

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 20 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 780 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	20	kW	At rated heat output	$\eta_n$	82	%
At [30%/50%] rated heat output, if applicable	$P_p$	10	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	79	%	EI	116		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.045	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.035	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>							
Log wood, moisture content ≤ 25%	yes	no	14	22	308	119	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 20 LAMBDA TOUCH					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 840 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
<b>Useful heat output</b>				<b>Useful efficiency</b>			
At rated heat output	$P_n$	21	kW	At rated heat output	$\eta_n$	83	%
At [30%/50%] rated heat output, if applicable	$P_p$	10	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%
<b>Seasonal energy efficiency of heating</b>				<b>Energy efficiency index</b>			
Seasonal efficiency	$\eta_s$	79	%	EEI		116	
<b>For solid fuel cogeneration boilers: Electrical efficiency</b>				<b>Auxiliary electricity consumption</b>			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.048	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.037	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>
Log wood, moisture content ≤ 25%	yes	no	12	17	218	123	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 25 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1055 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	26	kW	At rated heat output	$\eta_n$	82	%
At [30%/50%] rated heat output, if applicable	$P_p$	11	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	80	%	EI	118		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.050	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.040	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>							
Log wood, moisture content ≤ 25%	yes	no	16	18	147	124	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 25 LAMBDA TOUCH					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1080 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	26	kW	At rated heat output	$\eta_n$	83	%
At [30%/50%] rated heat output, if applicable	$P_p$	12	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	80	%	EI	117		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l_{max}}$	0.052	kW
				At [30%/50%] rated heat output	$e_{l_{min}}$	0.041	kW
				In STAND BY mode	$P_{SB}$	0.003	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>
Log wood, moisture content ≤ 25%	yes	no	14	21	233	123	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 30 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1280 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	31	kW	At rated heat output	$\eta_n$	82	%
At [30%/50%] rated heat output, if applicable	$P_p$	15	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	80	%	EEI		118	
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.055	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.045	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>							
Log wood, moisture content ≤ 25%	yes	no	15	15	208	134	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	



Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 30 LAMBDA TOUCH					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1315 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	32	kW	At rated heat output	$\eta_n$	82	%
At [30%/50%] rated heat output, if applicable	$P_p$	15	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	80	%	EI	117		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.056	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.047	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>							
Log wood, moisture content ≤ 25%	yes	no	16	20	226	138	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 35 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1345 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Useful heat output				Useful efficiency			
At rated heat output	$P_n$	33	kW	At rated heat output	$\eta_n$	82	%
At [30%/50%] rated heat output, if applicable	$P_p$	16	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%
Seasonal energy efficiency of heating				Energy efficiency index			
Seasonal efficiency	$\eta_s$	80	%	EI	118		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.055	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.045	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>							
Log wood, moisture content ≤ 25%	yes	no	13	11	269	143	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	



Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 35 LAMBDA TOUCH						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1410 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Useful heat output				Useful efficiency				
At rated heat output	$P_n$	35	kW	At rated heat output	$\eta_n$	82	%	
At [30%/50%] rated heat output, if applicable	$P_p$	17	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	84	%	
Seasonal energy efficiency of heating				Energy efficiency index				
Seasonal efficiency	$\eta_s$	80	%	EEI		117		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.056	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.047	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>								
Log wood, moisture content ≤ 25%	yes	no	18	19	219	152		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		

Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 40 PROFI						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1790 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Useful heat output				Useful efficiency				
At rated heat output	$P_n$	42	kW	At rated heat output	$\eta_n$	88	%	
At [30%/50%] rated heat output, if applicable	$P_p$	19	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	82	%	
Seasonal energy efficiency of heating				Energy efficiency index				
Seasonal efficiency	$\eta_s$	79	%	EEI		117		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.061	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.049	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>								
Log wood, moisture content ≤ 25%	yes	no	14	6	189	143		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		

Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 40 LAMBDA TOUCH						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1750 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Useful heat output				Useful efficiency				
At rated heat output	$P_n$	42	kW	At rated heat output	$\eta_n$	88	%	
At [30%/50%] rated heat output, if applicable	$P_p$	19	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	82	%	
Seasonal energy efficiency of heating				Energy efficiency index				
Seasonal efficiency	$\eta_s$	79	%	EEI		116		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.063	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.050	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>								
Log wood, moisture content ≤ 25%	yes	no	14	5	166	141		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 45 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1850 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
<b>Useful heat output</b>				<b>Useful efficiency</b>			
At rated heat output	$P_n$	44	kW	At rated heat output	$\eta_n$	81	%
At [30%/50%] rated heat output, if applicable	$P_p$	22	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	82	%
<b>Seasonal energy efficiency of heating</b>				<b>Energy efficiency index</b>			
Seasonal efficiency	$\eta_s$	79	%	EEI		116	
<b>For solid fuel cogeneration boilers: Electrical efficiency</b>				<b>Auxiliary electricity consumption</b>			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.061	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.049	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>
Log wood, moisture content ≤ 25%	yes	no	15	26	243	145	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 45 LAMBDA TOUCH						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 1805 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Useful heat output				Useful efficiency				
At rated heat output	$P_n$	43	kW	At rated heat output	$\eta_n$	81	%	
At [30%/50%] rated heat output, if applicable	$P_p$	22	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%	
Seasonal energy efficiency of heating				Energy efficiency index				
Seasonal efficiency	$\eta_s$	79	%	EEI		116		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.063	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.050	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>								
Log wood, moisture content ≤ 25%	yes	no	12	20	208	139		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 50 PROFI					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 2155 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
<b>Useful heat output</b>				<b>Useful efficiency</b>			
At rated heat output	$P_n$	51	kW	At rated heat output	$\eta_n$	87	%
At [30%/50%] rated heat output, if applicable	$P_p$	24	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%
<b>Seasonal energy efficiency of heating</b>				<b>Energy efficiency index</b>			
Seasonal efficiency	$\eta_s$	80	%	EEI		118	
<b>For solid fuel cogeneration boilers: Electrical efficiency</b>				<b>Auxiliary electricity consumption</b>			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.064	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.053	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>
Log wood, moisture content ≤ 25%	yes	no	14	5	210	146	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter							
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic					
Model identifier		ATTACK SLX 50 LAMBDA TOUCH					
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 2170 l							
Condensing boiler	no	Solid fuel cogeneration boiler	no	Combination boiler	no		
Energy efficiency class		A+					
Characteristics when operating with the preferred fuel only:							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
<b>Useful heat output</b>				<b>Useful efficiency</b>			
At rated heat output	$P_n$	51	kW	At rated heat output	$\eta_n$	89	%
At [30%/50%] rated heat output, if applicable	$P_p$	25	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%
<b>Seasonal energy efficiency of heating</b>				<b>Energy efficiency index</b>			
Seasonal efficiency	$\eta_s$	80	%	EEI		118	
<b>For solid fuel cogeneration boilers: Electrical efficiency</b>				<b>Auxiliary electricity consumption</b>			
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.067	kW
				At [30%/50%] rated heat output	$e_{l, min}$	0.055	kW
				In STAND BY mode	$P_{SB}$	0.004	kW
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions				
			PM	OGC	CO	NO <sub>x</sub>	
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>
Log wood, moisture content ≤ 25%	yes	no	12	4	170	144	
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-	
Chipped wood, moisture content > 35 %	no	no	-	-	-	-	
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-	
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-	
Other woody biomass	no	no	-	-	-	-	
Non-woody biomass	no	no	-	-	-	-	
Bituminous coal	no	no	-	-	-	-	
Brown coal (including briquettes)	no	no	-	-	-	-	
Coke	no	no	-	-	-	-	
Anthracite	no	no	-	-	-	-	
Blended fossil fuel briquettes	no	no	-	-	-	-	
Other fossil fuel	no	no	-	-	-	-	
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-	
Other blend of biomass and fossil fuel	no	no	-	-	-	-	

Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 55 PROFI						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 2355 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
<b>Useful heat output</b>				<b>Useful efficiency</b>				
At rated heat output	$P_n$	55	kW	At rated heat output	$\eta_n$	81	%	
At [30%/50%] rated heat output, if applicable	$P_p$	25	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%	
<b>Seasonal energy efficiency of heating</b>				<b>Energy efficiency index</b>				
Seasonal efficiency	$\eta_s$	80	%	EEI		117		
<b>For solid fuel cogeneration boilers: Electrical efficiency</b>				<b>Auxiliary electricity consumption</b>				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.064	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.053	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
							[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>	
Log wood, moisture content ≤ 25%	yes	no	10	24	180	161		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		



Boiler information letter								
Contact details		ATTACK, s.r.o. , Dielenska Kruzna 5020, 038 61 Vrutky, Slovak Republic						
Model identifier		ATTACK SLX 55 LAMBDA TOUCH						
Stoking model: Manual - the boiler should be operated with a hotwater storage tank of a volume of at least 2330 l								
Condensing boiler		no	Solid fuel cogeneration boiler		no	Combination boiler		no
Energy efficiency class		A+						
Characteristics when operating with the preferred fuel only:								
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Useful heat output				Useful efficiency				
At rated heat output	$P_n$	54	kW	At rated heat output	$\eta_n$	81	%	
At [30%/50%] rated heat output, if applicable	$P_p$	26	kW	At [30%/50%] rated heat output, if applicable	$\eta_p$	83	%	
Seasonal energy efficiency of heating				Energy efficiency index				
Seasonal efficiency	$\eta_s$	79	%	EEI		117		
For solid fuel cogeneration boilers: Electrical efficiency				Auxiliary electricity consumption				
At rated heat output	$\eta_{el, n}$	-	%	At rated heat output	$e_{l, max}$	0.067	kW	
				At [30%/50%] rated heat output	$e_{l, min}$	0.055	kW	
				In STAND BY mode	$P_{SB}$	0.004	kW	
Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Seasonal space heating emissions					
			PM	OGC	CO	NO <sub>x</sub>		
[x] mg/m <sup>3</sup> by 10% O <sub>2</sub>								
Log wood, moisture content ≤ 25%	yes	no	14	13	151	169		
Chipped wood, moisture content 15 - 35 %	no	no	-	-	-	-		
Chipped wood, moisture content > 35 %	no	no	-	-	-	-		
Compressed wood in the form of pellets or briquettes	no	no	-	-	-	-		
Sawdust, moisture ≤ 50 %	no	no	-	-	-	-		
Other woody biomass	no	no	-	-	-	-		
Non-woody biomass	no	no	-	-	-	-		
Bituminous coal	no	no	-	-	-	-		
Brown coal (including briquettes)	no	no	-	-	-	-		
Coke	no	no	-	-	-	-		
Anthracite	no	no	-	-	-	-		
Blended fossil fuel briquettes	no	no	-	-	-	-		
Other fossil fuel	no	no	-	-	-	-		
Blended biomass (30 - 70 %) fossil fuel briquettes	no	no	-	-	-	-		
Other blend of biomass and fossil fuel	no	no	-	-	-	-		