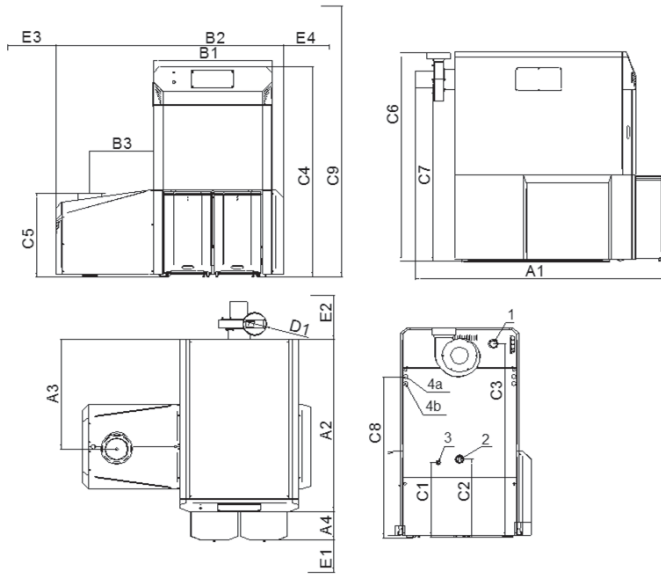


# HERZ firematic 130 - 301

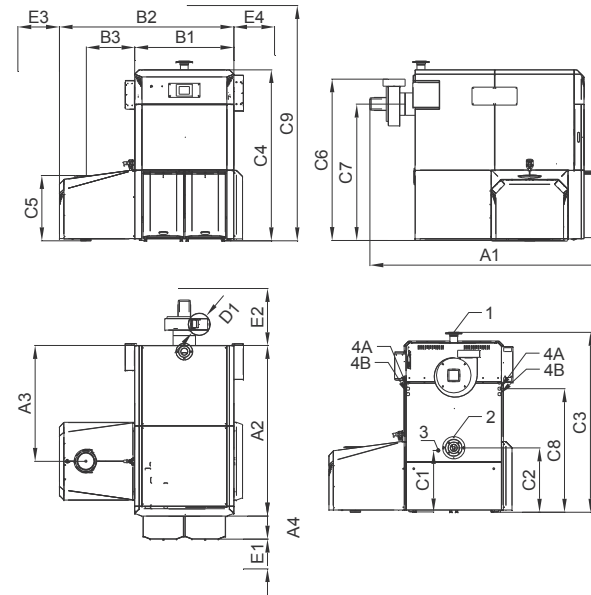
Standard specification sheet

Vers. 2.1

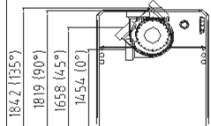
firematic 130 - 201



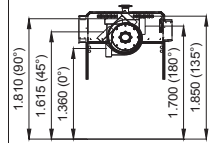
firematic 249-301



firematic 130-201

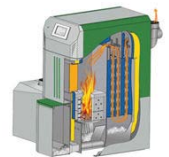


firematic 249-301

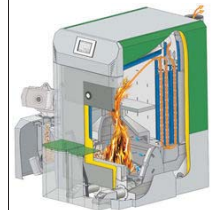


	firematic	130	149	151	180	199	201	249	251	299	301
Power range - Declaration at nameplate [kW] - wood chips (pellets)		37,8 - 130 (42,7-143)	37,8 - 149 (42,7-147)	37,8 - 155 (42,7-155)	42,2-180 (54,8-183)	42,2-199 (54,8 - 199)	42,2-201 (54,8-201)	67,9-249 (76,8-256)	67,9-251 (76,8-256)	67,9-299 (76,8-299)	67,9-301 (76,8-301)
Power range - measured [kW] - wood chips (wood pellets)		37,8 - 140,2 (42,7-135,2)	37,8 - 140,2 (42,7-135,2)	37,8 - 166,3 (42,7-154,4)	42,2-170,8 (54,8 - 173,9)	42,2-196,6 (54,8 - 203,9)	42,2-196,6 (54,8-203,9)	67,9-248,8 (76,8-262,9)	67,9-248,8 (76,8-262,9)	67,9-310,4 (76,8-306,4)	67,9-310,5 (76,8-306,4)
Continuance of combustion max. [h]		-	-	-	-	-	-	-	-	-	-
A1 Length					2071				2672		
A2 Length					1494				1906		
A3 Length					952				1293		
A4 Length					247				257		
B1 Width					980				1116		
B2 Breite ohne Demontage von Bauteilen					1888				2096		
B3 Width					523				552		
C1 Height					648				690		
C2 Height					678				717		
C3 Height					1679				2004		
C4 Height					1818				1911		
C5 Height					725				725		
C6 Height					1813				1807		
C7 Height					1578				1525		
C8 Height					1400				1380		
C9 Height minimal					2400				2600		
D1 Diameter flue pipe					200				250		
E1 minimal gap					1000				1000		
E2 minimal gap					600				800		
E3 minimal gap					300				300		
E4 minimal gap					700				700		
<b>Inserting dimensions</b>											
Length					1494				2065		
Width					950				1065		
Width without disassembly of the cover					1024				1230		
Height					1818				2010		

Mounting dimensions in [mm]



firematic 20-60



firematic 80-301

fm 130-201: 1...Flow (2°), 2...Return (IG 2°), 3...filling/depletion (IG 1/2°), 4 a...Safety heat exchanger - Input (1/2° IG), 4 b...Safety heat exchanger - Output (1/2° IG)  
 fm 249-301: 1...Flow(DN80, PN 6), 2...Return(DN80, PN 6), 3...filling/depletion (IG 1/2°), 4 a...Safety heat exchanger - Input (1/2° IG), 4 b...Safety heat exchanger - Output (1/2° IG)

# HERZ firematic 130 - 301

Standard specification sheet

Vers. 2.1

firematic	130	149	151	180	199	201	249	251	299	301			
weight of boiler [kg]							1370					2264	Technical Data
Volume of combustion chamber [ltr.]							-					-	
Volume ash drawer combustion chamber [ltr.]							75					85	
Volume ash drawer heat exchanger [ltr.]							75					85	
min./max. delivery pressure [mbar]							0,05/0,1					0,05/0,1	
operating overpressure Min/Max [bar]							1,5/3					1,5/3	
max. operating temperature [°C]							95					95	
Max. setting Safetytemperaturelimiter - STL [°C]							95					95	
Water capacity [ltr.]							254					436	
Electrical conention [V.Hz.A] / delivery rate [kW]							~230,50,16/2,8					~3x400,50,16/3,0	
Agitator - electrical connection [V]							3 x 400					3 x 400	
Resistance of boiler at dt=35K [mbar] **							-					-	
Resistance of boiler at dt=20K [mbar] *	10,1 (13,4)	13,4 (13,4)	13,4 (13,4)	13,0 (13,0)	16,9 (16,9)	16,9 (16,9)	8,7 (9,1)	8,7 (9,1)	12,4 (12,4)	12,4 (12,4)			
Resistance of boiler at dt=10K [mbar] *	38,7 (51,4)	51,4 (51,4)	51,4 (51,4)	50,2 (50,2)	54,3 (65,2)	54,3 (65,2)	33,8 (35,5)	33,8 (35,5)	48,7 (48,7)	48,7 (48,7)			
min. recomm. Flow rate dt=18K [kg/h] **	6210 (6831)	7118 (7022)	7404 (7404)	8598 (8742)	9506 (9506)	9602 (9602)	11895 (11895)	11990 (11990)	14283 (14283)	14379 (14379)			
Flow rate dt=15K [kg/h] **	7452 (8197)	8541 (8426)	8885 (8885)	10318 (10490)	11407 (11407)	11522 (11522)	14273 (14273)	14388 (14388)	17140 (17140)	17254 (17254)			
Electric power consumption, nominal load [kW] *	0,173 (0,145)	0,173 (0,173)	0,215 (0,161)	0,27 (0,239)	0,29 (0,261)	0,29 (0,261)	0,286 (0,240)	0,286 (0,240)	0,436 (-)	0,436 (-)			
Electric power consumption, part load [kW] *	0,090 (0,073)	0,090 (0,073)	0,090 (0,073)	0,095 (0,106)	0,095 (0,106)	0,095 (0,106)	0,089 (0,085)	0,089 (0,085)	0,089 (-)	0,089 (-)			
Size of heat exchanger [m2]							5,92					11,8	
Size of combustion surface[m2]							0,307					0,48	
Volume combustion chamber [m3]							0,3181					0,56	
Necessary quantity of water for safety heat exchanger [ltr./h]							>1050					-	
Heat exchanger - Number of conduits / tubes [qty.]							2 / 3x10:3x10					2 / 4x12: 4x12	
Opening temperature thermal safety valve [°C]							95					95	
Number of thermal safety valve							1					1	
Recommended minimal volume of the buffer [ltr.]	1500	1500	2000	2000	3000	3000	3000	3000	4000	4000			
<b>Emission -Nominal load (Data according to valid test reports)</b>							<b>Wood chips (Pellets)</b>						
Exhaust gas temperature [°C]	~140 (~130)	~140 (~130)	~160 (~140)	~130 (~160)	~160 (~170)	~160 (~170)	~ 130 (~145)	~ 130 (~145)	~150 (~160)	~150 (~160)			
Mass flow flue gas [kg/s] *	0,082 (0,079)	0,082 (0,079)	0,092 (0,079)	0,092 (0,103)	0,109 (0,118)	0,109 (0,118)	0,0155 (0,165)	0,0155 (0,165)	0,188 (0,193)	0,188 (0,193)			
Mass flow flue gas [Nm³/h] ** ( 0°C / 1013 mbar / 13%O2 )	252 (222)	252 (222)	287 (241)	282 (296)	337 (336)	337 (336)	437 (455)	437 (455)	524 (539)	524 (539)			
Mass flow flue gas [***Om³/h] **	386 (328)	386 (328)	455 (367)	421 (463)	531 (548)	531 (548)	676 (722)	676 (722)	825 (854)	825 (854)			
CO2 content [Vol. %] *	13,7 (13,5)	13,7 (13,5)	14,3 (14,3)	13,9 (13)	13,5 (13,6)	13,5 (13,6)	12,1 (12,2)	12,1 (12,2)	12,7 (12,3)	12,7 (12,3)			
Efficiency [%] *	90,9 (92,2)	90,9 (92,2)	91,5 (91,8)	93 (92,4)	92,3 (91,1)	92,3 (91,1)	92,8 (92,8)	92,8 (92,8)	91,3 (91,2)	91,3 (91,2)			
<b>Emission - Part load (Data according to valid test reports)</b>							<b>Wood chips (Pellets)</b>						
Exhaust gas temperature [°C]	~70 (~70)	~70 (~70)	~70 (~70)	~70 (~70)	~70 (~70)	~70 (~70)	~ 70 (~70)	~ 70 (~70)	~ 70 (~70)	~ 70 (~70)			
Mass flow flue gas [kg/s] *	0,028 (0,036)	0,028 (0,036)	0,028 (0,036)	0,026 (0,033)	0,026 (0,033)	0,026 (0,033)	0,045 (0,05)	0,045 (0,05)	0,045 (0,05)	0,045 (0,05)			
Mass flow flue gas [Nm³/h] ** ( 0°C / 1013 mbar / 13%O2 )	88 (105)	88 (105)	88 (105)	79 (96)	79 (96)	79 (96)	132 (-)	132 (-)	132 (-)	132 (-)			
Mass flow flue gas [***Om³/h] **	110 (132)	110 (132)	110 (132)	98 (122)	98 (122)	98 (122)	166 (-)	166 (-)	166 (-)	166 (-)			
CO2 content [Vol. %] *	10,3 (8,9)	10,3 (8,9)	10,3 (8,9)	12,1 (12)	12,1 (12)	12,1 (12)	10,6 (11,3)	10,6 (11,3)	10,6 (11,3)	10,6 (11,3)			
Efficiency [%] *	91,4 (92,8)	91,4 (92,8)	91,4 (92,8)	92,8 (96,5)	92,8 (96,5)	92,8 (96,5)	96,3 (95,2)	96,3 (95,2)	96,3 (95,2)	96,3 (95,2)			
<b>Test reports</b>													
Test report - reference number	166/12 (153/12)	167/12 (154/12)	168/12 (155/12)	169/12 (156/12)	170/12 (157/12)	171/12 (131/11)	125/12 (121/12)	126/12 (122/12)	127/12 (123/12)	128/12 (124/12)			
Test report - approval number	025/13 (012/13)	026/13 (013/13)	027/13 (014/13)	028/13 (015/13)	029/13 (016/13)	030/13 (012/12)	040/13 (044/13)	041/13 (045/13)	042/13 (046/13)	043/13 (047/13)			
Testing institute	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)	BLT (BLT)			
* measured value acc. to Test report ** calculated *** cubic metres at operating pressure													
<b>power input</b>													
Induced-draught fan - flue gas fan [kW]							0,31					1	
Ind.-dr. fan-flue g.-fan-cross s.of electric cable [mm²]/amount of w.							3x1 - 3x0,25 / 3+3					3x1 - 3x0,25 / 3+3	
Stoker screw [kW]							0,37					0,37	
Stoker screw-cross section of el. cable [mm²]/amount of wires							0,75 / 3+2					0,75 / 3+2	
Motor Tipping grate [kW]							0,085					0,085	
Motor Tipping grate-cross s. of el. cable [mm²]/amount of wires							0,75 / 3					0,75 / 3	
Motor push grate [kW]							0,085					0,085	
Motor push grate- cross s. of electric ca.[mm2] / amount of wires							0,75 / 3					0,75 / 3	
Heat exchanger [kW]							0,09					0,09	
Heat exchanger-cross section of electric c. [mm²] / amount of w.							0,75 / 3					0,75 / 3	
Ash screw - auto de ash drive [kW]							0,09					0,09	
Ash screw - auto de ash dr.-cross s. of el. c.[mm²]/amount of w.							0,75 / 3					0,75 / 3	
Hot-air blower; ignition fan [kW]							1,6					1,6	
Hot-air blower; ignition fan-cross s. of el. c. [mm²]/amount of w.							1,5 / 3					0,75 / 3	
fm 130-201: 1...Flow (2°) , 2...Return (IG 2°) , 3...filling/depletion (IG 1/2°) , 4 a...Safety heat exchanger - Input (1/2° IG), 4 b...Safety heat exchanger - Output (1/2° IG) fm 249-301: 1...Flow(DN80, PN 6) , 2...Return(DN80, PN 6) , 3...filling/depletion (IG 1/2°) , 4 a...Safety heat exchanger - Input (1/2° IG), 4 b...Safety heat exchanger - Output (1/2° IG)													

Acceptable fuel:  
 Hackgut P16B, P 31.5, P45A according to EN 14961-1/4 bzw.G50 W 15-40 according to ONORM M 7133  
 nominal power at max. W25 or heating value > 3.5 kWh/kg.  
 wood pellets quality level A1 according to EN 14961-2, ENplus, ONORM M 7135, DIN plus, Swiss Pellets.

Changes in the sense of the technical progress reserved