

ABB i-bus® KNX

Heating, Ventilation and Air Conditioning – Valve Drive Actuators/Valve Drive Controllers

■ = Function is supported
- = Function is not supported

	Electronic Switch Actuator	Electronic Relay	Valve Drive Actuator	Valve Drive Controller	Valve Drive Controller
	ES/S x.1.2.1 (x = 4/8)	ER/U 1.1 (in combination with US/U x.2 (x = 2/4))	VAA/S x.230.2.1 (x = 6/12)	VC/S 4.1.1	VC/S 4.2.1
General					
Supply voltage	KNX	24...250 V AC/DC	KNX	KNX	KNX
Type of installation	MDRC	Flush-mounted	MDRC	MDRC	MDRC
Module width (18 mm)	4/8	-	4/8	8	8
Current consumption, bus	< 12 mA	< 12 mA	< 12 mA	< 12 mA	< 12 mA
Rated current (per channel)	1 A (resistive load)	0.5 A (resistive load)	160 mA (resistive load)	250 mA	250 mA
Inrush current (per channel)	8 A (1 s, Tu = 20 °C)	1.2 A (1 min.)	300 mA (2 min., Tu = 60 °C)	300 mA (2 min., Tu = 60 °C)	300 mA (2 min., Tu = 60 °C)
Maximum number of thermoelectric valve drives (per channel)	10 (230 V) 3 (24 V)	2 (230 V) 2 (24 V)	3 (230 V) 1 (24 V)	3 (230 V) 1 (24 V)	3 (230 V) 1 (24 V)
Outputs					
Number	4/8	1	6/12	4	4
Type	thermoelectric or motor valve drives	thermoelectric valve drives	thermoelectric valve drives	thermoelectric valve drives	thermoelectric valve drives
Output voltage	24... 230 V AC/DC	24... 230 V AC/DC	24...230 V AC	24...230 V AC	24...230 V AC
Manual operation					
Manual operation	■	-	■	-	■
Fault acknowledgement	■	-	■	-	■
Function:					
Operating mode Valve drive, thermoelectric/motor valve drives					
Forced operation	■	■ (via US/U x.2)	■	■	■
Status	■	-	■	■	■
Adjustable control value after controller fault	■	■ (via US/U x.2)	■	■	■
Valve purge	■	■ (via US/U x.2)	■	■	■
Characteristic curve adaption	■	-	■	-	-
Blocking	■	-	■	-	-
Operating mode Switch actuator					
Time:					
Staircase lighting, delay, flashing	■	-	-	-	-
8-bit scene	■	-	-	-	-
Logical functions	■	-	-	-	-
Safety settings	■	-	-	-	-
Threshold values	■	-	-	-	-
Integrated room temperature controller (RTC)	-	-	-	■	■
Use in Master/Slave system with room operation units	-	-	-	■	■
Control and diagnosis via ABB i-bus® Tool	-	-	-	■	■