# **Electric boiler with flow-through technology**

- Independent heat source or additional heat source for heat pump systems.
- Can be connected to many heating systems.

JÄSPI

- For detached houses as well as terraced houses, blocks of flats and industrial properties.
- Electrical resistors and control unit.
- Does not include hot water tank.
- Works with flow-through technology and requires an external circulating water pump that circulates water in the boiler.
- 7 or 15 stage control system.



The Jäspi FIL SPL electric boiler can operate as an independent heat source or it can be connected to heat pump systems as a source of backup and additional heat.

Jäspi FIL SPL is suitable for terraced houses, apartment buildings and industrial properties.

FIL SPL consists of electric heaters and a control unit and does not include a hot water tank. FIL works with flow-through technology and requires an external circulating water pump that circulates water in the boiler.

Technical information 31.5 - 400	
Electrical information	
Rated voltage, models 31.5 - 300	400 V 3 N AC 50 Hz
Rated voltage, models over 300 - 400	400 V 3 AC 50 Hz
Control unit voltage (internally connected)	230 V 1 N AC 50 Hz +- 10 %
Secondary current of Jäspi current transformers	0-1A
Secondary current of primary current transformers	0 - 5 A
IP class	IP 20
Power steps	
Models 31.5 - 140	7 steps
Models 150 - 400	15 steps
General	
Ambient temperature	535 °C
Max temperature	110 °C
Max pressure	10 bar
Operating temp. (electric boiler)	30-99 °C
Pipe connections	
Models 31.5 - 140	DN 65
Models 150 - 400	DN 100
Volume	
Models 31.5 - 140	85 l
Models 150 - 400	220 l
Weight	
Models 31.5 - 140	170 kg
Models 150 - 400	320 kg

Power	Recommended fuse	Power	Rec
31.5 kW	3 x 63 A	150 kW	
42 kW	3 x 80 A	180 kW	
52.5 kW	3 x 100 A	225 kW	
70 kW	3 x 125 A	300 kW	
84 kW	3 x 160 A	400 kW	1
105 kW	3 x 200 A		
120 kW	3 x 250 A		
140 kW	3 x 250 A		

Recommended fuse
3 x 250 A
3 x 315 A
3 x 400 A
3 x 500 A
2 x (3 x 400 A)

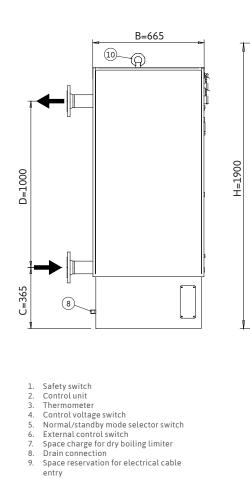
Accessories	Code
Outdoor temp sensor	M01027
Current transformers	M01026
Dry boiling protection*	M01695

\* Standard in models 150-400 Other accessories from our sale.

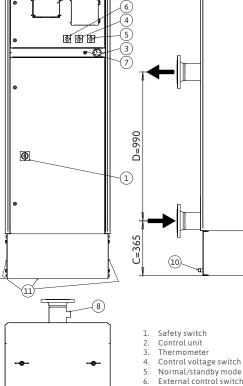
## Jäspi FIL SPL

### FIL SPL 31.5 - 140

## A=445 • (4) -@ 5 0 Ž Ğ 1 3 1 H=1560 1 9 ф þ







9

2

FIL SPL 150 - 400 A=700

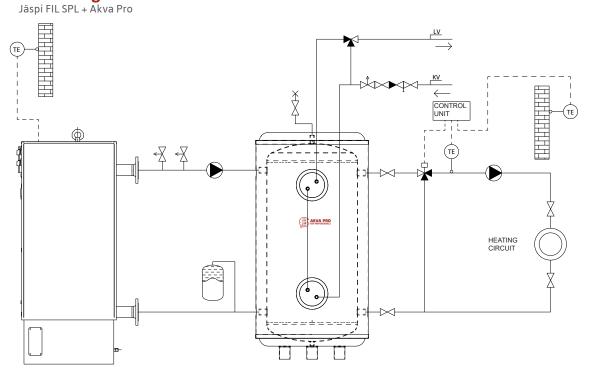
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B=855

(12)

- Normal/standby mode selector switch External control switch
- Temperature limiter Dry boiling limiter sensor 7. 8.
- 9.
- Dry boiling limiter
- Drain connection
  Space reservation for electrical cable
- entry 12. Lifting point

## **Circuit diagram L000662**





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- Electrical resistors and control unit.
- Does not include hot water tank.
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• 15 stage control system.

The Jäspi FIL SPL electric boiler can operate as an independent heat source or it can be connected to heat pump systems as a source of backup and additional heat.

Jäspi FIL SPL is suitable for terraced houses, apartment buildings and industrial properties.

FIL SPL consists of electric heaters and a control unit and does not include a hot water tank. FIL works with flow-through technology and requires an external circulating water pump that circulates water in the boiler.

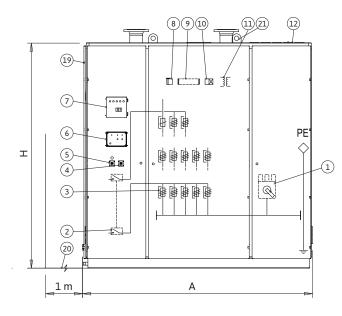
Technical information 500 - 1600	
Electrical information	
Rated voltage	400 V 3 AC 50 Hz
Control unit voltage (internally connected)	230 V 1 N AC 50 Hz +- 10 %
Secondary current of Jäspi current transformers	0-1A
Secondary current of primary current transformers	0 - 5 A
IP class	IP 20
Power steps	
Models 500 - 1600	15 steps
General	
Ambient temperature	535 °C
Max temperature	110 °C
Max pressure	10 bar
Operating temp. (electric boiler)	30-99 °C
Pipe connections	
Models 500 - 1600	DN 125
Volume	
Models 500 - 800	480 l
Models 800 - 1200	750 l
Models 1200 - 1600	1000 l
Weight	
Models 500 - 800	480 kg
Models 800 - 1200	750 kg
Models 1200 - 1600	1350 kg

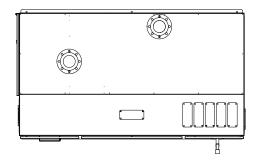
Power	Recommended fuse
500 kW	2 x (3 x 500) A
600 kW	2 x (3 x 630) A
700 kW	2 x (3 x 630) A
800 kW	3 x (3 x 500) A
900 kW	3 x (3 x 630) A
1000 kW	3 x (3 x 630) A
1200 kW	4 x (3 x 630) A
1500 kW	6 x (3 x 500) A
1600 kW	6 x (3 x 500) A

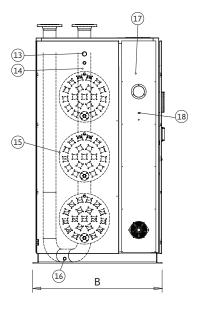
Accessories	Code
Outdoor temp sensor	M01027
Current transformers M01026	
Other accessories from	our sale.

# Jäspi FIL SPL

### FIL SPL 500-1600







- Main safety switch (AB + discon-1.
  - nector + shutdown command) Power stage contactors
  - Power stage contactors Power stage fuses Heating / backup heating switch Control voltage switch Anti-boiling protection unit Control unit / circuit board

- 3. 4. 5. 6. 7. 8. 9.
- Backup heating thermostat Terminal blocks
- Time relay
  Control voltage transformer

2.

- Electrical leads
  Anti-boiling protection sensor
  Temperature sensors (limiter and
- thermostat) 15. Electric heating elements
- 16. Drain sleeve DN15

- 17. Temperature gauge
  18. Thermostat / limiter
  19. Door for maintenance of heating
- elements 20. Space for maintenance of heating
- elements 21. Lifting lug
- м

Model	A x B x H
500800	2000 x 1150 x 1800 mm
8001200	2000 x 1150 x 2000 mm
12001600	2000 x 1150 x 2400 mm

#### **Circuit diagram L000662** Jäspi FIL SPL + Akva Pro

LV (te ΚV ¢∙∢%  $\leftarrow$ XXX CONTROL (te) UNIT \_ j Ф ~¥ ~¥ (TE) \_ \_ KVA PRO HEATING CIRCUIT tэ 



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