

The Valve Drive Actuator VAA/A 6.24.1 can be used for the control of 24 V thermoelectric valve drives, e.g. TSA/K 24.1.

It is used in residential buildings and in purpose-built buildings. In conjunction with valve drives, the VAA/A optimises the effect of the use of thermostats (room temperature controllers). It is suitable for the installation in heating circuit distribution systems where the application of triacs ensures silent switching.

#### **Technical data**

Supply	Mains voltage	230 V AC (+10/-15 %), 5060 Hz	
	Maximum power consumption	50 W	
	No-load power consumption	3 W	
	Leakage loss	18 W	
Outputs	Number	6	
	Туре	Triac	
	Output voltage	24 V AC (+/-20%), 5060 Hz	
	Output current per channel	Maximum 1 A	
	Fuse	T2A, common for all outputs	
Maximum number of connectable electrothermal valve actuators	Number	13	
	Per channel	4	
Connections	KNX	Bus connection terminal	
	Valve actuator (6) connection	Plug-in terminal	
		1.01.5 mm <sup>2</sup> stranded	
		0.51.5 mm <sup>2</sup> solid	
Operating and display elements	LED green	Power on indicator	
	LED red	Fuse defective indicator	
	LED red (6)	Channel on indicator	
	(-)		
	KNX programming LED	Programming mode indicator	
Release function	KNX programming LED	Programming mode indicator	
Release function Valve protection program	KNX programming LED KNX programming button	Programming mode indicator Assignment of the physical address	
	KNX programming LED KNX programming button After switch on	Programming mode indicator Assignment of the physical address 10 minutes	
Valve protection program	KNX programming LED KNX programming button After switch on In Summer mode	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes	
Valve protection program Emergency program	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off	
Valve protection program Emergency program Enclosure	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20	<ul> <li>Programming mode indicator</li> <li>Assignment of the physical address</li> <li>10 minutes</li> <li>Once a day for 6 minutes</li> <li>8 minutes on and 40 minutes off</li> <li>to DIN EN 60529</li> </ul>	
Valve protection program Emergency program Enclosure Safety class	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II	<ul> <li>Programming mode indicator</li> <li>Assignment of the physical address</li> <li>10 minutes</li> <li>Once a day for 6 minutes</li> <li>8 minutes on and 40 minutes off</li> <li>to DIN EN 60529</li> <li>to DIN EN 61140</li> </ul>	
Valve protection program Emergency program Enclosure Safety class	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category	<ul> <li>Programming mode indicator</li> <li>Assignment of the physical address</li> <li>10 minutes</li> <li>Once a day for 6 minutes</li> <li>8 minutes on and 40 minutes off</li> <li>to DIN EN 60529</li> <li>to DIN EN 61140</li> <li>III to DIN EN 60664-1</li> </ul>	
Valve protection program Emergency program Enclosure Safety class Isolation category	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category Pollution degree	<ul> <li>Programming mode indicator</li> <li>Assignment of the physical address</li> <li>10 minutes</li> <li>Once a day for 6 minutes</li> <li>8 minutes on and 40 minutes off</li> <li>to DIN EN 60529</li> <li>to DIN EN 61140</li> <li>III to DIN EN 60664-1</li> <li>2 to DIN EN 60664-1</li> </ul>	
Valve protection program Emergency program Enclosure Safety class Isolation category	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category Pollution degree Operation	Programming mode indicatorAssignment of the physical address10 minutesOnce a day for 6 minutes8 minutes on and 40 minutes offto DIN EN 60529to DIN EN 61140III to DIN EN 60664-12 to DIN EN 60664-1-5 °C+50 °C	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category Pollution degree Operation Storage	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off to DIN EN 60529 to DIN EN 60529 to DIN EN 61140 III to DIN EN 60664-1 2 to DIN EN 60664-1 -5 °C+50 °C	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range Ambient conditions	<ul> <li>KNX programming LED</li> <li>KNX programming button</li> <li>After switch on</li> <li>In Summer mode</li> <li>With bus voltage failure</li> <li>IP 20</li> <li>II</li> <li>Overvoltage category</li> <li>Pollution degree</li> <li>Operation</li> <li>Storage</li> <li>Maximum air humidity</li> </ul>	Programming mode indicatorAssignment of the physical address10 minutesOnce a day for 6 minutes8 minutes on and 40 minutes offto DIN EN 60529to DIN EN 61140III to DIN EN 60664-12 to DIN EN 60664-1-5 °C+60 °C-25 %	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range Ambient conditions	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category Pollution degree Operation Storage Maximum air humidity Surface mounted device	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off to DIN EN 60529 to DIN EN 60529 to DIN EN 61140 III to DIN EN 60664-1 2 to DIN EN 60664-1 -5 °C+50 °C -25 °C+60 °C 75 % Wall-mounted or on mounting rail	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range Ambient conditions Design	<ul> <li>KNX programming LED</li> <li>KNX programming button</li> <li>After switch on</li> <li>In Summer mode</li> <li>With bus voltage failure</li> <li>IP 20</li> <li>II</li> <li>Overvoltage category</li> <li>Pollution degree</li> <li>Operation</li> <li>Storage</li> <li>Maximum air humidity</li> <li>Surface mounted device</li> <li>Dimensions</li> </ul>	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off to DIN EN 60529 to DIN EN 60529 to DIN EN 61140 III to DIN EN 60664-1 2 to DIN EN 60664-1 -5 °C+50 °C -25 °C+60 °C 75 % Wall-mounted or on mounting rail	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range Ambient conditions Design Mounting position	KNX programming LEDKNX programming buttonAfter switch onIn Summer modeWith bus voltage failureIP 20IIOvervoltage categoryPollution degreeOperationStorageMaximum air humiditySurface mounted deviceDimensionsas required	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off to DIN EN 60529 to DIN EN 60529 to DIN EN 61140 III to DIN EN 60664-1 2 to DIN EN 60664-1 -5 °C+50 °C -25 °C+60 °C 75 % Wall-mounted or on mounting rail	
Valve protection program Emergency program Enclosure Safety class Isolation category Temperature range Ambient conditions Design Mounting position Weight	KNX programming LED KNX programming button After switch on In Summer mode With bus voltage failure IP 20 II Overvoltage category Pollution degree Operation Storage Maximum air humidity Surface mounted device Dimensions as required 1.700 kg	Programming mode indicator Assignment of the physical address 10 minutes Once a day for 6 minutes 8 minutes on and 40 minutes off to DIN EN 60529 to DIN EN 60529 to DIN EN 61140 III to DIN EN 60664-1 2 to DIN EN 60664-1 -5 °C+50 °C -25 °C+60 °C 75 % Wall-mounted or on mounting rail	

and low voltage guideline

Device type	Application program	Maximum number of communication objects	Maximum number of group addresses	Maximum number of associations
VAA/A 6.24.1	Valve Drive Actuator 6f 24V/*	20	66	66

\*... = current version number of the application program. Please observe the software information on our homepage for this purpose.

#### Note

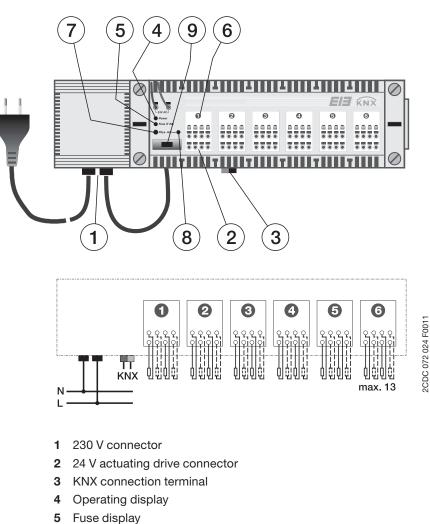
For a detailed description of the application program see *Valve Drive Actuator VAA/A 6.24.1* product manual. It is available free-of-charge at *www.abb.com/knx*.

The ETS and the current version of the device application program are required for programming.

The current version of the application program is available for download on the internet at *www.abb.com/knx*. After import it is available in the ETS under *ABB/Heating, Ventilation, Air conditioning/Valve Drive Actuator*.

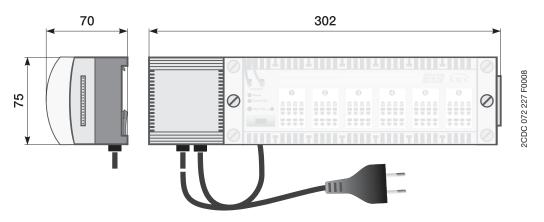
The device does not support the closing function of a KNX device in the ETS. If you inhibit access to all devices of the project with a *BCU code*, it has no effect on this device. Reading out data and programming is still possible.

**Circuit diagram** 



- 6 LED channel
- 7 KNX programming key
- 8 KNX programming LED
- 9 Fuse

#### **Dimension drawing**



Notes