

AXIO

Better by Design

Excellence for more than 40 Years

AXIO is Annicom's UK Control Brand of innovative Peripherals and Control Devices.

Exceptional products and service from concept to manufacturing sets us apart.

**BMS Peripherals & Controls
TOP SELLING PRODUCTS**



Annicom, Founded In 1983 A Brief History

Thanks to the continued support of our customers and suppliers, Annicom has entered it's 5th decade of trading.

Annicom's main products were Control Panel design and build for HVAC, Coal Mines and Bauxite Mines worldwide. Our first order was from Carrier.

Annicom began designing and producing OEM electronic products for a variety of industries. This quickly became the core of our business as gradually many UK coal mines were closed. Our unique approach to problem solving and forward thinking enabled our rapid growth.

Annicom introduced Annicom Cross Platform IO products and the AXIO brand. In addition we manufactured and designed almost all of our UK competitors IO modules and Thyristor controls.

2015: Annicom opened its UAE warehouse and offices which are now located in Ajman, enabling faster delivery, lower freight cost and local engineering support for our UAE/GCC customers.

Over the years Annicom has acquired a number of businesses in the UK and now has four manufacturing plants in the UK.

This brochure features a selection of our most recently launched, and most popular products.

At AXIO, we're dedicated to providing innovative, flexible, and British-made peripherals and control devices. Our passion drives us to deliver excellence in every product, from concept to creation. As always customer support is our number one priority. We are happy to discuss customization to fit our customer requirements.

Dennis Gates
Managing Director



AX-LSPTA

Liquid Static Pressure Transmitter

The AX-LSPTA range of Pressure Transmitters are a cost effective pressure monitoring solution for liquids and nonaggressive, non-combustible gases. The units are available in a number of different ranges with either 4-20mA or 0-10V DC output signals. Mechanical connection is via a 1/4" BSP male thread and electrical connection is made via a one metre flying lead cable or by a Hirschman plug.

Order Codes

(Example Part No: AX-LSPTA-V-6)

| | |
|---|--|
| AX-LSPTA-x-500m | Liquid Static Pressure Transmitter 0 - 500mbar |
| AX-LSPTA-x-1 | Liquid Static Pressure Transmitter 0 - 1bar |
| AX-LSPTA-x-2.5 | Liquid Static Pressure Transmitter 0 - 2.5bar |
| AX-LSPTA-x-4 | Liquid Static Pressure Transmitter 0 - 4bar |
| AX-LSPTA-x-6 | Liquid Static Pressure Transmitter 0 - 6bar |
| AX-LSPTA-x-10 | Liquid Static Pressure Transmitter 0 - 10bar |
| AX-LSPTA-x-16 | Liquid Static Pressure Transmitter 0 - 16bar |
| AX-LSPTA-x-25 | Liquid Static Pressure Transmitter 0 - 25bar |
| ** Replace "x" with either "V for 0-10V" or "I for 4-20mA" | |
| ** Add "P" at the end of part number for Plug | |



Specifications

| | |
|------------------|---|
| Range | 500mbar to 30bar (Higher Ranges Available) |
| Over Pressure | 300% FS (<70kPa), 200% FS (<10mPa) |
| Power Supply | 12- 36V DC (4-20mA), 15-36V DC (0-10V) |
| Output Load | <(Vsupply-12)/0.02A (4-20mA), >10kΩ (0-10V) |
| Accuracy | ±0.25% typical |
| Press Connection | 1/4" BSP male |
| Protection | IP65 |

AX-LDPT250F

Liquid Differential Pressure Transmitter

The AX-LDPT250F Differential Pressure Transmitters are piezo-resistive sensor for pressure monitoring of liquids and non aggressive gases. The units are available in a number of different ranges with either a 4-20mA or 0-10V DC output signal. Mechanical connection is via 1/4" BSP parallel male Stainless Steel 316 connectors and Hirschman Plug for electrical connection. The AX-LDPT250F units supports mounting as well.

Order Codes

(Example Part No: AX-LDPT250F-I-6)

| | |
|---|--|
| AX-LDPT250F-x-160 | Liquid Differential Pressure Tx, 0-160mbar |
| AX-LDPT250F-x-400 | Liquid Differential Pressure Tx, 0-400mbar |
| AX-LDPT250F-x-1 | Liquid Differential Pressure Tx, 0-1bar |
| AX-LDPT250F-x-2 | Liquid Differential Pressure Tx, 0-2bar |
| AX-LDPT250F-x-4 | Liquid Differential Pressure Tx, 0-4bar |
| AX-LDPT250F-x-7 | Liquid Differential Pressure Tx, 0-7bar |
| AX-LDPT250F-x-10 | Liquid Differential Pressure Tx, 0-10bar |
| AX-LDPT250F-x-16 | Liquid Differential Pressure Tx, 0-16bar |
| ** Replace "x" with either "V for 0-10V" or "I for 4-20mA" | |



Specifications

| | |
|------------------------|--|
| Over Pressure | Positive pressure: ≤2 times FS Negative pressure is not allowed |
| Maximum Static | ≤200bar |
| Pressure Connection | 1/4" BSP Female Stainless Steel 316 |
| Power Supply | 24V DC, 24V AC ±15% |
| Accuracy | 0.25%FS, (0.5%FS for 400mbar) |
| Output | 4-20mA, 0-10V DC |
| Operating Temperature: | -20°C to +70°C |
| Protection | IP65 |

AX-LSPS

Liquid Static Pressure Switch

The AX-LSPS Liquid Pressure Switch features a compact design with a standard solenoid valve plug for easy wiring. It supports pressure ranges up to 500 bar with high overload resistance up to 1230 bar. Gold-plated NO or NC contacts provide high switching capacity and long service life. A spring-loaded piston mechanism ensures accurate switching at the set pressure. Suitable for water, oil, and gas pressure applications.

Order Codes

| | |
|---------------------------------------|---|
| AX-LSPS-1 | Liquid Stat Press Switch -1bar to 1bar, Fixed Hysteresis |
| AX-LSPS-4 | Liquid Stat Press Switch 0.2bar - 4bar, Fixed Hysteresis |
| AX-LSPS-11 | Liquid Stat Press Switch 0.5bar - 11bar, Fixed Hysteresis |
| AX-LSPS-28 | Liquid Stat Press Switch 2bar - 28bar, Fixed Hysteresis |
| AX-LSPS-40 | Liquid Stat Press Switch 2bar - 40bar, Fixed Hysteresis |
| ** Custom Ranges Are Available | |



Specifications

| | |
|---------------------|---------------------|
| Contact Rating | 5A @ 250V AC |
| Hysteresis | 10-15% of set value |
| Tolerance | 2% of set value |
| Output | NO/NC |
| Pressure Connection | G1/4" Male |
| Protection | IP65 |



AX-LDPS-FD113

Liquid Differential Pressure Switch

The AX-LDPS-FD113 Differential Pressure Switch is a pressure monitoring solution for liquids and non aggressive gases. The unit is designed for both flow proving and flow failure detection to cover the range of 0.3bar to 4.5bar. Approximate setpoint can be viewed on the dial at the front of the unit. The AX-LDPS-FD113 uses the differential pressure between the two inputs to operate an electrical switch. Applications include refrigeration and air-conditioning systems according to EN378 e.g. Compressor oil pressure control.

Order Codes

| | |
|----------------|--|
| AX-LDPS-FD113 | Liquid Differential Pressure Switch 0.3bar to 4.5bar |
| AX-LDPS-FD113A | Liquid Differential Pressure Switch 0.3bar to 4.5bar – AXIO Logo |



Specifications

| | |
|------------------|----------------------------------|
| Range | 0.3bar to 4.5bar |
| Differential | 0.2bar |
| Max Pressure | Operating 12bar Test PT 23bar |
| Press Connection | 1/4" BSP Female |
| Protection | IP30 |

AX-ADPT-8

Air Differential Pressure Transmitter - Field Selectable

The AX-ADPT-8 series Differential Pressure Transmitters are engineered for building automation in the HVAC/R industry. The most technologically advanced transmitters on the market, measuring static and differential pressure, with field selectable units, range and output, all in a single device.

Order Codes

(Example Part No: AX-ADPT2K5-8-D)

| | |
|---|--|
| AX-ADPT250-8-x | Air Diff Press Tx ±25/50/100/150, 0-25 50 100 250 Pa |
| AX-ADPT2K5-8-x | Air Diff Press Tx ±100 100 250 500 1K 1K5 2K 2K5 Pa |
| AX-ADPT7K0-8-x | Air Diff Press Tx 1K 1K5 2K 2K5 3K 4K 5K 7K Pa |
| ** Replace "x" with "D" for display version | |
| ** Replace "x" with "AZ" for auto zero version | |
| ** Replace "x" with "AZ-D" for auto zero & display version | |
| ** Replace "x" with "D-MOD" for display & Modbus version | |



Specifications

| | |
|---------------------|------------------------------|
| Power Supply | 24V AC or 24V DC, ±10% |
| Output | 0-10V, 4-20mA |
| Overpressure | Proof: 25kPa, Burst: 30kPa |
| Pressure Connection | 5mm and 6.3mm ABS connectors |
| Ambient Temp | -20°C to +50°C |
| Protection | IP54 |

AX-ADPS

Air Differential Pressure Switch

The AX-ADPS Differential Pressure Switches are a cost effective solution for air flow proving and filter status monitoring applications. The switches are available in six ranges and can be used for static pressure switching applications by leaving one of the ports to remain open to normal atmospheric pressure. AX-ADPS units are suitable for use with air, nonaggressive and non-combustible gases.

Order Codes

(Example Part No: AX-ADPS-80-300D)

| | |
|---|---|
| AX-ADPS-80-300x | Air DP Switch 20Pa to 300Pa |
| AX-ADPS-83x | Air DP Switch 50Pa to 500Pa |
| AX-ADPS-84x | Air DP Switch 30Pa to 400Pa |
| AX-ADPS-85x | Air DP Switch 200Pa to 1000Pa |
| AX-ADPS-86x | Air DP Switch 500Pa to 2500Pa |
| AX-ADPS-DFK | Duct fixing Kit, Tube, Nozzles and Screws |
| ** Replace "x" with "D" for Duct fixing kit | |
| ** Replace "x" with "IP65D" for IP65 version & duct fixing kit | |
| ** Replace "x" with "EXE" for ATEX version | |



Specifications

| | |
|------------------------|--|
| Max Pressure | 10kPa |
| Pressure Connection | Plastic pipe suitable for use with 6mm plastic tube |
| Electrical Connection | 6.3mm Male Spade Lugs with Screw Terminal Adaptors |
| Electrical Rating | 250V AC 1.5A Resistive maximum |
| Cable Entry | Switch = M20 Compression Gland IP65 Enclosure = M12 Compression Gland |
| Operating Temperature: | -20°C to 85°C |
| Protection | IP54 & IP65 |



AX-HL

Hydrostatic Level Transmitter

The AX-HL Submersible Hydrostatic Level Transmitters are designed to be submerged directly in the liquid to be positioned as close as possible to the bottom and measure the hydrostatic pressure, which enables a direct conclusion regarding the current level. These units measure the height of liquid above the position in the tank, referenced to atmospheric pressure. The AX-HL is ideal for tanks, wells, storage tanks, water towers, dams and gauging stations .



| Order Codes | |
|--|--|
| | <i>(Example Part No: AX-HL-V-5M10)</i> |
| AX-HL-5M10 | Hydrostatic Level Tx, 5m Range 10m Cable, 4-20mA |
| AX-HL-3.5M8 | Hydrostatic Level Tx, 3.5m Range 8m Cable, 4-20mA |
| AX-HL-2.2M6 | Hydrostatic Level Tx, 2.2m Range 6m Cable, 4-20mA |
| AX-HL-3.5M10 | Hydrostatic Level Tx, 3.5m Range 10m Cable, 4-20mA |
| AX-HL-10M18 | Hydrostatic Level Tx, 10m Range 18m Cable, 4-20mA |
| AX-HL-10M15 | Hydrostatic Level Tx, 10m Range 15m Cable, 4-20mA |
| AX-HL-WF | AXIO Hydrostatic Waste Water Filter |
| ** Add “-V” after “-HL” for 0-10V output version, ** Add “DSP” for display | |
| ** Add “P” after HL for PTFE Cable (waste water) ** 24V PSU Available | |

| Specifications | |
|--------------------|---------------------------------|
| Power Supply | 12-30V DC |
| Output | 4-20mA OR 0-10V |
| Sensor Type | Piezo-resistive silicon |
| Accuracy | 0.25%-0.5%F.S |
| Overload | 150%F.S |
| Stability | ≤0.1%F.S./year |
| Material | Probe: SS316, Cable: PVC / PTFE |
| Ingress Protection | IP68 |

AX-LS-TM

Submersible Level Switch for Diesel

The AX-LS-TM range of Adjustable Submersible Level Switches are suspended in the fluid to be monitored and are secured at the desired level by a cable gland in the cap or plug. This range is constructed of Nylon and Buna making it the perfect solution for monitoring diesel tanks. They are available with either a 2” BSP brass cap, 1 1/4” plastic cap or 1” plastic cap. See order codes below for options.



| Order Codes | |
|----------------|---|
| AX-LS-TM | Diesel Level Float Sw, Single, 5m cable, 1-1/4” plastic cap |
| AX-LS-TM-5B | Diesel Level Float Sw, Single, 5m cable, 2” brass cap |
| AX-LS-TM-5P | Diesel Level Float Sw, Single, 5m cable, 1” plastic cap |
| AX-LS-TM-5BD | Diesel Level Float Sw, Two levels, 5m cable, 2” brass cap |
| AX-LS-TM-5BD3L | Diesel Level Float Sw, Three levels, 5m cable, 2” brass cap |
| AX-LS-TM-5BD4L | Diesel Level Float Sw, Four levels, 5m cable, 2” brass cap |

| Specifications | |
|----------------------|----------------------|
| Material | Nylon and Buna |
| Contact Rating | 50W, 240V AC/200V DC |
| Switching Current | 0.5A |
| Max. Carry Current | 1A |
| Lead Wire | 5m PVC cable (22AWG) |
| Operating Temp Range | -20°C to 80°C |

AX-LS-FL

Liquid Level Float Switches

The AX-LS-FL Float Switches are a control device for charging and discharging pumps, motors and magnetic valves. It is also an alarm device that alerts the user at specified surface levels. The unit consists of a float which is suspended from a weighted cable, as the liquid levels change, the float follows the surface level at the same time tilting due to its weighted restraint, Inside the float are a number of microswitches which trigger as the float tips. Suitable for a wide range of non-flammable liquids.



| Order Codes | |
|---|---|
| AX-LS-FL-1L | Liquid Level Float Switch, Low level alarm |
| AX-LS-FL-1H | Liquid Level Float Switch, High level alarm |
| AX-LS-FL-2L | Liquid Level Float Switch, Filling pump control |
| AX-LS-FL-2H | Liquid Level Float Switch, Emptying pump control |
| AX-LS-FL-2LH | Liquid Level Float Switch, High & low level alarm |
| ** Add “C” for 99mm Float Diameter ** Add “M” for 76mm Float Diameter | |
| ** Add “-15” for 15 Meter Cable Size, Custom Cable Size Available | |

| Specifications | |
|---------------------------|--|
| Standard Cable Length | 5 Metre (Custom length is available) |
| Standard Adjustment Range | 200 to 1200mm |
| Pressure Rating | 200 kPa |
| Contact Ratings | 6A @6-250V AC |
| Maximum DC Power | 75 VA (=0,3A, 250V) |
| Operating Temperature: | -20°C to 85°C |
| Material | Float: Polypropylene, Cable: PVC, PTFE |
| Buoyancy | 4 N |
| Ingress Protection | IP67 |

LIQUID LEVEL



AX-DPG

AXIO Differential Pressure Gauges

The AX-DPG Series Differential Pressure Gauges are designed specifically for HVAC/R applications. These gauges measure air and non-corrosive gas pressures (both differential and positive) and feature a clear analogue display for easy reading of measured values. Additionally, the AX-DPG Series includes field-adjustable zero-point calibration and built-in overpressure protection, ensuring reliable and precise performance.

Order Codes

| | |
|-------------|--|
| AX-DPG-060 | AXIO Differential Pressure Gauge, 0 - 60Pa |
| AX-DPG-500 | AXIO Differential Pressure Gauge, 0 - 500Pa |
| AX-DPG-750 | AXIO Differential Pressure Gauge, 0 - 750Pa |
| AX-DPG-6060 | AXIO Differential Pressure Gauge, -60 - 60Pa |

**** Custom Ranges Are Available on Request**



Specifications

| | |
|------------------------|--|
| Medium/Service: | Air and Non-Combustible gasses. |
| Accuracy : | ±2% FS |
| Pressure Range : | -68Pa to 108kPa |
| Enclosure Rating : | IP67 |
| Hole Size : | 114mm |
| Mounting Orientation : | Diaphragm in vertical position |
| Process Connections : | 1/8" female NPT |
| Compliances: | CE, LV Directive 2014/35/EU (EN-60730-1: 2011) |

AX-UL-S

Ultrasonic Level Transmitters

The AX-UL-S is a robust range of IP68-rated ultrasonic level sensors for tanks and sumps, offering non-intrusive measurement with a standard 4-20mA output. Available in 6m, 8m, 10m, 15m & 25m ranges, with optional Relay and HART output, and LCD display. A separate pluggable display is also available for non display units.

Order Codes

| | |
|-----------------|--|
| AX-UL-SEP-3x0-2 | Ultrasonic Level Transmitter (Clean & Waster Water), 4-20mA Output, 0.25-6/ 0.35-8 Meters, PP Housing |
| AX-UL-SEV-3x0-2 | Ultrasonic Level Transmitter (Diesel), 4-20mA Output, 0.25-6 Meters/ 0.35-8 Meters, PVDF Housing |
| AX-UL-SGP-3x5-2 | Ultrasonic Level Transmitter (Clean & Waster Water), 0.35-10 Meters/ 0.45-15 Meters/ 0.60-25 Meters, PP Housing |
| AX-UL-SGV-3x5-2 | Ultrasonic Level Transmitter (Diesel), 4-20mA Output, 0.35-10 Meters/ 0.45-15 Meters/ 0.60-25 Meters, PVDF Housing |



Specifications

| | |
|-----------------------|--|
| Measuring Range | 0-6, 8, 10, 15 & 25 Metres |
| Output | 4-20mA (into 250 Ohms at 24V DC or 850 Ohms at 38V DC) |
| Power Required | 0.5Watt at 24V |
| Accuracy | 0.25% of measuring range (electronic) |
| Ultrasonic Core Angle | 12° |
| Ultrasound Frequency | 50kHz ±10% |
| Ingress Protection | IP66 |

LIQUID LEVEL & FLOW

AX-LFS-B1

Liquid Flow Switch

The AX-LFS range of electro-mechanical flow switches is intended for flow control of water or corrosive media in heating and cooling systems. They are well suited for pipes used in industrial plants such as heating and air conditioning systems, refrigeration systems sprinkler, or anti-fire systems, heat pumps, devices for oil monitoring and lubrication circuits. They have a built in safety switch with an alarm signal for flow shortage signalling.

Order Codes

| | |
|-------------|---|
| AX- LFS-B1 | LFS ø1...8" pipe, 11bar max pressure, brass, FR1 |
| AX- LFS-B1A | LFS ø1...8" pipe, 11bar max pressure, brass, FR1, TUV app |
| AX- LFS-B2 | LFS ø1...8" pipe, 11bar max pressure, brass, FR2, TUV app |
| AX- LFS-S1A | LFS ø1...8" pipe, 30bar max pressure, SS316, FR1, TUV app |
| AX- LFS-S2 | LFS ø1...8" pipe, 30bar max pressure, SS316, FR2, |
| AX-LFS-B3T1 | LFS ø1/2" pipe, 11bar max pressure, brass, T Fitting, FR3 |
| AX-LFS-B3T2 | LFS ø3/4" pipe, 11bar max pressure, brass, T Fitting, FR3 |
| AX-LFS-B3T3 | LFS ø1" pipe, 11bar max pressure, brass, T Fitting, FR3 |



Specifications

| | |
|------------------|--|
| Contacts | Dust-tight microswitch with switching contacts (NC/NO) |
| Switch capacity | 24-230 V AC/ 15A (resistive load) or 8A (inductive load) |
| Operating temp | -40 - +85°C |
| Humidity | 10 - 90 % RH (non-condensing) |
| Max. liquid temp | -40 - +120°C |
| Paddles | Stainless steel AISI 316L |
| Housing | Base in ABS, transparent Polycarbonate (PC) cover |
| Certification | EU LVD, EU EMC, Eu RoHS, CE |
| Protection class | IP65, class I |



AX-GS-CM

Carbon Monoxide Transmitter (CO)

The AXIO AX-GS-CM CO sensor range is a reliable solution for car park ventilation systems, supporting Analog, MODBUS RS485, and BACnet outputs for easy BMS integration.

It is available in wall and duct mount versions, with the wall model offering both open and concealed wiring options for flexible installation.

Order Codes

| | |
|--|--|
| AX-GS-CM-V-65 | Carbon Monoxide Tx IP65, 0-300ppm, 0-10V O/P |
| AX-GS-CM-I3 | Carbon Monoxide Tx IP65, 0-300ppm, 4-20mA O/P |
| AX-GS-CM-VSQ | Carbon Monoxide Tx IP65, 0-300ppm, 0-10V O/P, Sq Enc |
| AX-GS-CM-V-65-D | Carbon Monoxide Tx IP65, 0-300ppm, 0-10V O/P, Duct |
| AX-GS-CM-M | Carbon Monoxide Tx IP65, 0-300ppm, MODBUS O/P |
| AX-GS-CM-BN | Carbon Monoxide Tx IP65, 0-300ppm, BACnet O/P |
| ** Add "R" for 1 Relay, "R2" for 2 Relays, "B" for Black Enclosure "100" for 0-100ppm range, "-T" for Temp O/P, "R" for Rear Entry, "L" for LCD | |



Specifications

| | |
|--------------------|---|
| Sensor Type | Electrochemical 3-electrode |
| Power Supply | 24V AC $\pm 10\%$, 100mA maximum 24V DC $\pm 10\%$, 60mA maximum |
| Output | Analogue (0-10V/4-20mA), MODBUS, BACnet |
| Output Range | 0-300ppm (0-100ppm as an option) |
| Output Accuracy | ± 5 ppm or $\pm 5\%$ of reading, between 0-50°C |
| Material | Polypropylene, White |
| Ingress Protection | IP65 |

AX-GS-CM-NO2-V

Nitrogen Dioxide & Carbon Monoxide Tx (CM & NO2)

The AX-GS-CM-NO2-V is an ideal solution for detecting harmful emission of carbon monoxide and nitrogen dioxide gases in parking garages, loading docks and warehouses etc. The output voltages are configurable for either 0-5V DC, 2-10V DC or 0-10V DC. This makes it compatible with most BMS and HVAC controllers with analogue inputs. By monitoring the levels of CO and NO2 in the air the ventilation system can be adjusted to ensure that the air quality is within safe limits.

Order Codes

| | |
|-----------------|--|
| AX-GS-CM-NO2-V | CO 0-300ppm , NO2 0-10ppm transmitter, voltage output |
| AX-GS-CM-NO2-VL | CO 0-300ppm , NO2 0-10ppm transmitter, voltage output, LCD display |



Specifications

| | |
|------------------------|--|
| Power Supply | 24V AC $\pm 10\%$, 100mA maximum OR 24V DC $\pm 10\%$, 60mA maximum |
| Sensor Type (CO & NO2) | Electrochemical 3-electrode |
| Outputs | 0-5V DC, 2-10V DC OR 0-10V DC at 5mA maximum load |
| Output Range | CO: 0-300ppm, NO2: 0-10ppm |
| Housing | Flame retardant ABS |
| Ingress Protection | IP65 |

AX-PM

PM2.5/PM10 Particulate Matter Transmitter

The AX-PM Particulate Matter Transmitter is suitable for use in ventilation applications. It uses a laser light scattering principle to measure particles of sizes PM2.5 and PM10. The unique data acquisition and calibration techniques used in the product ensure high accuracy and long term reliability. This data can be used as a reference in ventilation control systems to improve the overall air quality.

Order Codes

| | |
|----------|--|
| AX-PM-VI | PM2.5/PM10 0-1000ug/m3 transmitter with selectable voltage or current output |
|----------|--|



Specifications

| | |
|---------------------|--|
| Power Supply | 24V AC $\pm 10\%$, 100mA maximum OR 24V DC $\pm 10\%$, 60mA maximum |
| Detection Principle | Laser scattering |
| Particle Size | PM2.5, PM10 (selectable using jumper) |
| Outputs | 0-10V DC at 5mA max load 4-20mA at 600 Ohms max |
| Output Range | PM10, PM2.5: 0-1000 μ g/m3 |
| Output Accuracy | $\pm 10\%$ of FS |
| Response Time | < 10 Seconds |
| Ingress Protection | IP65 |



AX-AQM-3

Outdoor Air Quality (CM, NO2 & PM10)

The AX-AQM-3 is an ideal solution for detecting harmful emissions in parking garages, loading docks and warehouses etc. It offers the detection of carbon monoxide, nitrogen dioxide gases and particulate matter in the same enclosure. Voltage output and current output versions are available. The NO2 and CO sensor modules use plug-in connectors making easy in-the-field replacement easy. The PM sensor uses the laser light scattering principle to measure particles of sizes less than 10µm.

Order Codes

| | |
|----------------|---|
| AX-AQM-3VI | CO, NO2, PM2.5 & PM10 Tx,3x Select V/I Output |
| AX-AQM-V3-10 | CO, NO2, PM2.5 & PM10 Tx,3x Select V Output |
| AX-AQM-I3-10 | CO, NO2, PM2.5 & PM10 Tx,3x Select I Output |
| AX-AQM-3-MOD | CO, NO2, PM2.5 & PM10 Tx, Modbus |
| AX-AQM-3-MOD-L | CO, NO2, PM2.5 & PM10 Tx, Modbus LCD |



Specifications

| | |
|--------------------|---|
| Sensor Type | CO/NO2=Electrochemical 3-electrode PM=Laser scattering |
| Power Supply | 24V AC ±10%, 150mA maximum 24V DC ± 10%, 100mA maximum |
| Output | 0-10V DC @ 5mA max load/ 4-20mA @ 600 Ohms max |
| Response time(t90) | CO, NO2: <35 Seconds, PM10,PM2.5: <10 Seconds |
| Housing | ABS |
| Ingress Protection | IP65 |

AX-GS-AQM

Indoor Air Quality Monitor

The AX-GS-AQM monitors air purity with MOS sensor technology. It detects a wide range of Volatile Organic Compounds (VOC) which cause discomfort to humans and are associated with bad air quality. It converts the reading to CO2 equivalent which is the amount of VOCs with the same global warming potential of CO2 and provides a linear analogue voltage. The output range can be 0-5V/0-10V/2-10V DC based on the jumper setting.

Order Codes

| | |
|----------------|---|
| AX-GS-AQM-S | Air quality transmitter, 400-2000 ppm CO2Eq, Voltage output, 24V AC/DC |
| AX-GS-AQM-S230 | Air quality transmitter, 400-2000 ppm CO2Eq, Voltage output, 90-260V AC |



Specifications

| | |
|--------------------|---|
| Power Supply | 24V AC ±15% @ 35mA / 24V DC ±10% @ 35mA 0 ~ 260V AC, 50 ~ 400 Hz |
| Sensor Technology | Metal oxide semiconductor sensor |
| Output | 400 - 2000ppm CO2 equivalent |
| Analog output | 0-5/0-10/2-10V DC (5mA max.) |
| Housing | Flame retardant ABS |
| Ingress Protection | IP20 |

AX-GS-SD2000-P

Duct Smoke Detector-Photoelectric

The AX-GS-SD Photoelectric Duct Smoke Detector has the option of either a Photoelectric sensor or an Ionisation sensor for high temperature applications, the sensor heads are interchangeable. The sensors samples air currents passing through a duct using a range of sampling tubes and has two alarm relay outputs to switch on fans, blowers etc. and send an alarm to the BMS or alarm panel. A NEMA 4X version is also available for outdoor environments.

Order Codes

| | |
|-----------------|---|
| AX-GS-SD2000-P | Duct Smoke Detector with Photoelectric sensor |
| AX-GS-SD3000-P | Duct Smoke Detector with Photoelectric sensor –IP65 |
| AX-GS-SD-STN1 | Sampling tube 1' to 2' (25 to 50cm) |
| AX-GS-SD-STN2.5 | Sampling tube 2' to 4' (50 to 100cm) |
| AX-GS-SD-STN5 | Sampling tube 4' to 8' (100 to 200cm) |
| AX-GS-SD-STN10 | Sampling tube 8' to 12' (200 to 300cm) |
| AX-GS-SD-FT | Modular sampling tubes, 3pcs of 24Inches |



Specifications

| | |
|--------------------|---|
| Sensor Type | 4 wire Photoelectric |
| Power Supply | 24V AC/DC or 115/230V AC |
| Air Velocity | 0.5 to 20m/sec |
| Ambient Temp | 0 to +60°C |
| Humidity | 10% to 85% RH non-condensing |
| Conformity | CE marked, UL listed, CSFM, EMC, LVD |
| Ingress Protection | SD2000-P=IP54 SD3000-P= NEMA 4X rated (IP65) |



AX-GS-CD-T81G

Room CO2 Transmitter with Multicolor Display

The AX-GS-CD-T81G CO2 Transmitter uses NDIR technology to accurately measure carbon dioxide levels and features an optional multicolour LCD display for clear visual indication. It provides a proportional analogue output (voltage or current).

It supports measurement ranges of 0–2000ppm or 0–5000ppm, with optional MODBUS communication and RH & Temperature sensing.

Order Codes

| | |
|----------------------|--|
| AX-GS-CD-T81G-VI | Room CO2 transmitter, 0-2000/5000ppm, |
| AX-GS-CD-T81G-VI-MCD | Room CO2 transmitter, 0-2000/5000ppm, 0-10V/4-20mA output with Multicolour LCD |
| AX-GS-CD-T81G-M | Room CO2 transmitter, 0-5000ppm, RS485 Modbus output |
| AX-GS-CD-T81G-MCD | Room CO2 transmitter, 0-5000ppm, RS485 Modbus output with Multicolour LCD |

**** Add “-H” for RH&T Option with transmitter**

AX-GS-TC3

Wall & Duct Mount Gas Detectors

The AX-GS-TC3 series consist of all kinds of wall and duct mounted gas sensors i.e. Hydrogen, Oxygen, Chlorine, Hydrogen Sulphide, Methane, Nitric Oxide, Sulphur Dioxide, Ozone, Methane, Ammonia etc.

The TC3 series uses a duct pitot kit to be installed on ducts for gas detection purpose.

Order Codes

| | |
|---------------|---|
| AX-GS-TC3-H2 | Hydrogen sensor W/D mount 4-20mA o/p 0-1000ppm |
| AX-GS-TC3-O2 | Oxygen sensor W/D mount 4-20mA o/p 0-25% volume |
| AX-GS-TC3-CH | Chlorine sensor W/D mount 4-20mA o/p 0-20ppm |
| AX-GS-TC3-H2S | Hydrogen Sul. sensor W/D mount 4-20mA o/p 0-50ppm |
| AX-GS-TC3-NG | Methane Sensor W/D mount, 4-20mA o/p 0-100% |
| AX-GS-TC3-NO | Nitric Oxide Sensor W/D mount 0-5ppm 4-20mA L.P |
| AX-GS-TC3-SD | Sulphur Dioxide Sensor W/D mount 4-20mA o/p 0-20ppm |
| AX-GS-TC3-NG | Methane sensor Wall mount 4-20mA o/p 0-100% LEL |

AX-GS-CD-D8041

Duct Carbon Dioxide Sensor (CO2)

The AX-GS-CD-D80 Carbon Dioxide Duct mounted Transmitter uses single beam Infra-red technology to monitor CO2 concentration levels and output a corresponding 0-10V signal. The unit is intended for use in return air ducts to give a proportional signal to control ventilation and hence maintain air quality. The -AR versions have an adjustable switched relay output to directly control a fan. Various passive temperature sensors are available as an option.

Order Codes

| | |
|--------------------|---|
| AX-GS-CD-D8041 | Duct Mounted CO2 Sensor, 105mm probe, 24V supply |
| AX-GS-CD-D8042 | Duct Mounted CO2 Sensor, 205mm probe, 24V supply |
| AX-GS-CD-D8041-AR | Duct Mounted CO2 Sensor, 105mm probe, 24V supply, Adjustable relay output |
| AX-GS-CD-D8042-AR | Duct Mounted CO2 Sensor, 205mm probe, 24V supply, Adjustable relay output |
| AX-GS-CD-D8041-230 | Duct Mounted CO2 Sensor, 105mm probe, 230V supply |
| AX-GS-CD-D8042-230 | Duct Mounted CO2 Sensor, 205mm probe, 230V supply |
| AX-GS-CD-RHT-D | Duct Mount CO2 Sensor with RH&T, 205mm Probe 24V |



Specifications

| | |
|---------------------|--|
| Power Supply | 24V AC/DC ±15% |
| Consumption | 0.75W Typical. 1.5W Maximum |
| Ambient Temp. Range | -10°C-50°C, 0-95%RH Non-condensing |
| Sensor Type | CO2 Non-dispersive Infra-red |
| Range | 0-2000ppm/5000ppm Jumper Selectable |
| Accuracy | ±30ppm ±3% of reading |
| Output | 0-10V DC/4-20mA Selectable Using Dipswitch |
| Ingress Protection | IP20 |



Specifications

| | |
|--------------------|----------------------------|
| Sensor Type | Electromechanical |
| Power Supply | 18-28V DC (24V DC Nominal) |
| Output | 4-20mA linear output |
| Ambient Temp Range | -5 to +50°C |
| Weight | 840 grams |
| Housing | Plastic ABS |
| Ingress Protection | IP54 |



Specifications

| | |
|--------------------|---|
| Power Supply | AC:18 to 30V AC 50/60Hz, DC:18 to 42V DC (0.65W @ 42Vdc ,1.65W peak power) |
| Ambient Temp Range | 0 to +50°C, 0-95% RH non condensing |
| Analogue Output | 0-10V at 5mA maximum. Resolution <25mV steps |
| Output Range | 0-2,000ppm for 0-10V signal |
| Accuracy | ±40ppm or 3% whichever is greater at 22°C |
| Enclosure | Flame retardant ABS (UL 94 - 5VA). Protection IP30 |
| Conformity | CE marked, EMC, LVD |



AX-RA-A

Damper Actuators (Modulating)

The AX-RA-A Modulating Damper Actuators are designed for dampers in ventilation and air-conditioning systems. These 24V AC/DC & 230V AC operated actuators come with two auxiliary SPDT switches. The AX-RA-A Damper Actuators comes with a selectable control signal of 0(2)-10V DC or 0(4)-20mA and are used to regulate these dampers with ingress protection of IP54.

| Order Codes | | (Example Part No: AX-RA-6A-S) |
|---|--------------------------------------|-------------------------------|
| AX-RA-xA | Damper Actuator Modulating 24V, xNm, | |
| AX-RA-xA-S | Damper Actuator Modulating 24V, xNm, | |
| AX-RA-xA-S-230 | Damper Act Modulating 230V AC, xNm, | |
| ** Replace "x" with below torque ranges. | | |
| * 2Nm, 4Nm, 6Nm, 8Nm, 16Nm, 24Nm, 32Nm | | |

AX-RA-D

Damper Actuators (On/Off or 3 Points)

The AX-RA-D On/Off Damper Actuators are designed for dampers in ventilation and air-conditioning systems. These 24V AC/DC & 230VAC operated actuators come with two auxiliary SPDT switches. The AX-RA-D Damper Actuators comes with a selectable control signal of 0(2)-10V DC or 0(4)-20mA and are used to regulate these dampers with ingress protection of IP54.

| Order Codes | | (Example Part No: AX-RA-6D-S) |
|---|---|-------------------------------|
| AX-RA-xD | Damper Actuator On/Off or 3 Points 24V, xNm, 0-10V/4-20mA | |
| AX-RA-xD-S | Damper Actuator On/Off or 3 Points 24V, xNm, 0-10V/4-20mA, Aux Switch | |
| AX-RA-xD-S-230 | Damper Actuator On/Off or 3 Points 230V AC, xNm, 0-10V/4-20mA, Aux Switch | |
| ** Replace "x" with below torque ranges. | | |
| * 2Nm, 4Nm, 6Nm, 8Nm, 16Nm, 24Nm, 32Nm | | |

AX-RAS

Damper Actuators (Spring Return)

The AX-RAS Spring Return Modulating & On/Off type Damper Actuators are designed for dampers in ventilation and air conditioning systems. These 24V AC/DC & 230V AC operated actuators come with two optional auxiliary SPDT switches. The AX-RAS damper actuators come with control signals of 0(2)-10V or 0(4)-20mA with ingress protection IP54.

| Order Codes | | (Example Part No: AX-RAS-10D) |
|---|---|-------------------------------|
| AX-RAS-xD | Damper Act, Spring Ret, On-Off/3 Point 24V AC, xNm | |
| AX-RAS-xD-230 | Damper Act, Spring Ret, On-Off/3 Point 230V AC, xNm | |
| AX-RAS-xDS | Damper Act, Spring Ret, On-Off/3 Point 24V AC, xNm, 2 Aux Switches | |
| AX-RAS-xD-S-230 | Damper Act, Spring Ret, On-Off/3 Point 230V AC, xNm, 2 Aux Switches | |
| ** Replace "x" with below torque ranges. | | |
| * 3Nm, 5Nm, 10Nm, 15Nm, 20Nm | | |



Specifications

| | |
|-----------------------|---|
| Power Supply | AC/DC 24V 50/60Hz OR AC 100-240V 50/60Hz |
| Nominal Voltage Range | 24V AC (AC/DC 19.2V-28.8V), 230V AC (AC 85V-265V) |
| Direction Of Rotation | Manual Regulation |
| Life Cycle | 60,000 Cycles |
| Sound Power Level | 45dB |
| Protection | IP54 |



Specifications

| | |
|-----------------------|---|
| Power Supply | AC/DC 24V 50/60Hz OR AC 100-240V 50/60Hz |
| Nominal Voltage Range | 24V AC (AC/DC 19.2V-28.8V), 230V AC (AC 85V-265V) |
| Direction Of Rotation | Manual Regulation |
| Life Cycle | 60,000 Cycles |
| Sound Power Level | 45dB |
| Protection | IP54 |



Specifications

| | |
|-----------------------|---|
| Power Supply | AC/DC 24V 50/60Hz OR AC 100-240V 50/60Hz |
| Nominal Voltage Range | 24V AC (AC/DC 19.2V-28.8V), 230V AC (AC 85V-265V) |
| Angle of rotation: | 95° Max, (Mechanical Adjustment Option) |
| Life Cycle | 60,000 Cycles |
| Sound Power Level | 45dB |
| Protection | IP54 |



AX-RAF-DS

Damper Actuators (Fire & Spring Return)

The AX-RAF Fire & Spring Return Damper Actuators are designed for dampers in ventilation and air-conditioning systems. These 24V AC/DC & 230V AC operated actuators come with 2 auxiliary SPDT and Thermal switches. The AX-RAD Damper Actuators come with selectable control signal of 0(2)-10V DC or 0(4)-20mA used to regulate these dampers with ingress protection of IP54.

| Order Codes (Example Part No: AX-RAF-5DST) | |
|---|---|
| AX-RAF-xDS | Fire D.A, Spring Ret, 24V, xNm, Aux Switches |
| AX-RAF-xDS-230 | Fire D.A, Spring Ret, 230V, xNm, Aux Switches |
| AX-RAF-xDST | Fire D.A, Spring Ret 24V, xNm, Aux Switches, Thermistor |
| AX-RAF-xDST-230 | Fire D.A, Spring Ret 230V, xNm, Aux Switch, Thermistor |
| ** Replace "x" with below torque ranges. | |
| * 3Nm, 5Nm, 10Nm, 15Nm, 20Nm | |

AX-TE

Temperature Sensors (Duct, Immersion, Space, Outdoor, HT)

The AX-TE Temperature Sensor series has NTC type sensors for Duct, Immersion, Room, Space, Flying Lead, Strap On and High Temperature, compatible with all kind of controllers.

A wide range of thermowells is also available for immersion applications. Wire type temperature sensors are also available in the same range.

| Order Codes (Example Part No: AX-TE-I1K) | |
|---|--|
| AX-TE-Ix | Immersion Temperature Sensor-Duct |
| AX-TE-Dx | Duct Temperature Sensor |
| AX-TE-Fx | Flying Lead Temperature Sensor |
| AX-TE-Sx | Space Temperature Sensor |
| AX-TE-Ox | Outdoor Temperature Sensor |
| AX-TE-Rx | Room Temperature Sensor |
| AX-TE-Px | Plate Temperature Sensor |
| AX-TE-Ix-HT | High Temperature Sensor (Immersion/Duct) |
| ** Replace "x" with below thermistor options | |
| * (T-10K3A1), (H-20K6A1), (NIK-Ni1000), (I100-PT100), (I1K-PT1000) etc | |

AX-TE-xTX-W

Temperature Transmitter (Duct, Immersion, Room, Outdoor)

The AX-TE-xTX-W Temperature Transmitters are designed for wide range temperature measurements in Duct, Chilled Water, Room and Outdoor applications. These Temperature Transmitters come with analogue output of 0-10V & 4-20mA. A jumper selectable option is available for temperature ranges between -50°C to 400°C and for output selection.

| Order Codes (Example Part No: AX-TE-DTX-W) | |
|---|--|
| AX-TE-ITX-W | Immersion Temperature Transmitter, Analogue Output |
| AX-TE-DTX-W | Duct Temperature Transmitter, Analogue Output |
| AX-TE-RTX-W | Room Temperature Transmitter, Analogue Output |
| AX-TE-OTX-W | Outside Temperature Transmitter, Analogue Output |
| AX-TE-STX-W | Space Temperature Transmitter, Analogue Output |
| AX-TE-FTX-W | Flying Lead Temperature Transmitter, Analogue Output |
| AX-TE-TTX-W | Thimble Temperature Transmitter, Analogue Output |
| ** Standard Probe Size is 150mm | |
| ** Add "-65" for 65mm probe option | |



Specifications

| | |
|-----------------------|---|
| Power Supply | AC/DC 24V 50/60Hz OR AC 100-240V 50/60Hz 24V AC (AC/DC 19.2V-28.8V), 230V AC (AC 85V-265V) |
| Nominal Voltage Range | |
| Direction Of Rotation | Manual Regulation |
| Life Cycle | 60,000 Cycles |
| Sound Power Level | 45dB |
| Protection | IP54 |



Specifications

| | |
|--------------------|---|
| Output | Range of 2 wire thermistor and PTC platinum elements providing variable resistance |
| Accuracy | Thermistor: $\pm 0.2^{\circ}\text{C}$ between 0°C and 70°C Platinum: $\pm 0.35^{\circ}\text{C}$ between 0°C and 100°C (PT100a and PT1000a) |
| Ambient Temp Range | -10°C to 60°C . 0-95% RH |
| Housing | Flame retardant ABS plastic |
| Protection | IP20, IP65, IP68 |



Specifications

| | |
|---------------------|--|
| Power Supply | Voltage: 0-5V DC/0-10V DC at 5mA Max Current: 4-20mA max resistance load 500 Ω |
| Power Supply | Voltage: 24V DC or 24V AC ($\pm 15\%$) Current: 24V DC ($\pm 15\%$) 2-wire loop power |
| Ambient Temperature | 0-50°C for electronics |
| Power Consumption | 40mA for Voltage output 20mA for loop power |
| Protection | IP54 and IP65 |

DAMPER ACTUATORS

TEMPERATURE SENSORS



AX-RHT

Humidity & Temperature Transmitter (Duct/Room/Outdoor)

A range of accurate, high quality RH&T Transmitters with selectable current or voltage analogue outputs. The units are extremely reliable, have excellent stability and a quick response time. Both 2% and 3% accuracy versions are available. Options for this range of sensors include the addition of various passive temperature sensors for most BMS systems. .

| Order Codes | | (Example Part No: AX-RAF-5DST) |
|--|--|--------------------------------|
| AX-RHT-D3 | Duct RH & Temperature Transmitter | |
| AX-RHT-O3 | Outside RH & Temperature Transmitter | |
| AX-RHT-SD | Room RH & Temperature Transmitter (Optional Display) | |
| ** Replace "3" with "2" for 2% accuracy for duct & outdoor models | | |
| ** Replace "D" with Passive Thermistor for room models | | |



| Specifications | |
|---------------------|---|
| Supply Voltage | 24V AC/DC (±15%) |
| Output (Voltage) | 0-10V DC, 0-5V DC at 10mA maximum load |
| Output (Current) | 4-20mA at 500 Ohms maximum load |
| Output Range - RH | 0 to 95% |
| Output Range - Temp | duct: 0°C to +70°C, outside: -20°C to +50°C |
| Ambient Temp Range | -10°C to 60°C, 0-95% RH non condensing |
| Ingress Protection | IP54, IP65 |

DH-1

Duct Humidistat

The DH-1 Duct Humidistat is calibration-free and accurate to within 3% RH. Capable of switching loads of up to 10A at 250V AC, it is ideally suited to the control of ventilation, humidification and dehumidification equipment; such as extract fans, boost controls, override controls, alarms, etc.

The DH-1 Duct Humidistat delivers accurate electronic control of humidity levels in HVAC ventilation ducts.

| Order Codes | |
|--------------|---|
| DH-1/50 | Duct Humidistat 50mm probe (220V AC - 240V AC) |
| DH-1/24V/50 | Duct Humidistat 50mm probe (22V AC - 26V AC) |
| DH-1/196 | Duct Humidistat 196mm probe – Manufactured to Order |
| DH-1/24V/196 | Duct Humidistat 196mm probe –Manufactured to Order |



| Specifications | |
|----------------------|------------------------------------|
| Power Supply | 22V - 26V AC (50Hz) or DC |
| | 220V - 240V AC 50Hz (live/neutral) |
| Output switch rating | 10A, 250V AC 50Hz (resistive) |
| Humidity control | 5% RH to 95% RH |
| Sensor accuracy | +/- 3% RH |
| Guarantee | 3 Years |

AX-HUMI

Dew Point, Wet Bulb and Enthalpy Transmitters

The AX-HUMI Transmitters are rugged, compact and ideally suited for monitoring Dew Point, Wet Bulb, Enthalpy or Temperature in building automation and process application. Using a capacitive RH sensor, the unit's microprocessor computes the Dew Point, Wet Bulb or Enthalpy. Separate models are available for Space (Wall Mount), Duct and Outside Air.

| Order Codes | |
|---|-----------------------|
| AX-HUMI-DP-XR-x | Dew Point Transmitter |
| AX-HUMI-EN-XR-x | Enthalpy Transmitter |
| AX-HUMI-WB-XR-x | Wet Bulb Transmitter |
| ** Replace "x" with "S" for Wall Mount Version | |
| ** Replace "x" with "D" for Duct Mount Version | |
| ** Replace "x" with "O" for Open Air Version | |



| Specifications | |
|-----------------------------|--------------------------------------|
| Operating Range | -40°F to 140°F (-40°C to 60°C) |
| | 0% to 99% RH (non condensing) |
| Supply Voltage | -12 to 30 V DC |
| Signal Outputs | 4-20mA, 0-5V or 0-10V (selectable) |
| Max Load (Current O/P Only) | (Ω) = Supply Vol - 10/ 0.02 |
| Sensing Element | Capacitive Polymer Sensor |
| Storage Temp | -67°F to 185°F (-55°C to 85°C) |
| Ingress Protection | IP42 For Duct Mount & Outside Air Tx |

RH, TEMP, HUMIDISTAT & ENTHALPY TRANSMITTERS



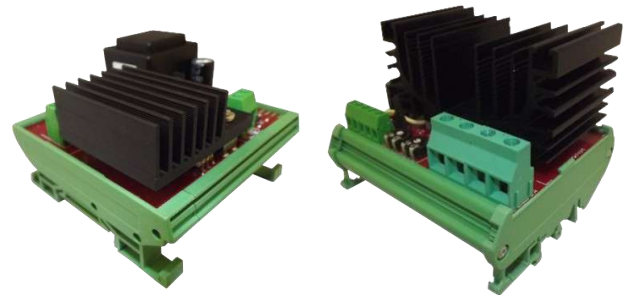
AX-MPR1

Din Mount Single Phase Thyristors

The AX-MPR1 DIN Rail Mount Power Regulator (thyristors) series provides continuously adjustable control of electric heating loads from a 0-10V control input. Applications include electric heating coils, heating cables and electric furnaces. These Din Rail Mount Single Phase Thyristors comes with rating of 2kW, 4kW, 6kW and 9kW.

Order Codes

| | |
|-----------|--|
| AX-MPR1-2 | Din Mount Thyristor, Single Phase, 2kW |
| AX-MPR1-4 | Din Mount Thyristor, Single Phase, 4kW |
| AX-MPR1-6 | Din Mount Thyristor, Single Phase, 6kW |
| AX-MPR1-9 | Din Mount Thyristor, Single Phase, 9kW |



Specifications

| | |
|--------------------|---|
| Input | 0-10V DC at 0.2mA maximum |
| Power Supply | 24V AC/DC ±10% |
| LED Indication | ON when output is on |
| Terminals | Rising clamp for 0.5-1.5mm ² stranded or 2.5mm ² solid core cable |
| Ambient Temp Range | 0 to 55°C Note; The units are rated at 40°C |
| Over Temp | Load is disconnected when heatsink temp exceeds 90°C Load is reconnected when heatsink temp falls below 85°C |

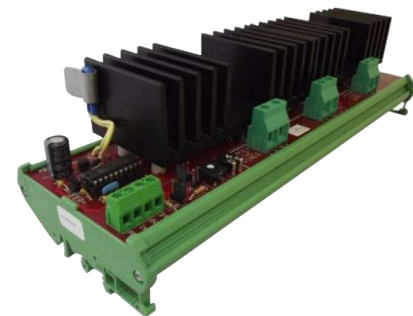
AX-MPR3

Din Mount Three Phase Thyristors

The AX-MPR3 Series of DIN Rail Mounting Power Regulators (thyristors) provides continuously adjustable control of electric heating loads from a BMS Controller or similar. Applications include electric heating coils, heating cables and electric furnaces. The AX-MPR3 Series come with rating of 6kW, 12kW & 18kW.

Order Codes

| | |
|------------|---------------------------------------|
| AX-MPR3-6 | Din Mount Three Phase Thyristor, 6kW |
| AX-MPR3-12 | Din Mount Three Phase Thyristor, 12kW |
| AX-MPR3-18 | Din Mount Three Phase Thyristor, 18kW |



Specifications

| | |
|-------------------|--|
| Input | 0-10V DC at 0.2mA maximum |
| Power Supply | 24V AC ±10% or 22 - 40V DC |
| Power Consumption | 30mA @24V DC (0.72VA) / 50mA @24V AC(1.2VA) |
| Alarm Output | 24V AC/DC (as power supply) - open-circuit when over temperature alarm is active |
| Rated Supply | 380-440V AC / 50-60Hz |
| Control Isolation | 3,000V |

AX-PPR1 & AX-PPR3

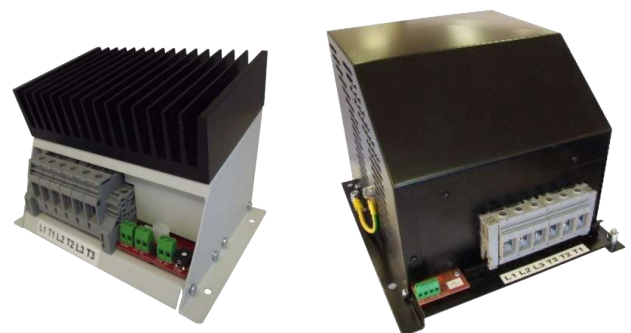
Panel Mount Three Phase Thyristors

The AX-PPR3 range of Panel Mount Three Phase power regulators (thyristors) provides continuously adjustable control of electric heating loads from a BMS Controller or similar. Applications include electric heating coils, heating cables and electric furnaces. The AX-PPR3 Series come with rating of 27kW, 36kW, 54kW, 72kW & 105kW.

Order Codes

| | |
|-------------|--|
| AX-PPR1-12 | Panel Mount Single Phase Thyristor, 12kW |
| AX-PPR3-27 | Panel Mount Three Phase Thyristor, 27kW |
| AX-PPR3-36 | Panel Mount Three Phase Thyristor, 36kW |
| AX-PPR3-54 | Panel Mount Three Phase Thyristor, 54kW |
| AX-PPR3-72 | Panel Mount Three Phase Thyristor, 72kW |
| AX-PPR3-105 | Panel Mount Three Phase Thyristor, 105kW |

**** 150kW, 180kW, 280kW & 400kW are also available**



Specifications

| | |
|----------------------|--|
| Input | 0-10V DC at 0.2mA maximum |
| Control Power Supply | 24V AC ±10% or 22 - 40V DC |
| Alarm Output | 250V AC at 5A VFC |
| Rated Supply | 380-440V AC / 50-60Hz |
| LED Indication | ON when output is on |
| Control Isolation | 3,000V |
| Ambient Temperature | 0 to 55°C. Note: The units are rated at 40°C. If using at higher ambient temperature derate the unit by 10% for every 5°C above 40°C |



AX-AV-SP-ESF-35-3

Single Point Air Velocity & Duct Temp Transmitter

The AX-AV-SP-ESF-35 are Single Point Air Velocity Transmitters designed on the Calorimetric principle of the air flow being passed across a heated thermistor and the results being measured against a control thermistor to determine heat loss and corresponding air flow. The units are mounted across the flow of the duct and give an analogue output proportionate to the air flow. Voltage or current output is available.

Order Codes

| | |
|---------------------|--|
| AX-AV-SP-ESF-35-3 | Single Point Air Velocity & Temperature Transmitter |
| AX-AV-SP-ESF-35-3D | Single Point Air Velocity & Temperature Transmitter with Display |
| AX-AV-SP-ESF-35-3DR | Single Point Air Velocity & Temperature Transmitter with Display and Relay |



Specifications

| | |
|--------------------|--|
| Power Supply | 24V AC / 24V DC $\pm 10\%$ (120mA) |
| Airflow Speed | 0-2m/sec or 0-10m/sec or 0-20m/sec (jumper selectable) |
| Temp Range | 0 to 50°C |
| Output Signal | Velocity 4-20mA (max 400 Ω) or 0-10V DC (min 1k Ω) Temperature 4-20mA (max 400 Ω) / 0-10V DC (min 1k Ω) |
| Ambient Temp | -20 to 70°C |
| Ingress Protection | IP54 |

AX-AV-MPP

Multi Point Air Velocity Probes

The AX-AV-MPP range of Multi Point Air Velocity Probes are mounted across the air flow in larger ducts and, in conjunction with the AX-ADPT Air Velocity Transmitter, gives an analogue output of the airflow. By rotating the static probe the effects of turbulent air on air flow measurements can be mitigated. Larger sizes are also available.

Order Codes

| | |
|---------------|-----------------------------|
| AX-AV-MPP-40 | 2 x Multipoint probes 40cm |
| AX-AV-MPP-50 | 2 x Multipoint probes 50cm |
| AX-AV-MPP-60 | 2 x Multipoint probes 60cm |
| AX-AV-MPP-70 | 2 x Multipoint probes 70cm |
| AX-AV-MPP-80 | 2 x Multipoint probes 80cm |
| AX-AV-MPP-100 | 2 x Multipoint probes 100cm |
| AX-AV-MPP-125 | 2 x Multipoint probes 125cm |
| AX-AV-MPP-150 | 2 x Multipoint probes 150cm |

****Add "175cm", "200cm", "230cm" after "MPP" for bigger sizes**



Specifications

| | |
|-------------|---|
| Materials | 316 Stainless steel, 25.4mm external diameter |
| Connectors | 316 Stainless steel to suit 6mm ID PVC tube |
| Duct Flange | 52mm external diameter with neoprene gasket duct seal |

AX-AV-ALU

Multi Point Pitot Tubes (Rectangular/Round Ducts)

The AX-AV-ALU Multi Point Air Velocity Probes are mounted across the air flow in smaller ducts and, in conjunction with the AX-ADPT250 Air Differential Pressure Transmitter gives an analogue output of the airflow. The shape of the probe profile creates a linear amplification of at least 2.5 times the velocity pressure, allowing for accurate measurement of velocities as low as 1.0m/s.

Order Codes

| | |
|--------------|---|
| AX-AV-ALU-Lx | Multi Point Pitot Tube, Rectangular Duct, ACC +/-2% |
| AX-AV-ALU-Rx | Multi Point Pitot Tube, Round Duct, ACC +/-2% |

**** For Rectangular Duct, replace x with required length, e.g. AX-AV-ALU-L200. Max Length 600mm, multiple of 50mm**

**** For Round Duct, replace x with required diameter, e.g. AX-AV-ALU-R080. Max Diameter 600mm, multiple of 50mm**



Specifications

| | |
|-----------------------|--|
| Measurement Units | Pa, l/s |
| Media Compatibility | Dry air or non-aggressive gases |
| Accuracy | $\pm 2\%$ |
| Operating Temperature | 5 to 95°C |
| Materials | T3015 Aluminium probe, mild steel mounting plate, expanded foam sealing gasket |
| Round Ducts | 80mm to 600mm |
| Rectangular Ducts | 200mm to 600mm |



AX-OC-CMPF

Ceiling Mount Occupancy Sensor (Big & Small)

The AX-OC-CMPF infrared sensor detects movements of people, large animals and vehicles in a detection range of up to 6m with a detection angle of 360° (on free area) and switches on the connected lighting. After a preset time of approximately 10 seconds to 15 minutes, the motion detector switches off again. A mini version of the occupancy sensor is also available with same features.

| Order Codes | |
|---------------|---|
| AX-OC-CMPF | Flush Ceiling Mount Occupancy PIR Sensor, 230V |
| AX-OC-CMPF-VF | Flush Ceiling Mount Occupancy PIR Sensor, 230V, Volt Free |
| AX-OC-CMPF-M | Flush Ceiling Mount Occupancy PIR Sensor-Mini, 230V –Mini |



| Specifications | |
|--------------------|---|
| Power Supply | 220-240V AC 50/60Hz |
| Power Consumption | Max. 1200W with usual lamps Max. 300W with LED and energy saving lamps |
| Switch | On, off or detector |
| Detection Speed | 0,6-1,5m/s |
| Detection Range | Max.6m (<24°C)/360° |
| Ambient Brightness | <3-2.000LUX |
| Ingress Protection | IP20 |

AX-OC-W

Wall Mount Occupancy Sensor (VF & Switched Live)

The AX-OC-W range of occupancy sensors are designed for use in energy savings systems where pet immunity is required and the lighting loads are automatically controlled based on human occupancy. It detects movement using a PIR sensor and turn on the connected loads. There is an adjustable timer that switches off the load when the area is no longer occupied.

| Order Codes | |
|---|--|
| AX-OC-W-24VF-SM | Wall Mount Occupancy PIR Volt Free Contact 24V AC |
| AX-OC-W-24SL-SM | Wall Mount Occupancy PIR Switched Live 24V AC |
| AX-OC-W-230VF-SM | Wall Mount Occupancy PIR Volt Free Contact 230V AC |
| AX-OC-W-230SL-SM | Wall Mount Occupancy PIR Switched Live 230V AC |
| ** Add “-O” before “-SM” for touch switch for overriding sensor | |
| ** Add “-65” for IP65 version | |



| Specifications | |
|-------------------|---|
| Power Supply | 230 V AC ± 10 % 230V versions 24 V AC/DC ± 10 % for 24V versions |
| Power Consumption | 1W maximum |
| Sensor Type | Infrared |
| Detection Range | 8m |
| Field Of View | 110° Degrees |
| Output | Supply voltage for switched live versions. SPST for VF |
| Contact Rating | 6A @ 240V AC resistive |

AX-LLT

Light Level Transmitter

The AX-LLT ambient light transmitter is designed for use in lighting control applications in indoor and outdoor environments. It converts the ambient light reading into a voltage(0-10V/0-5V) or current (3-wire 4-20mA) signal, making it compatible with most BMS and lighting control systems. The unit features jumper selectable output ranges 0-2000, 0-4000 and 0-10000 lux. The output voltage/ current selection is also done using on-board jumpers.

| Order Codes | |
|-------------|--|
| AX-LLT | Multirange Light Level Transmitter, Voltage and Current Output |



| Specifications | |
|--------------------|--|
| Power supply | 24 V AC ± 15% @ 65mA maximum 24 V DC ± 15% @ 40mA maximum |
| Sensor type | Photodiode |
| Sensing range | 0-2000 lux, 0-4000 lux and 0-10000 lux |
| Output | Voltage : 0-5V DC, 0-10V DC Current : 4-20mA (3Wire) |
| Field of view | 55° |
| Accuracy | ±5% across the range |
| Ingress Protection | IP65 |

OCCUPANCY & LIGHT LEVEL



AX-WLD

Water Leak Detection Module (2 & 4 Zone)

The AX-WLD is a range of two zone & four zone Water Leak Detection DIN rail mountable modules. Used with either a rain sensor, water-point sensor or cable sensor, this module can have a total of 200m of cable connected to each input (cable and header). The excitation signal generated by the unit for the sensor connections ensures that the sensors do not degrade when exposed to damp for long periods.

| Order Codes | | (Example Part No: AX-WLD2-24-LA) |
|--|---|----------------------------------|
| AX-WLD2-24 | Two zone water leak detection module 24V | |
| AX-WLD2-230 | Two zone water leak detection module 230V AC | |
| AX-WLDF-24 | Four zone water leak detection module 24V | |
| AX-WLDF-230 | Four zone water leak detection module 230V AC | |
| ** Add “-A” to part code for Alarm Buzzer | | |
| ** Add “-L” to part code for Latching Option | | |
| ** Add “-E” to part code for enclosure | | |



| Specifications | |
|----------------------------|--|
| Supply | WLD2-24 = 24V AC @50Hz ±10% 24V DC ±10% at 50mA max WLD2-230 = 230V AC @ 50Hz ±15% WLDF-24 = 24V AC @ 50Hz ±10% 24V DC ±10% at 150mA max WLDF-230 = 230V AC @ 50Hz ±15% |
| Sensor Types | Cable, Point or Rain (AX-WCS, AX-WPS, AX-WRS1) |
| Max Cable Length Per Input | 200m |

AX-WCS-EL

Water Leak Detection Cable Sensor

The AX-WCS-EL series of low smoke halogen free cable sensors, designed for efficient water leak detection, especially for under false floors, floor perimeters, around pipes, IT rooms and warehouses. This product works in tandem with the AX-WLD2 series of detection modules.

| Order Codes | |
|--|--|
| AX-WCS-EL002 | Easy Lay Water Leak Cable Sensor, 3m header 2m Sensor |
| AX-WCS-EL005 | Easy Lay Water Leak Cable Sensor, 3m header 5m Sensor |
| AX-WCS-EL010 | Easy Lay Water Leak Cable Sensor, 3m header 10m Sensor |
| AX-WCS-EL015 | Easy Lay Water Leak Cable Sensor, 3m header 15m Sensor |
| AX-WCS-EL020 | Easy Lay Water Leak Cable Sensor, 3m header 20m Sensor |
| AX-WCS-ELxx | Custom Cable Length—Easy Lay Water Leak Cable |
| ** Add “F” after “WCS” to for Four Zone Cables | |



| Specifications | |
|-------------------|-------------------------------|
| Cable Type | Low Smoke Zero Halogen Free |
| Colour | Yellow/Black |
| Maximum Temp | +80 °C |
| Dimension | 6mm ±0.2 |
| Maximum Cable Run | 300m (including header cable) |

WATER LEAK

AX-DTS-B

Drip Tray Switch

AX-DTS-B Drip Tray Switches are simple to install, easy to service and extremely reliable. The device is essentially a reed switch with a permanent magnet mounted onto the float.

It finds its application in air conditioners, commercial and residential HVAC systems, condensate drain pans, heating systems, ventilation systems and refrigeration equipment etc.

| Order Codes | |
|-------------|------------------|
| AX-DTS-B | Drip Tray Switch |



| Specifications | |
|------------------------------------|-----------------------|
| Float Material | Polypropylene, White |
| Housing and Retainer Ring Material | Polypropylene, Black |
| Power rating (max) | 50VA |
| Switching voltage | 200V DC, 150V AC |
| Breakdown voltage (min) | 250V DC |
| Switching current (max) | 1.5A AC/DC |
| Approvals | CE, Conforms to UL508 |



AX-TX

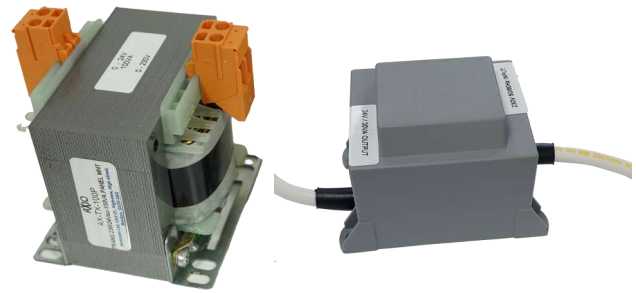
Panel Mount & Encapsulated Transformers

Single phase transformers with standard 230Vac input primary winding and 24V AC output. Designed for use in low voltage circuits where galvanic isolation is required. e.g. BMS and HVAC control panels. A surface mount encapsulated versions with leads are also available.

Order Codes

| | |
|------------|---|
| AX-TX-025P | Voltage Transformer, Panel mount, 230V AC-24V AC /25VA |
| AX-TX-050P | Voltage Transformer, Panel mount, 230V AC-24V AC /50VA |
| AX-TX-100P | Voltage Transformer, Panel mount ,230V AC-24V AC /100VA |
| AX-TX-L30 | Voltage Transformer, Encapsulated ,230V AC-24V AC /30VA |

** Custom Ratings are also available



Specifications

| | |
|------------------------------|--------------|
| Rated input voltage | 230V AC |
| Rated input frequency | 50...60 Hz |
| No of secondary windings | 1 |
| Output voltage | 24V AC |
| Transformer class (IEC61558) | Class I |
| Insulation class | Class A |
| Maximum temperature rise | 50°C max |
| Compliance | CE , EU RoHS |

ESC-RN & ESC87/84

Industrial Plug In Relay (2 Pole & 4 Pole)

The ESC-RN series comprises a range of high quality 2 pole & 4 pole industry standard relay footprint mounted in DIN Rail base and clip. Variants are available with 24V DC, 24V AC and 230V AC coils. Other versions are available on special request. The DIN Rail base is designed to be a snap fit onto TS35 section DIN Rail.

Order Codes

| | |
|----------------|---|
| ESC-R2N-230A.2 | Relay 2PDT Plug In 230V AC Coil, 10A, LED |
| ESC-R2N-24A.2 | Relay 2PDT Plug In 24V AC Coil, 10A, LED |
| ESC-R2N-24D.2 | Relay 2PDT Plug In 24V DC Coil, 10A, LED |
| ESC-R4N-230A.2 | Relay 4PDT Plug In 230V AC Coil, 5A, LED |
| ESC-R4N-24A.2 | Relay 4PDT Plug In 24V AC Coil, 5A, LED |
| ESC-R4N-24D.2 | Relay 4PDT Plug In 24V DC Coil, 5A, LED |

** ESC87N-2011-35 Series (Single Pole, Low Profile Relay, 12Amp)

** ESC84-2012-35 Series (Double Pole, Low Profile Relay, 8Amp)

Specifications

| | |
|------------------------|--|
| Resistance | ≤50mΩ |
| Material | Silver Tin Oxide |
| Resistive Load | 10A @220V AC/24V DC (2 Pole 2PDT), 5A @220V AC/30V DC (4 Pole 4PDT) |
| Max. Switching Current | 10A (2Pole 2PDT), 5Amp (4Pole 4PDT) |
| Max. Switching Voltage | 250V AC / 30V DC |
| Max. Switching Power | 1750VA / 210W |
| Insulation Resistance | ≥500mΩ |



ESC-GZT & ESC-GT80

Industrial Plug In Sockets & Clips (1Pole, 2Pole & 4Pole)

Plug in sockets for 1pole, 2 pole and 4 pole relays comes in three different categories, two sided connections, single sided connections and screwless connections. Clips are included with every plug in socket.

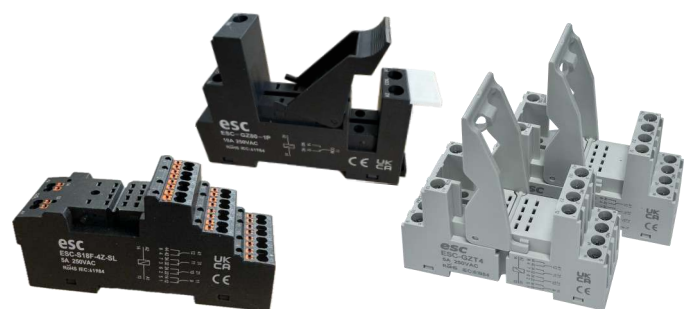
Order Codes

| | |
|--------------|--|
| ESC-GZT2 | Plug in socket, 2 pole, double sided connections with clip |
| ESC-GZT4 | Plug in socket, 4 pole, double sided connections with clip |
| ESC-GZ80-1P | Plug in socket, 1 pole, double sided connections with clip |
| ESC-GZT80-2P | Plug in socket, 2 pole, double sided connections with clip |

** Screwless & Single side connection bases are available

Specifications

| | |
|-----------------|--|
| Rated Voltage | 250 V AC |
| Rated Current | 2 pole, double sided = 12A 2 pole, single sided = 10A 2 pole, Screwless = 12A 4 pole, double sided = 8A 4 pole, double sided = 8A 4 pole, double sided = 7A |
| Socket Material | PA66+GF (V1/V0) |





AX-CNDR

AXIO's Digital Room Controller

The AX-CNDR Digital Room Controller features high-contrast blue backlit display with white text, and fit a single gang, flush-mount back box. The unit has selection for an internal or external temperature sensor and provides an adjustable proportional and integral heating and cooling outputs or on/off control depending on unit type.



Features

| | |
|---|--|
| * 0-10V PI heating and cooling outputs | * Keycard / occupancy input, adjustable exit delay |
| * 0-10V PI cooling with On/Off heating (CRX versions) | * Window contact input |
| * 0-10V fan speed control with Auto (XXE versions) | * 3 point fan speed voltage profile, limit noise |
| * On/off heating /cooling control (RXX versions) | * Unused Keycard/Window contact inputs available as BACnet binary inputs |
| * 3 speed fan speed control with Auto (XX3 versions) | * Fits a standard single gang, flush-mount back box |
| * Isolated BACnet MSTP / RTU, supports COV | * Two part plug-in connectors for easy installation |
| * Adjustable setpoint range | * Built in terminating resistor (BN version) |

AX-CS & AX-CT

AXIO Current Switch & Current Transmitter

The AX-CSL current switch solid-core can accept AC current up to 200A depending on the model. Both models provides an output switch signal with the state of normally open contact to control various automation devices.

The AX-CTX Analogue Current Transmitters are designed for use in any AC current monitoring application where it is required to monitor a particular piece of equipment for proper operation.



Order Codes

| Current Switches | Details | Current Transmitter | Details |
|------------------|--|---------------------|--|
| AX-CSL-150-2 | Current Switch 150A Solid Core Fixed Setpoint 0.2A, 0.3A 135 AC/DC SW | AX-CTX-LA10-50 | Current Transmitter, 4-20mA, Solid Core, 0-10, 0-20, 0-50A |
| AX-CSL-200-05 | Current Switch 200A Solid Core Fixed Setpoint 0.5A, 0.3A 135 AC/DC SW | AX-CTX-LA100-200 | Current Transmitter, 4-20mA, Solid Core, 0-100, 0-150, 0-200A |
| AX-CSL-200-05H | Current Switch 200A Solid Core Fixed Setpoint 0.5A, 1A 240 AC Switch | AX-CTX-LV10-50 | Current Transmitter, 0-10 V DC, Solid Core, 0-10, 0-20, 0-50A |
| AX-CSL-A200-1H | Current Switch 200A Solid Core Adjustable Setpoint 1-200A, 1A 240 AC Switch | AX-CTX-LV100-200 | Current Transmitter, 0-10 V DC, Solid Core, 0-100, 0-150, 0-200A |
| AX-CSL-A150-03 | Current Switch 150A Solid Core Adjustable Setpoint 0.3-150A, 0.3A 135 AC/DC | AX-CTX-SLA10-50 | Current Transmitter, 4-20mA, Split Core, 0-10, 0-20, 0-50A |
| AX-CSL-SA200-1 | Current Switch 200A Split Core Adjustable Setpoint 1-200A, 0.25A 100V AC/DC SW | AX-CTX-SLA100-200 | Current Transmitter, 4-20mA, Split Core, 0-100, 0-150, 0-200A |
| AX-CSLM-A50-01 | Current Switch 1A Solid Core Adjustable Setpoint 0.01-1A, 0.3A 130 V Switch | AX-CTX-SLV10-50 | Current Transmitter, 0-10 V DC, Split Core, 0-10, 0-20, 0-50A |
| AX-CSLM-A50-05 | Current Switch 50A Solid Core Adjustable Setpoint 0.5-50A, 0.3A 130V Switch | AX-CTX-SLV100-200 | Current Transmitter, 0-10 V DC, Split Core, 0-100, 0-150, 0-200A |

I/O & RELAY MODULES

Input Output Modules, Relay Modules, Commissioning Tool

AXIO has a wide range of I/O modules available in the shape of Multiplexers, Phase Cut Modules, Fan Speed Relay, Current Splitter Modules, Multi Mode Relay Modules etc.

AXIO also has AX-REF-VI which is a useful, versatile tool ideal for commissioning engineers, testers and system designers.



Features

| I/O Modules | Relay Modules |
|---|--|
| * Multiplexers - Digital and Analogue | * Single Relay Modules |
| * Raise/Lower and Conversion Modules | * Multi-Mode Relay Modules |
| * Rescaling, Limiting and Splitter Modules | * Fan Speed Relay Modules |
| * Phase Cut Modules and Analogue to Pneumatic | * Fan Speed Convertor Modules |
| * Timers and Phase Failure Relays | Commissioning Tools |
| | * Analogue output reference unit - hand held |

THERMOSTAT, CURRENT SWITCH & TX & I/O MODULES



Website Datasheet Links (Digital Version)

- * **INPUT OUTPUT MODULES**
- * **RELAY MODULES**
- * **THYRISTOR POWER CONTROLLERS, SSRs**
- * **CONTROLLERS**
- * **NETWORKING DEVICES**
- * **THERMOSTATS**
- * **TEMPERATURE, RELATIVE HUMIDITY & HUMIDISTATS**
- * **SETPOINT**
- * **EMERGENCY WATERLEAK & DISPLAY**
- * **PRESSURE**
- * **POWER SUPPLIES, MONITORING & METERING**
- * **GAS SENSOR, SMOKE DETECTOR & AIR QUALITY**
- * **AIR VELOCITY, FLOW & LIQUID LEVEL**
- * **OCCUPANCY & LIGHTING**
- * **VALVES**
- * **DAMPER ACTUATORS**
- * **ENCLOSURES**
- * **COMMISIONING TOOLS**
- * **ISOLATORS**



AXIO

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AXIO has a full and varied range of products demonstrating its commitment to providing customers with excellent Peripherals and Control Devices.

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