

Products and Services



Driving Forward Electrical Excellence

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Please feel free to contact
us with your enquires on:

0113 236 1509

Office Times:

Monday to Thursday
8.30am to 5pm

Friday
8.30am to 4.30pm
Excluding Bank Holidays

Service Available
24 hours a day
7 days a week

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About us

Since 1991, Halcyon Drives have developed a reputation a quality electrical engineering company for the excellent services and workmanship we provide, to both local and national industry. Organised into three customer-focused areas: Specialist distribution of products, variable speed drive service and the build of control panels and MCC's. All delivered as a first-class solution to the customer.

Our distribution division is specialist, offering a focused portfolio of brands, allowing us to have the ability to focus on our customers requirements. Whether the client has an understanding of their needs or requires support to determine the best solution available, we have the expertise and back up to offer advice and support.

Customer focus the priority of our business, so we employ a team of service engineers with a wealth of experience who provide service and expertise technically for our products and services for all industries and applications. Providing a solution to customers requirements no matter how complex is key.

The design and build of control panels completes our final division, boasting purpose built facilities and dedicated expertise to develop a panel to suit customers requirements.

Our objective is to offer a quality service and product while adding value and making savings for the customer at every opportunity.



Products



Halcyon Drives Ltd are partnered with leading brands including ABB, Rockwell Automation, Riello UPS & PULS.

Because our portfolio is focused, our team is enabled to train on the supported product groups regularly, to provide a quality service to our clients. Whether it is pre or post sales support of the product ranges, our team are available to assist with your enquiry.

Each of our supplied product groups has a specialist dedicated to the knowledge of the products to offer peace of mind to the customer when trying to make a selection.

Committed to delivering current information to our customers, we host seminars each year free of charge, which provides an update or refresh of knowledge. Our demonstration room is also available all year round for clients/engineers to visit and gain a greater understanding of the products available.



Drives
Sales, Support & Service
Motors
Sales & Support

Rockwell
Automation

riello ups

PULS

Services

Our alliance with ABB, forming our Authorized Value Provider partnership means we supply ABB Variable Speed Drives. We employ an experienced service team who offer a varied range of services of exceptional standard to our customers, providing peace of mind.

Our combined experience of applications and industry enable us to provide a solution to even the most complex of issues. For those applications that are classed as critical break down, we believe it is essential that a dedicated team of professionals are available to provide exceptional care anytime of the day.

Our services include:

- Installation and Commissioning
- Service Contracts
- Maintenance Visits
- Breakdown Assistance
- Hire Drives
- Repair
- Training Courses
- Energy Audit
- Power Quality Survey
- Harmonic Survey
- Lifecycle Assessment



Control Systems and MCC's

The foundations of our business were created with the building of control panels over 25 years ago. Located within a purpose built building in which we can produce a control panel of any design to our customers specifications and expectations.

It is important that we have these facilities to provide solutions for customers with varying requirements, whether it be a small panel built to a specification or a large motor control centre. Our engineering team are experienced in many industries and applications, and all our drawings are completed using CAD design software. We are also able to carry out PLC programming and system integration, as well as the facility to carry out factory acceptance tests. This is backed up with extensive after sales service and support to provide a complete solution, giving total peace of mind to our clients.



Products

As an ABB Authorized Value Provider we are fully trained in ABB products, tools, databases and services. Working as an extended division of ABB we are audited and receive regular training to provide a quality service to our mutual customers.

The products that we distribute for ABB are variable speed drives, low voltage motors, power quality products and softstarters. Providing excellent service is important to our business model, we go further than ABB's requirements and provide a service that is second to none.



Drives
Sales, Support & Service
Motors
Sales & Support

"ABB authorized value providers deliver the authorized offering of sales, support and service in close cooperation with ABB. They bring ABB's products and services straight to the customer's front door, with the addition of services such as application advice, energy saving calculations, installation, training, repair and servicing.

Halcyon Drives were a founding member of the UK authorised value provider network for drives and motors; thirteen years earlier they were a founder member of the Drives Alliance and Motor Service Partner networks, and for ten years before that they were an integral part of the ABB distributor network. A successful partnership spanning more than twenty years, delivering high quality products, services and solutions to our clients."

PETER MYATT, ABB.

ABB Low Voltage AC Variable Speed Drives



ABB LV AC drives can improve process efficiency, reduce energy consumption, and increase productivity in numerous applications. The portfolio covers the complete spectrum of our customers' needs, from micro drives used in machine building to industrial drives used to control process lines. ABB drives are available directly from our stock.

ABB MICRO DRIVE

The ABB micro drive meets the requirements of OEM's machinery builders and panel builders. ABB micro drive is so small and simple that users of contactors and softstarters can switch to the benefits of variable-speed control. (Simple drive, programmed by switches. Extended programming is possible via a PC if required, as is programming without power).

ACS55

1-phase supply, 0.18KW to 2.2KW , 240V

- Quick and easy installation less than 5 minutes
- Compact size and narrow shape
- Ideal drive for DIN-rail mounting
- Two mounting orientations

110 V single phase - input gives 240 V
3 phase output IP20 as standard



ACS150

1-phase supply, 0.37KW to 2.2KW , 240V

3-phase supply, 0.37KW to 4KW , 380V

PID controller built-in Parameter lock prevents tampering by unauthorised staff DIN rail or screw mounting as a standard IP20 enclosure.

- Fixed basic control panel
- Two year warranty
- Flashdrop - parameter programming whilst drive is still in its box excellent for OEM's
- Protected against wiring errors: shows fault if the power cable is inadvertently connected to motor terminals
- Automatic noise reduction
- Optional short or long parameter mode for standard or advanced users
- Unified height across the power range simplifies cabinet design



ABB Machinery Drive

ACS355 0.37KW TO 22KW

Motor control method - scalar, vector
(open and closed loop)

200/240 V, 1-phase supply, 0.37 kW - 2.2 kW

200/240 V, 3-phase supply, 0.37 kW - 11 kW

380/480 V, 3-phase supply, 0.37 kW - 22 kW

The drive is designed to be optimal for installation, setting parameters, available machinery features and commissioning. The drive is also equipped with a dual-channel safe torque-off interface to SIL3/PL e. Ideal for food and beverage, material handling, textile, printing, rubber and plastics and woodworking applications. The higher IP66 class variant meets all of the relevant hygiene requirements for the food and beverage industry.

FEATURES

- FlashDrop - parameter programming with drive still in its box excellent for OEM's
- Sequence programming designed for food, beverage, and materials handling applications - 8-steps included
- Unified height and depth across the power range simplifies cabinet design
- Protected against wiring errors: shows fault if power cable is inadvertently connected to motor terminals
- Automatic noise reduction
- Available in IP66



ABB General Purpose Drive

ACS580 0.55KW TO 250KW

Motor control method - scalar or vector control

(open or closed loop)

380 - 480 V, 3-phase supply,
0.55kW to 250kW

Where there is a need for simplicity to install, commission and use and where reasonable amounts of flexibility and functionality are required.



FEATURES

- Integral EMC filter for 1st and 2nd environment as standard
- Assistant control panel with improved primary settings menu and back ups
- Wide power range in wall-mounted IP21 and IP55 variants
- Patented permanent magnet swinging choke for superior harmonic reduction, even at reduced motor load
- STO as standard SIL 3 PL e
- Flexible fieldbus system with built-in Modbus and numerous internally mountable fieldbus adapters
- SynRM, permanent magnet (PM) and induction motor control with improved motor platform
- New energy monitoring features

ABB HVAC Drive

ACH580 0.55KW TO 250KW

Motor control method - scalar, vector speed and torque

(open and closed loop)

380 - 480 V, 3-phase supply,
0.55 W to 250 kW



ACH580 is the new dedicated low voltage AC drive for heating, ventilation and air conditioning (HVAC) applications. The drives are designed to meet – straight out of the box – the HVAC market requirements including harmonics and EMC standards and for easy integration with building management systems. HVAC features such as override functionality are enhanced to further make this drive an industry specialist. The new platform is able to accurately and appropriately control induction, permanent magnet and SynRM motors. With improved built-in PID control, native BACnet communication, timers, real-time clock and a calendar, ABB HVAC drives provide flexible solutions for a broad range of HVAC needs.

WHERE CAN IT BE USED?

ABB HVAC drives make maintaining a buildings comfort zone easy, quick and energy efficient. The drives control the speed of pump, fan and refrigeration compressor motors used in air handling units, cooling towers, chillers, and other HVAC applications. They help reduce the HVAC systems energy consumption by up to 70%, and quite often they have payback times of less than a year. These highly reliable drives with built-in BACnet easily integrate into building management systems.

FEATURES

- Built-in BACnet
- Accurate and efficient control of induction, permanent magnet and SynRM motors
- New energy monitoring features record energy CO2 and money saved (compared to equivalent DOL)
- Intelligent HVAC control panel
- Assistant control panel with improved primary settings menu and backups, smartphone usability
- STO SIL3, PL e

Drives for Water and Wastewater

ACQ580

0.75 KW TO 250KW, 380 TO 480V

The all-compatible ACQ580 drives for water and wastewater simplify your processes and motor control while ensuring effortless energy efficiency. This robust and compact wall-mounted and cabinet-built drive has built-in pump application functionalities such as sensor less flow calculation, multi-pump control, level control, soft pipe fill, dry run protection, and has quick ramps and a solution for keeping the impeller of the pump clean. Usability is enhanced with the intuitive Hand-Off-Auto control panel and the PC tool Drive composer. The built-in energy calculator visualises the energy savings achieved with the usage of the drive. The drive controls virtually any motor including an IE4 synchronous reluctance motor. Connectivity is supported by a wide range of Fieldbus protocols.



FEATURES

- IP21, IP42, IP54 and IP55 enclosure classes allows installation on wall or in cabinets
- Built-in energy saving calculators and pump functionalities secure optimal pump operation
- Supports IE4 synchronous reluctance, asynchronous induction, and permanent magnet motors
- Connects to a wide range of water and wastewater control systems
- Our local partners provide wide availability of service and support

ABB Industrial Drive

ACS880

0.55 KW TO 2800 KW

Motor control method - DTC or scalar

208 / 240 V, 3-phase supply, powers depends on range

380 / 415 V, 3-phase supply, powers depends on range

380 / 500 V, 3-phase supply, power depends on range

525 / 690 V, 3-phase supply, powers dependent on range

The drive is programmed by the most intuitive and user-friendly keypad ABB has produced to date. A new PC tool is designed to incorporate all of the latest functionality including a free of charge entry level version and a professional level version. The drive also contains the very latest 4th generation DTC motor control core, making the drives all compatible with any motor available on the market today including asynchronous, permanent magnet and synchronous reluctance (SynRM).



FEATURES

- Built-in safety functionality to satisfy the demands of IEC
- 62061 and ISO 13849-1
- Removable memory unit - zero re-commissioning
- Flexibility to programme more advanced applications
- Energy efficiency counters
- ACS880 ATEX Certified Package

WHERE CAN IT BE USED?

Suited for the most demanding industrial applications. Constant torque and torque at zero speed are perfect due to the DTC core. Suitable applications include cranes, winders, hoists, extruders and heavy conveyors. Applications with high breakaway torque, like rubber mixers and highly precise applications like paper machines and engine dynamometers are easily handled.

ABB Motors - Low Voltage AC Motors

ABB offer a comprehensive range of reliable and high-efficiency motors for all applications. Combining the best available materials with superior technology, ABB AC electric motors are designed to operate reliably no matter how challenging the process or application and have low life cycle costs. Halcyon has what it takes to help every industry and application reach new levels of efficiency and energy savings, even under the most demanding conditions.

Our offering has enabled us to become ABB AC motor specialists, offering an extensive range of IE2, IE3 and IE4 motors on safe area applications but also understanding the requirements for ATEX/IECEX motors for use on fixed and variable speed applications.

Legislation and the requirements of our customers are ever changing, therefore we believe our service and support is essential in helping our customers make the correct selection. Subsequently, our experienced team train regularly on ABB software including drive size and motor size, to meet demands.

With stocks held locally of up to 75kW as well as direct access to ABB stocks in Menden we have the ability to provide a next day delivery service of up to 500kW.

European Minimum Energy Performance Standards (Eu Meps)		
2014 Regulation EU 4/2014 introduced	MANDATORY EUP DIRECTIVE APPLIES TO MOTORS: <ul style="list-style-type: none">• rated voltage up to 1000v• single speed, three phase, 50 Hz• 2, 4 and 6-pole• rated output from 0.75kW to 375 kW• S1 Duty DOES NOT APPLY TO MOTORS DESIGNED TO OPERATE EXCLUSIVELY: <ul style="list-style-type: none">• in potentially explosive atmospheres as designed in ATEX directive 94/9/EC• brake motors• ambient air temperature outside the range<ul style="list-style-type: none">• -30C to +60C• altitudes exceeding 4000m asl• maximum operating air temperature above 400C	IMPLEMENTATION TIMETABLE PHASE 1 - FROM 16 JUNE, 2012 Motors must meet the IE2 efficiency level PHASE 2 - FROM 1 JANUARY, 2015 Motors with a rated output of 7.5 kW - 375 kW must meet EITHER the IE3 efficiency level OR the IE2 level if fitted with variable speed drive PHASE 3 - FROM 1 JANUARY, 2017 Motors with a rated output of 0.75kW - 375 kW must meet EITHER the IE3 efficiency level OR the IE2 level if fitted with variable speed drives.

Ability™ Smart Sensor

ABB's new condition monitoring solution connects low voltage (LV) motors with the twenty-first century. It monitors and provides vital motor performance intelligence that helps improve uptime, extend motor lifetimes, and increase machine performance and productivity. It connects motors with the Internet of Things, Services and People (IoTSP).

ABB's new solution enables almost all LV motors to be remotely monitored. Condition monitoring means that maintenance can be planned in advance, which reduces downtime and saves money. By producing status data for large numbers of motors, the solution also paves the way for plant-wide optimisation of operations and energy consumption.



For technical information on the motors download a brochure from our website: www.halcyondrives.com or contact the office on: sales@halcyondrives.com

Process Performance

The flagship of ABB's standard low voltage motors. This range provides the most comprehensive, versatile set of motors for the process industries and heavy duty applications which are dependent on continuous reliability, lowest possible environmental impact and life cycle costs.

CAST IRON M3BP OR ALUMINIUM M3AA

Cast iron 80-355, 2, 4 & 6 poles

TEFC low voltage motors, cast iron, IP55, IC 411, single speed, 400 V 3 phase 50 Hz

Aluminium motors 80-250, 2, 4 & 6 poles

TEFC low voltage motors, aluminium, IP55, single speed.

400 V 3 phase 50 Hz

FEATURES

- With three years warranty and option to extend to five years
- IE3 and IE4

WHERE CAN IT BE USED?

Demanding industries: pulp and paper metals minerals and mining.



General Performance

Motors combine convenience and easy handling seamlessly with ABB's engineering expertise, while at the same time providing standard variants and modifications.

CAST IRON M2BAX OR ALUMINIUM M2AA

132-355, 2, 4 & 6 poles - cast iron

TEFC low voltage motors, cast iron, IP55, IC 411, single speed.

400 V 3 phase 50Hz

56-250, 2, 4 & 6 poles - Aluminium

FEATURES

- Variant codes which OEM customers need
- One year warranty
- IE3, IE4
- 2, 4 & 6 pole

WHERE CAN IT BE USED?

Pumps, Fans, Compressors.

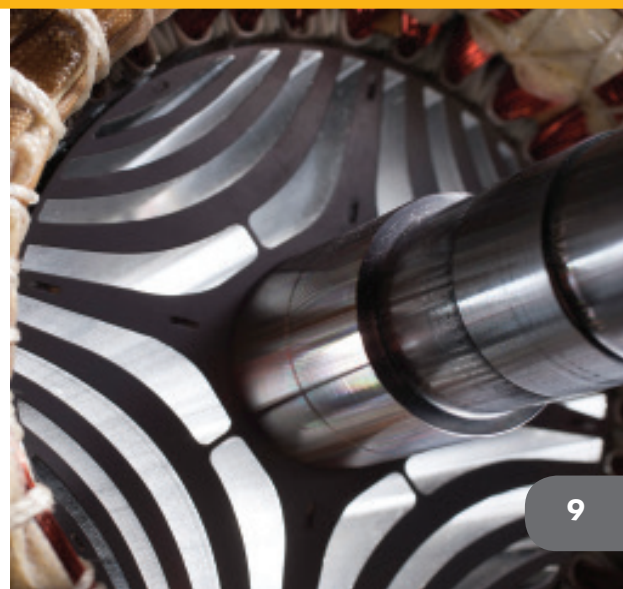


IE4 SynRM Motor-drive Packages

IE4 synchronous reluctance (SynRM) motors enable extremely efficient installations. Their low running temperatures mean high reliability and low maintenance costs. Combining these motors with the latest drive technology and purpose-designed software ensures optimal efficiency and reliability.

FEATURES

- IE4 Super premium efficiency
- Upgrade induction motor installations without mechanical modifications
- Unrivalled reliability through lower bearing and winding temperatures
- Permanent magnet motor performance - without magnets
- Induction motor levels of cost-efficiency and service-friendliness
- Preselected packages up to 315 kW
- Verified package efficiencies for accurate energy consumption figure



ATEX Packages

ABB is one of the only companies that produce both variable speed drives and low voltage AC motors. As such they are well equipped to offer customers a perfectly designed, tested and approved matched pair, for whatever the motor driven application. In addition, ABB has devised a selection of bespoke drives and motor packages aimed at specific industry applications. In this catalogue we introduce two such packages, however five are available from ABB.

ATEX approved AC motor and drive combination gives safe, economical power combined with effective control. By choosing an ATEX compliant motor drive package, end users can be confident that it is optimised for their application, complies to ATEX 95 and is commercially beneficial, giving more available power for your money.

SPEAK TO OUR MOTOR SPECIALISTS TO HELP SELECT AN ABB ATEX PACKAGE SUCCESSFULLY

ABB MACHINERY DRIVE ACS355

- IP20 as standard (UL type 1 as option)
- IP66/69 variants
- Advanced functionality with sequence programming
- Configuration of unpowered drive in two seconds
- Compact installation
- STO as standard



ACS580

- 0.55kW to 500kW
- Wide Power range in wall-mounted IP21 and IP55 variants
- Sensor less vector and scalar control



ABB INDUSTRIAL DRIVE ACS880

- Adaptive programming and CODESYS - like having a PLC (programmable logic controller) inside the drive
- DTC (direct torque control) proven motor control platform
- All major types of drive topology covered; 6-pulse, 12-pulse, 4 quadrants, low harmonic, air cooled and water cooled
- Built in safety module
- ATEX approved STO



HAZARDOUS AREA LOW VOLTAGE MOTORS

- Flameproof motors, frame size 80 to 450 0.18 kW to 710 kW
- Non-sparking motors, frame size 71 to 450 0.09 kW to 1,000 kW
- Loadability curves optimised for ABB drives



ABB EX TD/DIP MOTORS

- EX tD/DIP motors, frame size 71 to 450 0.09 kW to 1,000 kW
- IP55 or IP65 for non-conductive dust
- IP65 for conductive dust



SYNRM Packages

Get the best of both worlds. The efficiency advantages of permanent technology together with the simplicity and service-friendliness of an induction motor platform. Each motor-drive package combines proven stator technology and innovative magnet-free rotor design, a best-in-class drive and advanced software to offer a complete, optimised solution.

IE4 SynRM

The IE4 design offers super premium efficiency motors in a chassis that is identical to standard IEC induction motor frame sizes and fixings, offering a direct replacement package with a better efficiency. The variable speed drive and IE4 SynRM motor package has a better efficiency than a VSD + IE4 induction motor package.

- Aluminium frame 132
- 5.5kW to 15kW
- Cast iron frame 160 to 315
- 7.5kW to 315kW
- 40 percent lower losses compared to induction designs compared to induction designs
- No magnets
- Cool running rotor
- Improved bearing system reliability
- Easy to service
- Simple to retrofit on induction motor applications due to identical physical size

ACH580

- 0.75kW to 250kW
- Dedicated to HVAC
- Rapid start-up, trouble free use, easy interfacing
- Built-in BACnet



HIGH OUTPUT (HO) SynRM

High Output (HO) design takes advantage of the 40 percent fewer losses, allowing ABB to offer SynRM in a motor frame that can be two frames smaller than a conventional induction motor, while providing more power in a smaller package. SynRM weighs less than the equivalent induction motor, so applications where space and weight are premium are ideal for the HO design.

- Aluminium frame 90 to 132
- 1.1kW to 37kW
- Cast iron frame 160 to 315
- 17kW to 350kW
- Achieve the same output with a motor that's up to two frame sizes smaller
- Enables smaller, lighter, and more cost-efficient machine designs
- Ideal for applications where space and weight factors are critical



ACQ580

- 0.55kW to 250kW
- Dedicated drive for water and wastewater applications



ACS880

- 0.55kW to 3200kW
- Direct torque control (DTC) for precise open and close loop control
- Built in Safety features



ABB offer a selection of four softstarter models to provide a solution for the varied needs of all customers' requirements. Information on the most popular softstarters are highlighted below, for further details on the ABB Softstarter ranges is available on request.

PSE - THE EFFICIENT RANGE

The PSE has been designed to meet the most common requirements from the water segment and is specialised on pump operation. It combines the requested protections with a very compact design and built in bypass. Remote operation with external keypad or over Fieldbus is available as an option.



FEATURES

- Two phase controlled
- Operational voltage: 208...600 V AC
- Wide rated control supply voltage: 100...250 V AC, 50/60 Hz
- Rated operational current: 18...370 A
- Voltage ramp and torque control for both start and stop
- Current limit
- Kick start
- Built in bypass for energy saving and easy installation
- Coated PCBA protecting from dust, moist and corrosive atmosphere
- Illuminated display that uses symbols to become language neutral
- External keypad rated IP66 (Type 1, 4X, 12) as an option
- Fieldbus communication with FieldBusPlug adapter and the FieldBusPlug
- Analog we output for display of motor current
- Electronic overload protection
- Underload protection
- Locked rotor protection

PSTX – THE ADVANCED RANGE

The PSTX combines many years of research and product development with extensive knowledge of application specific requirements and needs. It is our latest advancement in motor control and protection and adds new functionality and increased reliability.



FEATURES

- Coated circuit boards protecting from dust, moist and corrosive atmosphere
- Detachable keypad rated IP66 (Type 1, 4X, 12)
- Graphical display with 16 languages for easy setup and operation
- Built in bypass for energy saving and easy installation
- Built in Modbus RTU for monitoring and control
- Support for all major communication protocols
- Analog we output for measurement of current, voltage, power factor etc.
- Three phase controlled
- Operational voltage: 208...690 VAC
- Wide rated control supply voltage: 100...250 V, 50/60 Hz
- PSTX Rated operational current: 30...1250 A
- (inside-delta: 2160 A)
- Both in-line and inside-delta

THE COST OF POOR POWER QUALITY

Poor power quality results in financial loss in electrical networks, as well impacting on the environment and safety concerns.

THERE ARE THREE SIGNIFICANT CAUSES OF POOR POWER QUALITY IN NETWORKS:

- Reactive power (poor power factor)
- Harmonic pollution
- Imbalanced load

AS WELL AS THE FINANCIAL PENALTIES, POOR POWER QUALITY CAN RESULT IN:

- Frequent equipment failures
- Reduced equipment lifetime
- Production losses
- Reduced safety levels within installations
- Increased carbon footprint
- Non-compliance with utility regulations

Additional costs can be incurred due to kWh losses in typical installed components such as transformers, cables and motors, as well as increased CO₂ emissions as more power has to be generated to satisfy these demands.

ADVANCE PFC EQUIPMENT RANGE

Advanced automatic capacitor banks

POWERFUL AND COMPACT

- High power density - small dimensions
- Proven technology CLMD capacitors

EASY TO INSTALL

- Complete factory tested unit ready for connection
- Ample wiring space
- Wall fixings (A50, A100)
- Lifting lugs and floor mount (A200, A400)
- Bottom cable entry (optional top entry)

RELIABLE AND SAFE

- IP42 protection (closed door)
- Protected against direct contact (open door)
- HRC fuses
- Use of ABB components:
 - PF Controller
 - CLMD capacitors

POWER QUALITY FILTERS PQF RANGE

The ABB Power Quality Filter offers unprecedented ability to clean the network from harmonics. The PQF actively eliminates the harmonics present in the supply system in a controlled way. It is insensitive to large network impedance changes due to change in network topology like paralleling of sources, or switching between mains supply and generator operation.

The PQF monitors the line current in real time and processes the measured harmonics as digital signals in a high power multi DSP (Digital Signal Processor) based system. The digital controller generates Pulse Width Modulated (PWM) signals that drive IGBT power modules which through line reactors inject harmonic currents in the network with exactly the opposite phase to the components that are to be filtered. The PQF also offers communication facilities with the customer's existing communication network. This feature which uses Modbus RTU, allows the PQF to be easily monitored and controlled from a remote location. The Modbus communication feature can be used by means of an RS-232 to RS-485 converter (optional).



Halcyon Drives can offer a complete power quality survey, which will identify the site load characteristics, including power factor and harmonic generation. We will then work with you to offer the most effective solution.

Allen-Bradley - GUARDMASTER

Rockwell Automation produce a comprehensive selection of safety products to protect people, machinery and the environment while maximising uptime.

The products are built for high reliability, stability and quality allowing access to potentially hazardous areas only when the area is safe. Highlighted below are a selection of the most popular Guardmaster products.



A

SAFETY RELAYS



Safety Relays check and monitor a safety system and either allow the machine to start or execute commands to stop the machine. Single function safety relays are the most economical solution for smaller machines where a dedicated logic device is needed to complete the safety function. Modular and configurable monitoring safety relays are preferred where a large and diverse number of safeguarding devices and minimal zone control are required.

B

NON-CONTACT SWITCH



Our Non-contact interlock switches help you protect personnel and equipment. At the same time, flexibility and productivity are points that you must also consider as you design your safety system. For non-contact interlocks, no physical contact (under normal conditions) takes place between the switch and actuator.

C

POC LIGHT CURTAIN



POC (Point of Contact) light curtains are opto-electronic presence sensing safety devices that detect the presence of an object in the light curtain's sensing field.

D

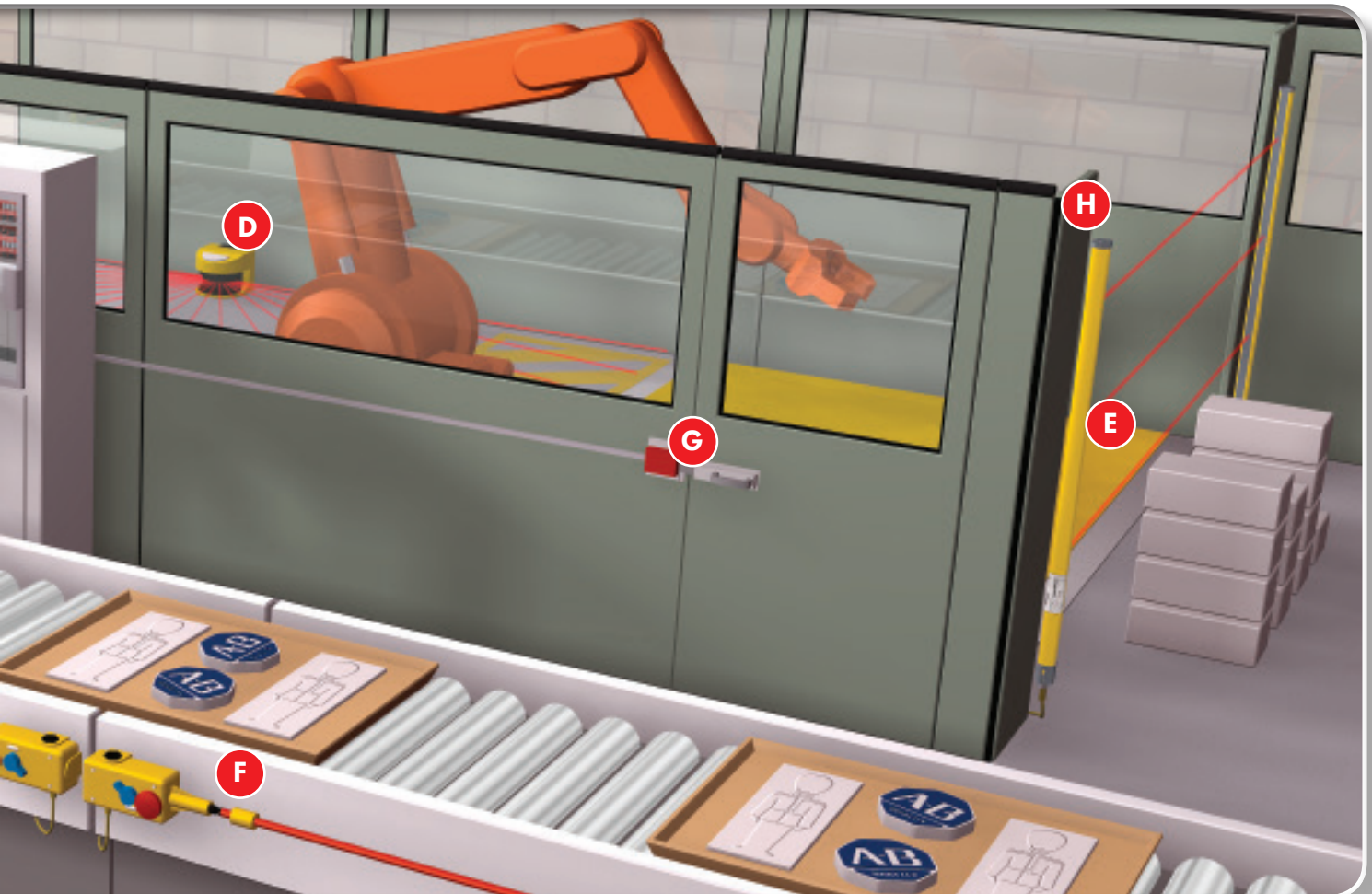
SAFEZONE LASER SCANNER

Our SafeZone™ Safety Laser Scanners are compact devices that have switchable, configurable field sets (warning and safety).

**E**

SAFETY MAT

Our Bulletin 440F MatGuard™ Safety Mats are pressure sensitive safeguarding products that we designed to detect the presence of people on the sensing surfaces.

**F**

CABLE PULL SWITCHES

Our Lifeline™ 4 Cable Pull Switches can be installed along or around awkward machinery such as conveyors and provide a constant emergency stop access.

**G**

GUARD LOCKING SWITCHES

Our Guard Locking Switches protect hazardous areas where a danger is not immediately removed after a stop request. On many machines, removing power to the motor or actuator will not immediately stop the dangerous motion.

**H**

LIGHT CURTAIN

Our PAC (Perimeter Access Control) light curtains are multiple beam, short range safety light curtains that provide access detection at machine entry points.



SAFETY MATS

Pressure sensitive safeguarding products designed to detect people on the sensing surfaces and easy to install.

FEATURES

- Hardened steel plate construction
- No dead spots
- 4-wire system to detect opens and shorts
- Can withstand a static pressure of 4500 psi
- IP67 rated



APPLICATIONS

- Ideal for guarding floor space ensuring operators can not locate themselves near hazards
- Use as a combined trip and presence sensing system
- Use as a presence sensing system within a guarded perimeter

TLSZ-GD2 GUARDSWITCH

The TLS-Z GD2 Guard Locking Switch is an interlock switch that has a uniquely coded RFID door sensor with inductive door position sensing technology. This switch can detect if an actuator key breaks or becomes separated from its door mounted position. Built with the same solid-state technology as the TLS GD2, this switch supports the highest level of safety – Performance Level “e” (Ple) to EN ISO 13849-1.

FEATURES

- Uniquely coded RFID door sensor
- Solid-state OSSD outputs connectable to ISO 14119
- Available in power-to-release or power-to-lock models
- Easy QD connection
- High locking force ≤ 2000 N (450 lb)



TONGUE INTERLOCK SWITCH

Universal Tongue Interlock Switches are universal tongue or key operated safety interlock switches. They fit at the leading edge of sliding, hinged or lift off guards. With dual key entry slots and rotatable heads, movable only by releasing the cover screws, these switches offer four actuator entry options.

FEATURES

- Strong and versatile, can be used in most applications
- Available in Standard and GD2 models
- Standard model has self ejecting tamper resistant actuator, only operates when mounted to the guard
- Contacts, 1 N.O. & 2 N.C. (sealed to IP67)
- Four possible actuator entry points, easy to install
- Optional semi-flexible actuator for operation on smaller radii doors (>60 mm)
- Optional catch mechanism for use on vibrating machinery
- Pneumatic versions of the Trojan available



LIFELINE 3™

CABLE PULL SWITCHES

Our Lifeline™ 3 Cable Pull Switches are cable (rope) operated emergency-stop devices designed to meet the stringent requirements of ISO 13850 (Safety of Machinery—Emergency Stop Equipment). The Lifeline 3 system can be installed along or around awkward machinery and provides a constant-access emergency stop facility.

FEATURES

- Switches up to 30 m (98 ft) span
- Universal mounting and operation
- Switch lockout on cable pulled and cable slack
- Cable status indicator on switch lid
- Industry standard fixing centers to DIN/EN 50041
- Quick disconnect styles available



PROSAFE

TRAPPED KEY SWITCH

Our Exchange Units for Trapped Key Interlock Switches are used in an interlocking sequence to link together other devices in the ProSafe® range. These units cater to more complex operating sequences.

FEATURES

- A range of off-the-shelf units in various combinations
- Replaceable/easy to clean code barrels
- 316 stainless steel construction
- Primary keys in release secondary keys simultaneously
- Weatherproof stainless steel dust cap



SENSAGUARD

NON-CONTACT SWITCH

Featuring the latest generation of RFID technology for coding and inductive technology for sensing, SensaGuard's large sensing range and tolerance to misalignment is a cost effective solution that is ideally suited for a wide range of industrial safety applications. The SensaGuard product line is a Category 4/SIL 3 rated switch per EN954-1, TÜV functional safety approved to IEC 61508.

FEATURES

- Switches can be connected to a standard safety relay, for example, the MSR126, MSR127, MSR200/300 Family, SmartGuard™ and Safety I/O Blocks
- Multiple actuator sizes for large sensing distance
- IP69K environmental rating
- Short-circuit and over-voltage protection
- LED located on the switch for door status and troubleshooting
- Unique coded version
- Automatic learn process at unit power up
- Option to select if the sensor can learn a new actuator up to eight times or lock the unit so it can not learn another actuator
- Integrated latch version
- Adjustable magnetic latch force 20...60N
- Designed for easy mounting on aluminium profile



SAFEDGES

SYSTEM COMPONENTS

The Safedge sensitive edge systems are used in a variety of applications where the edge of an object must be detected by contact. The Safedge system consists of three parts:

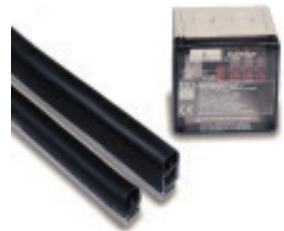
- 1) a C-rail, which is used to mount the profile;
- 2) a profile, which contains the sensing surface;
- 3) a control unit, which checks the operation of the profile and interfaces with the control system.

A typical system is shown below.

TYPICAL APPLICATIONS

Typical applications for sensitive edge systems are:

- Sliding doors
- Sliding gates
- Automated guided
- Vehicles
- X-Y tables
- Fence tops
- Scissor jacks
- Loading platforms



SAFETY RELAY

SINGLE FUNCTION

Our Guardmaster® Safety Relays check and monitor a safety system and either allow the machine to start or execute commands to stop the machine or control safety-related functions. Single-function safety relays are the most economical solution for smaller machines where a dedicated logic device is needed to complete the safety function. Modular and configurable safety relays are preferred where a large and diverse number of safeguarding devices and minimal zone control are required.

FEATURES

- Offers a broad range of safety functions
- Provides versatility through simple logic, reset and timing configurations
- Includes single wire safety relay connection which allows for ease of installation and system flexibility
- Terminals are grouped together by power inputs and outputs for clear connection
- Offers compact solution which saves energy and space on DIN rail
- Provides consistent terminal layouts and configuration allow simplified installation



Riello UPS fits conveniently within our product portfolio, a quality product built in Italy and designed to protect against power failure.

With power consumption increasing on a yearly basis the likelihood of industry being effected before residential power is significantly high. Some companies view an uninterrupted power supply as a critical tool to keep their plant/site/application running for a matter of time before critical information or product is lost/wasted. Below are two of Riello UPS's most popular products:

SENTINEL DUAL

SENTINEL DUAL is designed to power critical loads such as servers, storage systems, telephone equipment, medical systems and industrial applications.

The UPS is ideal for Blade servers with an input power factor close to Unity (1). The UPS has can be used as tower UPS or within a rack mount cabinet, and takes up only 2U in height.

SENTINEL DUAL has a modern design, choice of functional formats, and represents the state of the art technology from the Riello UPS research and development team. The UPS can achieve an on-line operating efficiency of 92%.

For critical business continuity applications requiring long run times, SENTINEL DUAL can be installed with battery extension packs (ER models) with their own internal battery chargers to maintain sensible recharge times.

The UPS also incorporates the Riello UPS 'power-off' function found in other ECO Line UPS. Premium Dual is designed to save energy when no loads are connected.



DUAL IS THE HIGH DENSITY VERSION OF THE PREMIUM PRO RANGE OF DOUBLE-CONVERSION ON-LINE UPS.



MULTI SENTRY

10-200 kVA

MULTI SENTRY is a state-of-the-art uninterruptible power supply, achieving the highest possible level of on-line double-conversion performance (VFI-SS-111) as defined within IEC EN 62040-3.

The UPS has been designed to protect critical information and telecommunications systems, networks, services and processes whose operation could be disrupted by poor power quality and/or breaks in their mains power supply.

The sizes available include: 10-12-15-20-30-40-60-80-100-120-160-200 kVA all with a three-phase input and output.

The MULTI SENTRY UPS is one of the most efficient UPS available with a minimal impact on its environment and power sources.

PULS Power Supplies are a German manufactured DIN Rail power supply, boasting one of the leading quality manufacturers on the market place. A product that we utilise ourselves within our own control panels, because quality components are key to an excellent product and service.

The portfolio consists of three product families:
MINILINE (25-100W), SILVERLINE (40-960W) AND DIMENSION (80-480W)

The products fall into one of the following categories:

- Single phase AC/DC Power Supplies
- Three-phase AC/DC Power Supplies
- DC/DC Converter
- Redundant Power Supplies and Modules
- AS-interface® Power Supplies
- Buffer Modules

PULS Power Supplies can be applied in the following industries:

Machine construction, control and automation, plant and systems construction, robotics, drive technology, building automation, lighting technology, cleaning technology, construction machinery etc.

As the products have been certified to meet a wide range of codes and standards, they can be readily installed throughout the world.

MINILINE

The compact units with a robust plastic housing for the lower and medium power range:

- Several output voltages
- Installs in seconds
- Also with a 400/480V input



DIMENSION FAMILIES

C-SERIES: A LOW COST AND EFFECTIVE SOLUTION IN A COMPACT DESIGN

Power Supplies and DC/DC converters for users looking for highly reliable power supplies in a compact housing. Focusing only on the essential features achieves significant advantages.

Q-SERIES: PREMIUM CLASS POWER SUPPLIES

Suitable when you need state-of-the-art technology and flexibility for demanding tasks. With high efficiencies, minimal losses, a compact housing and many other features, this series is the "Best-in Class".

X-SERIES: SEMI-REGULATED 3-PHASE POWER SUPPLIES

For motors and other loads with high power requirements. The X-series provides a low cost solution with benefits that include a compact design and maximum efficiency with only minor compromises in output voltage regulation precision and buffer time.



Variable Speed Drive Service

Installation and Commissioning

Our engineers are highly trained and experienced ABB engineers, the benefits of utilising our team to install and commission your variable speed drive are that you will have far more detailed settings for your process. We often find variable speed drives programmed in their most basic format, often this means they are running inefficiently.

Service Contracts

When you are running a plant where a number of your applications are critical, the last thing people consider is how you can deal with a variable speed drive failure. By implementing a service contract with us you can rely on us to get your variable speed drive back up and running to minimise your downtime 24 hours a day, 7 days a week. If we can't repair the variable speed drive on site we have a fleet of hire drives as a short-term solution.

As part of your service contract we record parameters from each of your units, again this enables us to minimise your down time in the scenario of a variable speed drive failure. The contract package will also include telephone support and maintenance visits (see below).

Maintenance Visits

Variable speed drives are an integral component to a process, often once they have been installed they are forgotten about. Realistically they need to be maintained at least once a year, more if they are in a dirty environment. Our team of highly trained engineers will work on site to maintain your variable speed drives, report any issues and make any recommendations. To implement a maintenance programme will increase the life expectancy of your unit and more importantly we aim to reduce any potential downtime before a fault occurs.

Breakdown Assistance

Our service engineers are fully equipped to work on site to repair breakdowns, however without a service contract this will be within normal working hours and we would also be under obligation to work with a contracted client if the breakdown occurred at the same time.



Hire Drives

It isn't always so straightforward to replace or repair a variable speed drive which is why we have a fleet of hire drive units ranging from 18.5kW to 400kW. All units are within a panel on wheels, in order to have the unit set up as quickly as possible. Hire drives are also often used to prove energy savings before capital expenditure.

(See our energy saving section)

Repair

Our highly qualified repair team will assess your variable speed drive within our repair workshop to give you an estimate of repair costs. Usually on larger drives the cost of a new drive can be significant vs the cost of repair but we will always provide you with the information to make the decision yourselves.

Training Courses

Training courses are available for ABB Variable Speed Drives, either at our purpose built training facility or at your own facilities a choice between two are available:

Full Day Course – Installation and Maintenance Schedule
Half Day Course - Programming

At the end of course the individuals will receive a training certificate. If you would like more in depth training we can produce a training programme to meet your requirements.



Survey Work

Energy Audit

Where centrifugal fans and pumps are installed on site, there is potential to reduce energy consumption with the use of variable speed drives. The added benefit will be your processes running more efficiently too, causing less wear and tear.

Our energy audits are free of charge and are quite a simple exercise. We will attend site to view your applications and motor sizes, gain an understanding of your application, costs and energy consumption and produce a report that estimates potential savings. We would then look to retro fit a hire drive to monitor the savings on site to provide enough information for the customer to make a well informed decision.



Power Factor Correction Survey

Power quality can be an issue to any industrial site consuming commercial volumes of electricity. Electricity must be consumed efficiently with its minimum performance of 0.95. Below 0.95 carries penalties charged by the electricity provider. We can assess your power consumption and determine whether improvements can be made and what benefits you will gain.

Harmonic Survey

As more and more electronic equipment is connected to the Power Supply Network the effect of non-linear loads will cause deterioration in quality. The introduced Engineering Recommendation G5/4 lays down the conditions under which connection to the Electricity Supply Network will be allowed and affect every industrial and commercial consumer connected to the public electricity supply.

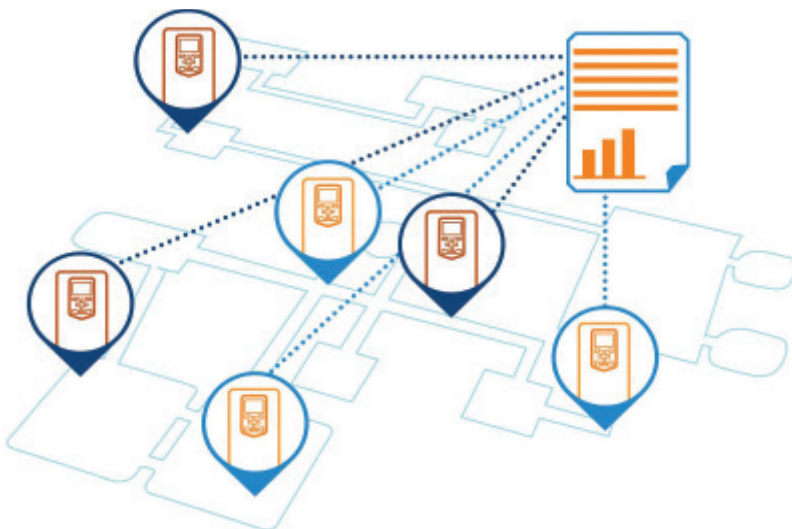
To facilitate our customers' needs in complying with this latest government legislation, Halcyon Drives carry out pre & post harmonic surveys to G5/4-1. These surveys are particularly important when carrying out any new installations or adding any additional drives on site that may have a bearing on the total harmonic loading.

Life Cycle Assessment

As plant becomes populated with multiple variable speed drives it is easy to lose track of the condition, maintenance status, and the stage in the life cycle of every unit. The Halcyon Drives Life Cycle Assessment provides a full report on the type, location, and duty of every drive in an installation. The report details the

condition and criticality of each drive, and highlights any issues which may result in premature failure due to incorrect installation or poor maintenance, as well as information on the position of each drive within its life cycle. This will highlight any drives which have become obsolete meaning parts may be hard to obtain, and maintenance and repairs are more difficult.

All this information allows better planning of preventative and routine maintenance, avoiding costly and unscheduled periods of downtime.



Control Panels and Motor Control Centre's

Halcyon Drives specialise in the design and manufacture of control systems and motor control centres for industrial processes and automation projects. Control panels can be built to customer specific requirements, or we can provide the full design and build together with the customer to meet their needs. All of our control panels are manufactured to IEC61439-1 Form 1, 2, 3 & 4 and up to IP66 degree of protection.

Automation applications and solutions are based on European harmonised standards and technical specifications to meet design, control and safety criteria. All schematics are produced utilising AutoCAD software. All components selected are market leading, renowned for their high quality offering. However, we will accommodate the use of customer specified components if requested. It is imperative that when the control panel is installed in its final location that the panel is reliable for the customer.



Our 20,000 sq ft facility and over 30 years of experience means we are fully equipped to build any solution required from a small operator panel to a large form 4 motor control centre. Working together with the client or on our own to build a quality product specifically for your needs. With our innovative experience, if we believe there is a better solution to provide a superior result we will give you our recommendations.

Our experience building control panels have given our team excellent opportunities over the years to build applications in all industries and applications. We are confident to build a control panel for any application or industry from pneumatic to oil and gas.

ABB Variable Speed Drive and Control Panel Solutions We have a very unique offering for our clients, especially those who need to control heavy industrial applications. Our ABB qualified engineers partnered with our control panel designers can offer a full solution to the customer.

Motor control centres are built with asta certified busbar and riser systems and fitted with starter gear providing 'type 2' Co-ordination to BS EN60947

PROGRAMMABLE CONTROLLERS

We have engineers who specialise in the programming of PLC's and Human Machine Interface (HMI) who also develop software.

Our capabilities of programming include:

- Siemens
- Mitsubishi
- Allen Bradley
- Modicon
- Telemechanique



Standards

- ISO9001
- IEC 61439-1
- IEC 61439-2
- EN 60204-1:2006+A1:2009+AC:2010

All of these meet required European standards and we can also comply with any countries regulations so your panel can be delivered anywhere in the world.

FACTORY ACCEPTANCE TESTING (FAT) INSTALLATION AND COMMISSIONING

Once the control panel is built to the agreed specification the customer will be invited to an inspection and factory acceptance test, either written by the customer or we can produce one. Once we have proved that the control panel or Motor Control Centre Suite has met the criteria of the customer, the product can be transported to the destination and can be installed and commissioned by Halcyon Drives engineers.

If the customer requires training on the product, this is a service we can offer to the customer.

Testimonial

"We've worked closely with Halcyon for over 20 years, the reason for that is the reliability, cost, skill set and most of all the excellent customer service we receive on every project.

From small panel projects to large multiple projects Halcyon are our first choice when it comes to panel build.

All panels are inspected internally before customer inspection with any remedial snags actioned before final sign off.

They are given a wide range of complex drawings from different customers to work with, and can offer everything from initial design right through to install and commissioning if needed.

The panel builders are very experienced and what is good to see is the investment in young apprentices that show the commitment to the future of the firm."

ELECTRICAL PROJECT MANAGER.

Accreditations



Achilles is a leading provider of supplier risk management services

We deliver managed supplier pre-qualification programmes, carry out industry audits, mitigate risks, cleanse supplier data and provide reports and analysis to drive continuous improvement.

We manage, validate and monitor millions of pieces of data but our mission is simple – to deliver commercial benefits, business intelligence and confidence to both buyers and suppliers.

What makes Achilles unique is our communities of buyers and suppliers, who work together to reduce time and effort in pre-qualification and sourcing.



Safecontractor are the leading third party accreditations scheme which recognises very high standards in health and safety management amongst UK contractors.

Under the Safecontractor scheme, businesses undergo a vetting process which examines health and safety procedures and their track record for safe practice. Those companies meeting the high standard are included in a database, which is accessible to registered users only via a website.



Reset aims to improve and simplify health and safety procedures for estates and facilities managers, health and safety professionals and building managers, as well as principal and sub-contractors.

Drawing on contracting, training and safety expertise, Reset offers a range of safety-enhancing, time and cost-saving products and tools for any organisation that needs to bring third-party contractors onto their site.



Certificate Number 14406
ISO9001

ISO9001:2015

The standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. Using ISO 9001:2015 helps ensure that customers get consistent, good quality products and services, which in turn brings many business benefits.

Halcyon Drives Ltd
Butler Way
Stanningley
Leeds
West Yorkshire
LS28 6EA

T. 0113 236 1509
F. 0113 239 3090
E. sales@halcyondrives.com
www.halcyondrives.com

