Controls
Product Catalog

2025

Effective July 14, 2025

REVISION B

www.aaon.com

**Controls manuals are available for download from
www.aaon.com/library**

Part Number Quick Price Reference		
AAON P/N	**Part Description**	**Page No.**
ASM01621	E-BUS Return Air Temp/Humidity Sensor Emulator Board with 1.5 ft. E-BUS Cable	page 37
ASM01622	E-BUS Space CO_2 Sensor Emulator Board with 1.5 ft. E-BUS Cable	page 38
ASM01623	E-BUS Return Air CO_2 Sensor Emulator Board with 1.5 ft. E-BUS Cable	page 38
ASM01624	Strap-On Temperature Sensor Kit	page 21
ASM01626	MiniLink Polling Device 5	page 30
ASM01629	VAV/Zone Controller Expansion Module (E-BUS)	page 25
ASM01635	E-BUS Adapter Hub with 1.5 ft. E-BUS Cable	page 37
ASM01640	Duct Static Pressure Sensor	page 17
ASM01643	Standard Room Sensor – with Override and Slide Adjust	page 21
ASM01646	3% Room Mounted Relative Humidity Sensor – 0-5 VDC Output	page 16
ASM01647	3% Outdoor Air Relative Humidity Sensor – 0-5 VDC Output	page 16
ASM01668	MODGAS-X Module	page 7
ASM01670	MHGRV-X Module	page 7
ASM01686	Refrigerant System Module for VFD Compressors (RSMV)	page 11
ASM01687	MHGRV-X Reheat Expansion Module	page 9
ASM01688	PREHEAT-X Module	page 8
ASM01689	PREHEAT-X-EXT Module	page 8
ASM01690	Water Source Heat Pump X2 Module	page 41
ASM01691	VCC-X EM1 Expansion Module	page 13
ASM01693	Refrigerant System Module for VFD Compressors – Heat Pump (RSMV-HP)	page 12
ASM01695	MODGAS-XWR2 Module	page 8
ASM01696	E-BUS Space Temp/Humidity Sensor Emulator Board with 1.5 ft. E-BUS Cable	page 37
ASM01697	E-BUS Outdoor Air Temp/Humidity Sensor Emulator Board with 1.5 ft. E-BUS Cable	page 37
ASM01820	E-BUS Digital Room Sensor with LCD Display – Temperature & Humidity	page 19
ASM01829	E-BUS CO_2 Sensor – Wall Mounted	page 18
ASM01831	E-BUS CO_2 Sensor with Remote Pickup – Duct Mounted	page 18
ASM01832	Building Static Pressure Sensor	page 17
ASM01835	3% Return Air Relative Humidity Sensor – 0-5 VDC Output	page 16
ASM01836	E-BUS Horizontal Outdoor Air Temperature & Humidity Sensor	page 19
ASM01838	E-BUS Vertical Outdoor Air Temperature & Humidity Sensor	page 20
ASM01840	E-BUS Return Air Temperature & Humidity Sensor	page 20
ASM01841	Slaved Zone Interface Card with Cable	page 39
ASM01845	VCB-X Suction Pressure Transducer Kit with E-BUS Adapter	page 21
ASM01846	Zone Damper Actuator	page 25
ASM01851	Slaved VAV/Zone Damper Kit	page 25
ASM01868	GPC-XP Controller	page 7
ASM01870	BACnet® General Purpose Controller	page 5
ASM01873	E-BUS 12 Relay Expansion Module	page 6
ASM01878	E-BUS Adapter Board	page 37
ASM01887	Dual Digital Compressor Module	page 41
ASM01889	Full Digital Compressor Module	page 41
ASM01890	One Condenser Head Pressure Module	page 41
ASM01891	Two Condenser Head Pressure II Module	page 42

	Part Number Quick Price Reference	
AAON P/N	**Part Description**	**Page No.**
ASM01893	Refrigerant System Module for Digital Compressors (RSMD-R22)	page 10
ASM01897	System Manager TS II Operator Interface for VCM, VCM-X E-BUS & VCB-X	page 32
ASM01898	System Manager TS II Operator Interface for the GPC-XP Controller	page 32
ASM01900	System Manager TS-L Operator Interface for Most Controllers (Limited Access)	page 32
ASM01956	Slaved Zone Interface Card	page 39
ASM01961	Modular Service Tool Adapter	page 38
ASM01963	USB-Link 2 Adapter	page 38
ASM01979	E-BUS to USB Mini Adapter Board	page 37
ASM02188	VAV/Zone Controller Power/Comm Cable Modular Adapter	page 39
ASM02201	Refrigerant System Module for Digital Compressors (RSMD)	page 10
ASM02215	Comm Driver Chips – Fault Tolerant – Package of 10	page 38
ASM02221	E-BUS Digital Room Sensor (No LCD Display) – Temperature & Humidity	page 19
ASM02224	Power/Comm Board	page 39
ASM02227	Standard Room Sensor – Plain	page 20
ASM02236	CO_2 Sensor – Return Air	page 17
ASM02237	CO_2 Sensor – Wall Mount	page 17
ASM02242	Duct Static Pressure Pick-up Tube	page 18
ASM02244	USB-Link 2 Kit	page 30
ASM02252	Slaved Zone Rectangular Damper Kit	page 29
ASM02261	2 Pole Terminal Block	page 38
ASM02262	3 Pole Terminal Block	page 38
ASM02263	4 Pole Terminal Block	page 38
ASM02264	12 Pole Terminal Block	page 38
ASM02265	7 Pole Terminal Block	page 38
ASM02266	9 Pole Terminal Block	page 38
ASM02267	10 Pole Terminal Block	page 38
ASM02268	6 Pole Terminal Block	page 38
ASM02269	8 Pole Terminal Block	page 38
ASM02293	CNTLR RSMVQ	page 12
ASM02338	Bypass Rectangular Damper Kit	page 29
ASM02350	CNTLR SUBCOOL MONITOR	page 13
ASM02351	CNTLR RSMZ MODULE	page 12
ASM02352	SNSR SUPPLY AIR EBUS RIGHT ANGLE	page 19
ASM02426	P.D. VAV/Zone BACnet® Controller	page 24
ASM02427	P.I. VAV/Zone BACnet® Controller	page 24
ASM02627	CNTLR RSMV W/O EXV CONTROL	page 11
ASM02652	RSMVQ2R	page 12
ASM02653	P.D. BACnet® Rectangular Damper Kit	page 29
ASM02661	P.D. VAV/Zone BACnet® Controller Package	page 24
ASM02662	P.I. VAV/Zone BACnet® Controller Package	page 25
ASM02771	VCCX2 Suction Pressure Transducer	page 21
ASM02786	CNTLR RSMVHPQ	page 12
ASM02869	Refrigerant System Module for Digital Compressors (RSMD2R)	page 11

Part Number Quick Price Reference		
AAON P/N	**Part Description**	**Page No.**
ASM02907	Motor Speed Controller - 240V	page 8
ASM02908	Motor Speed Controller - 480V	page 8
ASM06690	Compressor Protection Module	page 6
ASM06709	Refrigerant System Module for Digital Compressors – CM Cond Fan	page 11
ASM06721	SNSR EBUS LCD TEMP AND HUMIDITY - 1.5%	page 16
ASM06852	CNTRL RSMD-A MODULE	page 11
ASM06926	CNTLR MHGRVX-A2 WITH OPTION FOR DIFFERENT POWER SUPPLIES	page 7
ASM07272	PT-Link II BACnet 5	page 30
ASM07274	Defrost Controller	page 6
ASM07290	SNSR DUCT CO_2 0-5000PPM EBUS	page 18
ASM07413	SENSOR SUPPLY AIR TEMP/HUMIDITY	page 22
ASM07420	COMMLINK 6	page 30
ASM07424	CNTLR VCCX-IP	page 14
ASM07430	5 Pole Terminal Block	page 38
ASM07491	CNTLR RSMZ 2500	page 13
ASM07503	VCCX-454	page 13
ASM07527	REMOTE LCD SPACE TEMP/RH EBUS	page 19
ASM07559	CNTLR FAN ARRAY	page 6
ASM07563	CNTLR A2L MITIGATION	page 5
ASM07687	RSM - DEV1	page 10
ASM07716	CNTLR RM454 - D MODULE	page 9
ASM07717	CNTLR RM454 - Z MODULE	page 10
ASM07718	CNTLR RM454 - V MODULE	page 9
ASM07719	CNTLR RM454 - SC MONITOR	page 9
ASM07771	BD - 3PI	page 5
ASM07804	CNTLR BD - FANCOMM - S	page 6
ASM07805	CNTLR BD - FANCOMM - R	page 5
G012870	E-BUS Cable Assembly – 3 ft. Long	page 34
G018870	E-BUS Cable Assembly – 1,000 ft. Long Spool	page 34
G018890	E-BUS Bulk Connectors	page 34
G029440	E-BUS Cable Assembly – 1.5 ft. Long	Page 30
G029450	E-BUS Cable Assembly – 100 ft. Long	Page 30
G029460	E-BUS Cable Assembly – 10 ft. Long	Page 30
G029470	E-BUS Cable Assembly – 150 ft. Long	Page 30
G029500	E-BUS 3 Foot HB Service Tool Replacement Cable	page 38
G029510	E-BUS Cable Assembly – 50 ft. Long	page 38
G029530	E-BUS Cable Assembly – 75 ft. Long	page 34
G030890	Modular Cable for Modular Service Tool and USB-Link – 6 ft. Long	page 35
G030900	Power/Comm Pigtail Cable Assembly – 12 ft. Long	page 42
G030910	Power/Comm Pigtail Cable Assembly – 120 ft. Long	page 42
G030920	Power/Comm Pigtail Cable Assembly – 25 ft. Long	page 42
G030930	Power/Comm Pigtail Cable Assembly – 50 ft. Long	page 42
G030940	Power/Comm Pigtail Cable Assembly – 80 ft. Long	page 42
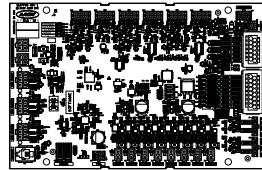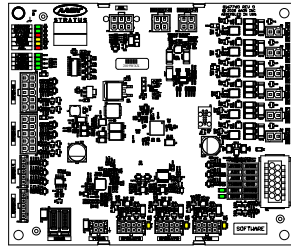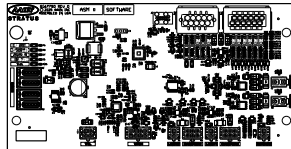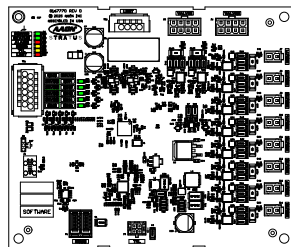
	Part Number Quick Price Reference	
AAON P/N	**Part Description**	**Page No.**
G030980	USB Cable for USB-Link – 2 ft. Long	page 35
G030990	USB Cable for CommLink III, IV, 5 or Remote Link II – 6 ft. Long	page 35
G033970	E-BUS Adapter Hub	page 37
G034180	E-BUS Crimp Tool	page 34
G034540	Power Supply for CommLink II, III, IV, 5, or 6	page 35
G034560	Power Supply for Modular Service Tool	page 35
G042230	Outdoor Air Temperature Sensor	page 20
G043260	Power/Comm Cable Assembly – 120 ft. Long	page 42
G043270	Power/Comm Cable Assembly – 25 ft. Long	page 42
G043280	Power/Comm Cable Assembly – 3 ft. Long	page 42
G043290	Power/Comm Cable Assembly – 40 ft. Long	page 42
G043300	Power/Comm Cable Assembly – 80 ft. Long	page 42
G043310	Power/Comm Extension Cable Assembly – 10 ft. Long	page 42
G043320	Power/Comm Extension Cable Assembly – 20 ft. Long	page 42
G045270	E-BUS Cable Assembly – 25 ft. Long	page 34
G045890	Bypass Damper Actuator	page 24
G051240	Duct Temperature Sensor – 6 in. Probe Length	page 18
G051250	Duct Temperature Sensor – 12 in. Probe Length	page 18
G075510	WIRE 22AWG BACNET COMM CABLE	page 35
G145190	A2L Leak Detection Sensor Plug	page 17
R69330	Modular Cable for Actuator to VAV/Zone Controller – 18 in. Long	page 34
R88450	Modular Cable for Actuator to VAV/Zone Controller – 2 ft. Long	page 34
V36590	E-BUS Cable Assembly – 250 ft. Long	page 34
Varies	Pressure Dependent BACnet Round Zone Damper Assembly	page 27
Varies	Pressure Dependent Round Slaved Zone Damper Assembly	page 28
Varies	Pressure Independent BACnet Round Zone Damper Assembly	page 27
Varies	Round Bypass Damper Assembly	page 28
ASM08150	STRATUS UNIT MANAGER	page 3
ASM08153	STRATUS POWER-COMM	page 3
ASM08156	STRATUS AIR HANDLER I-O	page 2
ASM08159	STRATUS COOLING I-O	page 2
ASM08162	STRATUS HEATING I-O	page 2
ASM08165	STRATUS OUTDOOR AIR I-O	page 3
ASM08168	STRATUS ENERGY RECOVERY I-O	page 2
ASM08171	STRATUS PREHEAT I-O	page 3
ASM08196	STRATUS SPACE SENSOR	page 3
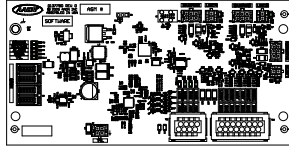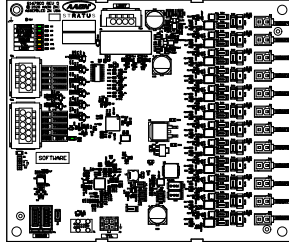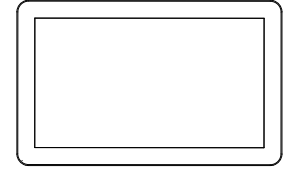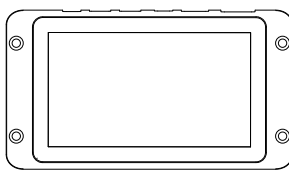
Stratus Controllers and Boards

AAON CONTROLS 2025 PARTS PRICING

Part Number	Stratus Controls and Boards
	Description
ASM08156	**STRATUS Air Handler I-O** Field wiring connections for: · Fan Control · OA\RTN Damper · A2L Sensors · Duct Static Sensor · Supply, Return, and Space Air Temperatures · Chilled\Hot Water Valve Controls · Remote Shutdown · Supply Fan Airflow Status · Hood On Status · BACnet Passthroughs
ASM08159	**STRATUS Cooling I-O** Field wiring connections for: · Compressors · Reversing Valve Control · Reheat Valve Control · Line Temperature Sensors · Refrigerant Pressure Sensors · Oil Level Sensor · Defrost Switch · Condenser Fan · A2L Sensors · BACnet Passthroughs
ASM08168	**STRATUS Energy Recovery I-O** Field wiring connections for: · Heat Wheel Speed Signal · Heat Wheel Enables · Bypass Dampers · Entering Air Temperatures · Leaving Air Temperatures · Dirty Filter Switches · Rotation Status · BACnet Passthroughs
ASM08162	**STRATUS Heating I-O** Field wiring connections for: · ModGas Valves · Ignition Proof Status · SCR Electric Signals · Heat Enables · Inducer Fan Low Speed · BACnet Passthroughs
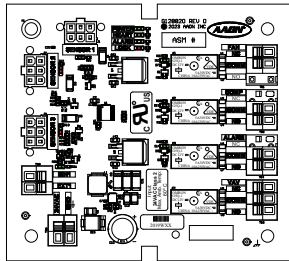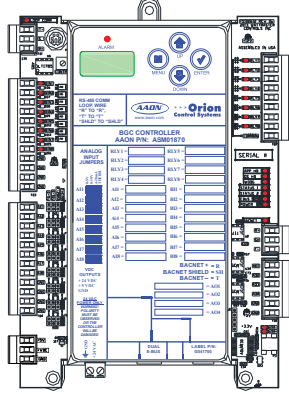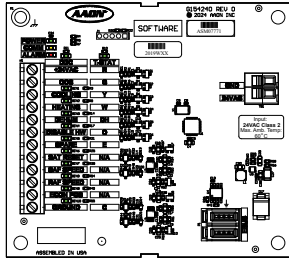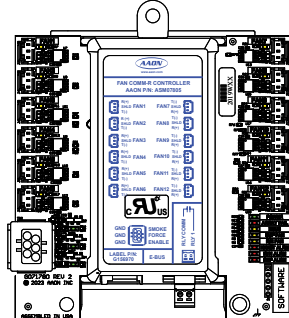
AAON CONTROLS 2025 PARTS PRICING

Part Number	Stratus Controls and Boards
	Description
ASM08165	STRATUS Outdoor Air I-O Field wiring connections for: · OA/RTN Air Damper · Exhaust Air Damper · ERV Bypass Damper · Outside Air Temperature · Return Air Temperature · Supply Airflow Switch · Return Airflow Switch · Exhaust Airflow Switch · Dirty Filter Switch · Building Pressure Sensor · Exhaust Pressure Sensor · BACnet Passthroughs
ASM08153	STRATUS POWER-COMM Main power and communications board for the STRATUS system.
ASM08171	STRATUS Preheat I-O Field wiring connections for: · Stage Enables · PWM SCR Signal · Entering Air Temperatures · Leaving Air Temperatures · BACnet Passthroughs
ASM08196	STRATUS Space Sensor · See and adjust desired space temperature · See and adjust desired occupancy schedule · Override Cooling\Vent\Heating mode · Override Unit Schedule · See Alarms · User Management · Air Balance Service Mode
ASM08150	STRATUS Unit Manager Field wiring connections for: · In Unit Board Communications · MS/TP or BACnet IP Communications · Building IP Network Communications · EBUS Sensor Communications · TS Space Sensor Communication
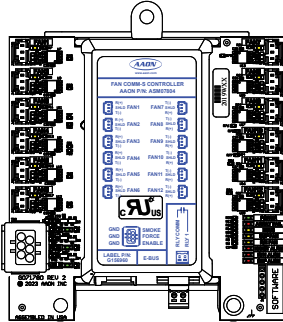
Unit Controllers and Modules

Part Number	Unit Controllers and Modules
	Description
ASM07563	**A2L Mitigation Controller** **Used on units with R454.** The A2L Mitigation Controller is required for installation and operation in all A2L AAON Units. It features 3 sensor inputs, 1 binary input, and 4 relays. The controller functions as part of the safety measures by detecting refrigerant gas leaks and dispersing gas through proper means. The A2L Mitigation controller functions as either standalone or with the VCCX-454 Controller
ASM01870	**BACnet® General Controller (BGC)** The BGC is a stand-alone Input/Output device that uses BACnet® MS/TP communications. Features • 8 Analog Inputs - 10k Type III thermistor, 4-20mA, 0-5 VDC, 0-10 VDC • 4 Analog Outputs - 0-10 VDC • 8 Binary Inputs • 8 Relay Outputs In addition to the physical points listed above, it also has two modular sensor ports for specific communicating E-BUS temperature, humidity, and CO_2 sensors. The BGC has no internal logic, but allows a BACnet® front end to read the status of the analog and binary inputs. It also allows the front end to command the relay outputs to an On or Off mode and to command the 0 - 10 VDC analog outputs to specific voltages. The on-board 2 x 8 LCD display and buttons allow viewing of input and output status, configuration of the BACnet® settings, and setting of the WattCom network address.
ASM07771	**BD - 3PI** Used for Supervisory Control of the VCCX-454. Inputs available for Remote Occupied, Cooling, Heating, Dehumidification, Disable Heat Wheel, Spare, Supply Air Temp Reset, Supply Fan Speed, Return Fan Speed, and Economizer Position. The BD-3PI has three configurable modes of operation: DDC, Thermostat, and HP Thermostat. Some inputs vary in functionality based on the selected mode. See VCCX-454 technical guide for full input descriptions.
ASM07805	**BD Controller – Fancomm - R** Fan Array Controller used with just the Return/Exhaust fans. This cannot be used in conjunction with the FANCOMM-SR. Can control up to 12 supply fan
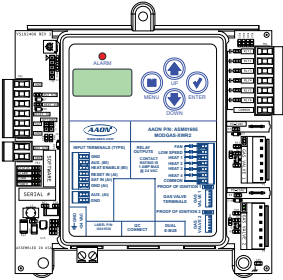
Part Number	Unit Controllers and Modules
	Description
ASM07804	**BD Controller – Fancomm- S** Fan Array Controller used with just the supply fans. This cannot be used in conjunction with the FANCOMM-SR. Can control up to 12 supply fans.
ASM07559	**BD Controller – Fancomm – SR** Fan Array Controller used to control up to 12 fans including supply, return, or exhaust fans. This cannot be used in conjunction with either the FANCOMM-R or FANCOMM-S.
ASM06690	**Compressor Protection Module** The Compressor Protection Module is used in split systems as a stand-alone module. It provides additional protection for compressors in systems with self-resetting pressure switches. The module uses high pressure and low pressure switches to disable the compressor and enforce a minimum compressor off time when a fault occurs. It also limits the number of retries and locks out the compressor if it exceeds the maximum number of allowed faults. The Compressor Protection Module sequence is intended to help with the start up of units with microchannel coils and prevent nuisance lockouts when the coil is cold.
ASM07274	**Defrost Controller** The Defrost Controller is used to manage the defrost cycle on a unit without AAON controls. This controller manages the timing and duration of the defrost cycle and allows for time interval configuration between each defrost cycle.
ASM01873	**E-BUS 12 Relay Expansion Module** The E-BUS 12 Relay Expansion Module provides an additional 12 Relay Outputs to either the VCCX2 and VCCX-IP series controllers or the VCB-X controllers. The module connects to the controllers using the included E-BUS cable.
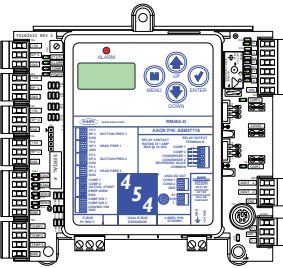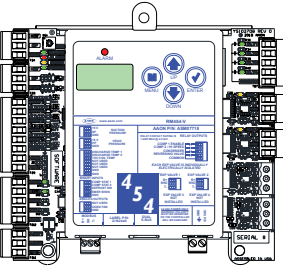
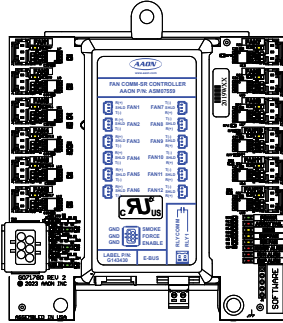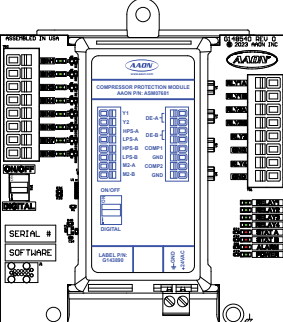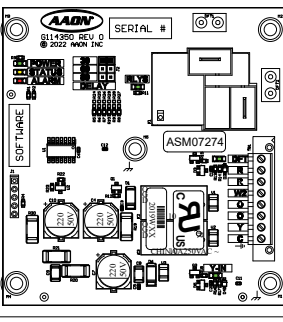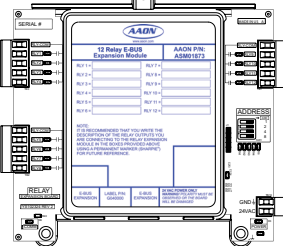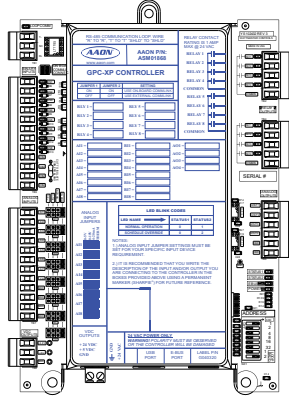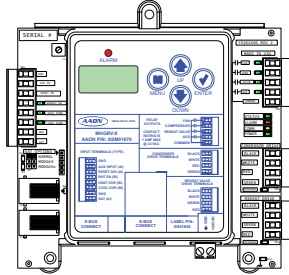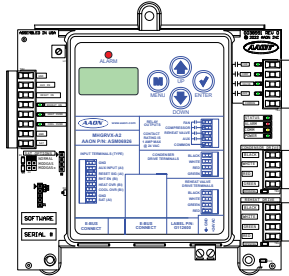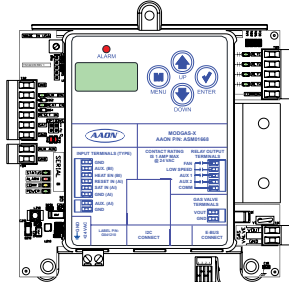| Part Number	Unit Controllers and Modules
	Description
ASM01868	**General Purpose Controller (GPC-XP)** The GPC-XP is used for controlling equipment or processes that cannot be controlled using a standard HVAC unit controller. Prism 2 software is required to interface with the GPC-XP Controller. The GPC-XP Controller provides the flexibility to control, schedule and/or monitor equipment such as pumps, unit heaters, exhaust fans, motorized louvers, and lighting. Features · On-board CommLink · Customizable · Weekly schedules · 8 Analog Inputs - 10k Type III thermistor, 4-20mA, 0-5 VDC, 0-10 VDC · 4 Analog Outputs - 0-10 VDC · 8 Binary Inputs · 8 Relay Outputs · High/Low/Average calculations of Analog Inputs · Broadcasting values to other controllers · Lead/Lag function	
ASM01670	**MHGRV-X Module** The MHGRV-X Module controls a Modulating Hot Gas Reheat Valve to maintain a desired Supply Air Temperature and Dehumidification Setpoint. The MHGRV-X Module connects to the VCB-X and with VCCX2 and VCCX-IP series controllers via an included E-BUS cable.	
ASM06926	**MHGRVX-A2 Controller** The MHGRVX-A2 is designed to control a Modulating Hot Gas Reheat Valve to maintain a desired Supply Air Temperature Setpoint. Option for different power supplies. The MHGRVX-A2 can be used as a stand-alone module or can be used in conjunction with an AAON unit controller with E-BUS capability. In addition, up to seven Reheat Expansion Modules can be connected to the MHGRVX-A2 and to each other for additional reheat valve control. The MHGRVX-A2 connects to an AAON unit controller or expansion module via an E-BUS cable.	
ASM01668	**MODGAS-X Module** The MODGAS-X Module modulates up to two gas valves to maintain a desired Discharge Air Temperature. It also controls the speed of the induced draft fan to maintain proper combustion in the heat exchanger. The MODGAS-X Module connects to the VCB-X and with VCCX2 and VCCX-IP series controllers via an included E-BUS cable.	

AAON CONTROLS 2025 PARTS PRICING
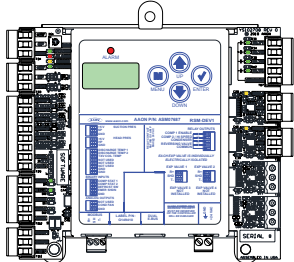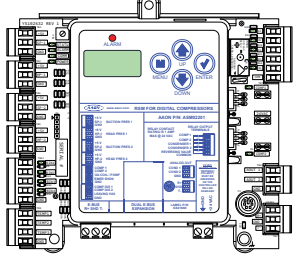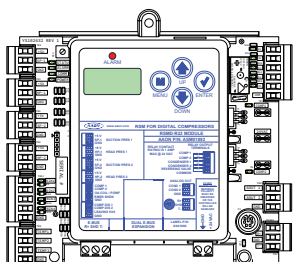
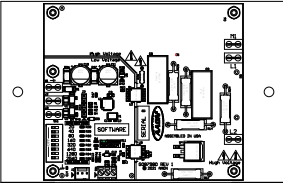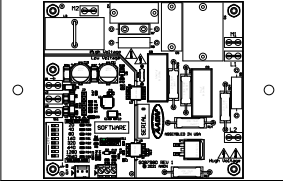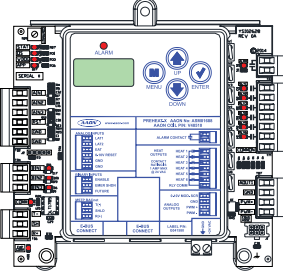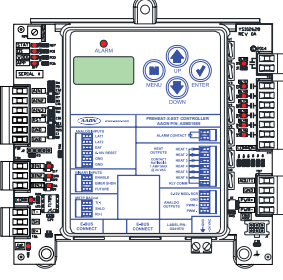| Part Number	Unit Controllers and Modules
	Description
ASM01695	**MODGAS-XWR2 Module** The MODGAS-XWR2 Module is used in units with White Rogers gas valves. It modulates up to two gas valves to maintain a desired Discharge Air Temperature. It also controls the speed of the induced draft fan to maintain proper combustion in the heat exchanger. The MODGAS-XWR2 Module connects to the VCB-X and with VCCX2 and VCCX-IP series controllers via an included E-BUS cable.
ASM02907	**Motor Speed Controller - 240V** The Motor Speed Controller is designed to control the speed of alternating current (AC) induction motors in combustion air blowers. The Motor Speed Controller is used with blower motors with Hall effect tachometer sensors included to help facilitate blower speed control.
ASM02908	**Motor Speed Controller - 480V** The Motor Speed Controller is designed to control the speed of alternating current (AC) induction motors in combustion air blowers. The Motor Speed Controller is used with blower motors with Hall effect tachometer sensors included to help facilitate blower speed control.
ASM01688	**PREHEAT-X Module** The PREHEAT-X Module is designed to control fixed stages of Preheat and optional modulating Preheat to maintain a desired Preheat Leaving Air Temperature Setpoint. It can be used as a communicating module in conjunction with the VCB-X and with VCCX2 and VCCX-IP series controllers or as a stand-alone module. The PREHEAT-X Module is limited to a 35°F Leaving Air Temperature Setpoint. The module contains a 2 x 8 LCD character display and 4 buttons that allow status display, setpoint changes, and configuration changes. Connects to the unit controller with an E-BUS cable (supplied separately).
ASM01689	**PREHEAT-X-EXT Module** The PREHEAT-X-EXT Module is designed to control fixed stages of Preheat and optional modulating Preheat to maintain a desired Preheat Leaving Air Temperature Setpoint. It can be used as a communicating module in conjunction with the VCB-X and with VCCX2 and VCCX-IP series controllers or as a stand-alone module. The PREHEAT-X-EXT Module has an extended Leaving Air Temperature Setpoint range down to 0°F. Use of this module on any given unit should be reviewed by AAON applications team. The Module contains a 2 x 8 LCD character display and 4 buttons that allow status display, setpoint changes, and configuration changes. Connects to the unit controller with an E-BUS cable (supplied separately).

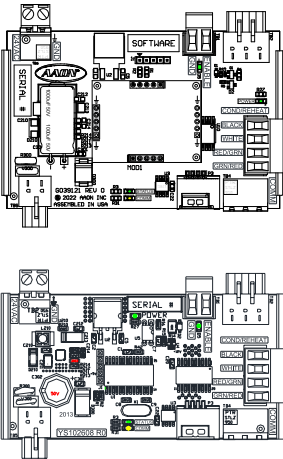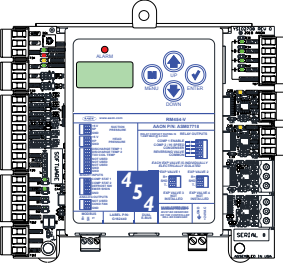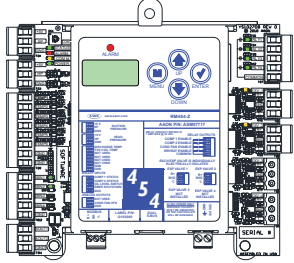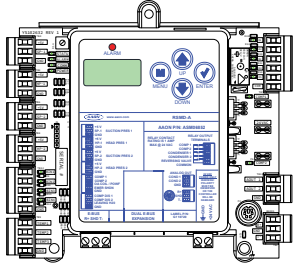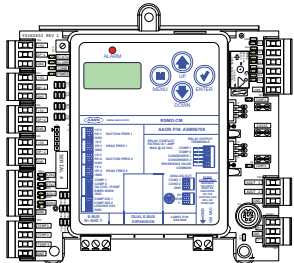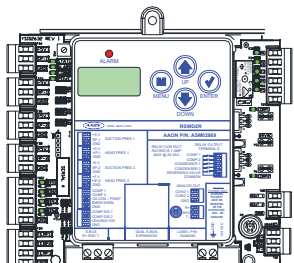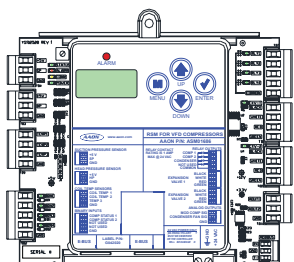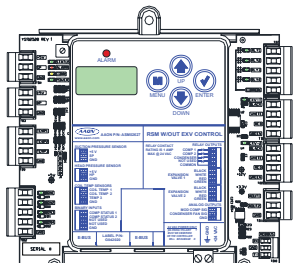| Part Number	Unit Controllers and Modules
	Description
ASM01687	**Reheat Expansion Module** Includes: Snap track mounting base The Reheat Expansion Module connects to the MHGRV-X Module via an included E-BUS cable and allows control of multiple sets of valves.
ASM07716	**RM454 Controller – D Module (RM454-D)** **Used on units with R454.** The RM454-D does not operate as a stand-alone controller and must be used with a VCCX-454 Controller. The RM454-D monitors and controls one or two refrigeration circuits. The module is designed for R454 Refrigerant. Up to 4 RM454-D's can be connected. There are 2 E-BUS ports for communication with the VCCX-454 and other E-BUS devices. The RM454-D provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary. RM-454's are required in applications with digital compressors, head pressure control, dehumidification, or heat pumps.
ASM07719	**RM454 Controller – SC Monitor (RM454-SC)** **Used on units with R454.** The Subcool Monitor Module is optional. It is used to read the Liquid Line Temperature sensors to calculate the subcooling. One or two subcool monitor modules can be connected depending on the size of the system.
ASM07718	**RM454 Controller – V Module (RM454-V)** **Used on units with R454.** The RM454-V does not operate as a stand-alone controller and must be used with a VCCX-454 Controller. Up to 4 RM454-V's can be connected. The RM454-V is used with VFD compressors with Independent Electronic Expansion Valve (EXV) to control and monitor the refrigeration circuits of the AAON unit. There are 2 E-BUS ports for communication with the VCCX-454 and other E-BUS devices. The RM454-V provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary.
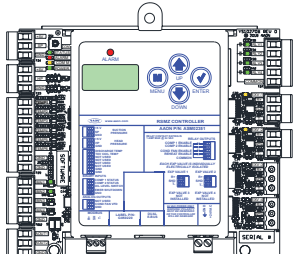
Part Number	Unit Controllers and Modules
	Description
ASM07717	**RM454 Controller – Z Module (RM454-Z)** **Used on units with R454.** The RM454-Z does not operate as a stand-alone controller and must be used with a VCCX-454 Controller. The RM454-Z monitors and controls one refrigeration circuit. The module is designed for R454 Refrigerant. The RM454-Z is used on RZ units and RN-E with Danfoss compressors. 3 or 6 RM454-Z's can be connected depending on the size of the system. There are 2 E-BUS ports for communication with the VCCX-454 and other E-BUS devices. The RM454-Z provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary.
ASM07687	**RSM Module – DEV1** **Used on units with R410-A** The Refrigerant System Module for VFD compressors with Independent Electronic Expansion Valve (EXV) monitors and controls the refrigeration circuits of the AAON unit. It connects to DMQ Universal SuperHeat Controller (USHC) or Sporlan S3C Superheat Controller and is used in conjunction with VCCX2 and VCCX-IP series controllers.
ASM02201	**Refrigerant System Module for Digital Compressors (RSMD)** **Used on units with R410-A** The RSMD does not stand alone and must be used with VCCX2 and VCCX-IP series controllers. The RSMD monitors and controls one or two refrigeration circuits of the HVAC unit. The module is designed for R410-A refrigerant. Up to 4 RSMD's can be connected. There are 2 E-BUS ports for communication with the VCCX2 and VCCX-IP series controllers and other E-BUS devices. The RSMD provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary. RSMD's are required in applications with digital compressors, head pressure control, dehumidification, or heat pump.
ASM01893	**Refrigerant System Module for Digital Compressors – R22 (RSMD-R22)** **Used on units with R22 refrigerant** The RSMD does not stand alone and must be used with VCCX2 and VCCX-IP series controllers. The RSMD monitors and controls one or two refrigeration circuits of the HVAC unit. The module is designed for R22 refrigerant. Up to 4 RSMD's can be connected. There are 2 E-BUS ports for communication with the VCCX2 and other E-BUS devices. The RSMD provides a 2 x 8 LCD character display and four buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary. RSMD's are required in applications with digital compressors, head pressure control, dehumidification, or heat pump.
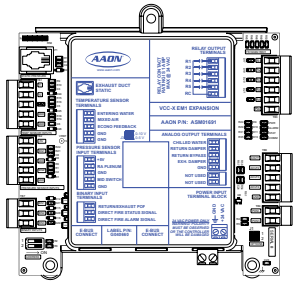
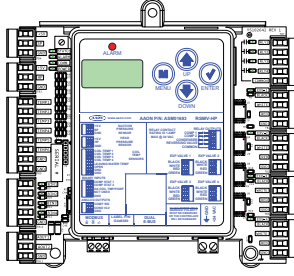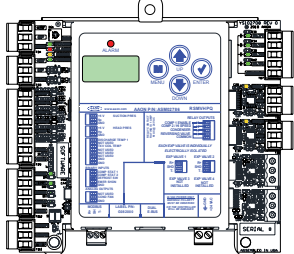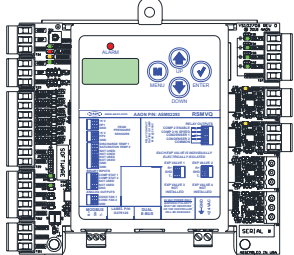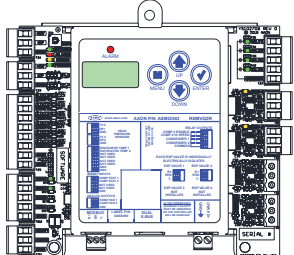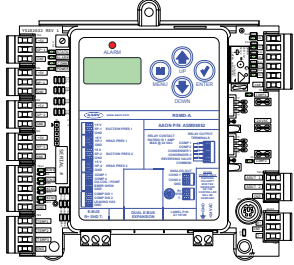| Part Number	Unit Controllers and Modules
	Description
ASM06852	**RSMD-A Module** **Used on units with R410-A** The RSMD-A does not operate as a standalone controller and must be used with VCCX2 and VCCX-IP series controllers. The RSMD-A monitors and controls one refrigeration circuit with up to two compressors and one condenser. Up to 2 RSMD-A's can be connected depending on the size of the system. There are 2 E-BUS ports for communication with VCCX2 and VCCX-IP series controllers and other E-BUS devices. The RSMD-A provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary.
ASM06709	**Refrigerant System Module for Digital Compressors – CM Cond Fan** **Used on units with R410-A** The Refrigerant System Module for Digital Compressors with Condenser Fans with Microchannel Coils (RSMD-CM) can monitor and control up to two compressors and condensers. The compressors can be in either a tandem or non-tandem configuration. The module is designed for R410-A refrigerant.
ASM02869	**Refrigerant System Module for Digital Compressors-with 2nd circuit reheat (RSMD2R)** **Used on units with R410-A** The RSMD2R can monitor and control up to two compressors and condensers. The compressors can only be in non-tandem configuration. The module is designed for R410-A refrigerant.
ASM01686	**Refrigerant System Module for VFD Compressors (RSMV)** **Used on units with R410-A** Includes: E-BUS cable The RSMV does not stand alone and must be used with VCCX2 and VCCX-IP series controllers. The RSMV monitors and controls one tandem refrigeration circuit of the HVAC unit. The module is designed for R410-A refrigerant. Up to 4 RSMV's can be connected. There are two E-BUS ports for communication with VCCX2 and VCCX-IP series controllers and other E- BUS devices. The RSMV provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary. RSMV's are required in applications with VFD compressors, head pressure control, dehumidification, or heat pump.
ASM02627	**RSMV Controller without EXV Control** **Used on units with R410-A** The Refrigerant System Module for VFD compressors without EXV Superheat Control monitors and controls two refrigeration circuits of the AAON unit. It is used with VCCX2 and VCCX-IP series controllers.

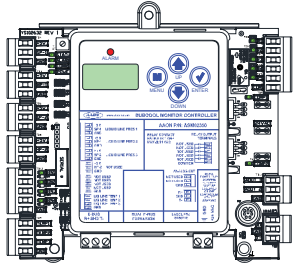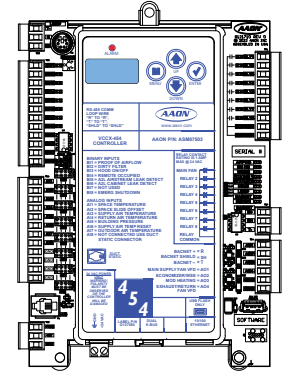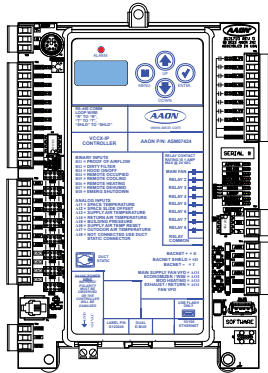| Part Number	Unit Controllers and Modules
	Description
ASM01693	**Refrigerant System Module for VFD Compressors - Heat Pump (RSMV-HP)** **Used on units with R410-A** The RSMV-HP does not stand alone and must be used with VCCX2 and VCCX-IP series controllers. The RSMV-HP monitors and controls one tandem refrigeration circuit of the HVAC heat pump unit. The module is designed for R410-A refrigerant. Up to 4 RSMV-HP's can be connected. There are 2 E-BUS ports for communication with VCCX2 and VCCX-IP series controllers and other E-BUS devices. The RSMV-HP provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary. RSMV-HP's are required in applications with VFD compressors, head pressure control, dehumidification, or heat pump.
ASM02786	**RSMVHPQ Controller** **Used on units with R410-A** The Refrigerant System Module for VFD compressors with DMQ Superheat Control monitors and controls two refrigeration circuits of the AAON unit. It is used in conjunction with VCCX2 and VCCX-IP series controllers. It connects to the DMQ Universal SuperHeat Controller or Sporlan S3C Superheat controller.
ASM02293	**RSMVQ** **Used on units with R410-A** The Refrigerant System Module for VFD compressors with the DMQ Superheat Control monitors and controls two refrigeration's circuits of the AAON unit. It is used in conjunction with VCCX2 and VCCX-IP series controllers.
ASM02652	**RSMVQ2R** **Used on units with R410-A** The Refrigerant System Module (RSM) for VFD compressors with DMQ® Superheat Control and second circuit reheat (RSMVQ2R) monitors and controls two refrigeration circuits of the AAON unit. It is used in conjunction with VCCX2 and VCCX-IP series controllers.
ASM02351	**RSMZ Controller Module** **Used on units with R410-A** The RSMZ does not operate as a stand-alone controller and must be used with VCCX2 and VCCX-IP series controllers. The RSMZ monitors and controls one refrigeration circuit. The RSMZ is used on RZ units and RN-E ones with Danfoss compressors. 3 or 6 RSMZ's can be connected depending on the size of the system. There are 2 E-BUS ports for communication with VCCX2 and VCCX-IP series controllers and other E-BUS devices. The RSMZ provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary.
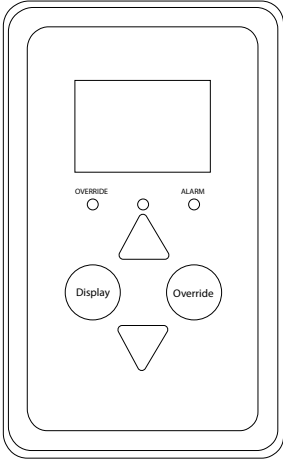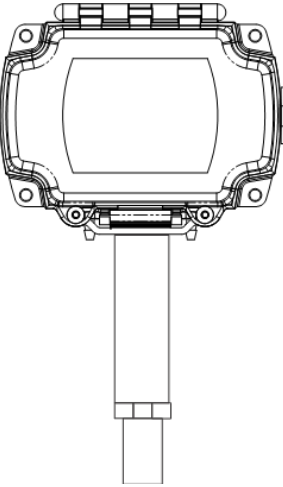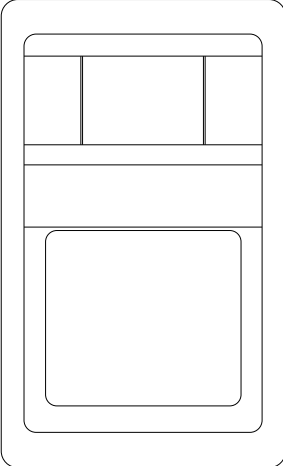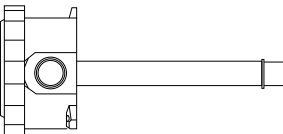
Part Number	Unit Controllers and Modules
	Description
ASM07491	**RSMZ Controller-2500** **Used on units with R410-A** The RSMZ does not operate as a stand-alone controller and must be used with VCCX2 and VCCX-IP series controllers. The RSMZ monitors and controls one refrigeration circuit. The RSMZ is used on RZ units and RN-E with Danfoss compressors with specifically the 2500 Step Sporlan Valves. 3 or 6 RSMZ's can be connected depending on the size of the system. There are 2 E-BUS ports for communication used with VCCX2 and VCCX-IP series controllers and other E-BUS devices. The RSMZ provides a 2 x 8 LCD character display and 4 buttons that allow for status of system operation, system setpoints, system configurations, sensors, and alarms and to change the module's address, if necessary.
ASM02350	**Subcool Monitor Module** The Subcool Monitor Module is optional. It is used to read the Liquid Line Temperature sensors to calculate the subcooling. One or two subcool monitor controller modules can be connected depending on the size of the system.
ASM07503	**VCCX-454** **Used on units with R454.** Used for Constant Volume, VAV, Single Zone VAV, MUA, Space Temperature Control of High Percentage of Outdoor Air and DOAS Applications. Air to Air and Water Source Heat Pump operations can also be configured. It also has on board BACnet® MS/TP and BACnet® IP. The Controller contains 2 x 8 LCD Character display and four buttons that allow for status and alarm display as well as BACnet® configuration
ASM01691	**VCC-X EM1 Expansion Module** Features • Title 24 (FDD) Economizer Feedback • Modulating Chilled Water control • 3 analog outputs for controlling a Return Air Bypass Damper and a Return Damper in Return Air Bypass applications • 5 configurable relay outputs • Return/Exhaust fan proof of flow It connects with an included E-BUS cable to the VCCX series controller
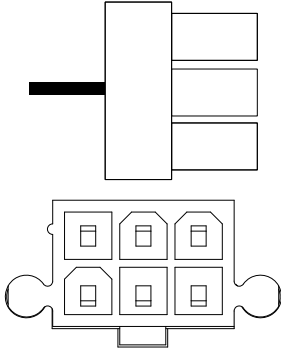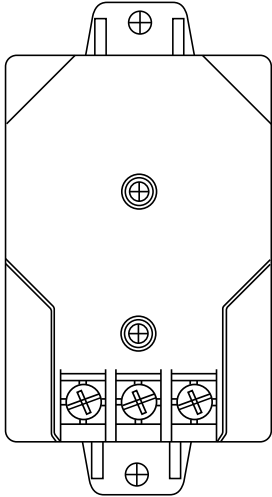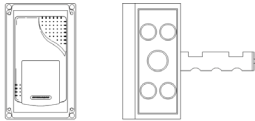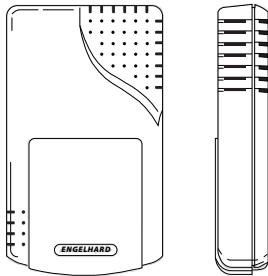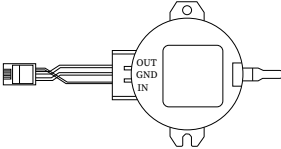
Part Number	Unit Controllers and Modules
	Description
ASM07424	**VCCX-IP Controller** **Used on units with R410-A** Used for Constant Volume, VAV, Single Zone VAV, MUA, Space Temperature Control of High Percentage Outdoor Air, and DOAS applications. Air to Air and Water Source Heat Pump operations can be configured. It also has on-board BACnet® MS/TP and BACnet® IP. The Controller contains a 2 x 8 LCD character display and four buttons that allow for status and alarm display as well as BACnet® configuration.

Sensors
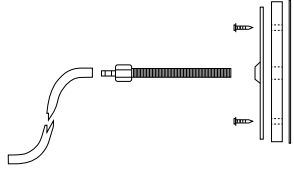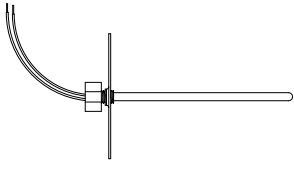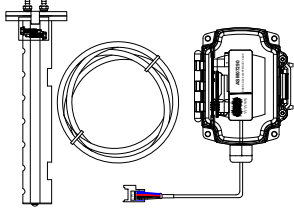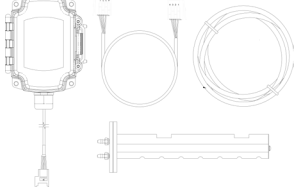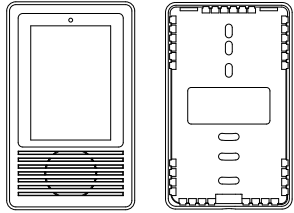
AAON CONTROLS 2025 PARTS PRICING

Part Number	Sensors
	Description
ASM06721	**1.5% E-BUS Temperature and Humidity Sensor with LCD Display** E-BUS communicating Room Temperature & Humidity Sensor with LCD for display of certain status, setpoints, and buttons for setpoint adjustment and override. Requires an E-BUS cable, sold separately.
ASM01647	**3% Outdoor Air Relative Humidity Sensor 0-5 VDC Output** 0-5 VDC, Outdoor Air Relative Humidity Transmitter mounted in a weatherproof, enclosure only. Used for outdoor air humidity sensing applications. Can be used with GPC-XP and BGC Controller.
ASM01646	**3% Room Mounted Relative Humidity Sensor 0-5 VDC Output** The sensor is 0-5 VDC, Room Mounted Relative Humidity Sensor only Used for room air humidity sensing applications. Can be used with GPC-XP and BGC Controller.
ASM01835	**3% Return Air Relative Humidity Sensor 0-5 VDC Output** 0-5 VDC, Return Air Relative Humidity Sensor mounted in a weatherproof, handy box only. Used for return air humidity sensing applications. Can be used with GPC-XP and BGC Controller.
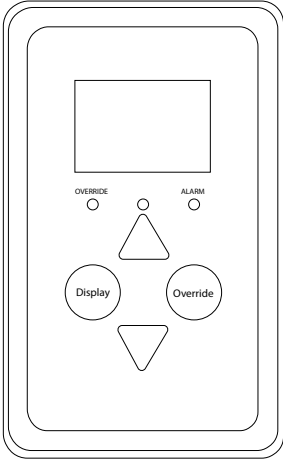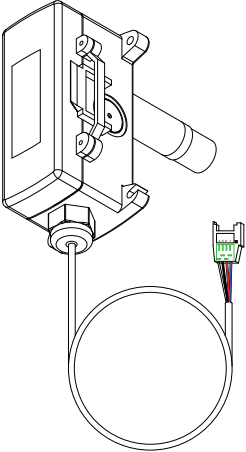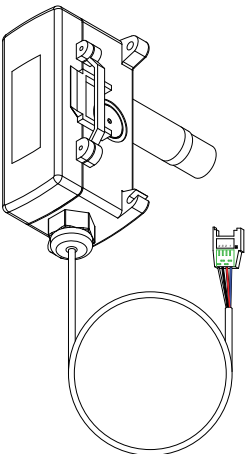
Part Number	Sensors
	Description
G145190	**A2L Leak Detection Sensor Plug** Includes: 1 Sensor Plug. Used on the A2L Mitigation Board to fill an open A2L Leak Detection Sensor Port.
ASM01832	**Building Static Pressure Sensor** The Building Static Pressure Sensor is -0.25 to +0.25 W.C., 0-5 VDC, and requires a 24 VAC/VDC power supply. Connects via 3-conductor field wiring.
ASM02236	**CO_2 Sensor – Return Air** Includes: 20-30 VAC Power Input, 0-10 VDC or 4-20 mA output, and CO_2 Sensor for return air duct mounting with aspiration box. Accuracy of 20 PPM at 78ºF. Can be used with GPC-XP and BGC Controller.
ASM02237	**CO_2 Sensor – Wall Mount** Includes: 20-30 VAC Power Input, 0-10 VDC or 4-20 mA output, and CO_2 Sensor for wall mounting. Accuracy of 20 PPM at 78ºF. Can be used with GPC-XP and BGC Controller.
ASM01640	**Duct Static Pressure Sensor** The Duct Static Pressure Sensor is 0-5 inch W.C., 0-5 VDC and is connected to controller via integral "RJ" connector.
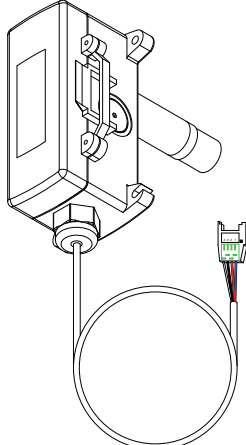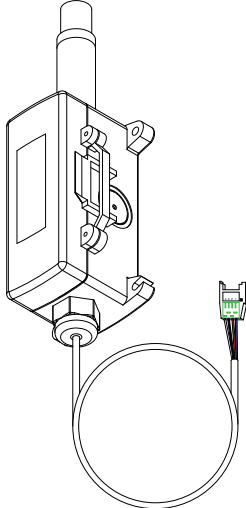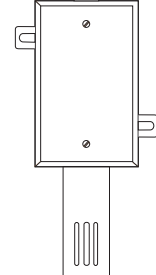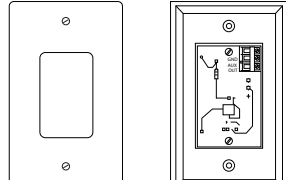
Part Number	Sensors
	Description
ASM02242	**Duct Static Pressure Pick-up Tube Kit** Includes: Duct Static Pressure Pick-up Tube, 1 ft. length of FRP tubing, gasketed mounting bracket, and screws. Used with Duct Static Pressure Sensor.
G051240	**Duct Temperature Sensor – 6 inch Duct Temperature Sensor** Includes: Mounting hardware 10k Ohm type III thermistor. Used for supply or return air temperature sensing applications.
G051250	**Duct Temperature Sensor – 12 inch Duct Temperature Sensor** Includes: Mounting hardware 10k Ohm type III thermistor. Used for supply or return air temperature sensing applications.
ASM07290	**E-BUS CO_2 Duct Sensor – 0-5000 PPM** CO_2 Duct Sensor used in Direct Fire applications.
ASM01831	**E-BUS CO_2 Sensor – Duct Mounted with Remote Pickup Tube** Includes: Integral Aspiration Box, Airflow Pickup Tube, 10 ft. of ¼ inch tubing, and 10 ft. E-BUS cable. Used with the VCCX2 and VCB-X Controllers for Return Air CO_2 sensing applications.
ASM01829	**E-BUS CO_2 Sensor – Wall Mounted** Used with the VCCX2 and VCB-X Controllers for CO_2 sensing applications where wall mounting in the space is desired. Connects to controller with E-BUS cable of required length. Cable sold separately. See page 26 for available cable lengths.
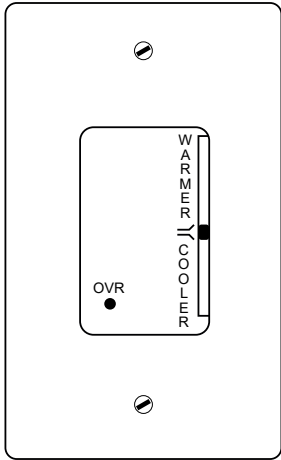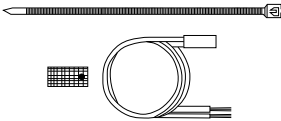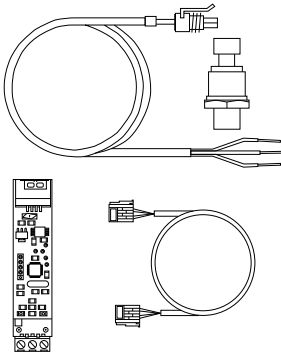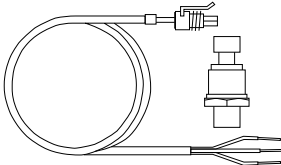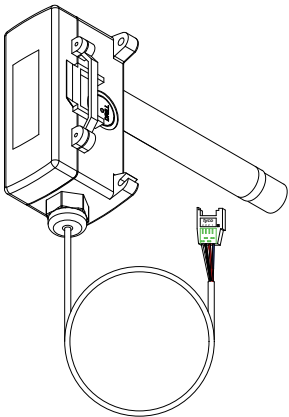
Part Number	Sensors
	Description
ASM01820	**E-BUS Digital Room Temperature & Humidity Sensor** E-BUS communicating Room Temperature and Humidity Sensor with LCD for display of certain status and setpoints and buttons for setpoint adjustment and override.
ASM02221	**E-BUS Digital Room Temperature & Humidity Sensor (No LCD Display)** The E-BUS Digital Room Temp & Humidity Sensor without display has no LCD Display or buttons. All models are used with the VCCX2 and VCB-X Controllers and require an E-BUS cable, sold separately. See page 26 for available cable lengths.
ASM07527	**E-BUS Remote Space Temperature & Return Heat (with LCD Display)** E-BUS communicating display of the current space temperature that the VCCX is configured to read. This display has no sensing functionality. Equipped with an LCD display with buttons for override and setpoint adjust.
ASM01836	**E-BUS Horizontal Outdoor Air Temperature & Humidity Sensor** Includes: Plastic weatherproof enclosure with attached 3 ft. pigtail with female E-BUS connector and an additional 25 ft. standard E-BUS cable. If a longer E-BUS cable is required, it must be ordered separately. See page 26 for available cable lengths. Connects to VCCX2 or VCB-X Controller or E-BUS Adapter Hub.
ASM02352	**E-BUS Supply Air Temerature and Humidity Sensor** Includes: Plastic weatherproof enclosure with attached 3 ft. pigtail with female E-BUS connector and an additional 25 ft. standard E-BUS cable. If a longer E-BUS cable is required, it must be ordered separately. See page 26 for available cable lengths. Connects to VCCX2 or VCB-X Controller or E-BUS Adapter Hub.

Part Number	Sensors
	Description
ASM01840	**E-BUS Return Air Temperature & Humidity Sensor** Includes: Plastic weatherproof enclosure with attached 3 ft. pigtail with female E-BUS connector. If a longer E-BUS cable is required, it must be ordered separately. See page 26 for available cable lengths. Connects to VCCX2 or VCB-X Controller or E-BUS Adapter Hub.
ASM01838	**E-BUS Vertical Outdoor Air Temperature & Humidity Sensor** Includes: Plastic weatherproof enclosure with attached 3 ft. pigtail with female E-BUS connector. If a longer E-BUS cable is required, it must be ordered separately. See page 26 for available cable lengths. Connects to VCCX2 or VCB-X Controller or E-BUS Adapter Hub.
G042230	**Outside Air Sensor**
ASM02227	**Standard Room Sensor – Plain** Standard Room Sensor. Connects to controller via 2-conductor field wiring.
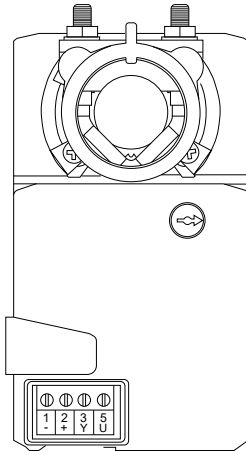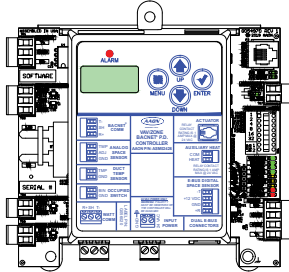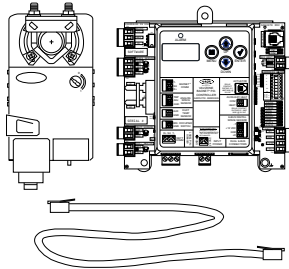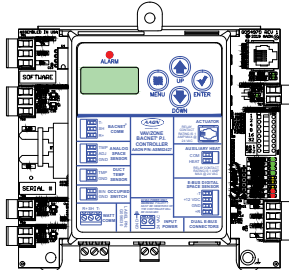
Part Number	Sensors
	Description
ASM01643	**Standard Room Sensor with Override and Slide Adjust** Standard Room Sensor with Override Button and Slide Adjust. Connects to controller via 3-conductor field wiring.
ASM01624	**Strap-on Temperature Sensor Kit** Includes: 10k Ohm Type III thermistor, Strap-on Temperature Sensor, two wire thermal mastic, and plastic mounting strap. Used for water temperature sensing applications.
ASM01845	**VCB-X Suction Pressure Transducer Kit with E-BUS Adapter** Includes: Suction Pressure Transducer, modular cable with a modular connector on one end and bare stripped wires on the opposite end, E-BUS Adapter, and 3 ft. E-BUS cable. The Suction Pressure Transducer is 0-250 psi and is used to monitor refrigerant suction line pressure of a DX cooling coil. The Suction Pressure Transducer has a ¼ inch SAE flare connection for connection to the refrigerant suction line.
ASM02771	**VCCX2 Suction Pressure Transducer** Includes: Modular cable The cable is supplied with a modular connector on one end and bare stripped wires on the opposite end. The Suction Pressure Transducer is 0-250 psi and is used to monitor refrigerant suction line pressure of a DX cooling coil. The Suction Pressure Transducer has a ¼ inch SAE flare connection for connection to the refrigerant suction line.

Part Number	Sensors
	Description
ASM07413	**Supply Air Temperature and Humidity Sensor** E-BUS communicating Supply Air Temperature & Humidity Sensor. Connects to a VCCX controller anywhere on the E-BUS daisy chain. Required for the DOAS sequence of operation.
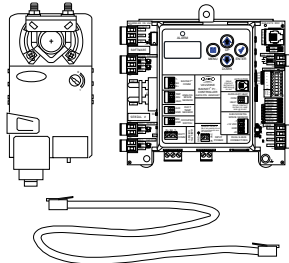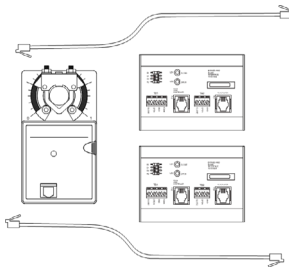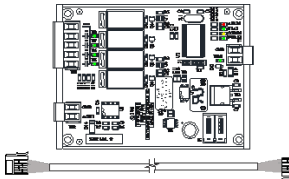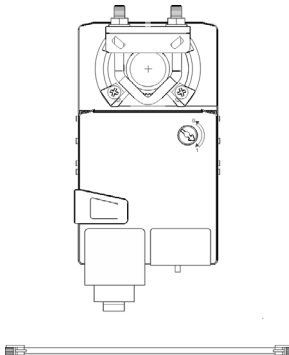
Zone Controllers and Modules

Part Number	Zone Controllers and Modules
	Description
G045890	**Bypass Damper Actuator** Used for control of bypass damper to maintain static pressure in a VAV/Zone system. Can be field or factory mounted. Accepts a 2-10 VDC signal.
ASM02426	**Pressure Dependent VAV/Zone BACnet® Controller** The controller has terminal block connections to connect a transformer and to daisy-chain communications between VAV/Zone BACnet® Controllers using 2-conductor shielded communication wire. Note: Discount when ordering a new system. Contact Parkville.sales@aaon.com for details.
ASM02661	**Pressure Dependent VAV/Zone BACnet® Controller Package** Includes: Pressure Dependent VAV/Zone BACnet® Controller and Zone Damper Actuator with 18in modular cable. The Pressure Dependent VAV/Zone BACnet® Controller is designed for pressure dependent VAV box and zone damper applications. One stage of auxiliary heat is provided on the controller. The controller has terminal block connections to connect a transformer and to daisy-chain communications between VAV/Zone controllers using a 2-conductor shielded communication wire. The VAV/Zone Controller Expansion Module (sold separately) is also available for applications using fan terminals and/or more than one stage of electrical heat, SCR electrical heat, or modulating HW heat. Note: Discount when ordering a new system. Contact parkville.sales@aaon.com for details.
ASM02427	**Pressure Independent VAV/Zone BACnet® Controller** The controller has terminal block connections to connect a transformer and to daisy-chain communications between VAV/Zone BACnet® Controllers using 2-conductor shielded communication wire. Note: Discount when ordering a new system. Contact Parkville.sales@aaon.com for details.
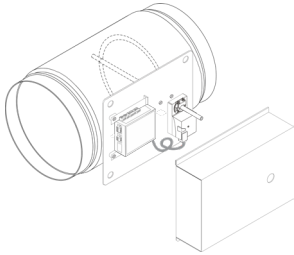
Part Number	Zone Controllers and Modules
	Description
ASM02662	**Pressure Independent VAV/Zone BACnet® Controller Package** Includes: Pressure Independent VAV/Zone BACnet® Controller and Zone Damper Actuator with 18 inch modular cable. The Pressure Independent VAV/Zone BACnet® Controller is designed for pressure independent VAV box and zone damper applications. It is supplied with an integral airflow sensor. One stage of auxiliary heat is provided on the controller. The controller has terminal block connections to connect atransformer and to daisy-chain communications between VAV/Zone Controllers using 2-conductor shielded communication wire. The VAV/Zone Controller Expansion Module (sold separately) is also available for applications using fan terminals and/or more than one stage of electrical heat, SCR electric heat, or modulating HW heat. Note: Discount when ordering a new system. Contact parkville.sales@aaon.com for details.
ASM01851	**Slaved VAV/Zone Damper Kit** Includes: Damper Actuator, two Interface Boards and modular cables for controller to actuator connection. Used to operate two actuators simultaneously. Refer to the VAV/Zone Controller technical guide for wiring instructions.
ASM01629	**VAV/Zone Controller Expansion Module Includes: 18 inch E-BUS cable** The Expansion Module is used in conjunction with the VAV/Zone BACnet® Controllers and allows fan and heat control of terminal units with up to three stages of electric heat, SCR electric heat, or modulating hot water heat.
ASM01846	**Zone Damper Actuator** Includes: 18 inch modular cable. Generally used as a replacement zone actuator. Will connect with the VAV/Zone controllers via modular cable.

Zone Dampers
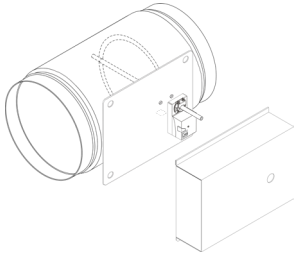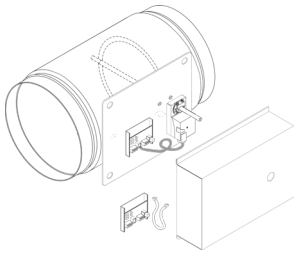
Part Number	Zone Dampers	
	Description	
ASM02605 (6" Diameter) ASM02606 (8" Diameter) ASM02607 (10" Diameter) ASM02608 (12" Diameter) ASM02609 (14" Diameter) ASM02610 (16" Diameter)	**Pressure Dependent BACnet® Round Zone Damper Assembly** Includes: Pressure Dependent VAV/Zone BACnet® Controller and actuator with modular cable mounted in a sheet metal control enclosure on a round damper assembly. One stage of on/off heat is available on the controller. For fan control or other heat options, see the ASM01629 Module. This controller uses the Standard Room Sensor or the E-BUS Digital Room Temperature Sensor.	
ASM02611 (6" Diameter) ASM02612 (8" Diameter) ASM02613 (10" Diameter) ASM02614 (12" Diameter) ASM02615 (14" Diameter) ASM02616 (16" Diameter)	**Pressure Independent BACnet® Round Zone Damper Assembly** Includes: Pressure Independent VAV/Zone BACnet® Controller and actuator with modular cable mounted in a sheet metal control enclosure on a round damper assembly. One stage of on/off heat is available on the controller. For fan control or other heat options, see the ASM01629 Module. This controller uses the Standard Room Sensor or the E-BUS Digital Room Temperature Sensor.	

NOTES:

All round dampers are non-returnable

For damper sizing information, see "**Sizing of Zone Dampers" on page 43**.

Part Number	Zone Dampers
	Description
ASM01928 (10" Diameter)

ASM01929 (12" Diameter)

ASM01930 (14" Diameter)

ASM01931 (16" Diameter) | **Round Bypass Damper Assembly**

Includes: Modulating damper actuator, mounted in a sheet metal control enclosure on a round damper assembly. |
| ASM01932 (6" Diameter)

ASM01933 (8" Diameter)

ASM01934 (10" Diameter)

ASM01935 (12" Diameter)

ASM01936 (14" Diameter)

ASM01937 (16" Diameter) | **Pressure Dependent Round Slaved Zone Damper Assembly**

Includes: Damper Actuator, Slave Interface Card, modular cables for controller to interface card connection, and Interface card to actuator connection, mounted in a sheet metal control enclosure on a round damper assembly. Also includes a second Slave Interface Card and modular cables shipped loose for field connection to master zone controller. |
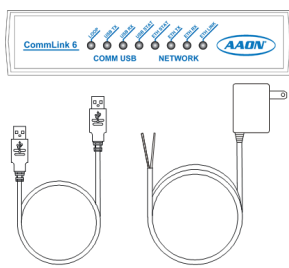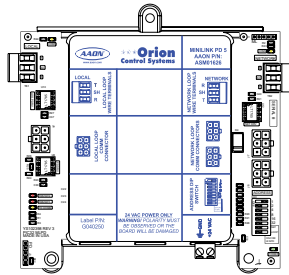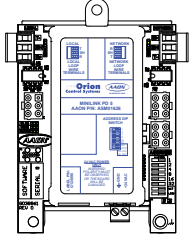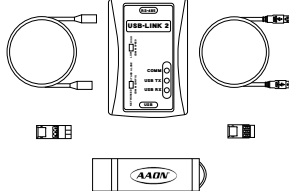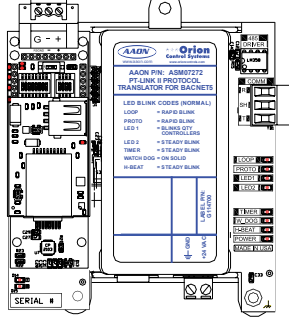
NOTES:

All round dampers are non-returnable

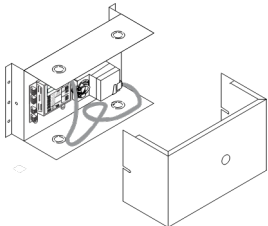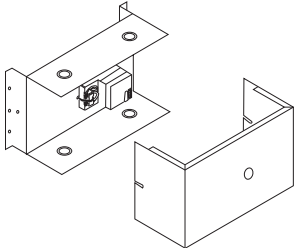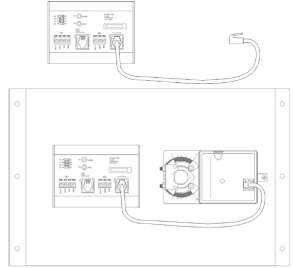For damper sizing information, see "**Sizing of Zone Dampers**" on page 43.
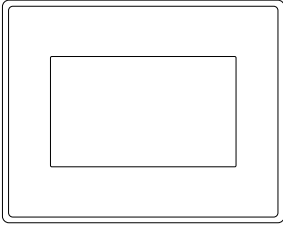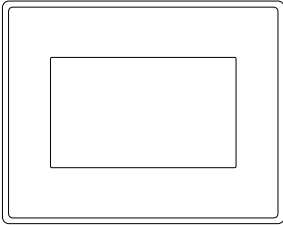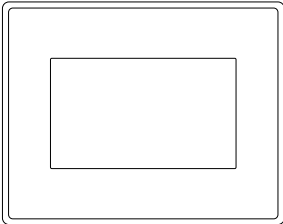
Part Number	Zone Dampers
	Description
ASM02653	**Pressure Dependent BACnet® Rectangular Damper Kit** Includes: Pressure Dependent VAV/Zone BACnet® Controller, actuator and 18 inch long modular cable all mounted in a sheet metal enclosure. One stage of on/off heat is available on the controller. for fan control or other heat options, see the ASM01629 Module. This controller uses the Standard Room Sensor or the E-BUS Digital Room Temperature Sensor.
ASM02338	**Bypass Rectangular Damper Kit** Includes: Modulating damper actuator, factory mounted in a sheet metal enclosure. Used when a rectangular damper is to be used as a bypass damper for a zoning system.
ASM02252	**Slaved VAV/Zone Rectangular Damper Kit** Includes: Damper Actuator, two Interface Boards and modular cables for controller to actuator connection. Mounted in a metal enclosure. Used to operate two actuators simultaneously. Refer to the VAV/Zone Controller technical guide for wiring instructions.

Part Number	Communication Devices
	Description
ASM07420	**CommLink 6** Includes: CommLink 6, 6 ft. long USB cable, and 120/24 VAC power supply. The CommLink 6 connects to your control system using a USB computer connection to provide direct communication with the control system from a computer with the Prism 2 software installed. The CommLink 6 has a built-in IP Module which provides an Ethernet connection to the controls system form any computer with Prism 2 software that is connected to a building's LAN. It can also be configured to allow access to the control system from the Internet through your LAN (if your Ethernet firewall is configured for this option).
ASM01626	**MiniLink PD 5** Used with all Orion controllers to provide network communications, zone voting, alarming, and tenant logging capabilities. A MiniLink PD 5 is required on each loop of a Networked system.
ASM02244	**USB-Link 2 Kit** Includes: USB-Link 2, USB cable, modular connection cable, two mini-DIN to terminal adapters, and Prism 2 software and manual on USB flash drive. The USB-Link 2 is a pocket-sized communications interface used to connect a laptop computer to your controls system for configuration and monitoring purposes. Requires laptop with Prism 2 software installed.
ASM07272	**PT-Link II BACnet 5** Includes: PT-Link II board complete with one communication protocol module and a 10 ft. crossover cable. Supplied mounted in plastic enclosure. The AAON PT-Link II (Protocol Translator) is used to provide bi- directional translation of data and information between the Orion System controllers and BACnet® 4 control protocol.
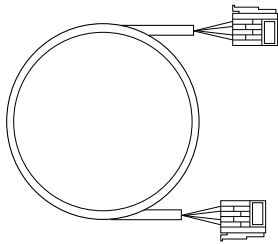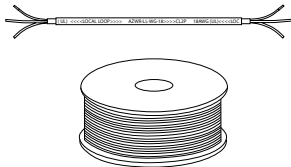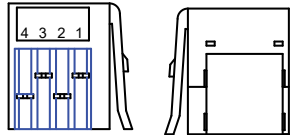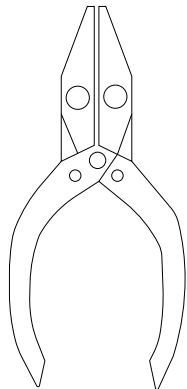
User Interface

Part Number	User Interfaces
	Description
ASM01900	**System Manager Touch Screen Limited Access** The SMTS-L is an end-user interface only and allows the end user to view status points, change Space Temperature Setpoint and schedules, and view certain alarms of compatible controllers on the Orion Controls System. The SMTS-L is furnished with hardware for flush mounting into hollow drywall or surface mounting on concrete brick or plaster surfaces. Compatible controllers: VCCX2, VCCX-IP, VCB-X, VCM-X, VAV/ZoneControllers
ASM01897	**System Manager TS II** The SMTS II is an end-user interface only and allows the end user to view status and adjust setpoints of any compatible controller on the Orion controls system. The SMTS II is furnished with hardware for flush mounting into hollow drywall or surface mounting on concrete brick or plaster surfaces. Compatible controllers: VCB-X, VCM-X E-BUS and VCM Controllers
ASM01898	**System Manager TS II for the GPC-XP** This System Manager is designed specifically for the GPC-XP. It allows the end user to view status and adjust setpoints. The package includes hardware for flush mounting into hollow drywall or surface mounting on concrete brick or plaster surfaces.

User Interface
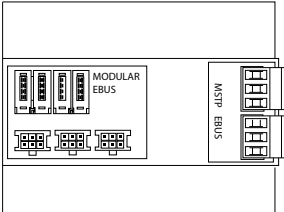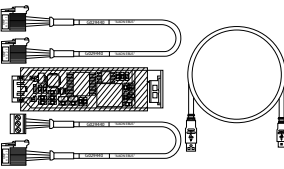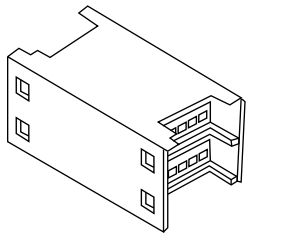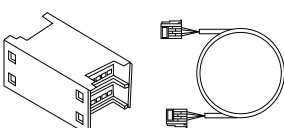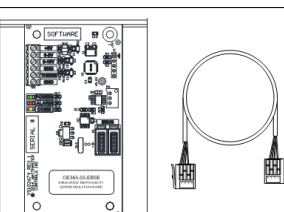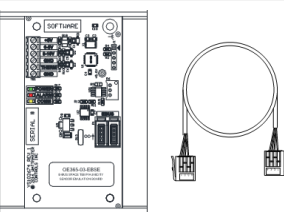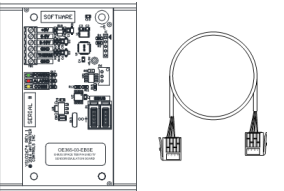
Part Number	Cables
	Description
G029440 (1.5ft.) G012870 (3 ft.) G029460 (10 ft.) G045270 (25 ft.) G029510 (50 ft.) G029530 (75 ft.) G029450 (100 ft.) G029470 (150 ft.) V36590 (250 ft.)	**E-BUS Cable Assembly** The E-BUS cables are used to connect the VCCX2 & VCB-X Controllers to their associated expansion modules and E-BUS sensors. Premade E-BUS cables are available in the standard lengths shown.
G018870	**Bulk E-BUS Cable** Includes: 1000 ft. spool Allows field fabrication of E-BUS cables using G018890 E-BUS connectors. The E-BUS connectors can be crimped to the E-BUS cable.
G018890	**E-BUS Bulk Connector** Crimps to E-BUS spool cable. Note: Must be crimped using G034180 crimp tool or equivalent 3M E-9E E-BUS crimp tool.
G034180	**E-BUS Crimp Tool** Parallel Jaw Pliers for crimping G018890 E-BUS connectors to G018870 E-BUS cable.
R69330	**Modular Cable for Actuator to VAV/Zone Controller** Used with the ASM01846 Actuator to a VAV/Zone Controller. Also used to connect expansion base boards to each other and/or to the VCM Controller. Includes: 18 inch modular cable only.
R88450	**Modular Cable for Actuator to VAV/Zone Controller** Used with the ASM01846 Actuator to a VAV/Zone Controller. Also used to connect expansion base boards to each other and/or to the VCM Controller. Includes: 2 ft. modular cable only.
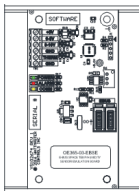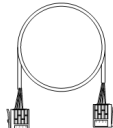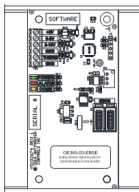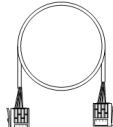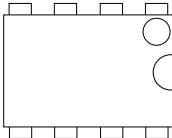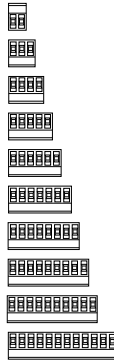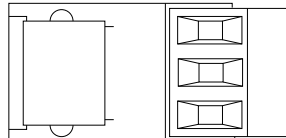
Part Number	Cables
	Description
G030890	**Modular Cable for Modular Service Tool and USB-Link** Includes: 6 ft. modular cable with mini DIN connectors on both ends for Modular Service Tool and USB-Link.
G030980	**USB Cable for USB-Link** Includes: 2 ft. USB cable.
G030990	**USB Cable for CommLink III, IV, 5, 6, or Remote Link II** Includes: 6 ft. USB cable used with CommLink III or IV or Remote Link II.
G034540	**Power Supply for CommLink II, III, IV, 5, or 6** Includes: Plug in 120/24 VAC power supply for CommLink II, III, 5, or 6.
G034560	**Power Supply for Modular Service Tool** Includes: Plug-in 120 VAC / 5 VDC power supply for Modular Service Tool.
G075510	**Wire 22AWG BACnet® Comm Cable** Includes: 1,000 ft. spool, 18 AWG, plenum rated, 2-conductor with aluminum foil shield and drain wire. UL NEC rating CL2P/CMP.

Accessories
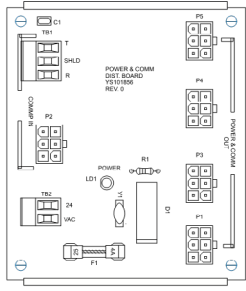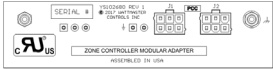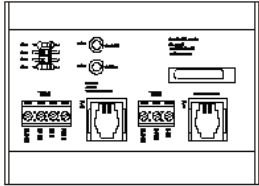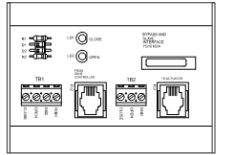
Part Number	Accessories
	Description
ASM01878	**E-BUS Adapter Board** The E-BUS Adapter Board is used for connecting approved EBTRON® or Paragon Airflow Measurement Digital Transmitters to the VCCX2 and VCB-X controllers. The E-BUS Adapter Board connects to the VCCX2 or VCB-X Controller with a E-BUS cable, sold separately.
ASM01979	**E-BUS to USB Mini Adapter Board Kit** Includes: E-BUS to USB Mini Adapter Board, 6 ft. USB A to USB Mini-B mini cable, a 1.5 ft. E-BUS to three pin cable, and a 1.5 ft. E-BUS to E-BUS cable. The E-BUS to USB Mini Adapter Board is an interface used to update E-BUS modules and controllers as well as the PT-Links using Prism 2 software.
G033970	**E-BUS Adapter Hub** The E-BUS Adapter Hub provides additional E-BUS ports when needed to add more E-BUS devices. An E-BUS cable is required to connect the additional devices.
ASM01635	**E-BUS Adapter Hub Kit** Includes: E-BUS Adapter Hub and 1.5 ft. E-BUS cable. The E-BUS Adapter Hub provides additional E-BUS ports when needed to add more E-BUS devices. An additional E-BUS cable is required to connect the additional devices.
ASM01696	**E-BUS Emulator Board - Space Temperature and Humidity** Includes: 1.5 ft. E-BUS cable. The E-BUS Emulator Board allows the use of third party analog sensors to emulate the E-BUS sensors. Both temperature and humidity sensors must be connected to the Emulator Board. Space temperature slide adjust and override button functions are not available when using the Emulator Board. See spec sheet for details of the type of sensors that can be used.
ASM01697	**E-BUS Emulator Board - Outdoor Air Temperature and Humidity** Includes: 1.5 ft. E-BUS cable. The E-BUS Emulator Board allows the use of third party analog sensors to emulate the E-BUS sensors. Both temperature and humidity sensors must be connected to the Emulator Board. See spec sheet for details of the type of sensors that can be used.
ASM01621	**E-BUS Emulator Board - Return Air Temperature and Humidity** Includes: 1.5 ft. E-BUS cable. The E-BUS Emulator Board allows the use of third party analog sensors to emulate the E-BUS sensors. Both temperature and humidity sensors must be connected to the Emulator Board. See spec sheet for details of the type of sensors that can be used.

Part Number	Accessories
	Description
ASM01622	**E-BUS Emulator Board - Space CO_2** Includes: 1.5 ft. E-BUS cable. The E-BUS Emulator Board allows the use of third party analog sensors to emulate the E-BUS sensors. See spec sheet for details of the type of sensors that can be used.
ASM01623	**E-BUS Emulator Board - Return Air CO_2** Includes: 1.5 ft. E-BUS cable. The E-BUS Emulator Board allows the use of third party analog sensors to emulate the E-BUS sensors. See spec sheet for details of the type of sensors that can be used.
ASM02215	**Communication Driver Chips – Fault Tolerant** Includes: 10 driver chips.
ASM02261 ASM02262 ASM02263 ASM07430 ASM02268 ASM02265 ASM02269 ASM02266 ASM02267 ASM02264	**Pluggable Terminal Blocks (Screw Terminal Portion Only)** Each package includes 5 blocks. 2 Pole Terminal Block 3 Pole Terminal Block 4 Pole Terminal Block 5 Pole Terminal Block 6 Pole Terminal Block 7 Pole Terminal Block 8 Pole Terminal Block 9 Pole Terminal Block 10 Pole Terminal Block 12 Pole Terminal Block
ASM01961	**Modular Service Tool Adapter** Used for Connecting Standard DIN Cable Supplied with Modular Service Tool to Controllers without DIN connectors. Used by unplugging the controller's communications terminal block and plugging into its terminal block socket. Does not provide for communications with other controllers on the loop. For temporary communication, port connection use only.
ASM01963	**USB-Link 2 Adapter** Used for Connecting Standard DIN cable supplied with USB-Link 2 to controllers without DIN connectors. Used by connecting wire from the adapter's terminal block to the controller's or network device's communications terminal block. Provides for communications with all controllers on the loop. Can be left on loop as a permanent communications port connection.
G029500	**E-BUS to HSS Replacement Cable for the HB Controller** Includes: E-BUS to HSS 3 ft. communication cable. The cable allows you to connect the HB Modular Service Tool to the HB Controller.
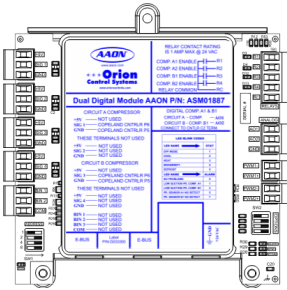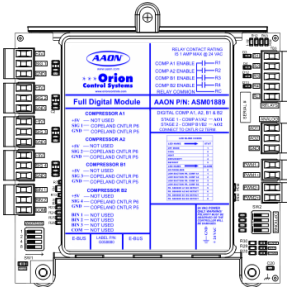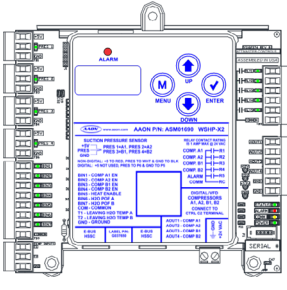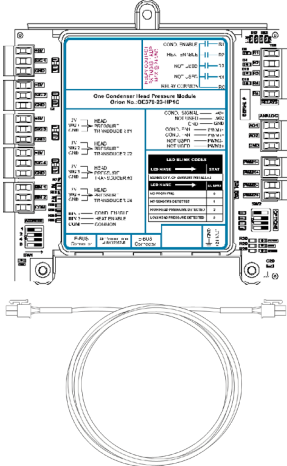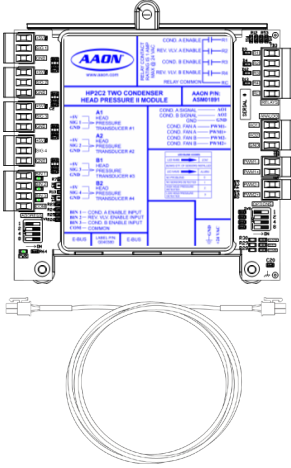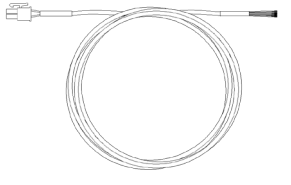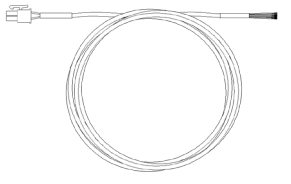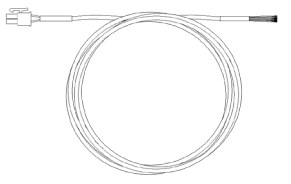
Part Number	Accessories
	Description
ASM02224	**Power/Communication Board** Includes: Power/Communication Board mounted on snap track. Used to connect VAV/Zone Controllers to communication and power wiring. Branch devices plug into board using prefabricated Power/Communication Cable. Four branch connections available per Power/Communication Board. Each of the four branch terminals can supply a maximum of six controllers. Total power load allowed per board is 100 VA at 24 VDC.
ASM02188	**VAV/Zone Controller Power/Comm Cable (PCC) Modular Adapter** The VAV/Zone Controller Modular Adapter is used to provide two modular PCC connections to the VAV/Zone BACnet® Controllers so that these controllers can be used with PCC cables. The VAV/Zone Controller Modular Adapter is only available as a field-installable kit. It plugs into the three pin comm connector, and the two pin 24 VAC power connector that is on the VAV/Zone BACnet® Controller.
ASM01956	**Slaved Zone Interface Card** Used to connect slaved zone actuators together. Interface card only. Generally used as a replacement.
ASM01841	**Slaved Zone Interface Card with Cable** Includes: Modular cable. Used to connect slaved zone actuators together. Generally used as a replacement.

Legacy Controls

Part Number	Legacy Controls
	Description
ASM01887	**Dual Digital Compressor Module** Includes: Dual Digital Compressor Module in a plastic enclosure and modular cable. Used with the VCM-X Modular E-BUS Controller for AAON units with two digital scroll compressors and that are not water source heat pump units.
ASM01889	**Full Digital Compressor Module** Includes: Full Digital Compressor Module in a plastic enclosure and modular cable. Used with the VCM-X Modular E-BUS Controller. For AAON units with multiple digital scroll compressors and that are not water source heat pump units.
ASM01690	**Water Source Heat Pump X2 Module** Includes: Water Source Heat Pump X2 (WSHP-X2) Module in a plastic enclosure and E-BUS cable. Provides monitoring and compressor control for all AAON WSHP-X2 units. It can be used as a VCM-X-WSHP or SA E-BUS Controller communicating module or as a stand-alone module. The WSHP-X2 Module's water circuit configuration can be either single or dual. There are eight R-410A glycol configurations for the WSHP-X2 Module—0%-40% in increments of 5%.There are two refrigerant selections—R410-A refrigerant and R-22 refrigerant. If R-22 refrigerant is selected, the glycol will automatically default to 0%. The WSHP-X2 Module can also be used stand-alone. The Module contains a 2 x 8 LCD character display and four buttons that allow status display, setpoint changes, and configuration changes.
ASM01890	**One Condenser Head Pressure Module** Includes: One Condenser Head Pressure Module in a plastic enclosure and E-BUS cable. This module is used on units with one condenser section and is able to monitor up to four individual head pressure transducers to control the condenser fan or water valve based on the highest of the four readings. It is also capable of monitoring a heating enable control signal (Heat Pump Mode) and forces the condenser signal to 100% while in this mode. This module can be used as a communicating module with a VCM-X Modular E-BUS controller or a VCM-X WSHP E-BUS Controller. It can also be used in a stand-alone application.

Part Number	Legacy Controls
	Description
ASM01891	**Two Condenser Head Pressure II Module** Includes: E-BUS cable This module is used on units with two physically separate condenser sections and is able to monitor up to four individual head pressure transducers (two per section) to control the condenser fans or water valves based on the highest of the two readings for each section. It is also capable of monitoring a heating enable control signal (Heat Pump Mode) and forces the condenser signal to 100% while in this mode. This module can be used as a communicating module with a VCM-X Modular E-BUS Controller, VCM-X WSHP E-BUS Controller, or SA Controller. It can also be used in a stand-alone application.
G030900 (12 ft.) G030920 (25 ft.) G030930 (50 ft.) G030940 (80 ft.) G030910 (120 ft.)	**Power/Comm Pigtail Cable Assembly** Includes: 16 AWG, plenum rated, 5-conductor with aluminum foil shield and drain wire. UL NEC rating CL2P/CMP. One end terminated with Molex® Mini-Fit Jr. Plug connector and other end has 5 stripped wire ends. Use to connect from devices, which have Molex® Mini-Fit Jr. Receptacle connectors to devices with wire terminal connections. Available in 12, 25, 50, 80 & 120 foot lengths.
G043280 (3 ft.) G043270 (25 ft.) G043290 (40 (ft.) G043300 (80 ft.) G043260 (120 ft.)	**Power/Comm Cable Assembly** Includes: 16 AWG, plenum rated, five conductor with aluminum foil shield and drain wire. UL NEC rating CL2P/CMP. Both ends terminated with Molex® Mini-Fit Jr. Plug connectors. Available in 3, 25, 40, 80, and 120 ft. lengths.
G043310 (10 ft.) G043320 (20 ft.)	**Power/Communication Extension Cable Assembly** Includes: 16 AWG, plenum rated, five conductor with aluminum foil shield and drain wire. UL NEC rating CL2P/CMP. One end terminated with Molex® Mini-Fit Jr. plug connector and other end terminated with Molex® Mini-Fit Jr. receptacle connector. Used to extend Power/Communiction cable assembly length. Available in 10 and 20 ft. lengths.

SIZING OF ZONE DAMPERS

Size all zone dampers based on the required zone CFM per design calculations. The recommended velocity for selecting Pressure Dependent Zone Dampers is 1000 to 1500 FPM. **Pressure Independent Zone Dampers must be selected below 1250 FPM for proper airflow sensor operation.** For quiet operation, it is recommended all zone dampers be selected for 1000 FPM or less velocity.

SIZING OF BYPASS DAMPERS

Size all bypass dampers to handle 60% to 70% of the HVAC units rated CFM. The recommended velocity for selecting bypass dampers is 1750 to 2250 FPM.

SLAVING OF ZONE DAMPERS

Whenever possible, a single zone damper should be used. If space limitations or airflow requirements dictate, up to two slaved zone dampers can be used. When ordering zone dampers for slaving, calculate the zones total required CFM and divide by two or three depending on the total number of zones that are to be slaved together. Go to the chart below and select the correct size of damper needed. Order one Pressure Dependent Zone Damper of the size selected. Please note that Pressure Independent Zone Dampers cannot be slaved. Order (one or two as required) slaved zone dampers of the same size as the zone damper that was selected. Each slaved zone damper is supplied with a slave wiring adapter for connecting to the Pressure Dependent Zone Damper.

SLAVING OF BYPASS DAMPERS

Whenever possible, a single bypass damper should be used. If space limitations or airflow requirements dictate, multiple bypass dampers can be used. When ordering multiple bypass dampers for slaving, calculate the bypass total required CFM and divide by two or three depending on the total number of bypass dampers that are to be slaved together. Go to the chart below and select the correct size of damper needed. Order (two or three as required) bypass dampers of the size selected.

Round Damper Selection						
Round Damper Duct Size (Area ft^2)	6 in. (0.196)	8 in. (0.349)	10 in. (0.545)	12 in. (0.785)	14 in. (1.069)	16 in. (1.396)
Velocity through Round Damper (FPM)	Volume through Round Damper (CFM)					
750 - P.I. or P.D. Zone	147	262	409	589	802	1047
1,000 - P.I. or P.D. Zone	196	349	545	785	1069	1396
1,250 - P.I. or P.D. Zone	245	436	681	981	1336	1745
1,500 - P.D. Zone only	294	523	818	1178	1604	2094
1,750 - Bypass only	Bypass dampers are not available in these sizes		954	1374	1871	2443
2,000 - Bypass only			1090	1570	2138	2792
2,250 - Bypass only			1226	1766	2405	3141
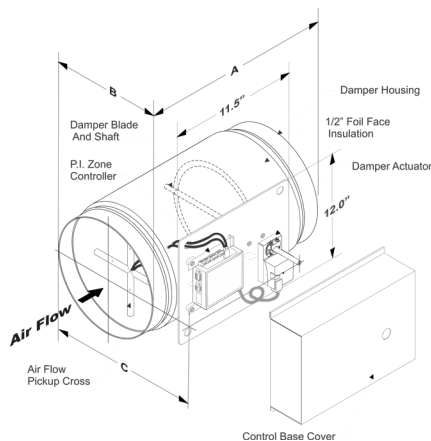
Round Damper Dimension Data			
Duct Diameter	A	B	C
6"	23.00	5.88	9.88
8"	23.00	7.88	12.13
10"	23.00	9.88	14.31
12"	23.00	11.88	16.43
14"	23.00	13.88	18.50
16"	23.00	15.88	20.56

GENERAL

This price list is not an offer to sell any of the products herein at the price shown other than to AAON approved accounts. All prices are list prices.

PRICING

All prices are subject to change without notice. In the event of a price change, all undelivered items will be billed at the prices in effect at the time of shipment. Unless otherwise noted, all prices contained herein are list prices expressed in U.S. dollars and do not include shipping, local, state, or federal taxes.

EXPEDITE FEES

AAON Stock Controls Products Any order received that requires product shipment within 24 hours of receipt of order (in stock items only) will have a 15% expedite fee added to the standard product order net amount, plus shipping costs.

ORDERING

Verbal orders will not be accepted. All purchase orders must be e-mailed to AAON Parkville.

E-mail: controls-orderentry@aaon.com

All order changes must conform to the following:

Additions to orders will require a separate customer purchase order.

TAXES

AAON, Inc. will collect applicable sales/use tax on all orders due to the establishment of sales tax nexus in all states. To avoid taxes being collected, submit exemption paperwork during account setup or, if job specific, include with purchase order.

DELIVERY

Any delivery or ship dates shall be deemed to be only an approximation or estimate, and AAON, Inc. shall not be liable for failure to deliver on such dates nor for delays or for failure to deliver products hereunder resulting from the failure of AAON, Inc. or any other manufacturer thereof to manufacture or deliver such products by reason of factory or labor conditions, or labor controversies, product shortages, errors in manufacturing, fire, delay of common carrier, or delays in the usual sources of supply of raw material, or resulting from any causes beyond the control of AAON, Inc.

FREIGHT

All sales are FOB shipping point. All freight charges are prepaid (PPA) and billed including any fuel surcharges that may be assessed by the carrier. AAON, Inc. assumes no liability for damage or loss of shipments. Claims for damage or lost shipments in transit must be made with the carrier, by the customer.

PAYMENT TERMS

Customers with approved credit are invoiced net amount due within 30 days from the date of invoice.

Accounts with unpaid balances over 30 days are subject to credit hold.

WARRANTY

All AAON Controls products, unless otherwise specified, are warranted to be free from defects in workmanship or material under normal use and service for a period of one year from date of original installation, or 18 months from date of original shipment from the factory, whichever occurs first. Under no circumstances will AAON, Inc. be liable for any consequential damages including, but not limited to, such losses as personal injury, personal damage, labor, transportation, repairs, and the like. These guarantees are in lieu of all other guarantees, expressed or implied, and no agent or employee of AAON, Inc. is authorized to assume any other liability on behalf of AAON, Inc.

RETURNS

All products that are listed as non-returnable in the pricing are manufactured by other vendors. They can only be returned if they are defective unless otherwise noted in the pricing. Any allowable product or material returned must have a return goods authorization number (RGA No.) before it will be considered for credit or warranty. Any material received without a valid return authorization number will be returned at the expense of the shipper. Any item returned for credit must be in sellable condition and in its original packaging. All returns are subject to restocking charges. Dampers cannot be returned for credit.

AAON

2425 So. Yukon Ave

Tulsa, OK 74107-2728

www.AAON.com

AAON Controls 2025
Parts Catalog

Rev. B · 250714