

>> LOG COMBUSTION SYSTEMS

TECHNICAL DATA

DIMENSIONS

INSTALLATION
EXAMPLE



ZYKLOTRONIC XV



EASYTRONIC XV



NOVATRONIC XV



BRIEF DESCRIPTION

Wood gasification boiler of boiler class 5 with lower, side combustion. Stepped riddle grate, ceramic Gasification zone with secondary air supply and cyclone-type burnout zone

Underpressure controlled combustion chamber for the lowest possible emission values
Very quiet operation with speed-controlled EC fan with underpressure controlled EC fan

Cleaning springs with actuating lever outside the cladding for convenient cleaning of the boiler passes

Cleaning and stoking implement
Ash container

TECHNICAL DATA / LIMIT AREAS

Type:	Zyklotronic XV
Capacities:	20 / 30 kW
Max. boiler water temperature	95° C
Return line min:	65° C
Operating pressure:	3.0 bar
Test pressure:	6.0 bar
Fuels:	Virgin wood logs in compliance with LRV
Electrical connection:	230 VAC / 50 Hz 10 A

DIMENSIONS

in cm	Width	x Depth	x Height
Main dimensions:	85.0	92.0	151.0
Feed dimensions without cladding, doors:	75.5	84.5	151.0
Minimum room height	196.0		

FEATURES / SCOPE OF SUPPLY

Boiler control LambdaControl 3
EC flue gas fan 230V/60W
Actuator motors for primary and secondary air
Return line and flue gas temperature sensor
Lambda sensor
Ash tray
Cleaning and stoking implement

Supplied: Bare boiler body / Separately packed insulation and cladding / Flue gas fan / Boiler tableau
Installation by installation engineer

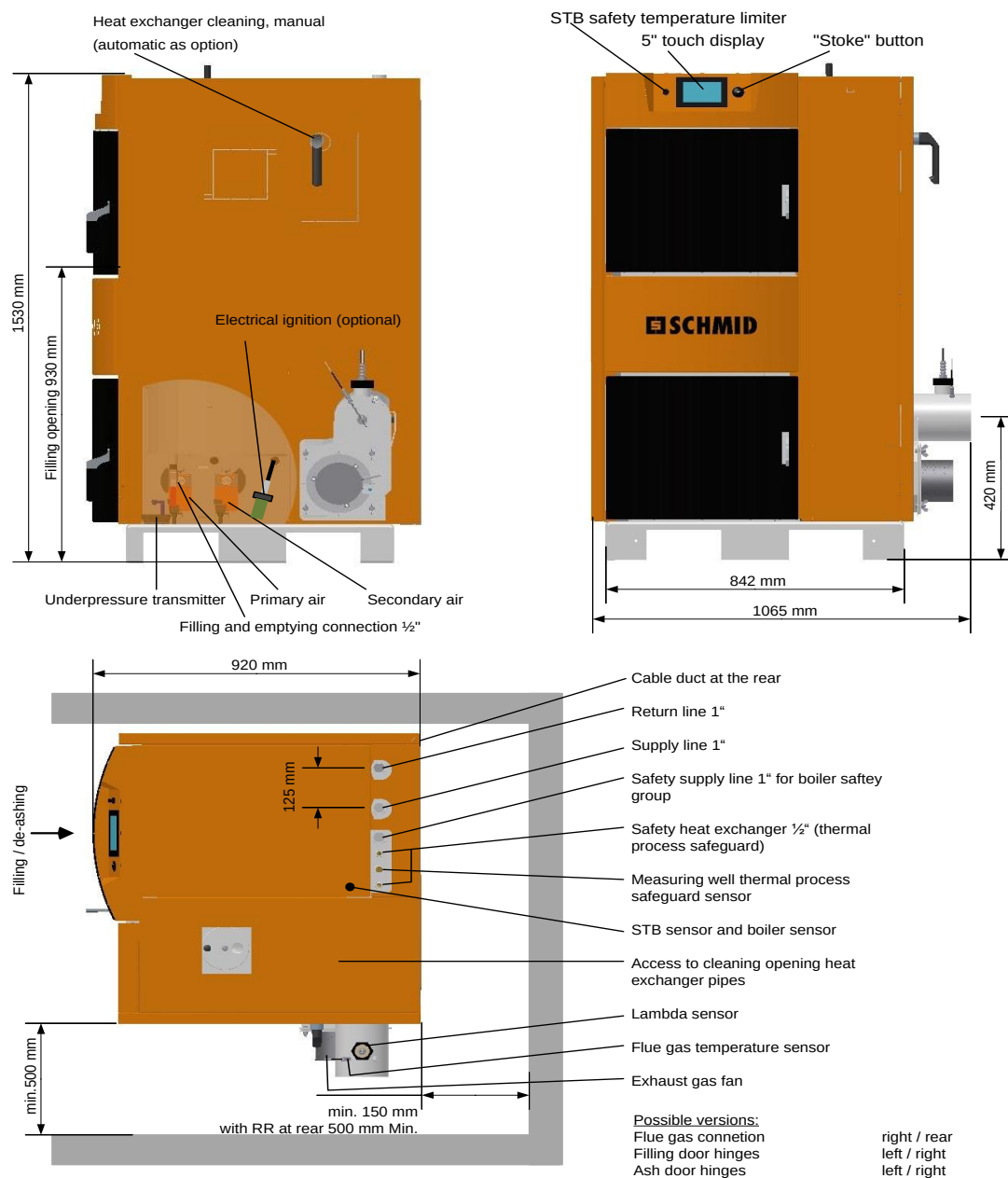
OPTIONS

Configuration of the flue gas fan - can be mounted on right or at the rear
Return temperature control group module block
Heating circuit module with 1, 2 or 3 heating circuits
Hot water controller
Automatic ignition unit
Automatic cleaning
Networking with PC, smartphone etc.

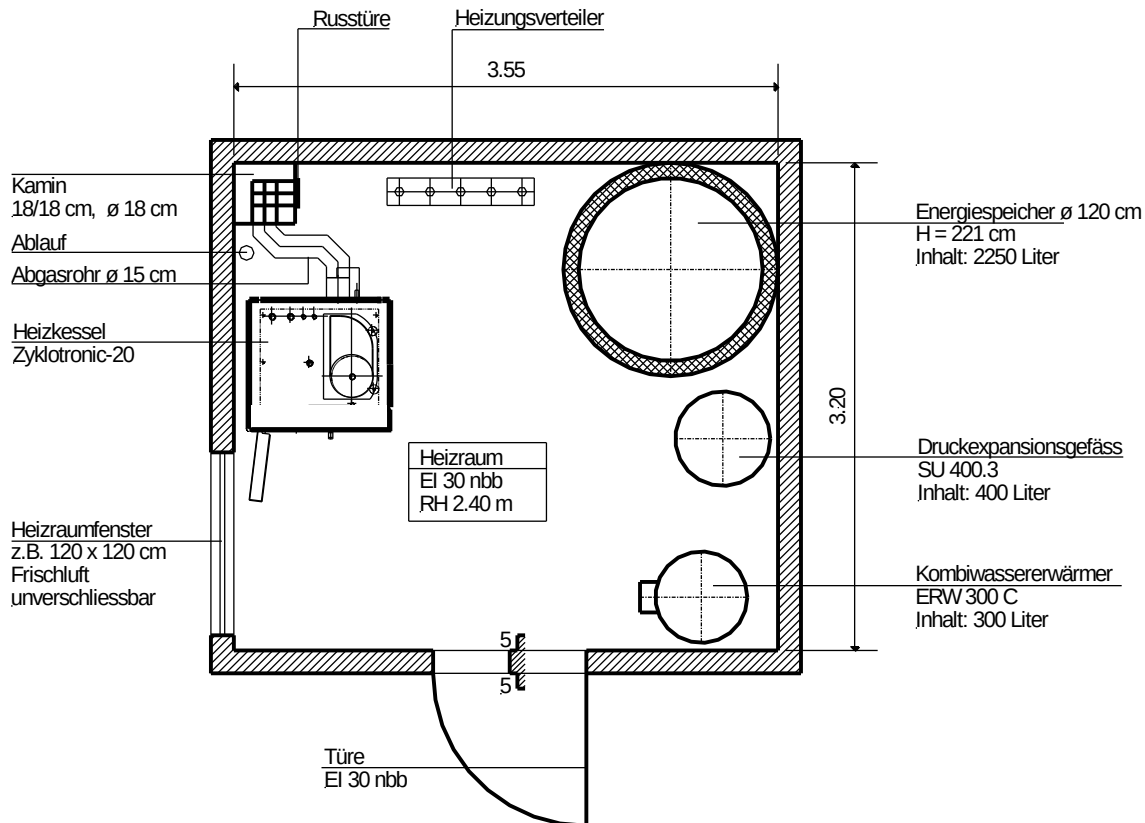
TECHNICAL DATA

Zyklotronic XV	Capacity	Wood	Filling chamber		Filling doors	Water	Weight	Test numbers	
	Full/partial load kW	Length cm	Contents dm3	Length cm	Dimensions cm clear	Contents litres	kg	VKF	Vhe
20	20 - 20	50	165	59	38 x 32	115	623	27634	0005
25	25 - 20	50	165	59	38 x 32	115	623	27634	0005
30	30 - 20	50	165	59	38 x 32	115	623	27634	0005

Zyklotronik XV			20	25	30
Nominal heat capacity		kW	20	25	30
Heat capacity range		kW	20	20-25	20-30
Combustion capacity		kW	21.3	26.6	33.3
Permissible operating overpressure		kPa / bar	300 / 3	300 / 3	300 / 3
Test pressure		kPa / bar	600 / 6	600 / 6	600 / 6
Maximum boiler temperature		°C	95	95	95
Minimum return line temperature		°C	65	65	65
Water side resistance at dt 10°		mbar	11.7	16.9	23.5
Water side resistance at dt 20°		mbar	2.6	4.1	6
Boiler water content		Litres	115	115	115
Fuel filling chamber volume		dm³	165	165	165
Fuel length (max.)		cm	50 (58)	50 (58)	50 (58)
Combustion time at nominal heat capacity					
Beech	w=20% 3.73kWh	ca. h	10.4	8.32	6.9
Fir	w=20% 4.18kWh	ca. h	7.6	6.1	5.0
Utilisable heat capacity per charge					
Beech	w=20% 3.73kWh	kWh	209	209	209
Fir	w=20% 4.18kWh	kWh	152	152	152
Heat radiation losses approx.		kW	0.24	0.3	0.34
Minimum heat consumption		kW	20	20	20
Accumulator volume in accordance with CEN standard		Litres	2184	1945	1707
Flue gas temp. at tested nominal load		°C	93.9	104.5	117.5
Flue gas temp. at lowest load		°C	93.9	93.9	93.9
Flue gas flow rate at the nominal capacity		g/s	12	14	17
Necessary conveying pressure		mbar	0.08	0.08	0.08
CO2 content		Vol-%	14.2	14.6	15
Flue gas connection diameter		mm	150	150	150
Therm. process safeguard: Flow rate		m³/h	2.12	2.12	2.12
Min. pressure		bar	2.0	2.0	2.0
Max. temperature		°C	20	20	20
Electrical connection					
Nominal voltage		V	230	230	230
Frequency		Hz	50	50	50
Nominal capacity		A	10	10	10
Nominal capacity		kW	2	2	2
Standby capacity		W	8.6	8.6	8.6
Required auxiliary electrical energy		W	33.3	37.1	41.7
Nominal capacity motor flue gas fan		W	60	60	60
Noise emission					
Sound pressure level (at distance of 0.5m)		dB(A)	40	41	42
Sound power level		dB(A)	53	54	55
Filling opening dimensions					
Width		mm	320	320	320
Height		mm	380	380	380
Boiler weight (without water)		kg	623	623	623



Zyklotronik XV type	Capacity	Filling chamber	Water content	Weight	Boiler class
30	20-30 kW	165 l	120 l	623 kg	5
Operating temperature:		70-90°C	Filling opening:	380x320 mm	
Return line temperature:		>65°C	Opening of the ash door	400x400 mm	
Operating pressure:		300 kPa / 3 bar	Ash tray	30 litres	
Test pressure:		600 kPa / 6 bar			



Zyklotronik XV 20 with:

- 1 energy accumulator
- 1 combined water heater
- 1 expansion tank
- 1 heating distributor

Installation / heating room must comply with VKF fire protection directive 01/01/2015 / 24-15de (extract)

- Combustion systems must be installed in separate heating rooms. At nominal heat capacities of up to 70 kW heating rooms must be designed with the same fire resistance as the use-related fire section formation, but at least with a fire resistance of EI 30, with a nominal heat capacity of more than 70 kW at least with a fire resistance of EI 60. Doors require fire resistance of EI 30 and with a nominal heat capacity of more than 70 kW must be hinged to open in the escape direction
- In single family houses, wood fuels and coal quantities of up to 5 m³ can be stored in rooms of any kind.
- Up to 10 m³ of wood fuels or coal can be stored in heating rooms with a fire resistance of EI 60 behind a barrier at a distance of 1 m from the combustion unit

Rule of thumb for rough calculation of the supply or vent air cross-section / VKF 01/01/2015 / 24-15de

A = Free supply or vent air cross-section in cm²
 K = Coefficient (wood 10.3)
 P = Nominal heat capacity of the combustion system in kW

$$A = K \times P$$

Example Zyklotronik XV 20:

$$10.3 \times 20 = 206 \text{ cm}^2$$

Flue cross-sections 18 x 18 cm clear or Ø = 18 cm

(Must be examined by the flue constructor)

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Manually stoked wood combustion system

Date: 21.11.2017
 Sheet no.: 3.04c
 Replaces sheet: 3.04b
 Register: 3

Size	Capacity	Fuel
Zyklotronic XV 30/20	20kW	Wood logs ½ m
Zyklotronic XV 30/25	25kW	Wood logs ½ m
Zyklotronic XV 30/30	30kW	Wood logs ½ m



- Boiler class 5 / standard EN 303-5: 2012
- Quality seal "Wood Energy Switzerland" (Holzenergie Schweiz)
- Very simple 5" real glass touch control with hot water controller
- Extension module for 1, 2 and 3 heating circuits, freely combinable
- Access possible from smartphone, tablet and PC
- Speed-controlled EC fan with underpressure controlled combustion chamber
- Convenient, external lever for heat exchanger cleaning
- Optional, automatic heat exchanger cleaning and ignition
- Conical combustion chamber for optimum fuel infeed
- Easy operation and self-adjusting doors permit simple ignition
- Carbonisation gas extraction when the door is open
- Highly heat-resistant cast step grate for optimum maintenance of the firebed
- Low, side burnout with special turbulence nozzle with secondary air injection
- Cyclone-type burnout chamber for residue-free combustion
- Simple grate de-ashing with slide grate
- Large, integrated ash tray (sufficient for approx. 15 combustion operations)
- Low flue connection Configuration freely selectable on right or at rear
- Short assembly time / low installation costs
- Door can be hinged on left or right



BRIEF DESCRIPTION

Wood gasification boiler of boiler class 5 with lower combustion system
Two-part nozzle, used conically and without clamping
Full steel panel cladding in the combustion chamber
Gasification zone with secondary air supply and water-cooled burnout zone

Underpressure controlled combustion chamber for the lowest possible emission values
Very quiet operation with speed-controlled EC fan with underpressure controlled EC fan

Cleaning springs with actuating level outside the cladding for convenient cleaning of the boiler passes

Cleaning and stoking implement
Ash container integrated into boiler base

TECHNICAL DATA / LIMIT AREAS

Type:	Easytronic
Capacities:	15/20/25/30 kW
Max. boiler water temperature	95° C
Return line min:	65° C
Operating pressure:	3.0 bar
Test pressure:	6.0 bar
Fuels:	Virgin wood logs in compliance with LRV regulations
Electrical connection:	230 VAC / 50 Hz 10 A

DIMENSIONS

in cm	Width	x Depth	x Height
Main dimensions:	65.5	108	157
Feed dimensions			
Without cladding:	65.5	123.5	157

Boiler can be transported without pallet with a lowlift truck

FEATURES / SCOPE OF SUPPLY

Boiler control LambdaControl 3
EC flue gas fan 230V/60W
Actuator motors for primary and secondary air
Return line and flue gas temperature sensor
Lambda sensor
Ash tray
Cleaning and stoking implement

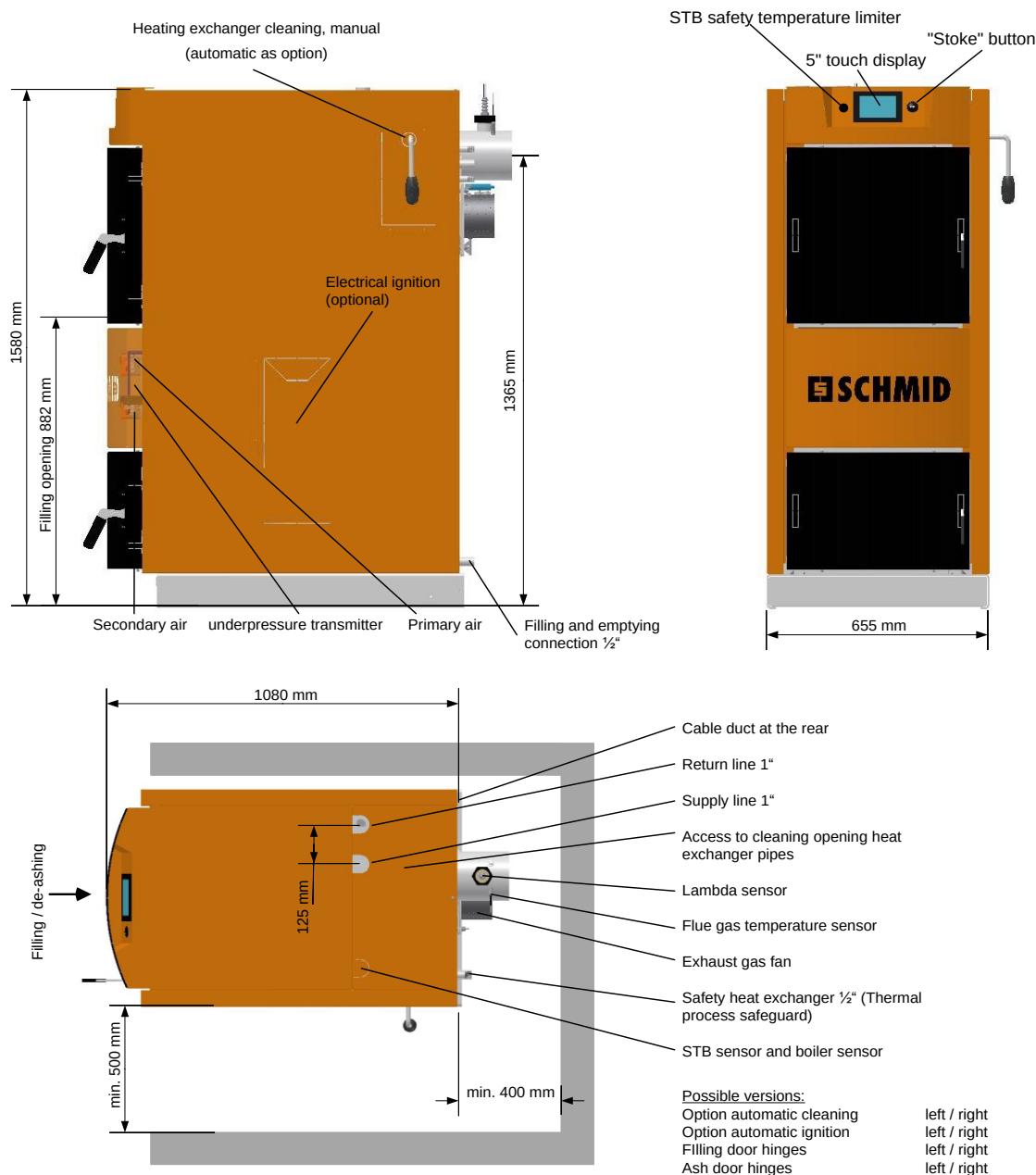
OPTIONS

Return temperature control group module block
Heating circuit module with 1, 2 or 3 heating circuits
Automatic ignition unit
Automatic cleaning
Networking with PC, smartphone etc.

Supplied: Bare boiler body / Separately packed insulation and cladding / Flue gas fan / Boiler tableau
Assembly at the works possible for additional fee

Easytronic	Capacity	Wood	Filling chamber	Filling opening	Water	Weight	Test numbers
Type	Full/partial load kW	Length cm	Contents Litres	Length cm	Height/width cm	Contents litres	kg VKF Vhe
15	15 / 15	50	155	58	44 / 41	154	650 27664 0005
20	20 / 15	50	155	58	44 / 41	154	650 27664 0005
25	25 / 15	50	155	58	44 / 41	154	650 27664 0005
30	30 / 15	50	155	58	44 / 41	154	650 27664 0005

Easytronic XV			15	20	25	30
Nominal heat capacity	kW		15	20	25	30
Heat capacity range	kW		15	15-20	15-25	15-30
Combustion capacity	kW		17	21.8	26.8	33.3
Permissible operating overpressure	kPa / bar		300 / 3	300 / 3	300 / 3	300 / 3
Test pressure	kPa / bar		600 / 6	600 / 6	600 / 6	600 / 6
Maximum boiler temperature	°C		95	95	95	95
Minimum return line temperature	°C		65	65	65	65
Water side resistance at dt 10°	mbar		6	11	16	22
Water side resistance at dt 20°	mbar		3	4	5	6
Boiler water content	Litres		154	154	154	154
Fuel filling chamber volume	dm ³		155	155	155	155
Fuel length (max.)	cm		50 (58)	50 (58)	50 (58)	50 (58)
Combustion time at nominal heat capacity						
Beech	w=20% 3.73kWh	ca. h	12-15	9.5-15	7.5-15	6.5-15
Fir	w=20% 4.18kWh	ca. h	9.4	7.0	5.6	4.7
Utilisable heat capacity per charge						
Beech	w=20% 3.73kWh	kWh	193	193	193	193
Fir	w=20% 4.18kWh	kWh	141	141	141	141
Heat radiation losses approx.	kW		0.36	0.42	0.45	0.42
Minimum heat consumption	kW		15	15	15	15
Accumulator volume in accordance with CEN standard	Litres		2016	1728	1443	1152
Flue gas temp. at tested nominal load	°C		88	103.4	119.6	140.3
Flue gas temp. at lowest load	°C		88	88	88	88
Flue gas flow rate at the nominal capacity	g/s		9.6	12.1	14.7	18.1
Necessary conveying pressure	mbar		0.08	0.08	0.08	0.08
CO ₂ content	Vol-%		13.1	13.3	13.5	13.8
Flue gas connection diameter	mm		150	150	150	150
Therm. process safeguard: Flow rate	m ³ /h		2.1	2.1	2.1	2.1
Min. pressure	bar		2.0	2.0	2.0	2.0
Max. temperature	°C		20	20	20	20
Electrical connection						
Nominal voltage	V		230	230	230	230
Frequency	Hz		50	50	50	50
Nominal capacity	A		10	10	10	10
Nominal capacity	kW		2	2	2	2
Standby capacity	W		8.6	8.6	8.6	8.6
Required auxiliary electrical energy	W		30.5	33.9	37.5	42.1
Nominal capacity motor flue gas fan	W		60	60	60	60
Noise emission						
Sound pressure level (at distance of 0.5m)	dB(A)		45	45	45	51
Sound power level	dB(A)		58	57	57	63
Filling opening dimensions						
Width	mm		410	410	410	410
Height	mm		440	440	440	440
Boiler weight (without water)	kg		650	650	650	650



Easytronic XV Type	Capacity	Filling chamber	Water content	Weight	Boiler class
30	15-30 kW	155 l	154 l	650 kg	5
Operating temperature:		70-90°C	Filling opening:		440x410 mm
Return line temperature:		>65°C	Opening of the ash door		306x410 mm
Operating pressure:		300 kPa / 3 bar	Ash tray		15 litres
Test pressure:		600 kPa / 6 bar			

Size	Capacity	Fuel
Easytronic XV 30/15	15kW	Wood logs ½ m
Easytronic XV 30/20	20kW	Wood logs ½ m
Easytronic XV 30/25	25kW	Wood logs ½ m
Easytronic XV 30/30	30kW	Wood logs ½ m



- Boiler class 5 / standard EN 303-5: 2012
- Quality seal "Wood Energy Switzerland" (Holzenergie Schweiz)
- Very simple 5" real glass touch control with hot water controller
- Extension module for 1, 2 and 3 heating circuits, freely combinable
- Access possible from smartphone, tablet and PC
- Speed-controlled EC fan with underpressure controlled combustion chamber
- Convenient, external lever for heat exchanger cleaning
- Optional, automatic heat exchanger cleaning and ignition
- Robust and very slimline design
- Water-cooled substructure - for a longer service life
- Simple and easy filling due to the very large filling door
- Easy operation and self-adjusting doors permit simple ignition
- Large filling room
- Carbonisation gas extraction when the door is open
- Wide filling channel for best fuel infeed
- Boiler body can be moved directly without a pallet with a lowlift truck
- Ash tray integrated into boiler base
- Short assembly time / low installation costs
- Door can be hinged on left or right



BRIEF DESCRIPTION

Wood gasification boiler with lower side burnout.
Slide grate, ceramic gasification zone with
secondary air injection in the flame channel and
channel-type burnout zone.

Underpressure controlled combustion chamber
Cleaning springs with actuating lever
Very quiet operation with speed-controlled EC fan
with underpressure controlled EC fan

Cleaning springs with actuating lever
outside the cladding for convenient
cleaning of the boiler passes

Cleaning and stoking implement with ash tray

TECHNICAL DATA / LIMIT AREAS

Type:	Novatronic XV
Capacities:	30 - 50 kW
Max. boiler water temperature	95° C
Return line min:	65° C
Operating pressure:	3.0 bar
Test pressure:	6.0 bar
Fuels:	Virgin Wood logs in compliance with Swiss LRV
Electrical connection:	230VAC/ 50-60Hz 10 A

DIMENSIONS

in mm	Width	x Depth	x Height
Main dimensions:	875	1253	1250
Feed dimensions			
Without cladding:	780	1187	1250

FEATURES / SCOPE OF SUPPLY

Boiler control LambdaControl 3
EC flue gas fan 230V/60W
Actuator motors for primary and secondary air
Return line and flue gas temperature sensor
Lambda sensor
Ash tray
Cleaning and stoking implement
Supplied: Fully assembled at the works

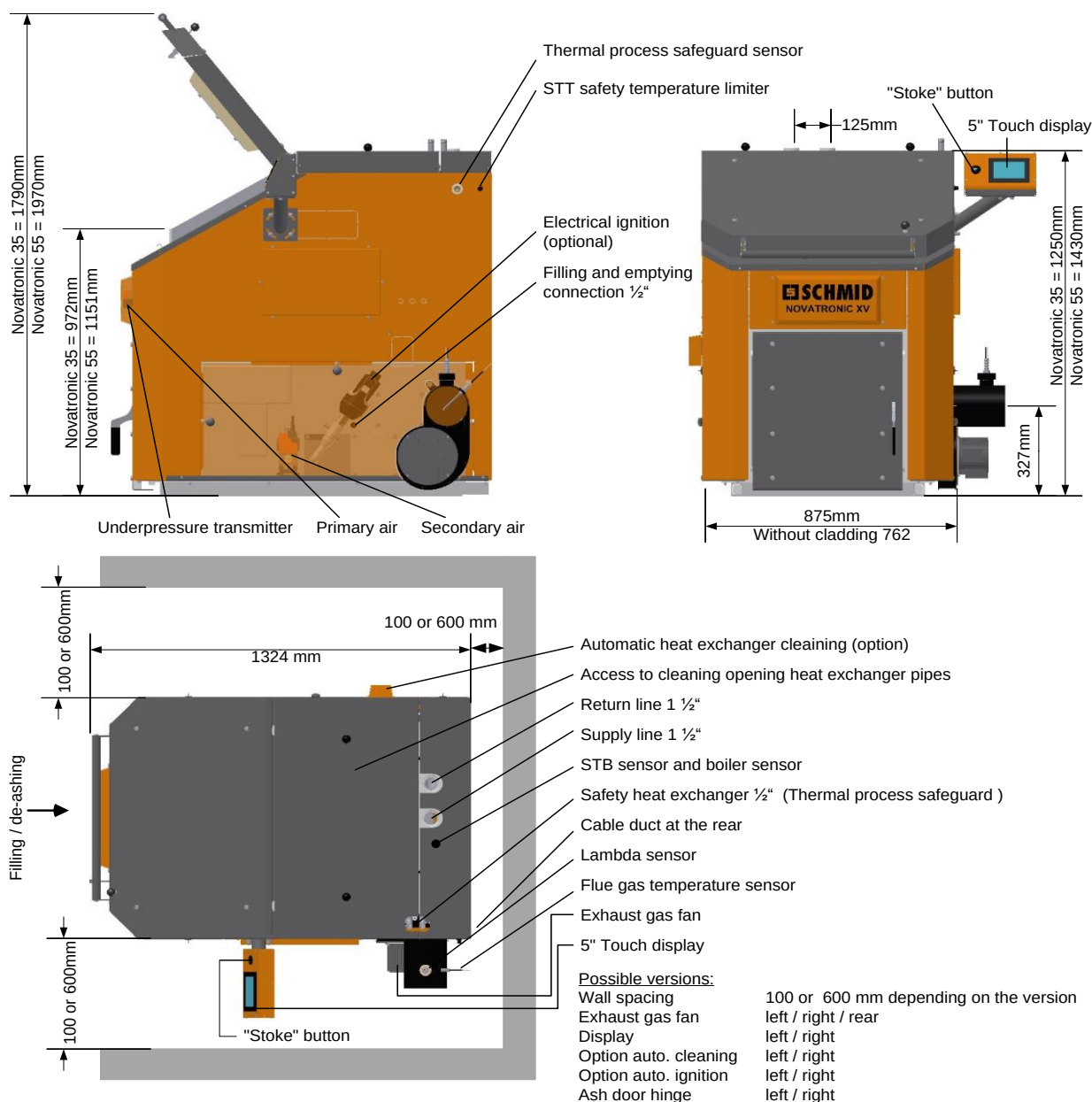
OPTIONS

Flue gas fan can be mounted on right, left or at the rear
Heating circuit module with 1, 2 or 3 heating circuits
Hot water controller
Automatic ignition unit
Automatic cleaning
Networking with PC, smartphone etc.

TECHNICAL DATA

Novatronic	Capacity	Wood	Filling chamber		Filling doors	Water	Weight	Test numbers	
	TL / VL	Length	Contents	Length	Dimensions	Contents			
Type	kW	cm	l	cm	cm	l	kg	VKF	Vhe
XV 35/30	26 / 30	50	163	56	38 x 59	190	930	27332	005
XV 35/35	26 / 35	50	163	56	38 x 59	190	930	27332	005
XV 35/40	26 / 40	50	163	56	38 x 59	190	930	27332	005
XV 35/49	26 / 49	50	163	56	38 x 59	190	930	27332	005
XV 35/50	26 / 50	50	163	56	38 x 59	190	930	27332	005

Novatronic XV			35/26	35/30	35/35	35/40	35/45	35/49	35/50
Nominal heat capacity	kW		26	30	35	40	45	49	50
Heat capacity range	kW		27.2	27.2-30	27.2-35	27.2-40	27.2-45	27.2-49	27.2-50
Combustion capacity	kW		29.2	32.4	38	43.8	49.7	54.4	54.4
Permissible operating overpressure	kPa / bar		300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3
Test pressure	kPa / bar		600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6
Maximum boiler temperature	°C		95	95	95	95	95	95	95
Minimum return line temperature	°C		65	65	65	65	65	65	65
Water side resistance at dt 10K	mbar		11.9	16.8	23.5	30.2	36.8	42.2	43.5
Water side resistance at dt 20K	mbar		3.1	4.6	6.4	8.2	10.1	11.5	11.5
Boiler water content	Litres		190	190	190	190	190	190	190
Fuel filling chamber volume	dm³		163	163	163	163	163	163	163
Fuel length (max.)	cm		50 (56)	50 (56)	50 (56)	50 (56)	50 (56)	50 (56)	50 (56)
Combustion time at nominal heat capacity									
Beech	w=20% 3.73kWh	h	10.1	8.7	7.5	6.5	5.8	5.3	5.2
Fir	w=20% 4.18kWh	h	7.3	6.3	5.4	4.7	4.2	3.9	3.8
Utilisable heat capacity per charge									
Beech	w=20% 3.73kWh	kWh	262	262	262	262	262	262	262
Fir	w=20% 4.18kWh	kWh	190	190	190	190	190	190	190
Heat radiation losses approx.	%		2.0	1.9	1.9	1.8	1.7	1.6	1.7
Minimum heat consumption	kW		27.2	27.2	27.2	27.2	27.2	27.2	27.2
Accumulator volume in accordance with	Litres		2757	2560	2347	2100	1882	1693	1650
Flue gas temp. at tested nominal load	°C		111.1	119.5	134.5	149.4	164.4	176.4	176.4
Flue gas temp. at lowest load	°C		111.1	111.1	111.1	111.1	111.1	111.1	111.1
Flue gas flow rate at the nominal capac	g/s		16.0	17.5	20.3	23.0	25.8	28.0	28.0
Necessary conveying pressure	mbar		0.08	0.08	0.08	0.08	0.08	0.08	0.08
CO ₂ content	Vol-%		14.6	14.7	14.9	15.1	15.3	15.5	15.5
Flue gas connection diameter	mm		150	150	150	150	150	150	150
Therm. process safeguard: Flow rate	m³/h		1.5	1.5	1.5	1.5	1.5	1.5	1.5
Min. pressure	bar		2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max. temperature	°C		20	20	20	20	20	20	20
Electrical connection									
Nominal voltage	V		230	230	230	230	230	230	230
Frequency	Hz		50	50	50	50	50	50	50
Nominal capacity	A		10	10	10	10	10	10	10
Nominal capacity	kW		2	2	2	2	2	2	2
Standby capacity	W		8.6	8.6	8.6	8.6	8.6	8.6	8.6
Required auxiliary electrical energy	W		58.3	58.3	58.3	58.3	58.3	58.3	58.3
Nominal capacity motor flue gas fan	W		60	60	60	60	60	60	60
Noise emission									
Sound pressure level (at distance of 0.5	dB(A)		47	47	47	47	47	47	47
Sound power level	dB(A)		60	60	60	60	60	60	60
Filling opening dimensions									
Width	mm		590	590	590	590	590	590	590
Height	mm		380	380	380	380	380	380	380
Boiler weight (without water)	kg		930	930	930	930	930	930	930



Novatronic XV Type	Capacity	Filling chamber	Water content	Weight without water	Boiler class
35	26-52 kW	163 l	190 l	930 kg	5
55	27.5-55 kW	203 l	245 l	1045 kg	5

Operating temperature:	95°C max.	Filling opening:	380x590 mm
Return line temperature:	65°C min.	Opening of the ash door	180x400 mm
Operating pressure:	3 bar	Opening of the stoking door	180x400 mm
Test pressure:	6 bar		



BRIEF DESCRIPTION

Wood gasification boiler with lower side burnout. Slide grate, ceramic gasification zone with secondary air injection in the flame channel and channel-type burnout zone.

Underpressure controlled combustion chamber for the lowest possible emission values
Very quiet operation with speed-controlled EC fan with underpressure controlled EC fan

Cleaning springs with actuating lever outside the cladding for convenient cleaning of the boiler passes

Cleaning and stoking implement with ash tray

TECHNICAL DATA

Type:	Novatronic XV
Capacities:	35 - 55 kW
Max. boiler water temperature	95° C
Return line min:	65° C
Operating pressure:	3.0 bar
Test pressure:	6.0 bar
Fuels:	Virgin Wood logs in compliance with Swiss LRV
Electrical connection:	230VAC/ 50-60Hz 10 A

DIMENSIONS

in mm	Width	x Depth	x Height
Main dimensions:	875	1253	1430
Feed dimensions			
Without cladding:	780	1187	1430

FEATURES / SCOPE OF SUPPLY

Boiler control LambdaControl 3
EC flue gas fan 230V/60W
Actuator motors for primary and secondary air
Return line and flue gas temperature sensor
Lambda sensor
Ash tray
Cleaning and stoking implement
Supplied: Fully assembled at the works

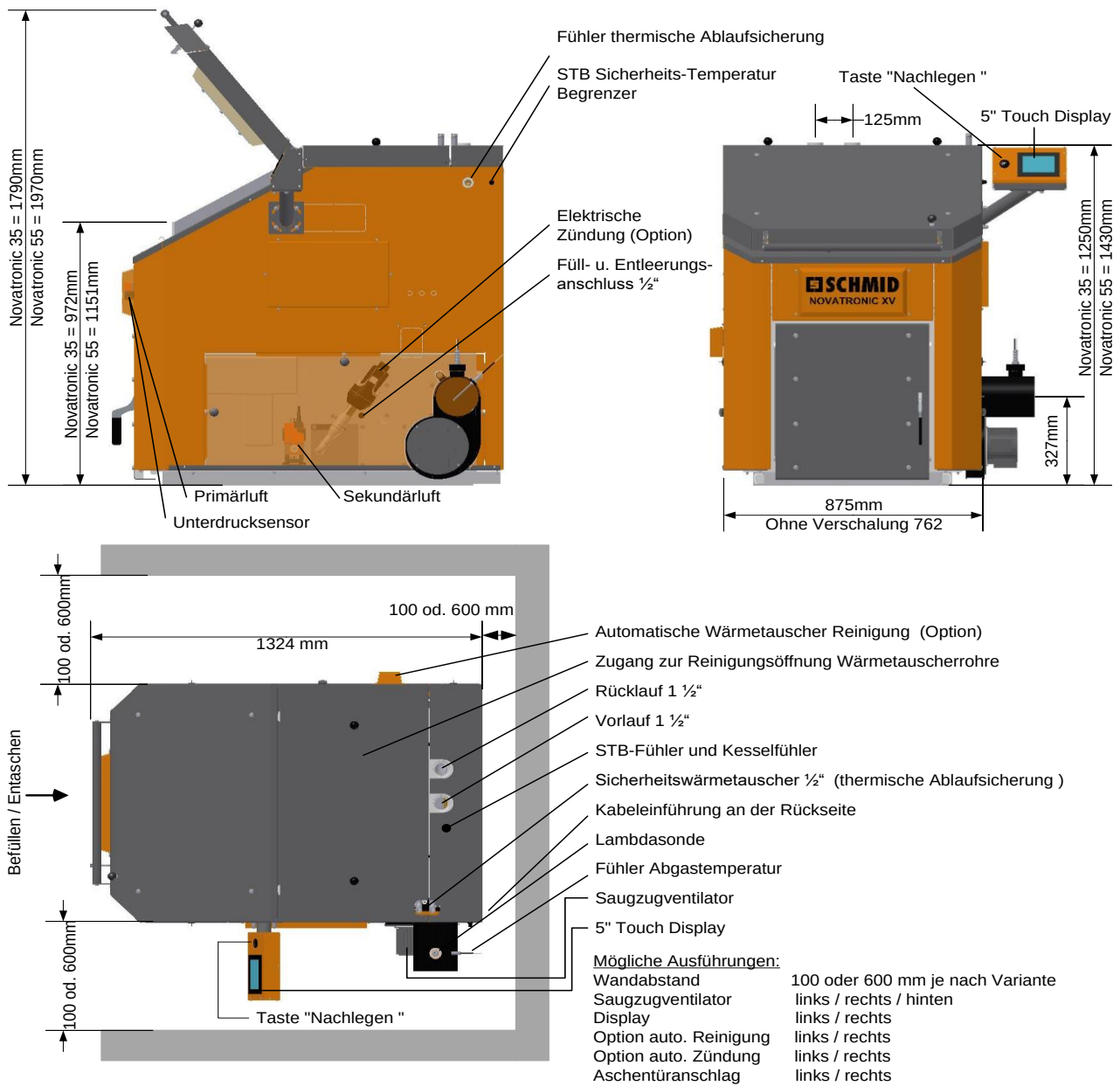
OPTIONS

Flue gas fan can be mounted on right, left or at the rear
Heating circuit module with 1, 2 or 3 heating circuits
Hot water controller
Automatic ignition unit
Automatic cleaning
Networking with PC, smartphone etc.

TECHNICAL DATA

Novatronic	Capacity	Wood	Filling chamber		Filling doors	Water	Weight	Test numbers	
	TL / VL	Length	Contents	Length	Dimensions	Contents			
Type	kW	cm	l	cm	cm	l	kg	VKF	Vhe
XV 55/35	27.5 / 35	50	203	56	38 x 59	245	1045	27332	005
XV 55/45	27.5 / 45	50	203	56	38 x 59	245	1045	27332	005
XV 55/49	27.5 / 49	50	203	56	38 x 59	245	1045	27332	005
XV 55/55	27.5 / 55	50	203	56	38 x 59	245	1045	27332	005

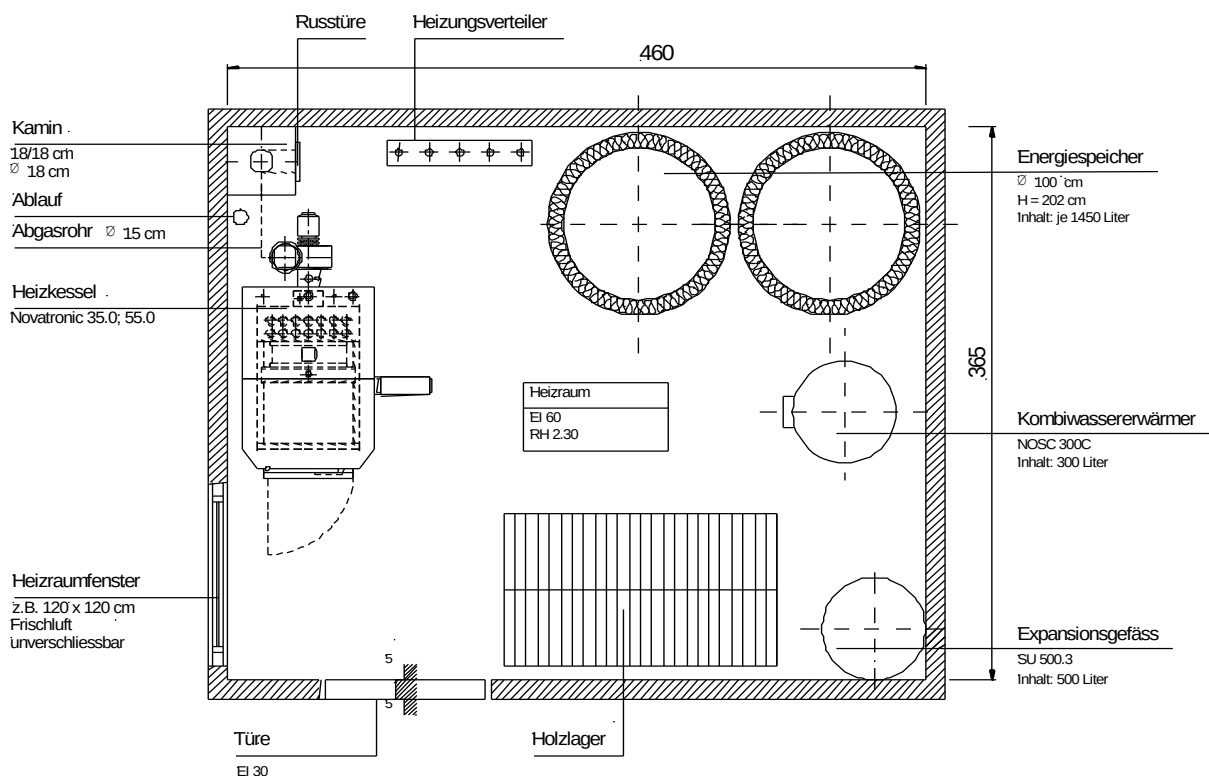
Novatronix XV			55/27,5	55/30	55/35	55/40	55/45	55/49	55/50	55/55
Nominal heat capacity	kW		27.5	30	35	40	45	49	50	55
Heat capacity range	kW		29.4	29,4-30	29,4-35	29,4-40	29,4-45	29,4-49	29,4-50	29,4-55
Combustion capacity	kW		31.3	32.0	37.4	42.8	48.3	52.8	53.9	56.9
Permissible operating overpressure	kPa / bar		300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3
Test pressure	kPa / bar		600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6
Maximum boiler temperature	°C		95	95	95	95	95	95	95	95
Minimum return line temperature	°C		65	65	65	65	65	65	65	65
Water side resistance at dt 10K	mbar		8.3	10.6	15.1	19.6	24.1	27.7	28.6	33.1
Water side resistance at dt 20K	mbar		1.3	1.9	3.2	4.5	5.8	6.8	7.0	8.3
Boiler water content	Litres		245	245	245	245	245	245	245	245
Fuel filling chamber volume	dm³		203	203	203	203	203	203	203	203
Fuel length (max.)	cm		50 (56)	50 (56)	50 (56)	50 (56)	50 (56)	50 (56)	50 (56)	50 (56)
Combustion time at nominal heat capacity										
Beech	w=20% 3.73kWh	h	11.8	10.8	9.3	8.1	7.2	6.6	6.5	5.9
Fir	w=20% 4.18kWh	h	8.6	7.9	6.7	5.9	5.2	4.8	4.7	4.3
Utilisable heat capacity per charge										
Beech	w=20% 3.73kWh	kWh	326	326	326	326	326	326	326	326
Fir	w=20% 4.18kWh	kWh	237	237	237	237	237	237	237	237
Heat radiation losses approx.	%		2.5	2.5	2.3	2.1	2.0	1.8	1.8	1.7
Minimum heat consumption	kW		29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
Accumulator volume in accordance with	Litres		3400	3269	3018	2739	2474	2258	2215	1947
Flue gas temp. at tested nominal load	°C		85.7	86.7	95.5	104.2	112.9	119.9	121.6	126.3
Flue gas temp. at lowest load	°C		85.7	85.7	85.7	85.7	85.7	85.7	85.7	85.7
Flue gas flow rate at the nominal capac	g/s		17	17.3	19.9	22.5	25	27.1	27.6	29
Necessary conveying pressure	mbar		0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
CO ₂ content	Vol-%		14.4	14.4	14.6	14.7	14.9	15	15	15.1
Flue gas connection diameter	mm		150	150	150	150	150	150	150	150
Therm. process safeguard: Flow rate	m³/h		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Min. pressure	bar		2	2	2	2	2	2	2	2
Max. temperature	°C		20	20	20	20	20	20	20	20
Electrical connection										
Nominal voltage	V		230	230	230	230	230	230	230	230
Frequency	Hz		50	50	50	50	50	50	50	50
Nominal capacity	A		10	10	10	10	10	10	10	10
Nominal capacity	kW		2	2	2	2	2	2	2	2
Standby capacity	W		8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Required auxiliary electrical energy	W		53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
Nominal capacity motor flue gas fan	W		60	60	60	60	60	60	60	60
Noise emission										
Sound pressure level (at distance of 0.5	dB(A)		47	47	47	47	47	47	47	47
Sound power level	dB(A)		60	60	60	60	60	60	60	60
Filling opening dimensions										
Width	mm		590	590	590	590	590	590	590	590
Height	mm		380	380	380	380	380	380	380	380
Boiler weight (without water)	kg		1045	1045	1045	1045	1045	1045	1045	1045



Novatronic XV Typ	Leistungs-bereich	Füllraum	Wasser-Inhalt	Gewicht ohne Wasser	Kessel-Klasse
35	26-52 kW	163 l	190 l	930 kg	5
55	27,5-55 kW	203 l	245 l	1045 kg	5

Betriebstemperatur: max. 95°C
 Rücklaufftemperatur: min. 65°C
 Betriebsdruck: 3 bar
 Prüfdruck: 6 bar

Füllöffnung: 380x590 mm
 Öffnung Aschentüre 180x400 mm
 Öffnung Schürtüre 180x400 mm



- Novatronic XV 35/40 with: 2 energy accumulators
- 1 combined water heater
- 1 expansion tank
- 1 heating distributor

Installation / heating room must comply with VKF fire protection directive 01/01/2015 / 24-15de (extract)

- Combustion systems must be installed in separate heating rooms. At nominal heat capacities of up to 70 kW heating rooms must be designed with the same fire resistance as the use-related fire section formation, but at least with a fire resistance of EI 30, with a nominal heat capacity of more than 70 kW at least with a fire resistance of EI 60. Doors require fire resistance of EI 30 and with a nominal heat capacity of more than 70 kW must be hinged to open in the escape direction
- In single family houses, wood fuels and coal quantities of up to 5 m³ can be stored in rooms of any kind.
- Up to 10 m³ of wood fuels or coal can be stored in heating rooms with a fire resistance of EI 60 behind a barrier at a distance of 1 m from the combustion unit

Rule of thumb for rough calculation of the supply or vent air cross-section / VKF 01/01/2015 / 24-15de

A = Free supply or vent air cross-section in cm²
 K = Coefficient (wood 10.3)
 P = Nominal heat capacity of the combustion system in kW

$$A = K \times P$$

Example Novatronic XV 35/40:

$$10.3 \times 40 = 412 \text{ cm}^2$$

Flue cross-sections 18 x 18 cm clear or Ø 18 cm

(Must be examined by the flue constructor)

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Manually stoked wood combustion system

Date: 21.11.2017
 Sheet no.: 3.12e
 Replaces sheet: 3.12d
 Register: 3



BRIEF DESCRIPTION

Wood gasification boiler with lower side burnout. Slide grate, ceramic gasification zone with secondary air injection in the flame channel and channel-type burnout zone.

Underpressure controlled combustion chamber for the lowest possible emission values
Very quiet operation with speed-controlled EC fan with underpressure controlled EC fan

Cleaning springs with actuating lever outside the cladding for convenient cleaning of the boiler passes

Cleaning and stoking implement with ash tray

TECHNICAL DATA

Type:	Novatronic XV
Capacities:	49 - 80 kW
Max. boiler water temperature	95° C
Return line min:	65° C
Operating pressure:	3.0 bar
Test pressure:	6.0 bar
Fuels:	Virgin Wood logs in compliance with Swiss LRV
Electrical connection:	230VAC/ 50-60Hz 10 A

DIMENSIONS

in mm	Width	x Depth	x Height
Main dimensions:	1405	1116	1345
Feed dimensions			
Without cladding:	1417	1038	1345

FEATURES / SCOPE OF SUPPLY

Boiler control LambdaControl 3
EC flue gas fan 230V/60W
Actuator motors for primary and secondary air
Return line and flue gas temperature sensor
Lambda sensor
Ash tray
Cleaning and stoking implement
Supplied: Fully assembled at the works

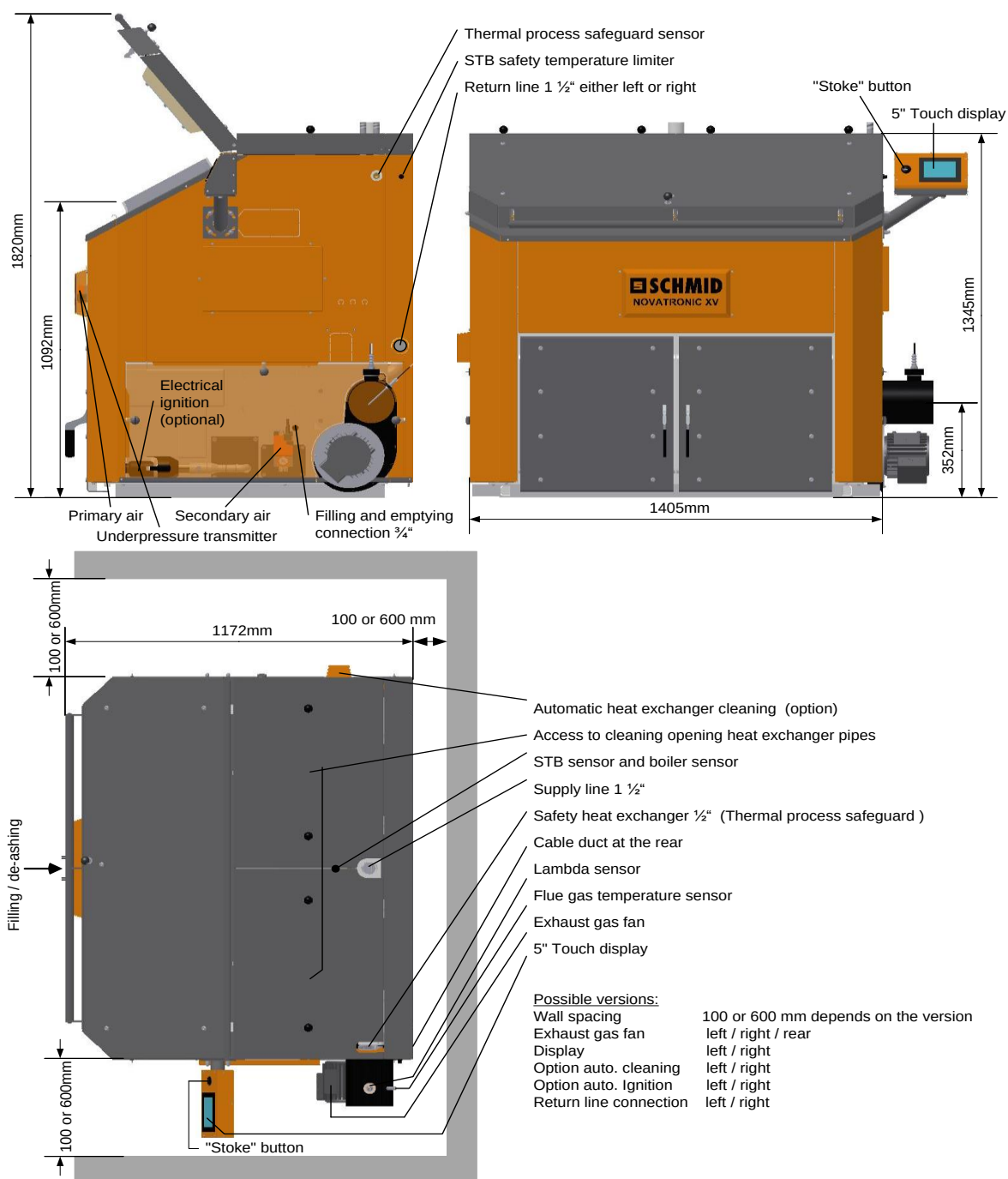
OPTIONS

Flue gas fan can be mounted on right, left or at the rear
Heating circuit module with 1, 2 or 3 heating circuits
Hot water controller
Automatic ignition unit
Automatic cleaning
Networking with PC, smartphone etc.

TECHNICAL DATA

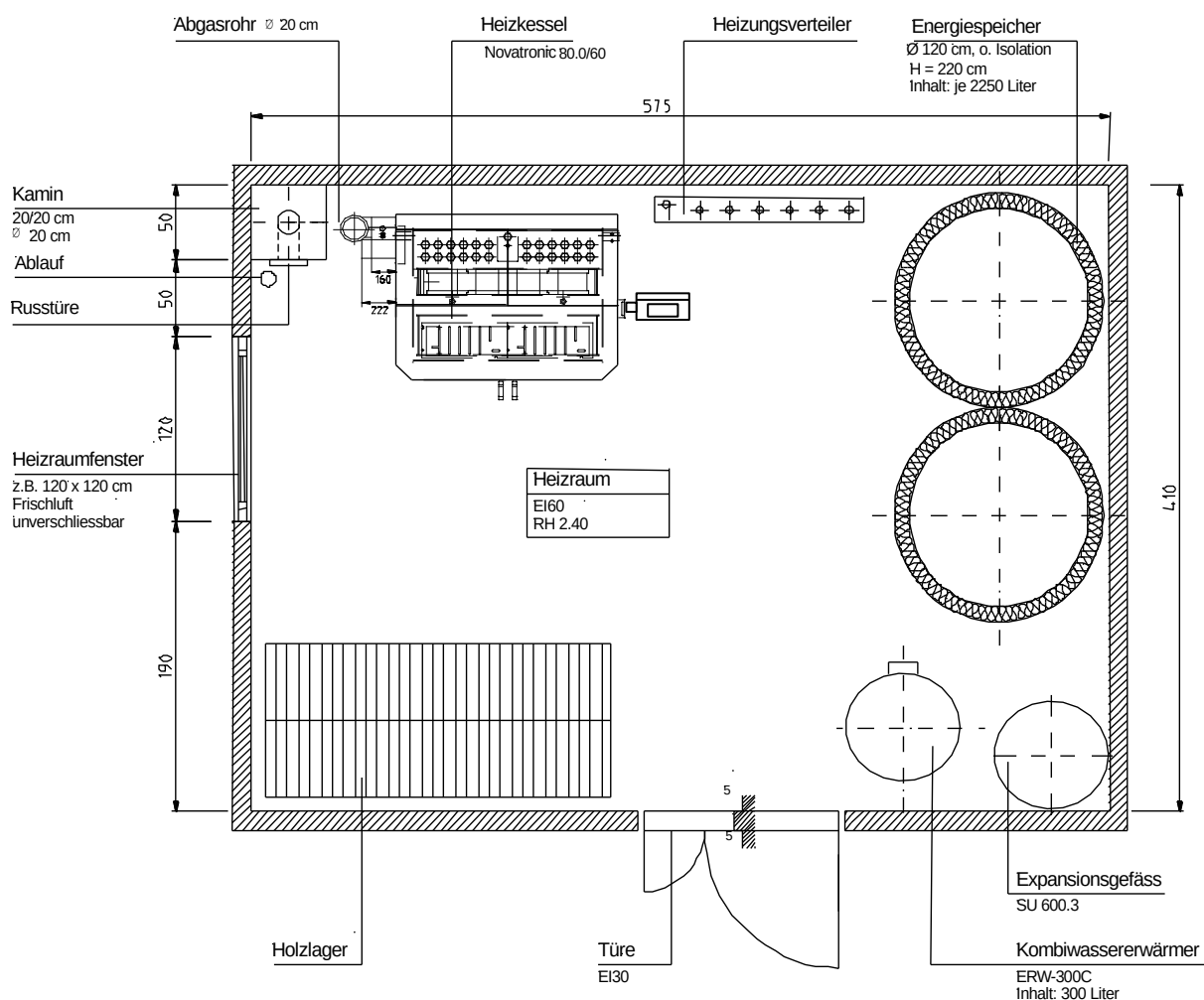
Novatronic	Capacity	Wood	Filling char	Filling char	Filling doors	Water	Weight	Test numbers	
Type	TL / VL kW	Length cm	Contents dm3	Length cm	Dimensions cm	Contents litres	kg	VKF	Vhe
XV 80/49	49 / 49	100	319	109	32 x 112	240	1480	27332	005
XV 80/50	49 / 50	100	319	109	32 x 112	240	1480	27332	005
XV 80/60	49 / 60	100	319	109	32 x 112	240	1480	27332	005
XV 80/70	49 / 70	100	319	109	32 x 112	240	1480	27332	005
XV 80/80	49 / 80	100	319	109	32 x 112	240	1480	27332	005

Novatronic XV			80/49	80/50	80/55	80/60	80/63	80/65	80/70	80/75	80/80
Nominal heat capacity	kW		49	50	55	60	63	65	70	75	80
Heat capacity range	kW		52.8	52,8-50	52.855	52,8-60	52,8-63	52,8-65	52,8-70	52,8-75	52,8-80
Combustion capacity	kW		57.5	57.5	59.9	65.6	68.9	71.2	76.9	82.6	86.3
Permissible operating overpressure	kPa / bar		300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3	300 / 3
Test pressure	kPa / bar		600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600 / 6	600/6
Maximum boiler temperature	°C		95	95	95	95	95	95	95	95	95
Minimum return line temperature	°C		65	65	65	65	65	65	65	65	65
Water side resistance at dt 10K	mbar		30.2	30.2	34.1	43.1	48.4	52	60.9	69.9	75.4
Water side resistance at dt 20K	mbar		7.8	7.8	8.8	11.2	12.6	13.5	15.9	18.2	19.7
Boiler water content	Litres		240	240	240	240	240	240	240	240	240
Fuel filling chamber volume	dm ³		319	319	319	319	319	319	319	319	319
Fuel length (max.)	cm		100(109)	100(109)	100(109)	100(109)	100(109)	100(109)	100(109)	100(109)	100(109)
Combustion time at nominal heat capacity											
Beech	w=20% 3.73kWh	h	10.4	10.2	9.3	8.5	8.1	7.9	7.3	6.8	6.4
Fir	w=20% 4.18kWh	h	7.6	7.5	6.8	6.2	5.9	5.7	5.3	5.0	4.6
Utilisable heat capacity per charge											
Beech	w=20% 3.73kWh	kWh	513	513	513	513	513	513	513	513	513
Fir	w=20% 4.18kWh	kWh	375	375	375	375	375	375	375	375	375
Heat radiation losses approx.	%		2.4	2.4	2.3	2.2	2.1	2	1.9	1.7	1.6
Minimum heat consumption	kW		52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
Accumulator volume in accordance with	Litres		5350	5308	5088	4839	4738	4637	4380	4137	3918
Flue gas temp. at tested nominal load	°C		128.3	128.3	131	137.4	141.3	143.9	150.3	156.8	161
Flue gas temp. at lowest load	°C		128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3	128.3
Flue gas flow rate at the nominal capac	g/s		30	30	31.3	34.5	36.4	37.6	40.8	44	46
Necessary conveying pressure	mbar		0.08	0.08	0.08	0.08		0.08	0.08	0.08	0.08
CO ₂ content	Vol-%		14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
Flue gas connection diameter	mm		160	160	160	160	160	160	160	160	160
Therm. process safeguard: Flow rate	m ³ /h		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Min. pressure	bar		2	2	2	2	2	2	2	2	2
Max. temperature	°C		20	20	20	20	20	20	20	20	20
Electrical connection											
Nominal voltage	V		230	230	230	230	230	230	230	230	230
Frequency	Hz		50	50	50	50	50	50	50	50	50
Nominal capacity	A		10	10	10	10	10	10	10	10	10
Nominal capacity	kW		2	2	2	2	2	2	2	2	2
Standby capacity	W		8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
Required auxiliary electrical energy	W		113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4
Nominal capacity motor flue gas fan	W		170	170	170	170	170	170	170	170	170
Noise emission											
Sound pressure level (at distance of 0.5	dB(A)		45	45	45	45	45	45	45	45	45
Sound power level	dB(A)		58	58	58	58	58	58	58	58	58
Filling opening dimensions											
Width	mm		1120	1120	1120	1120	1120	1120	1120	1120	1120
Height	mm		318	318	318	318	318	318	318	318	318
Boiler weight (without water)	kg		1480	1480	1480	1480	1480	1480	1480	1480	1480



Novatronic XV Type	Capacity	Filling chamber	Water content	Weight without water	Boiler class
80	49-80 kW	319 l	240 l	1480 kg	5

Operating temperature:	95°C max.	Filling opening:	318x1120 mm
Return line temperature:	65°C min.	Opening of the ash door	180x400 mm
Operating pressure:	3 bar	Opening of the stoking door	180x400 mm
Test pressure:	6 bar		



Novatronic XV 80/49 with: 2 energy accumulators, 1 combined water heater, 1 expansion tank, 1 heating distributor

Installation / heating room must comply with VKF fire protection directive 01/01/2015 / 24-15de (extract)

- Combustion systems must be installed in separate heating rooms. At nominal heat capacities of up to 70 kW heating rooms must be designed with the same fire resistance as the use-related fire section formation, but at least with a fire resistance of EI 30, with a nominal heat capacity of more than 70 kW at least with a fire resistance of EI 60. Doors require fire resistance of EI 30 and with a nominal heat capacity of more than 70 kW must be hinged to open in the escape direction
- In single family houses, wood fuels and coal quantities of up to 5 m³ can be stored in rooms of any kind.
- Up to 10 m³ of wood fuels or coal can be stored in heating rooms with a fire resistance of EI 60 behind a barrier at a distance of 1 m from the combustion unit

Rule of thumb for rough calculation of the supply or vent air cross-section / VKF 01/01/2015 / 24-15de

A = Free supply or vent air cross-section in cm²

K = Coefficient (wood 10.3)

P = Nominal heat capacity of the combustion system in kW

$$A = K \times P$$

Example Novatronic XV 80/60:

$$10.3 \times 60 = 618 \text{ cm}^2$$

Flue cross-sections 20 x 20 cm clear or Ø = 20 cm

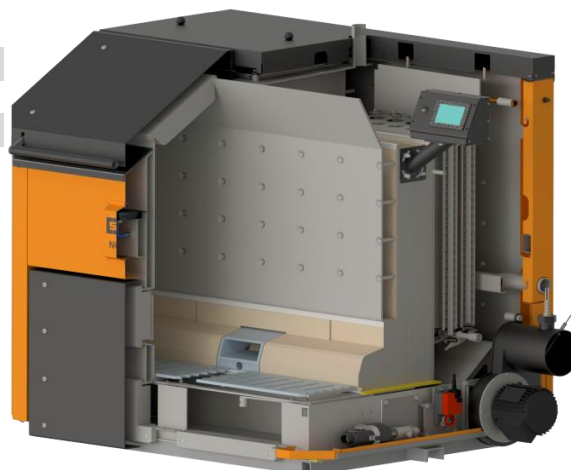
(Must be examined by the flue constructor)

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Manually stoked wood combustion system

Date: 21.11.2017
Sheet no.: 3.16e
Replaces sheet: 3.16d
Register: 3

Size	Capacity	Fuel
Novatronic XV 35	30 - 50kW	Wood logs ½ m
Novatronic XV 55	35 - 55kW	Wood logs ½ m
Novatronic XV 80	49 - 80kW	Wood logs 1 m



- Boiler class 5 / standard EN 303-5: 2012
- Quality seal "Wood Energy Switzerland" (Holzenergie Schweiz)
- Very simple 5" real glass touch control with hot water controller
- Extension module for 1, 2 and 3 heating circuits, freely combinable
- Access possible from smartphone, tablet and PC
- Speed-controlled EC fan with underpressure controlled combustion chamber
- Convenient, external lever for heat exchanger cleaning
- Optional, automatic heat exchanger cleaning and ignition
- **EXKLUSIV** from Schmid AG; 1m log boiler with automatic ignition AND cleaning
- Vertical heat exchanger tubes permit convenient mechanical cleaning
- Side panels in the combustion chamber for protection of the boiler body
- Lower combustion system with optimised secondary air injection in the flame channel
- Configuration of the low flue connection can be selected on the right, left and rear
- Low filling edge 97- 115 cm permits convenient feeding
- Front grate doors guarantee simple ignition and cleaning
- Configuration of control on right and left possible
- Configuration of heat exchanger cleaning on right and left possible
- Flue connection near the floor simplifies connection to existing flues
- Extremely low heat radiation due to the all-round, 10 cm insulation