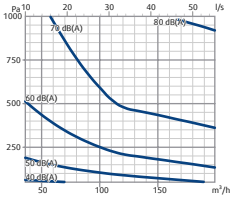
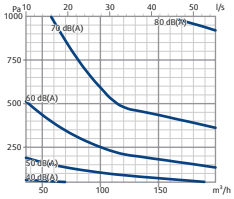
OPTIMA-S

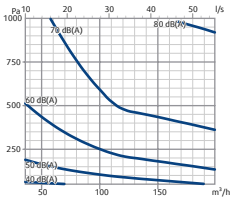
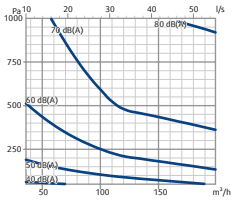
VAV Controller

Belimo - Siemens Compact Comparison

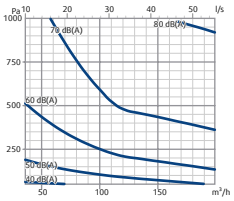
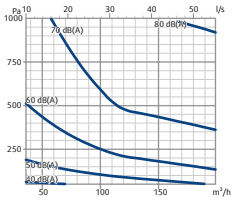
systemair

	Belimo		Siemens
Type	**OPTIMA-S(SI)...BLC4**		**OPTIMA-S(SI)-FC...SA**
Mechanical design, sizes, casing, damper, measurement probe, connections, gaskets, impulse tubing, insulation		≡	
Tightness acc. to EN1751	4C/3C	≡	4C/3C
Q / Δ*P* / L_w Parameters (see design.systemair.com)		≡	
VAV control parameters & adjustment ranges	V_{min}, V_{max}, V_{nom}	≡	V_{min}, V_{max}, V_{nom}
Typical control error	±5 %	≡	±5 %
Setpoint & feedback signal type	DC 0 V ... 10 V, 2 V ... 10 V	≡	DC 0 V ... 10 V, 2 V ... 10 V
Choice of feedback information on analog output	Air flow, pressure, damper position	≡	Air flow, pressure, damper position
Power supply	DC 24 V, AC 24 V	≈	AC 24 V
Power consumption	< 5 VA	≈	< 5 VA
Actuator typical transition time	120 s	≈	150 s
Override modes (hard-wired)	Open, Close, V_{min}, V_{max}	≡	Open, Close, V_{min}, V_{max}
Handheld configuration tool	Belimo ZTH-EU 	≈	Siemens AST20 

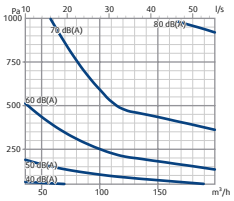
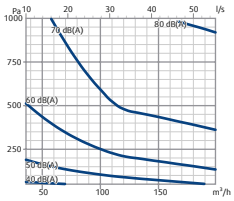
Parameters/features	≡ Identical	≈ Similar (no significant difference)	≠ Entirely different

	Belimo		Siemens
Type	**OPTIMA-S(SI)...BLC1**		**OPTIMA-S(SI)-FC...SA**
Mechanical design, sizes, casing, damper, measurement probe, connections, gaskets, impulse tubing, insulation		≡	
Tightness acc. to EN1751	4C/3C	≡	4C/3C
Q / Δ*P* / L_w Parameters (see design.systemair.com)		≡	
VAV control parameters & adjustment ranges	V_{min}, V_{max}, V_{nom}	≡	V_{min}, V_{max}, V_{nom}
Typical control error	±5 %	≡	±5 %
Setpoint & feedback signal type	DC 0 V ... 10 V, 2 V ... 10 V	≡	DC 0 V ... 10 V, 2 V ... 10 V
Choice of feedback information on analog output	Air flow, pressure, damper position	≡	Air flow, pressure, damper position
BUS interface	MP-Bus	≠	-
Power supply	DC 24 V, AC 24 V	≈	AC 24 V
Power consumption	< 5 VA	≈	< 5 VA
Actuator typical transition time	120 s	≈	150 s
Override modes (hard-wired)	Open, Close, V_{min}, V_{max}	≡	Open, Close, V_{min}, V_{max}
Override modes (BUS)	Open, Close, V_{min}, V_{max} (only in MP-Bus mode)	≠	-
Handheld configuration tool	Belimo ZTH-EU 	≈	Siemens AST20 

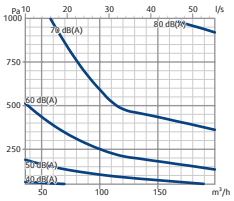
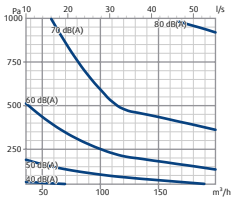
Parameters/features	≡ Identical	≈ Similar (no significant difference)	≠ Entirely different

	Belimo		Siemens
Type	**OPTIMA-S(SI)...BLC1MOD**		**OPTIMA-S(SI)-FC...SM**
Mechanical design, sizes, casing, damper, measurement probe, connections, gaskets, impulse tubing, insulation		≡	
Tightness acc. to EN1751	4C/3C	≡	4C/3C
***Q* / Δ*P* / L_w Parameters (see design.systemair.com)**		≡	
VAV control parameters & adjustment ranges	V_{min}, V_{max}, V_{nom}	≡	V_{min}, V_{max}, V_{nom}
Typical control error	±5 %	≡	±5 %
Setpoint & feedback signal type	DC 0 V ... 10 V, 2 V ... 10 V	≠	-
Choice of feedback information on analog output	Air flow, pressure, damper position	≠	-
BUS interface	Modbus RTU (RS485), BACnet MS/TP (RS485)	≈	Modbus RTU (RS485)
Power supply	DC 24 V, AC 24 V	≈	AC 24 V
Power consumption	< 5 VA	≈	< 5 VA
Actuator typical transition time	120 s	≈	150 s
Override modes (hard-wired)	Open, Close, V_{min}, V_{max} (AC 24 V power supply)	≠	-
Override modes (BUS)	Open, Close, V_{min}, V_{max}	≡	Open, Close, V_{min}, V_{max}
Handheld configuration tool	Belimo ZTH-EU 	≈	Siemens AST20 

Parameters/features	≡ Identical	≈ Similar (no significant difference)	≠ Entirely different

	Belimo		Siemens
Type	**OPTIMA-S(SI)...BLC1MOD**		**OPTIMA-S(SI)-FC...SB**
Mechanical design, sizes, casing, damper, measurement probe, connections, gaskets, impulse tubing, insulation		≡	
Tightness acc. to EN1751	4C/3C	≡	4C/3C
Q / Δ*P* / L_w Parameters (see design.systemair.com)		≡	
VAV control parameters & adjustment ranges	V_{min}, V_{max}, V_{nom}	≡	V_{min}, V_{max}, V_{nom}
Typical control error	±5 %	≡	±5 %
Setpoint & feedback signal type	DC 0 V ... 10 V, 2 V ... 10 V	≠	-
Choice of feedback information on analog output	Air flow, pressure, damper position	≠	-
BUS interface	Modbus RTU (RS485), BACnet MS/TP (RS485)	≈	BACnet MS/TP (RS485)
Power supply	DC 24 V, AC 24 V	≈	AC 24 V
Power consumption	< 5 VA	≈	< 5 VA
Actuator typical transition time	120 s	≈	150 s
Override modes (hard-wired)	Open, Close, V_{min}, V_{max} (AC 24 V power supply)	≠	-
Override modes (BUS)	Open, Close, V_{min}, V_{max}	≡	Open, Close, V_{min}, V_{max}
Handheld configuration tool	Belimo ZTH-EU 	≈	Siemens AST20 

Parameters/features	≡ Identical	≈ Similar (no significant difference)	≠ Entirely different

	Belimo		Siemens
Type	**OPTIMA-S(SI)...BLC1KNX**		**OPTIMA-S(SI)-FC...SK**
Mechanical design, sizes, casing, damper, measurement probe, connections, gaskets, impulse tubing, insulation		≡	
Tightness acc. to EN1751	4C/3C	≡	4C/3C
***Q* / Δ*P* / L_w Parameters (see design.systemair.com)**		≡	
VAV control parameters & adjustment ranges	V_{min}, V_{max}, V_{nom}	≡	V_{min}, V_{max}, V_{nom}
Typical control error	±5 %	≡	±5 %
BUS interface	Modbus RTU (RS485), BACnet MS/TP (RS485)	≈	BACnet MS/TP (RS485)
Power supply	DC 24 V, AC 24 V	≈	AC 24 V
Power consumption	< 5 VA	≈	< 5 VA
Actuator typical transition time	120 s	≈	150 s
Override modes (hard-wired)	Open, Close, V_{min}, V_{max} (AC 24 V power supply)	≠	-
Override modes (BUS)	Open, Close, V_{min}, V_{max}	≡	Open, Close, V_{min}, V_{max}
Handheld configuration tool	Belimo ZTH-EU 	≈	Siemens AST20 

Parameters/features	≡ Identical	≈ Similar (no significant difference)	≠ Entirely different

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