

SOLID STATE RELAYS (SSR)







Extremely Reliable AC and DC Solid State Relays to Provide an **Extended Service Life**

- Panel, PCB or Din mount
- Single and three phase
- Available with integrated finger guards, heat sinks & connecting cables













Automotive

Catering & Drinks Vending

Machinery

Food

Industrial Control Panels

Moulding

UL Standards Also Available

ELECTROMECHANICAL RELAYS

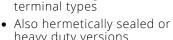






Choice of Quality Signal, Power, Industrial, Latching and **Automotive Relays**





heavy duty versions

• Wide range of coil voltages, contact arrangements and

Various bracket types















RELAYS & CONTACTORS





High Performance Industry-Standard Contactors **Engineered for Longer Life**

- 3 & 4 pole contactors
- Full range of accessories including overload relays & top or side mounting auxiliary blocks







Catering Equipment





Commercial Industrial Refrigeration Process Control



Vending Machines



UL Standards Also Available

CIRCUIT BREAKERS RCD & MCB





Wide Range of 2 and 4 Pole Modules and MCBs

- Compact design
- Easy wiring
- Rated up to 63 amps
- A, B & C curve options available





Commercial Industrial Refrigeration Control Panels



Research Facilities



Telecoms

UL Standards Also Available





AXIAL FANS НХНТ



EC, DC and AC Axial Fans Offering a Cost-**Effective Choice** Without A Compromise in Performance

- Typical airflow up to 434 CFM
- AF-AC frequency switching fan for energy savings
- Can offer protection to IP54, IP56, IP68 & ATEX
- Huge range of sizes to meet any application













Commercial Refrigeration

& Catering Equipment

Industrial Control Panels

Scientific Equipment

ATEX Versions UL Standards Available Also Available

AXIAL FANS SUNON



SUNON



Fans Ranging from Cost-Effective AC & DC **Models to EC Versions** for Greater Energy-Efficiency

- Low, medium & high speed: typical airflow up to 335 CFM
- Protection available: IP21, IP55, IP68 & ATEX
- High airflow, silent and dust/water-proof versions
- Typical sizes between 80 mm and 220 mm















Air Conditioning Commercial Refrigeration & Bottle Coolers

Consumer

FAN MOTORS





High Efficiency Fans From Kulthorn Offering a Competitive Alternative to **Existing Brands**

- Enhanced blade design achieves same air flow at lower speeds to save energy
- Extremely quiet operation
- Variable programmable speeds with optional bluetooth control
- ATEX compliance for use with hydrocarbon refrigerants





Commercial



Hazardous Environments



Oil & Gas



ATEX

UL Standards Also Available

TANGENTIAL FANS AND HOT-CUPBOARD FANS





Choice of Hot Air Circulation Fans Widely Used in **Catering Applications**

- High efficiency EC tangential cross flow fans in a range of blade lengths, air flow and wattage
- Available as single or double blades and with choice of motor position
- Oven fan assemblies with galvanised blades











Foodservice

Food Production

Hot Cupboards UL Standards & Ovens Also Available



SWITCHES









Rocker, Toggle and **Push Button Switches Chosen from Selected** International Suppliers

- Various styles, types, sizes, voltages and cutout shapes
- Design support available to specify right model
- Splash-proof and waterproof options for sterile areas (IP65)
- Some ATEX-approved for use in hazardous environments







Catering Equipment



Industrial Control Panels



Medical Products



Waterproof Options



UL Standards Also Available

INDICATORS

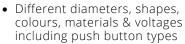












- Splash-proof versions and caps rated to IP65 - ideal for sterile environments
- Easy latching design for faster assembly

















UL Standards

LED LIGHTING



Single Modular Design **Featuring Advanced LED Technology for Attractive Display**

- Range of lengths for design flexibility
- Compliance with ATEX requirements & IP65 rated
- Available with Brilliant White high output colour (CRI 93)
- Full advice on drivers and other accessories



Commercial Refrigeration



Freezers



Retail





Scientific



Waterproof Design



UL Standards Also Available

ALSO AVAILABLE...

COMPREHENSIVE CONTROL SOLUTIONS

Our full product portfolio includes a range of control components.

We offer digital controllers from established brands like Pixsys, LAE Electronic and Carel.

We can advise on suitable thermal cut-outs, snap discs or temperature sensors for your chosen application. We also supply thermistors and themocouple probes to meet any specific design.







WHATEVER THE APPLICATION...

A FEW SUCCESS STORIES

ASSURED RELIABILITY IN AWARD-WINNING COFFEE MACHINES

Every year, we supply thousands of components to the UK's most successful manufacturers of coffee vending machines - who rely on us for electrical parts that meet their exacting standards for product safety, quality and reliability.



The free-standing machines made by one of our customers include i-Autoc SSR and NGT thermal cut-outs supplied by Hawco and we assisted them with the international certification required to use these parts within their products.

We also provide an uninterrupted supply by storing their stock in our UK distribution centre, always ensuring that stock levels are sufficient to satisfy peak demands in their production schedule.

Another Hawco customer has been designing and manufacturing drinks machines for over 30 years. We supply a number of different components for their products, including ultra-sensitive low-range pressure sensors, thermostats, thermistors, cord sets and rocker switches.

BLOOD PRODUCTS STERILISATION

One of our customers is a pioneering manufacturer of autoclaves, which are often used to sterilise blood products. We supply the i-Autoc solid state relays used to switch the high electrical currents inside the autoclaves along with temperature probes and rocker switches to meet their stringent design criteria.

We support our OEM customers with a diverse range of electrical requirements, including catering equipment, refrigeration, vending machines, car production, plastic injection moulding, oil and gas and research laboratories.

ENERGY-SAVING REFRIGERATION

Carter Retail Equipment is a highly respected manufacturer of refrigerated display cases. It prides itself on employing energy efficient methods and we helped the company improve the environmental rating of its products.

After discussions with the company's design team, we recommended using the latest energy-saving EC fans from HXHT. The new fans are also ATEX-approved, which means they can be safely used with hydrocarbon refrigerants. In

addition, these fans are multi-voltage, making it easy for the same model to be specified in display cases destined for either US or European markets.



BETTER FAN PERFORMANCE

We work with a number of major Turkish manufacturers, supplying components which are used in a wide variety of refrigerated retail counters found in supermarket chains across Europe and the US.

Many of these customers have switched to the latest energy-saving EC fans from Kulthorn which offer clear advantages over other fans on the market. The design of the blade offers better air flow, enabling significant energy savings to be made. The fans are also quieter. Finally, with all fans available as ATEX-compliant, they can be specified for use with propane and other hydrocarbon refrigerants.

BRIGHTER VENDING MACHINES

We worked with Selecta on a project to refurbish 2500 Wurlitzer vending machines found in airports, train stations and bus terminals across Switzerland.

We advised the company's R&D team on the best way to integrate new LED lighting from Self Electronics. After a period of testing, the new lighting offered a brighter appearance and better colour rendering, which resulted in an immediate increase in sales as well as reduced energy costs.

GOT A DESIGN PROBLEM? WE CAN HELP

Our engineers love a challenge. Every day, they work with a host of OEM customers, taking the time to understand their specific technical requirements and respond with a practical solution.

In our experience, no two projects are the same. Sometimes we will source the exact part to meet an existing design specification or set of technical drawings. Just as often, we will work with an in-house design team to investigate all viable solutions and assess which one is best suited for the outcome to be achieved.

Not every supplier can offer our level of in-depth product knowledge. This is based on an experienced team of technical advisers who have built strong relationships with our 250 specialised providers of quality components.

Got a project in mind? Put our team to the test. Need help finding the right component? Just ask Hawco.

Our Team

- Experienced engineers across a range of sectors
- In-depth product knowledge
- Dedicated account management & on-site consultation
- Technical support always available

Our Company

- 40+ years' experience supporting OEMs
- Quality products from 250 suppliers approved to international standards
- Stock control & inventory solutions
- Part of Diploma PLC, an international group with a turnover of £450 million



We offer a full range of complementary process heating and control components. For further details, refer to our additional line cards - available on request - or visit www.hawco.co.uk for product and technical information.



