EnergyCabin EMax Pellet Data Sheet

EMax Pellet		EMax XS					EMax XS automatic					EMax S					EMax M 5,2 m					EMax M 8,2 m				
		10 - 30 kW					10 - 30 kW					10 - 30 kW					10-30 kW					10-30 kW				
Length	in m	3,2					3,2					5,2					5,2					8,2				
Width	in m	2,4					2,4					2,4					2,5					2,5				
Height	in m	2,6					2,6					2,6					2,6					2,6				
Solar Collector Area [1*]	in m²	7,2					7,2					12					12					19				
Solar Collector Angle	in °	78					78					78					>60					>60				
Buffer Tank Size	in l	800					500					800					1000					1500				
Pellet Store (Filling 90 %)	in m³	300 l Storage Container					2,5					6,6					8,5					16,2				
Pellet Store (Filling 90 %)	in t	0,2					1,6					4,3					5,5					10,5				
Filling System Storage Room		Manual Filling with Bagged Pellets					Storz A/110					Storz A/110					Storz A/110					Storz A/110				
Exterior Build:		Timber Laminated (Walls & Roofs 63 mm, Floor 95 mm), Roof with Sarnafil																								
Facade		Larch Planking																								
Fire Protection Heating Room		Fire Resistant Design																								
Fire Protection Storage Room		Fire Resistant Design																								
Boiler (KWB): [2*]		USP10	USP15	USP20	USP25	USP30	USP10	USP15	USP20	USP25	USP30	USP10	USP15	USP20	USP25	USP30	USP10	USP15	USP20	USP25	USP30	USP10	USP15	USP20	USP25	USP30
Rated Output	kW	10	14,9	20,4	25	30	10	14,9	20,4	25	30	10	14,9	20,4	25	30	10	14,9	20,4	25	30	10	14,9	20,4	25	30
Partload	kW	2,6	4,3	6,1	8	10	2,6	4,3	6,1	8	10	2,6	4,3	6,1	8	10	2,6	4,3	6,1	8	10	2,6	4,3	6,1	8	10
Boiler Temperature:	°C	60-90					60-90					60-90					60-90					60-90				
Max. Working Pressure	bar	3,5					3,5					3,5					3,5					3,5				
Fuel		Pellet: Pure Wood, ÖNORM M 7135; Calorific Value approx. 4900 kWh/t; Density approx. 650 kg/m³; Water Content 8 - 10 Weight%; Ash Content < 0,5 Weight%; Length 0,5 - 3 cm; Raw Material (kg/kg) Dry Substance% Pure Wood, Bark < 15%																								
Ash Box Volume	l	33					33					33					33					33				
Chimney Diameter [3*]	mm	150					150					150					150					150				
Conveying System:		None/Storeage Container Installed on Boiler					Worm Conveyor for Operation with Pellets					Elbow Worm Conveyor for Operation with Pellets					Elbow Worm Conveyor for Operation with Pellets					Elbow Worm Conveyor for Operation with Pellets				
Hydraulics:																										
Solar Expansion Tank	in l	25					25					25					25					50				
Heating Expansion Tank	in l	100					100					100					200					250				
Thermal Regulator Feed		Not Required					Not Required					Not Required					Not Required					Not Required				
Hydraulic Connections Piping [4*]	DN (mm)	25					25					25					25					25				
Distribution Pumps		Wilo RS25/6					Wilo RS25/6					Wilo RS25/6					Wilo RS25/6					Wilo RS25/6				
Pumps Return Flow Temperature Maintenance		Wilo RS25/6					Wilo RS25/6					Wilo RS25/6					Wilo RS25/6					Wilo RS25/6				
Electric Connection:																										
Voltage	V	230 V AC					230 V AC					230 V AC					230 V AC					230 V AC				
Total Connected Wattage	W	1190	1190	1190	1280	1280	1190	1190	1190	1280	1280	1190	1190	1190	1280	1280	1190	1190	1190	1280	1280	1190	1190	1190	1280	1280
Feed Cable (Cross Section) [5*] NYY-	mm²	3x2,5²					3x2,5²					3x2,5²					3x2,5²					3x2,5²				
Safety Fuse/Circuit Breaker [6*]		C16/1N					C 16/1N					C16/1N					C16/1N					C16/1N				
Control Unit:		KWB-Comfort 3' with Heating Circuit Control for One Heating Circuit					KWB-Comfort 3' with Heating Circuit Control for One Heating Circuit					Standard: 'KWB-Comfort 3' and 'Hanazeder'; Add. Charges for 'Schneid Electronic'					Standard: 'KWB-Comfort 3' and 'Hanazeder'; Add. Charges for 'Schneid Electronic'					Standard: 'KWB-Comfort 3' and 'Hanazeder'; Add. Charges for 'Schneid Electronic'				
Connections Control Unit		Boiler Demand – Potential Free Contact/Signal On/Off (e.g.: with Data Cabel Cat 5); Telephone Line (4-wire Screened)																								
Weights:																										
Transport Weight (Empty)	t	3,5	3,5	3,5	3,6	3,6	3,8	3,8	3,8	3,9	3,9	4,9	4,9	4,9	5,0	5,0	5,5	5,5	5,5	5,6	5,6	8,7	8,7	8,7	8,8	8,8
Overall Weight (Full)	t	4,6	4,6	4,6	4,7	4,7	5,4	5,4	5,4	5,5	5,5	10,1	10,1	10,1	10,2	10,2	12,1	12,1	12,1	12,3	12,3	21,0	21,0	21,0	21,1	21,1

[1*] Solar panel (gross collector area): type "Gluatmugl" with sun-strip absorber; performance, quality and shutdown test according to ÖNorm EN 12975-2, inspection report no.: 2.04.00138.1.0 (2), Österreichisches Forschungs- und Prüfzentrum Arsenal Research GmbH

[2*] Boiler Inspection Report for Operation with Pellets: KWB USP-10: BLT Wieselburg 051/00; KWB USP-15: BLT Wieselburg 1933/02; KWB USP-20: BLT Wieselburg 026/02; KWB USP-25: BLT Wieselburg 1933/02; KWB USP-30: BLT Wieselburg 032/99; KWB USV 15: TÜV Bayern 41140-1.2/97; KWB USV 25: BLT Wieselburg 035/99; KWB USV 40: BLT Wieselburg 002/05: KWB USV 80: BLT Wieselburg 004/05; KWB USV 100 (99kW): BLT Wieselburg 020/03; KWB USV 100(101kW): BLT Wieselburg 018/03;

[3*] Chimney: doubel walled insulated stainless steel chimney (DW-Alkon), CE-certification for the flue gas system according to EN 1856-1, certificate no.: 0432-BPR-119938

[4*] Standard: one temperature mixed heating circuit; up to 4 possible; assumption: temperature difference between flow and return flow at least 20 K and length of pipes max. 20 m

[5*] Assumption: maximum length of cable 20 m

[6*] Optionally a RCD (release current 0,03A) with the same specifications can be used

All Data is Subject to Change

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EnergyCabin EMax Pellet Data Sheet

EMax Pellet		EMax M 8,2 m					EMax M 10,3 m										EMax L
		40-100 kW					10-30 kW					40-100 kW					150 kW
Length	in m	8,2					10,3					10,3					12,2
Width	in m	2,5					2,5					2,5					2,5
Height	in m	2,6					2,6					2,6					2,6
Solar Collector Area	in m²	19					24					24					24
Solar Collector Angle	in °	>60					>60					>60					65
Buffer Tank Size	in l	1500					1500					1500					1500
Pellet Store (Filling 90%)	in m³	13,2					23,3					20,5					23,5
Pellet Store (Filling 90%)	in t	8,6					15,1					13,3					15,3
Filling System Storage Room		Storz A/110					Storz A/110					Storz A/110					Storz A/110
Exterior Build:		Timber Laminated (Walls & Roofs 63mm, Floor 95 mm), Roof with Sarnafil															ISO Steel-Sea Container
Facade		Larch Planking															Steel, Standard Gentian Blue, Additional Charge for Wood Casing
Fire Protection Heating Room		Fire Resistant Design (in Consideration of prTRVB H 118)															
Fire Protection Storage Room		Fire Resistant Design (in Consideration of prTRVB H 118)															
Boiler (KWB): [2*]		USV40	USV50	USV60	USV80	USV100	USP10	USP15	USP20	USP25	USP30	USV40	USV50	USV60	USV80	USV100	TDS 150
Rated Output	kW	40	50	60	80	100	10	14,9	20,4	25	30	40	50	60	80	100	150
Partload	kW	11,5	15	18	24,4	29,7	2,6	4,3	6,1	8	10	11,5	15	18	24,4	29,7	45
Boiler Temperature	°C	65 - 90					60-90					65 - 90					65 - 90
Max. Working Pressure	bar	3,5					3,5					3,5					3,5
Fuel		Pellet: Pure Wood, ÖNORM M 7135; Calorific Value approx. 4900 kWh/t; Density approx. 650 kg/m³; Water Content 8 - 10 Weight%; Ash Content < 0,5 Weight%; Length 0,5 - 3 cm; Raw Material (kg/kg) Dry Substance% Pure Wood, Bark < 15%															
Ash Box Volume	l	65					33					65					101
Chimney Diameter [3*]	mm	200			250		150					200			250		250
Conveying System:		Elbow Worm Conveyor for Operation with Pellets					Elbow Worm Conveyor for Operation with Pellets					Elbow Worm Conveyor for Operation with Pellets					Worm Conveyor System with Inclined Worm for Operation with Pellets only
Hydraulics:																	
Solar Expansion Tank	in l	50					50					50					50
Heating Expansion Tank	in l	300					250					300					500
Thermal Regulator Feed		1/2"					Not Required					1/2"					3/4"
Hydraulic Connections Piping [4*]	DN (mm)	32	32	32	40	40	25					32	32	32	40	40	50
Distribution Pumps		Wilo RS30/6			Wilo TOP S 40/10		Wilo RS25/6					Wilo RS30/6			Wilo TOP S 40/10		Wilo TOP S 50/10
Pumps Return Flow Temperature Maintenance		Wilo RS30/6			Wilo TOP S 30/7		Wilo RS25/6					Wilo RS30/6			Wilo TOP S 30/7		Wilo TOP S 40/7
Electric Connection:																	
Voltage	V	3 x 400 V+N					230 V AC					3 x 400 V+N					3 x 400 V+N
Total Connected Wattage	W	3064	3064	3084	3364	3458	1190	1190	1190	1280	1280	3064	3064	3084	3364	3458	4550
Feed Cable (Cross Section) [5*] NYY-	mm²	5x2,5²					3x2,5²					5x2,5²					5x2,5²
Safety Fuse/Circuit Breaker [6*]		C16/3N					C16/1N					C16/3N					C16/3N
Control Unit:		KWB-Comfort 3' and 'Schneid Electronic' with Telemonitoring					Standard: 'KWB-Comfort 3' and 'Hanazeder'; Add. Charge for 'Schneid Electronic'					KWB-Comfort 3' and 'Schneid Electronic' with Telemonitoring					KWB-Comfort 3' and 'Schneid Electronic' with Telemonitoring
Connections Control Unit		Boiler Demand – Potential Free Contact/Signal On/Off (e.g.: with Data Cabel Cat 5); Telephone Line (4-wire Screened)															
Weights:																	
Transport Weight (Empty)	t	9,1	9,2	9,2	9,4	9,4	10,4	10,4	10,4	10,5	10,5	10,8	10,9	10,9	11,1	11,1	11,6
Overall Weight (Full)	t	15,3	15,3	15,3	15,5	15,5	16,4	16,4	16,4	16,6	16,6	26,0	26,0	26,0	26,3	26,3	28,9

[1*] Solar panel (gross collector area): type "Gluatmugl" with sun-strip absorber; performance, quality and shutdown test according to ÖNorm EN 12975-2, inspection report no.: 2.04.00138.1.0 (2), Österreichisches Forschungs- und Prüfzentrum Arsenal Research GmbH

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[3*] Chimney: doubel walled insulated stainless steel chimney (DW-Alkon), CE-certification for the flue gas system according to EN 1856-1, certificate no.: 0432-BPR-119938

[4*] Standard: one temperature mixed heating circuit; up to 4 possible; assumption: temperature difference between flow and return flow at least 20 K and length of pipes max. 20 m

[5*] Assumption: maximum length of cable 20 m

[6*] Optionally a RCD (release current 0,03A) with the same specifications can be used

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