / 19 %                                  | 38 / 19 %       |
| adjoining accumulation mass  | ----   | ----              | 17–36 %                                    | 22–41 %         |
| <b>Information for ventilated builds</b>   |  |                   |  |                 |
| Minimal grill area supply / outgoing   | 900 / 1050 cm²                               | 1200 / 1400 cm²   | 1200 / 1400 cm²                            | 1200 / 1400 cm² |
| Minimum distance from insulated areas / floor                                      | 80 / 0 mm                                    |                   | 80 / 0 mm                                  |                 |
| Reference insulation <sup>2</sup><br>ceiling / back wall / side wall / floor       | 120 / 80 / 80 / 0 mm                         |                   | 120 / 80 / 80 / 0 mm                       |                 |
| Calciumsilicate insulation <sup>3</sup><br>ceiling / back wall / side wall / floor | 90 / 60 / 60 / 0 mm                          |                   | 90 / 60 / 60 / 0 mm                        |                 |
| <b>Information for non-ventilated builds (closed grills)</b>                       |  |                   |  |                 |
| Minimum radiant area <sup>4</sup>  | 3,5 m²                                       |                   | 5 m²                                       |                 |
| Minimum distance from insulated areas / floor                                      | 80 / 20 mm                                   |                   | 80 / 20 mm                                 |                 |
| Reference insulation <sup>2</sup><br>ceiling / back wall / side wall / floor       | 160 / 100 / 100 / 20 mm                      |                   | 160 / 100 / 100 / 20 mm                    |                 |
| Calciumsilicate insulation <sup>3</sup><br>ceiling / back wall / side wall / floor | 120 / 75 / 75 / 20 mm                        |                   | 120 / 75 / 75 / 20 mm                      |                 |
| <b>General technical information</b>   |  |                   |  |                 |
| Total weight / lining weight   | ca. 355 / 110 kg                             |                   | ca. 355 / 110 kg                           |                 |
| Burning chamber dimensions (width x depth)   | 810 x 315 mm                                 |                   |  |                 |
| Combustion air connection  | Ø 125 mm                                     |                   |  |                 |
| Use in non-ventilated accumulation builds according to craft rules                 | suitable                                     |                   |  |                 |
| Tested according to  | EN 13229                                     |                   |  |                 |
| Meets values   | 1. BlmSchV (Stufe2), 15a BVG                 |                   |  |                 |

1 Listed value from testing. For accurate results is evaluation of each system in the Ortner / KOV program necessary.

2 Mineral wool according to AGI-Q 132

3 Example SkamoEnclousure Board 225 kg/m³

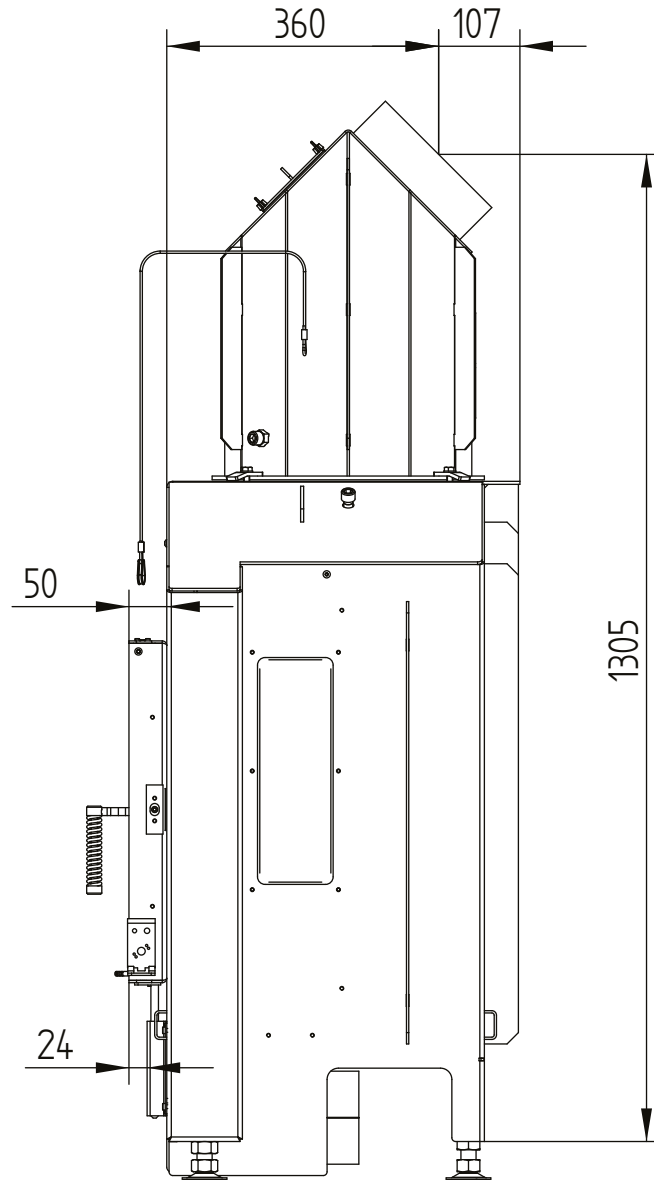
4 Depends on accumulation period and material characteristics. Listed values calculated with chamotte stone thickness 30 mm with radiant area 500 W/m²

# HAKA 89/45

Technical data  
Version 2019/08

hot air exchanger 45°

M 1:10

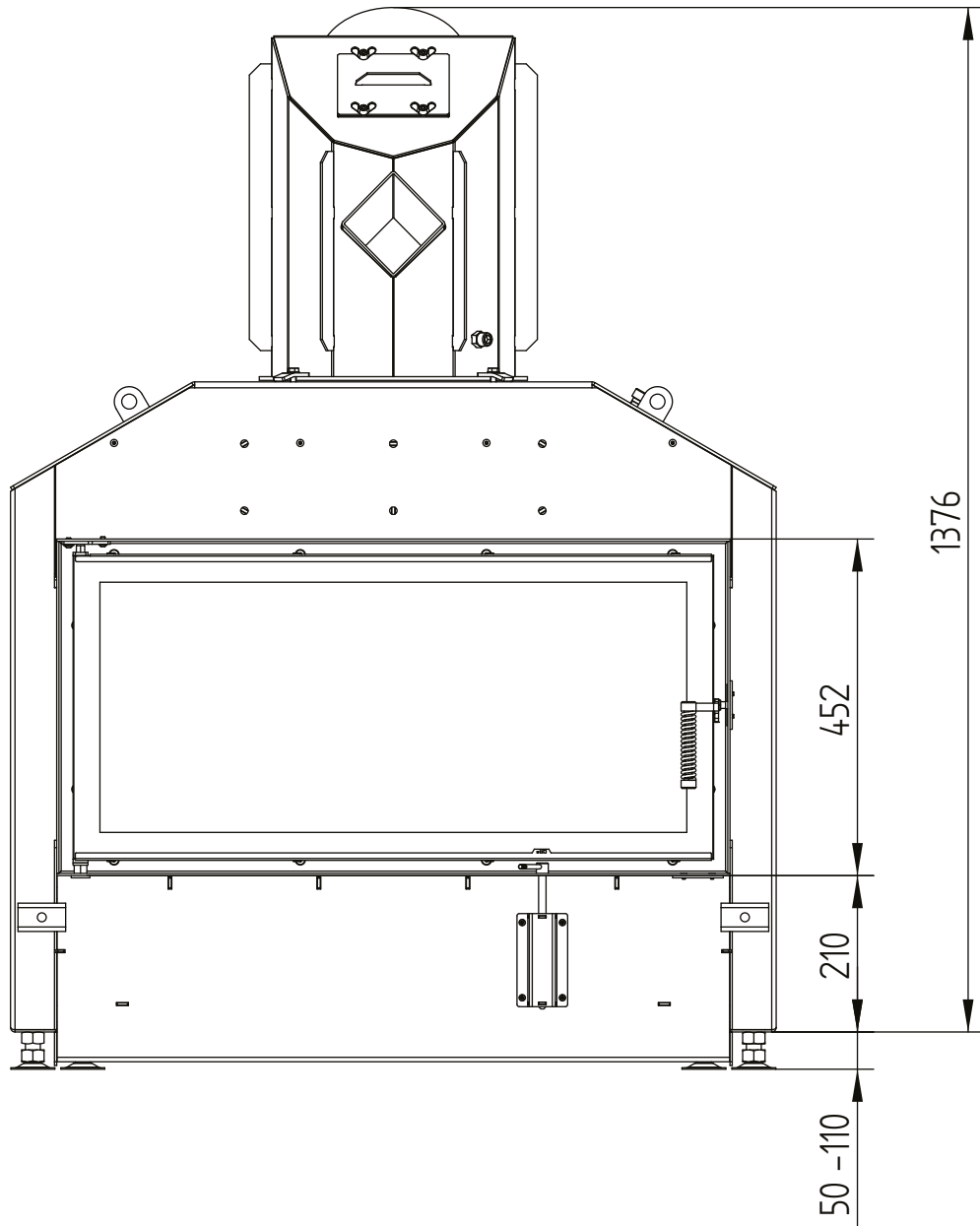


# HAKA 89/45

Technical data  
Version 2019/08

hot air exchanger 45°

M 1:10

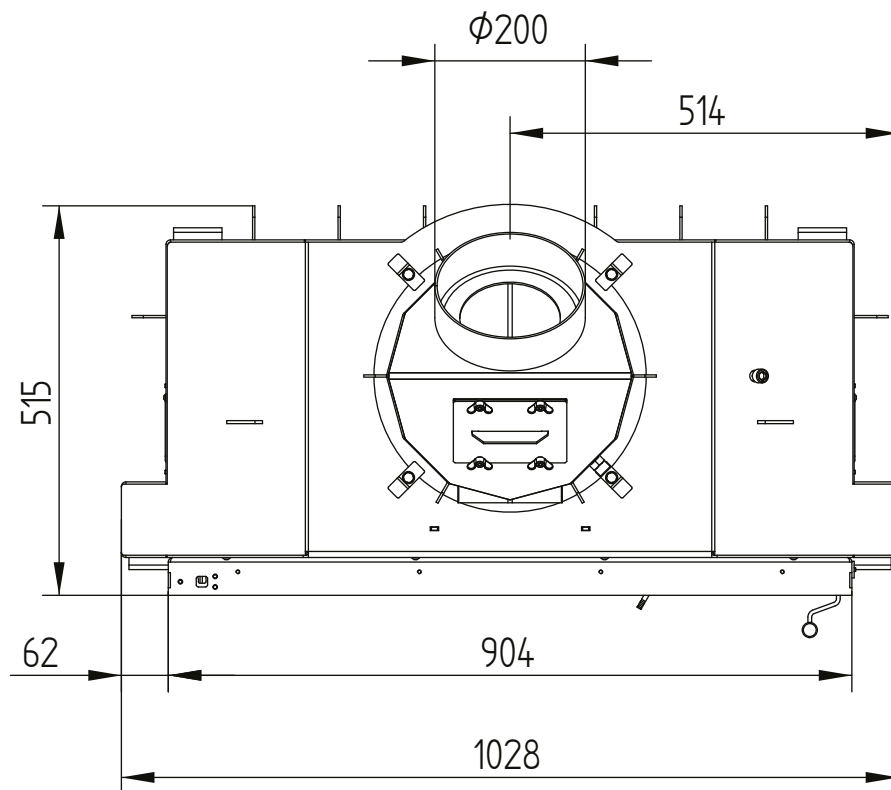


# HAKA 89/45

Technical data  
Version 2019/08

hot air exchanger 45°

M 1:10

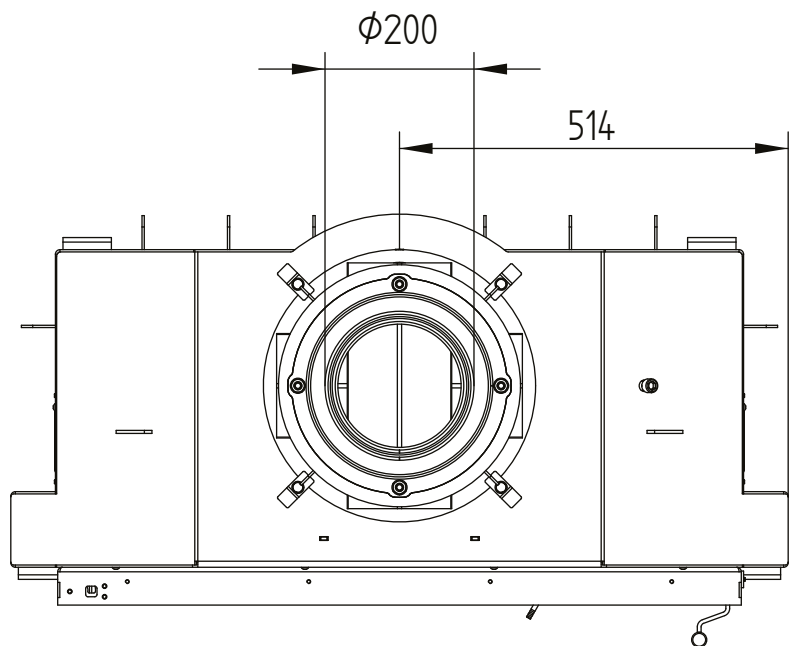
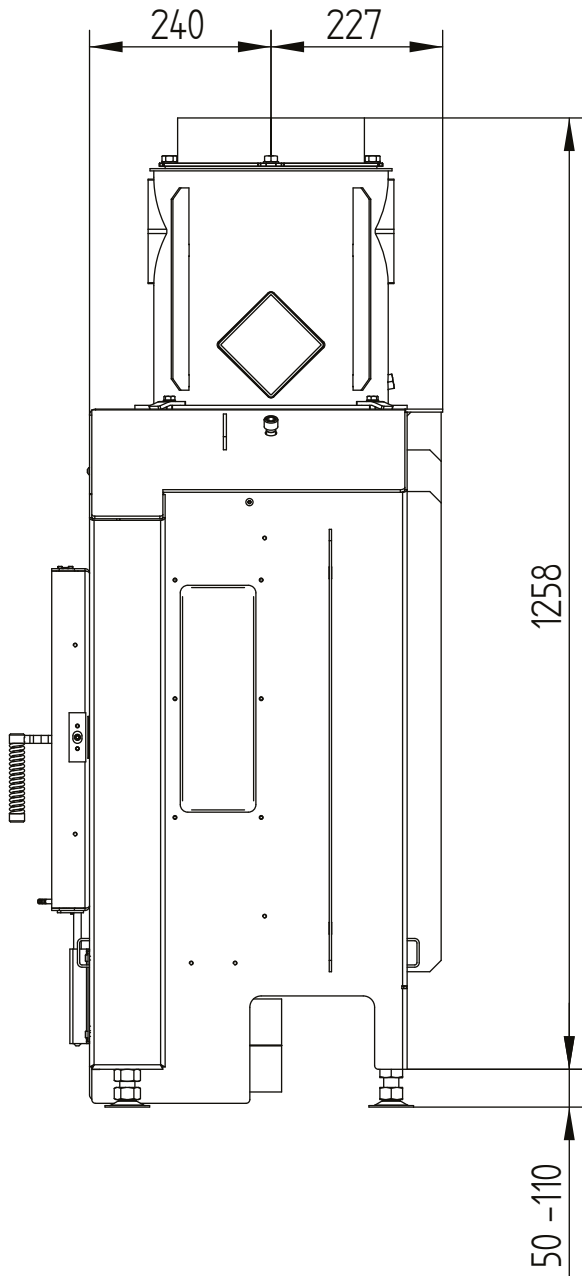


# HAKA 89/45

Technical data  
Version 2019/08

hot air exchanger vertical

M 1:10

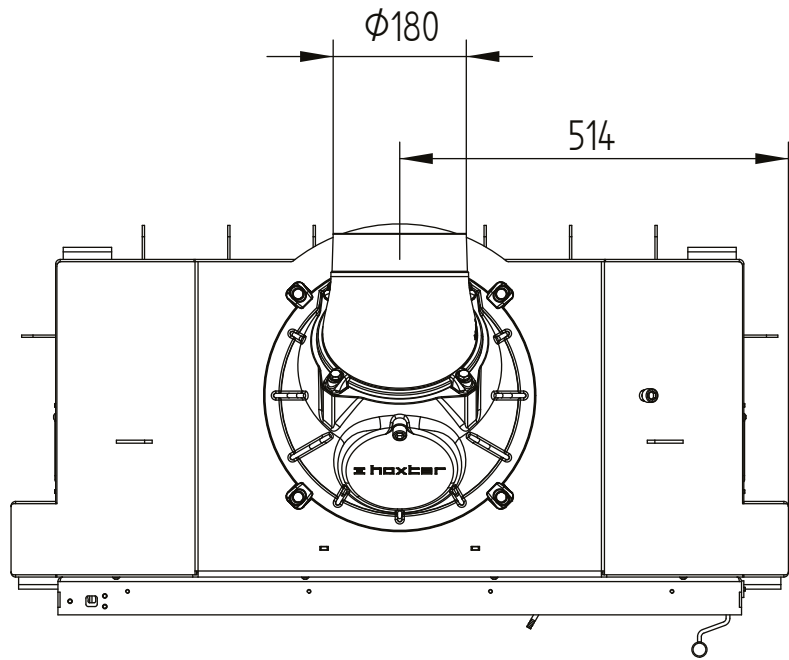
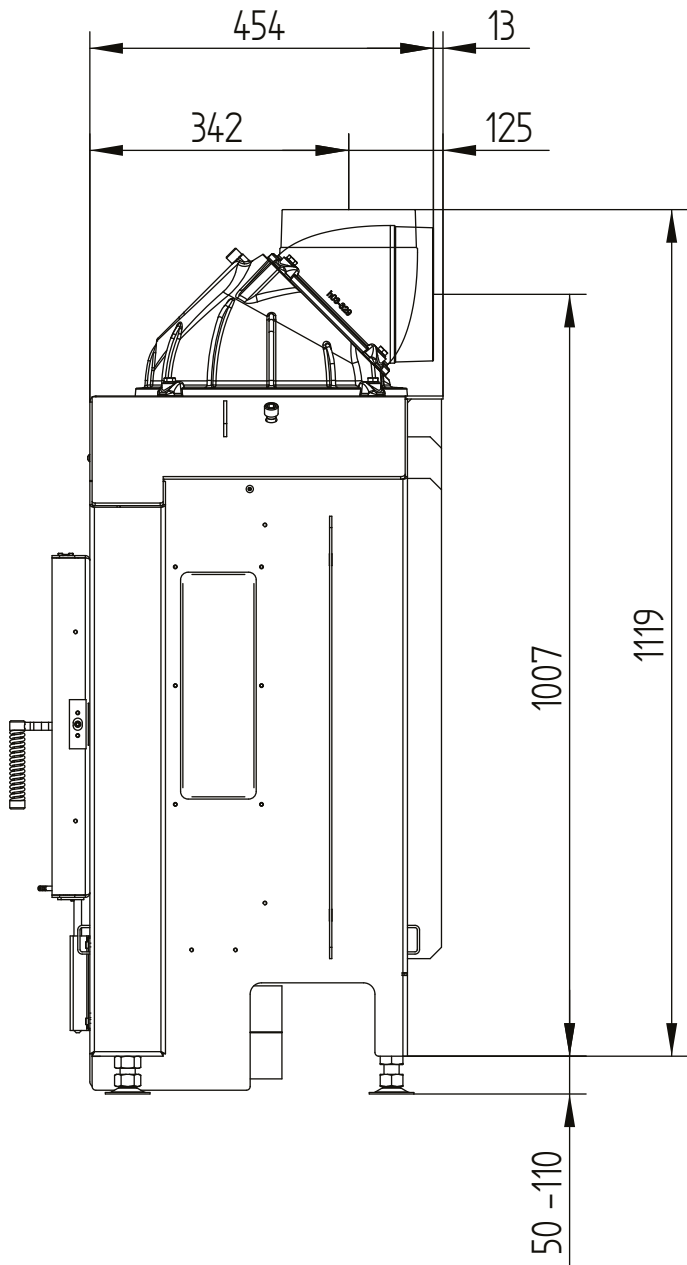


# HAKA 89/45

Technical data  
Version 2019/08

cupola

M 1:10

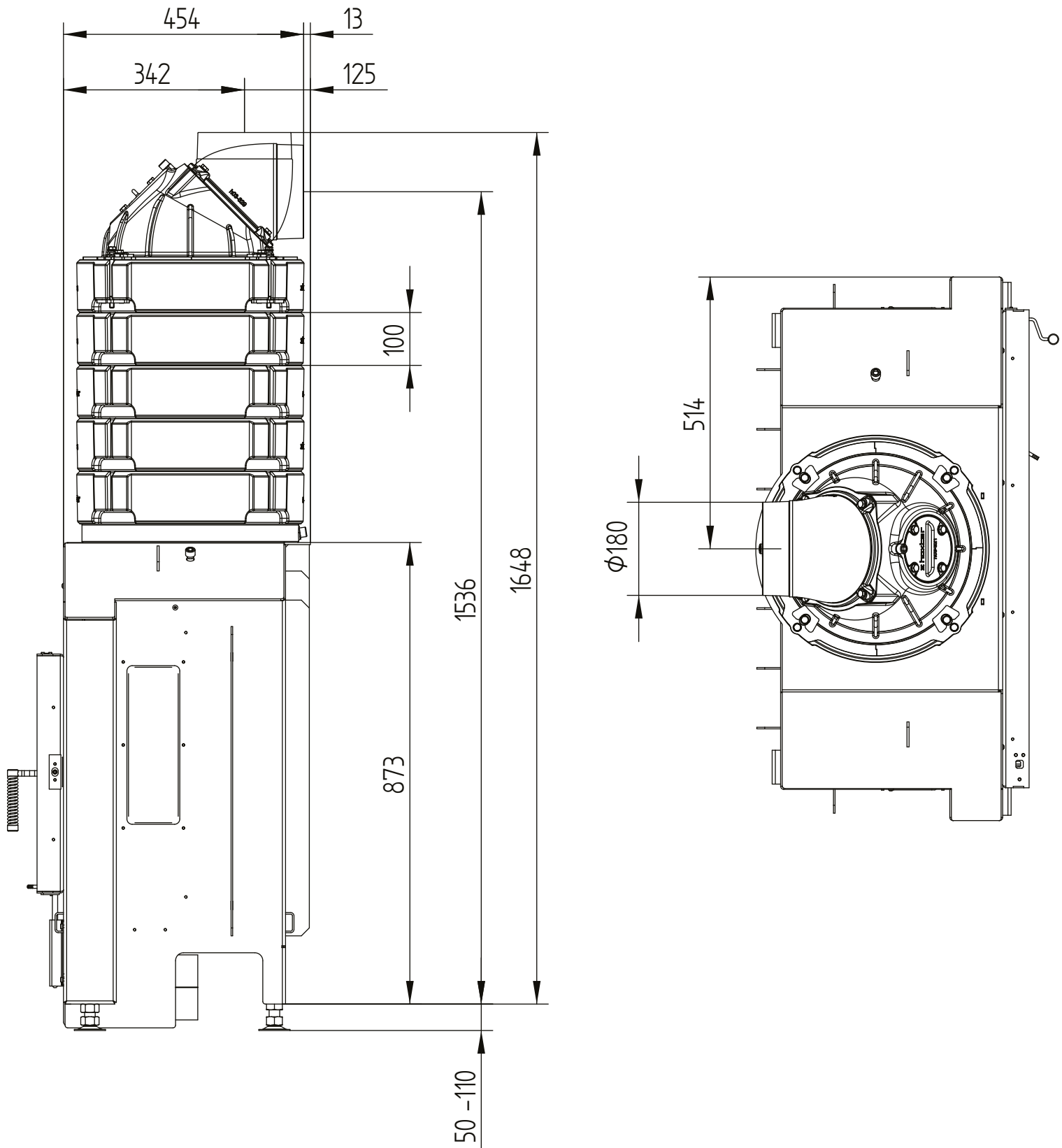


# HAKA 89/45

Technical data  
Version 2019/08

accumulation rings

M 1:10

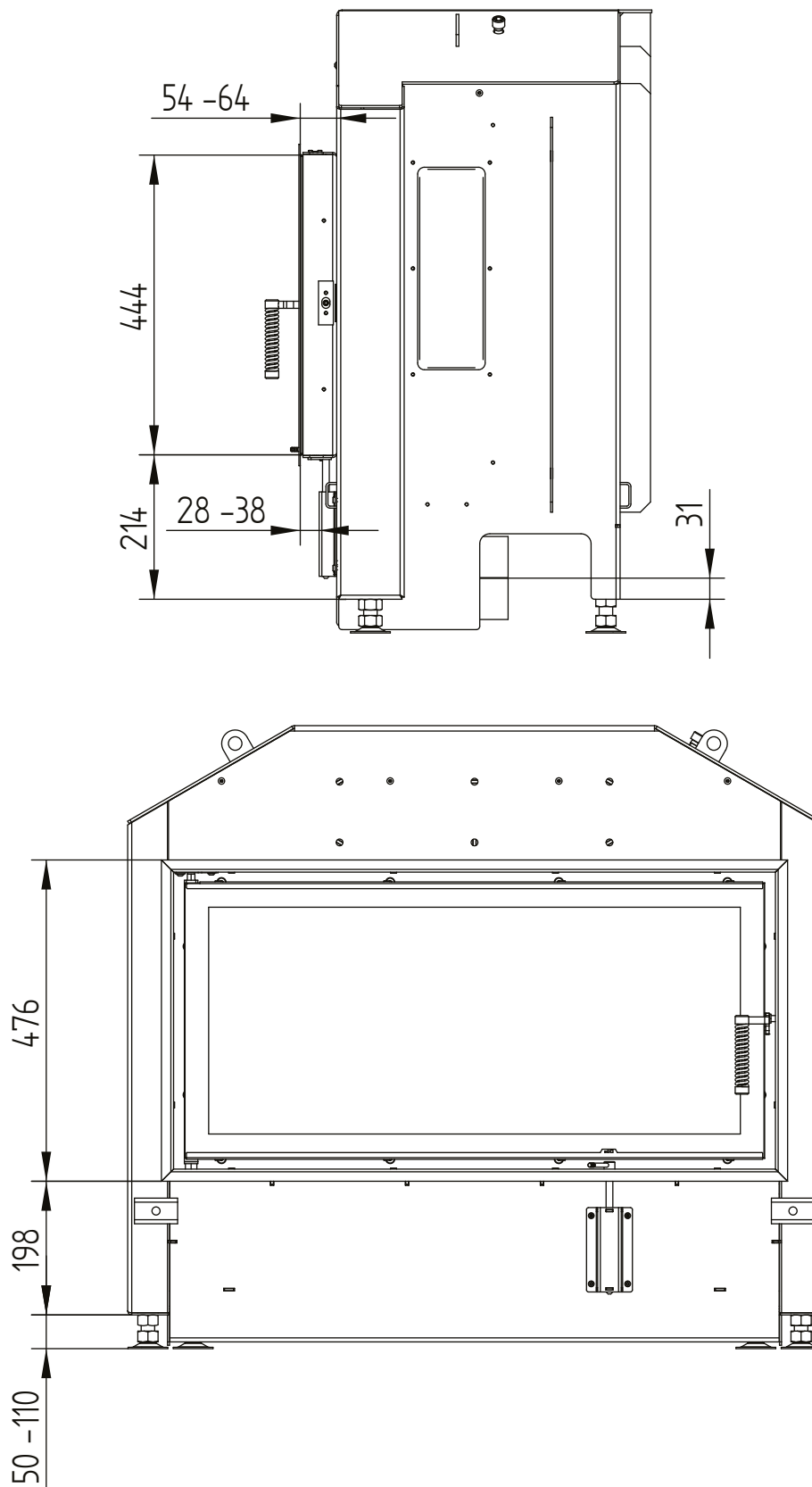


# HAKA 89/45

Technical data  
Version 2019/08

cover frame 89/45 4sides 1 x 90° 50 mm / air intake

M 1:10



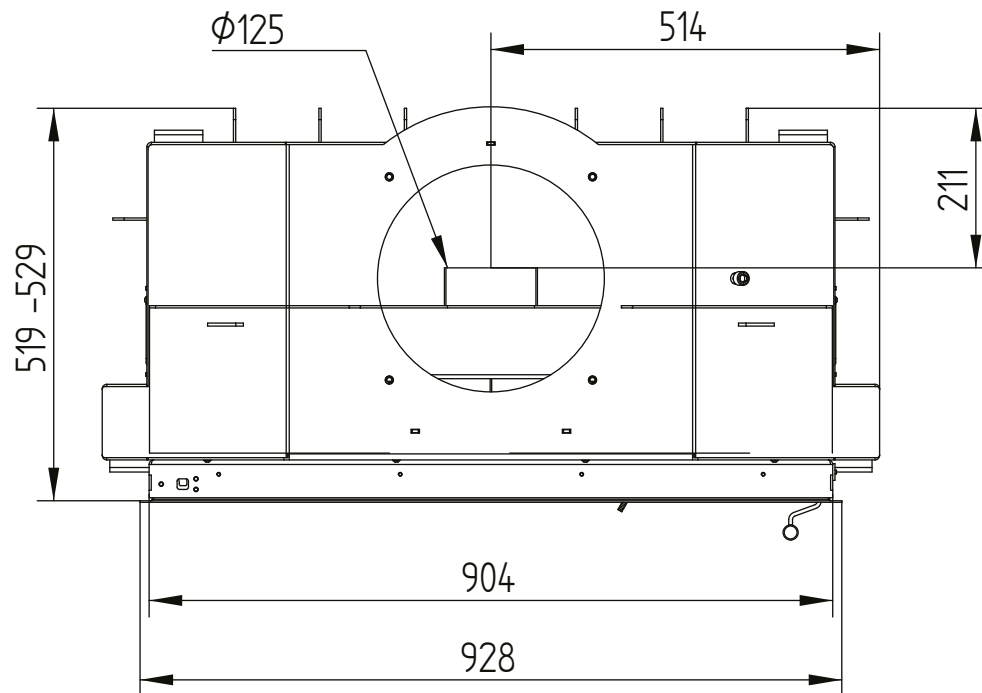


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Technical data  
Version 2019/08

cover frame 89/45 4sides 1 x 90° 50 mm / air intake

M 1:10

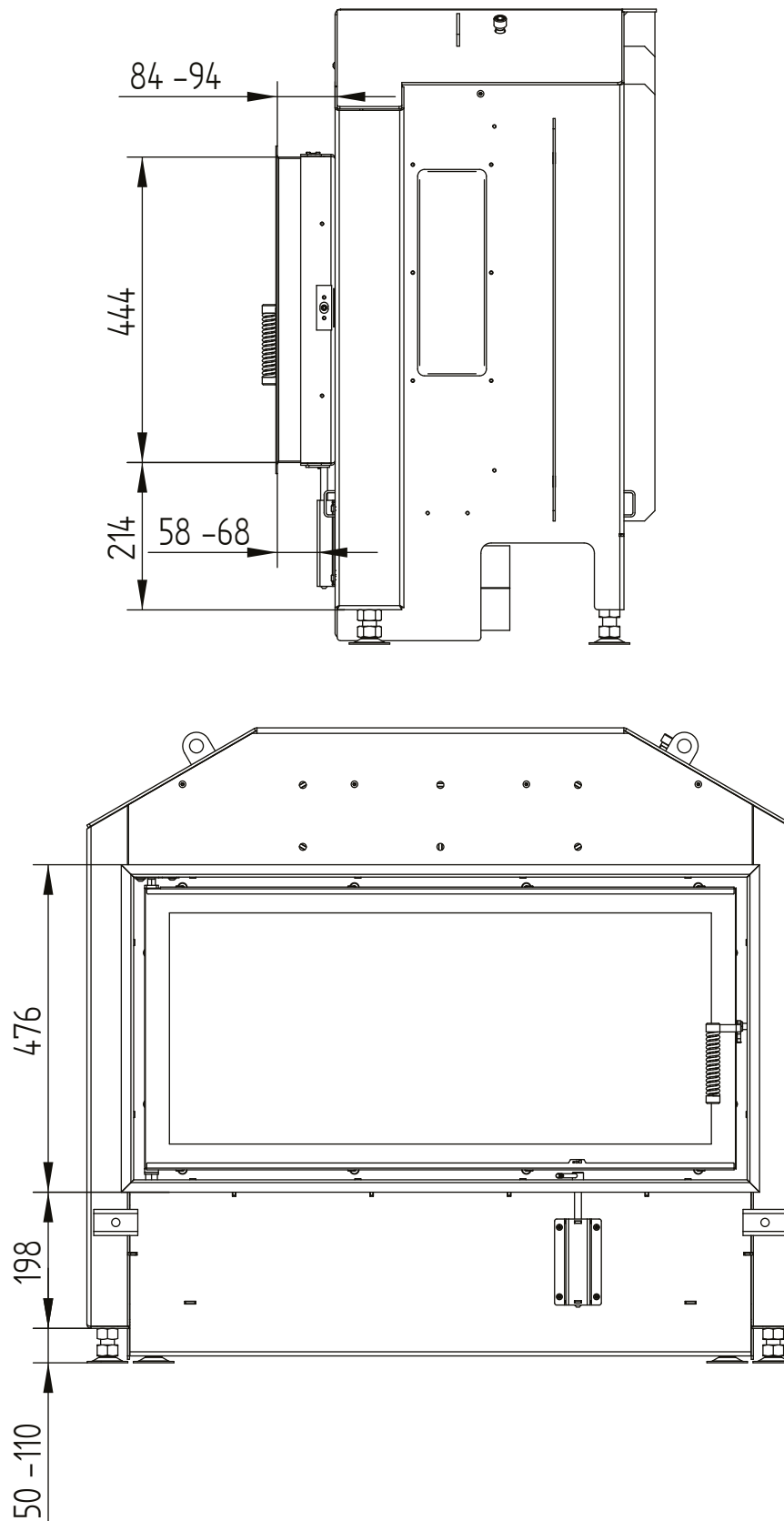


# HAKA 89/45

Technical data  
Version 2019/08

cover frame 89/45 side opening 4sides 80 mm 1 x 90°

M 1:10

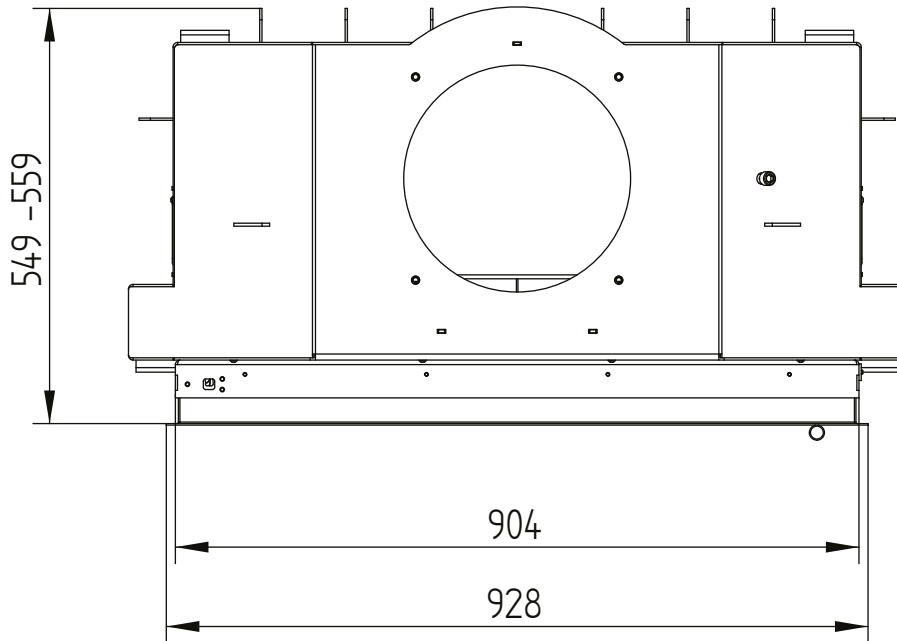


# HAKA 89/45

Technical data  
Version 2019/08

cover frame 89/45 side opening 4sides 80 mm 1 x 90°

M 1:10



# HAKA 89/45

Technical data  
Version 2019/08

build-on frame 89/45 side opening 4sides 80 mm / feet

M 1:10

