



*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.

A handwritten signature in blue ink, reading 'D. Gates', with a stylized flourish at the end.

**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-LDPS1382 & 1482

#### Liquid Differential Pressure Switch - Wide Range

The AX-LDPS1382 & 1482 range of Differential Pressure Switches are cost effective pressure monitoring solution for liquid and non aggressive gases. The units are designed for both flow proving and flow failure detection with models available to cover wide differential pressure range.

#### Order Codes

AX-LDPS1382-1	Liquid Diff Press Switch 0.07bar - 1bar
AX-LDPS1382-4	Liquid Diff Press Switch 0.2bar - 4bar
AX-LDPS1382-11	Liquid Diff Press Switch 0.5bar - 11bar
AX-LDPS1382-28	Liquid Diff Press Switch 2bar - 28bar
AX-LDPS1382-125	Liquid Diff Press Switch 5bar - 125mbar
AX-LDPS1382-250	Liquid Diff Press Switch 15mbar - 250mbar
AX-LDPS1382-400	Liquid Diff Press Switch 25mbar - 400mbar



#### Specifications

Max Line Pressure	>250mbar = 34 bar max <125mbar = 14 bar max
Out Of Balance Press	4x Pressure Range
Pressure Connection	1/8" BSP Female Brass
Media Temp	-10°C to +85°C
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 $\pm 25/50/100/150$ , 0-25 50 100 250 Pa
AX-ADPT2K5-8-x	Air Diff Press Tx $\pm 100$ 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, $\pm 10\%$
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

(Example Part No: AX-HL-V-5M10)

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-C

### Liquid Level Float Switches - 99mm

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



### 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	$\pm 5\text{ppm}$ 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
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#### 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: 0-1000ug/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-T81

#### Room CO2 & Temperature Transmitter with Display

The AX-GS-CD-T81 Combined Humidity, Temperature and Carbon Dioxide Transmitter uses NDIR single beam Infra-red technology to monitor the CO2 levels and give both a Voltage and Current output of CO2 levels and a Thermistor to monitor the temperature and a Thermoset Polymer Based Capacitive sensor for the RH and outputs a linear signal as either 4-20mA or 0-5/10V DC. The options include a LCD display displaying the ppm levels.

#### Order Codes

AX-GS-CD-T81-E	Space CO2 Sensor & therm. temp o/p
AX-GS-CD-T81-EB	Space CO2 Sensor & therm. temp & BACnet MSTP o/p
AX-GS-CD-T81-ES	Space CO2 Sensor 0-5000ppm & therm. temp o/p
AX-GS-CD-T81-ED	Space CO2 Sensor & therm. temp o/p & LCD
AX-GS-CD-T81-EH	Space CO2 Sensor & analogue temp & RH o/p
AX-GS-CD-T81-EHD	Space CO2 Sensor & analogue temp & RH o/p & LCD display

### 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-CDRHT-D	Duct Mount CO2 Sensor with RH&T, 205mm Probe 24V

#### Specifications

Power Supply	18 to 30V AC 50/60Hz
Consumption	0.7W @ nominal voltage of 24V AC
Ambient Temp. Range	0 to +50°C, 0-95% RH non condensing
Sensor Type	CO2 Non-dispersive Infra-red
Range	0-2000ppm standard, 0-5000ppm available (-S ver)
Accuracy	±or 5% whichever is greater
Output	0-5/10V DC and 4-20mA
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 <span>(Example Part No: AX-RA-6A-S)</span>	
AX-RA-xA	Damper Actuator Modulating 24V, xNm, 0-10V/4-20mA
AX-RA-xA-S	Damper Actuator Modulating 24V, xNm, 0-10V/4-20mA, Aux Switch
AX-RA-xA-S-230	Damper Act Modulating 230V AC, xNm, 0-10V/4-20mA, Aux Switch
<b>** Replace "x" with below torque ranges.</b>	
<b>* 2Nm, 4Nm, 6Nm, 8Nm, 16Nm, 24Nm, 32Nm</b>	



#### 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

### 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 <span>(Example Part No: AX-RA-6D-S)</span>	
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
<b>** Replace "x" with below torque ranges.</b>	
<b>* 2Nm, 4Nm, 6Nm, 8Nm, 16Nm, 24Nm, 32Nm</b>	



#### 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

### 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 <span>(Example Part No: AX-RAS-10D)</span>	
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
<b>** Replace "x" with below torque ranges.</b>	
<b>* 3Nm, 5Nm, 10Nm, 15Nm, 20Nm</b>	



#### 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 <small>(Example Part No: AX-RAF-5DST)</small>	
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
<b>** Replace "x" with below torque ranges.</b>	
<b>* 3Nm, 5Nm, 10Nm, 15Nm, 20Nm</b>	



#### 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

### 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 <small>(Example Part No: AX-TE-11K)</small>	
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)
<b>** Replace "x" with below thermistor options</b>	
<b>* (T-10K3A1), (H-20K6A1), (N1K-Ni1000), (I100-PT100), (I1K-PT1000) etc</b>	



#### Specifications

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

### 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  $-50^{\circ}\text{C}$  to  $400^{\circ}\text{C}$  and for output selection.

Order Codes <small>(Example Part No: AX-TE-DTX-W)</small>	
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
<b>** Standard Probe Size is 150mm</b>	
<b>** Add "-65" for 65mm probe option</b>	



#### Specifications

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



## AX-RHT

### Humidity & Temperature Transmitter (Duct/Room/

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)
<b>** Replace "3" with "2" for 2% accuracy for duct &amp; outdoor models</b>	
<b>** Replace "D" with Passive Thermistor for room models</b>	



#### 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	<b>duct:</b> 0°C to +70°C, <b>outside:</b> -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
<b>** Replace "x" with "S" for Wall Mount Version</b>	
<b>** Replace "x" with "D" for Duct Mount Version</b>	
<b>** Replace "x" with "O" for Open Air Version</b>	



#### 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



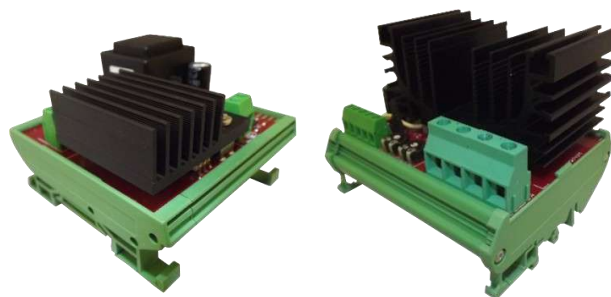
### AX-MPR1

#### 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 $\pm 10\%$
LED Indication	ON when output is on
Terminals	Rising clamp for 0.5-1.5mm <sup>2</sup> stranded or 2.5mm <sup>2</sup> 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

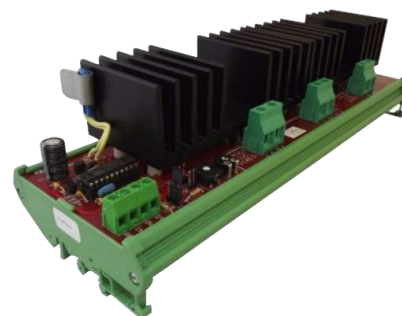
### AX-MPR3

#### 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 $\pm 10\%$ 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

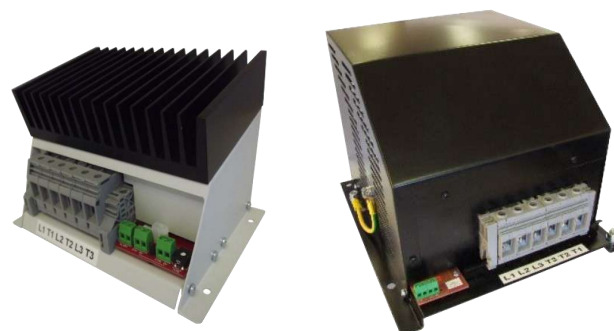
### AX-PPR1 & AX-PPR3

#### 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 $\pm 10\%$ 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 $\Omega$ ) or 0-10V DC (min 1k $\Omega$ )
	Temperature 4-20mA (max 400 $\Omega$ ) / 0-10V DC (min 1k $\Omega$ )
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 $\pm 10\%$ 230V versions 24 V AC/DC $\pm 10\%$ 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
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#### Specifications

Power supply	24 V AC $\pm 15\%$ @ 65mA maximum 24 V DC $\pm 15\%$ @ 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	$\pm 5\%$ across the range
Ingress Protection	IP65

## 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	<b>WLD2-24</b> = 24V AC @50Hz ±10% 24V DC ±10% at 50mA max
	<b>WLD2-230</b> = 230V AC @ 50Hz ±15%
	<b>WLDF-24</b> = 24V AC @ 50Hz ±10% 24V DC ±10% at 150mA max
	<b>WLDF-230</b> = 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



#### 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

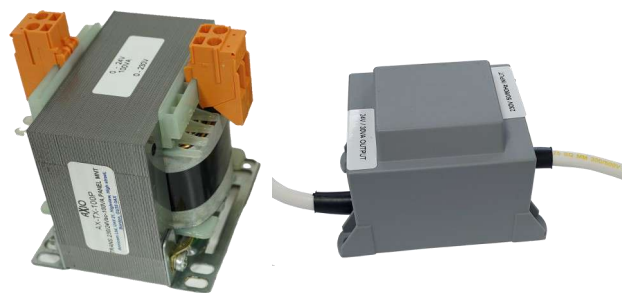
### Panel Mount & Encapsulated Transformers

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

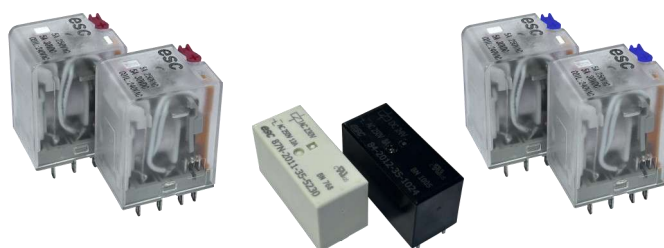
ESC-R2N-230A.2	Relay 2PDT Plug In 230V AC Coil, 10A, LED
ESC-R2N-24A.2	Relay 2PDT Plug In 24V AC Coil, 10A, LED
ESC-R2N-24D.2	Relay 2PDT Plug In 24V DC Coil, 10A, LED
ESC-R4N-230A.2	Relay 4PDT Plug In 230V AC Coil, 5A, LED
ESC-R4N-24A.2	Relay 4PDT Plug In 24V AC Coil, 5A, LED
ESC-R4N-24D.2	Relay 4PDT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

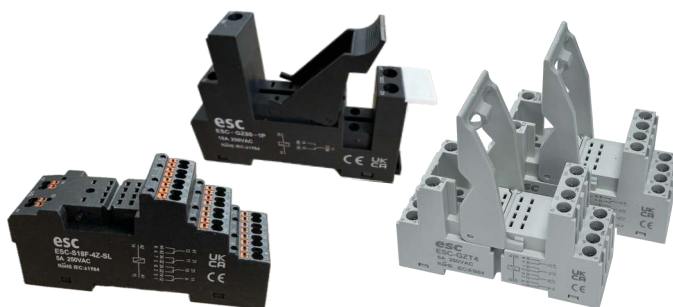
### Industrial Plug In Sockets & Clips (1Pole, 2Pole & 4Pole)

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	<b>Commissioning Tools</b>
	* Analogue output reference unit - hand held



## 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**





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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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