

Specialized switching solution



Innovating Motion



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The data used in this Product Overview may be used as a guideline only.
Specific operational characteristics of our products may vary according to
individual applications. It is strongly recommended that specific operating
conditions are clarified with Johnson Electric before application.

Johnson Electric Terms and Conditions of Sale apply.





All data may be subject to change without notice.

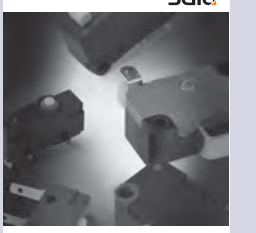
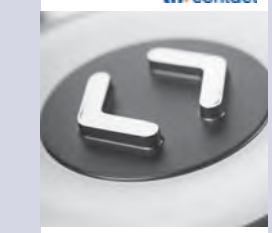
Looking for a specialized switching solution?

Look no further:

In addition to the wide range of standard products shown in Johnson Electric catalogues, we will be happy to work with you to meet your system needs. If your application requires more than a standard product solution, please consider us early in your design process. Our product development team will be happy to discuss your specification, whether you need a special value-added assembly or a complete system. We specialize in developing solutions for medium and high-volume applications.

The images shown give some examples of our capabilities.

| | | | |
|--|--|--|---|
| | | <p>Building Automation & Security</p> |  |
| <p>Switch Subsystems</p> | <p>Home Appliances, White Goods, Floor Care</p> | <p>Business Machines, Leisure & Fitness</p> |  |
| | <p>Transportation</p> | <p>Industrial Equipment & Automation</p> |  |
| <p>Value Added Switch Solutions</p> | <p>Power & Garden Tools</p> | <p>Healthcare & Medical Equipment</p> |  |

| | | | | |
|-------------------------------|---|--|---|---|
| <p>Switch Products</p> | <p>saia</p>  <p>JOHNSON ELECTRIC</p> | <p>BAR</p>  <p>JOHNSON ELECTRIC</p> | <p>burgess</p>  <p>JOHNSON ELECTRIC</p> | <p>th+contact</p>  <p>JOHNSON ELECTRIC</p> |
|-------------------------------|---|--|---|---|

Value Added Switch Solutions & Subsystems

Johnson Electric offers a unique combination of technology, engineering and manufacturing resources to ensure the market success of your customer project:

Johnson Electric is an engineering and manufacturing powerhouse with a vertically integrated supply chain to ensure quality and just-in-time performance worldwide. Every switch component in our value added solutions & subsystems is manufactured inhouse to drive attainment of our ultimate goal of zero defects.

Cables and harnesses are made in-house to suit the application and customer requirements. As an alternative we have a highly competent team of first class external suppliers for connectors, connector housings, mounting solutions and printed circuit boards.

Our product range consists of several brands. Each brand specialises in particular areas. The Johnson Electric family is the safe choice for value added solutions & subsystems.

saia

State of the art precision microswitches
www.saia-switch.com

burgess

#1 in robust construction and environmental protection
www.burgess-switch.com

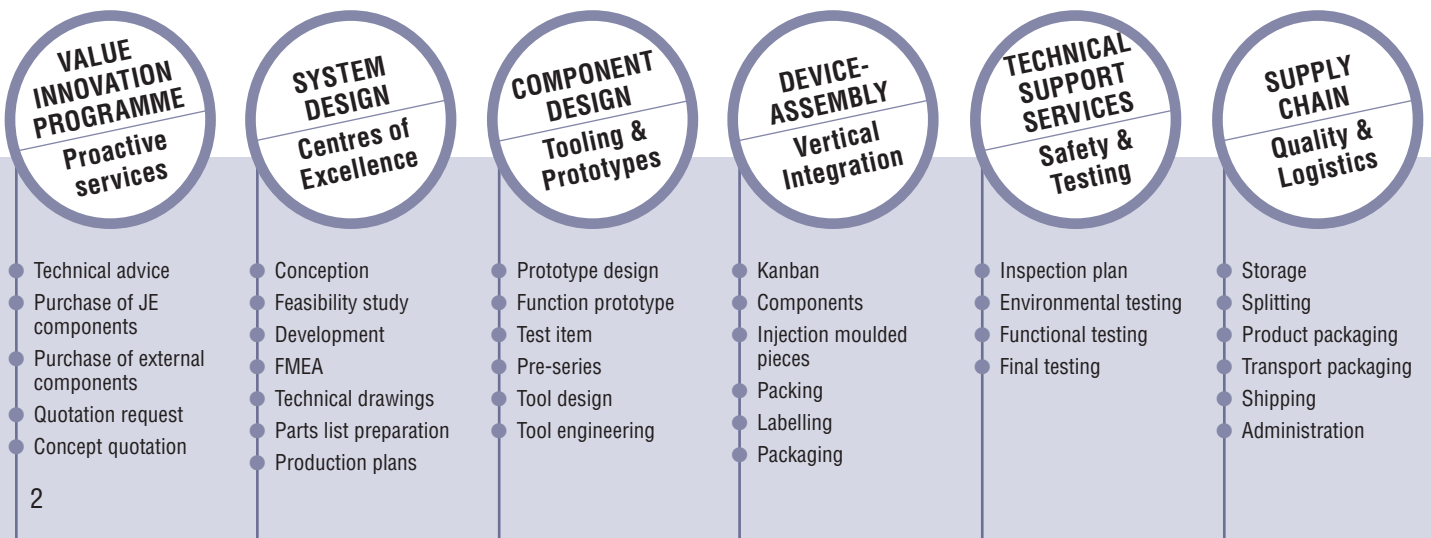
BAR

#1 in innovation
www.baer-switch.com

th contact

Best modular design
www.th-contact.com

Johnson Electric offer



Building Automation & Security Switches



Alarm call points
Electric door openers
Alarm devices

Locks
Door, building entry
Gate control, vehicle entry

Market and application requirements:

Safe switching, restricted access systems and vandalism detection. Johnson Electric systems master these tasks in everyday use, whether in an industrial or residential environment, in consumer or commercial applications. Typical applications are call points, electric digital locks, and alarm system modules. With our systems, you are on the safe side.

Johnson Electric solution examples

Alarm call point

Dual microswitch in custom made housing with additional control device
 Function: Manual activation and glass break detection



Emergency Stop

Portable emergency stop with reduced depth ideal for switch panels and emergency stop boxes
 Function: Emergency-off

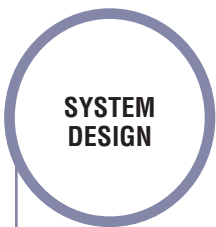


Switch combination panel

Panel with piezo switches in robust vandal proof design
 Function: Door open and close including text display



Johnson Electric Switches offer



- Vandal proof products
- Special approved components
- Vertical integration of switch products



- Assembly of custom made housings
- Plug-in assembly
- Capable of variation

Home Appliances, White Goods, Floor Care Switches



Espresso machines
Filter coffee machines
Blenders

Refrigeration
Range Hoods
Vacuum cleaners

Market and application requirements:

Immediate response. Our systems are used for coffee grinding, whipping milk, cleaning valves, ejecting filter sets, detecting fluid levels, and testing to ensure safe appliance maintenance, such as during the cleaning process, suitable for both low budget devices and high end machines.

Johnson Electric solution examples

Automatic coffee machine

Subsystem consisting of motor, switch, and wiring harness
 Function: Coffee grinding machine

Vacuum cleaner

Subsystem consisting of switches, cables, and custom made housing
 Function: Control switch

Cooker Hood

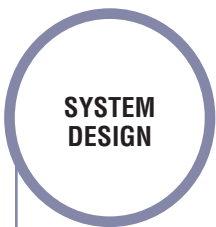
Subsystem consisting of switches and PCB mounting plate
 Function: Control switch

Coffee machine

Integrated auto shut off with ASIC
 Function: Control switch with auto shut off



Johnson Electric Switches offer



- Optimized design & tactile feeling
- Electronic subsystems & intelligent Auto Shut Off
- Twin shot moulding tool engineering



- PCB assembly
- Panel assembly
- Standard or custom made harnesses

Business Machines, Leisure & Fitness Switches

Vending machines

Gaming machines

ATM (automated teller machines)



Card Readers

Postal equipment

Market and application requirements:

Make your selection: Applicable to any machine automated function such as: insert payment card, detect cash insertion, eject small change and vend product. Versatile and high quality tactile solutions. Johnson Electric products fulfil these and many other tasks in public places worldwide, every day, around the clock.

Johnson Electric solution samples

Vending machine

Subsystem with motor, switch and custom made cable harness
 Function: Goods dispense control

Gaming machine

Switch with miniature PCB and integrated connector
 Function: Push button switch



Johnson Electric Switches offer

SYSTEM DESIGN

- Extremely long mechanical lifetime
- Tactile feeling
- Moulding tool engineering

SYSTEM SOLUTIONS

- Assembly of custom made housings
- Custom made connectors
- Integration of motor products

Transportation Switches



Market and application requirements:

Dust, heat, humidity: Johnson Electric systems are reliable task masters, whether drive control, panels and operating levers, or when transmitting positional signals to pedals and detecting positioning of major parts, such as drive battery cover. Leading brands use our expertise.

Johnson Electric solution examples

Drive lever control in combine harvesters

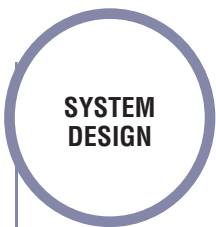
Microswitches in IP67 complete with cable harness and special plugs
Function: Forward/backward signal

Brake pedal switches

Microswitch for use in extreme environmental conditions, shock resistant, fully sealed, unaffected by aggressive substances such as battery acid, petrol and oil. The switch is designed for use in fork lift trucks.
Function: Brake pedal position-signal



Johnson Electric Switches offer



- Robust solutions optimized as to environmental protection
- Custom made accessories and kits
- Low to medium volume applications



- Use of sealed switch products
- Harness assembly & seal
- Lead frame technology



Industrial Equipment & Automation Switches



Control panels

Industrial automation

Testing equipment

Market and application requirements:

Reliable opening and closing of all types of gates, roller blinds, and Venetian blinds. Used in operating controls, whether for commercial or domestic applications. Our switches reliably detect the drive end position and switch off the drive. For comfort and safety, choose Johnson Electric.

Johnson Electric solution samples

Gate control

Switch with extremely long overtravel,
 Supplied with cable harness and plug
 Function: Terminal position detection
 in security gates



Emergency stop switch box

Emergency stop switch in industry
 standard box with circular plug-in
 connector
 Used in industrial automation
 Function: Emergency stop function
 for industrial applications



Johnson Electric Switches offer



- Robust custom made solutions
- Long life
- Medium to high volume applications



- Harness assembly (welding, solder)
- Assembly of custom made accessories
- Panel assembly

Power & Garden Tools Switches



Circular saws

Grass cutters

Electric screwdrivers

Leaf blowers

Grass trimmers

Market and application requirements:

Heavy professional use day after day, in icy cold conditions or unbearable hot weather, rain or drought, motorway or camp site, large building site or in the garden or forest. Our solutions are even used to activate hand grip heating systems. Comfort and safety, Johnson Electric applications equally fulfil both requirements.

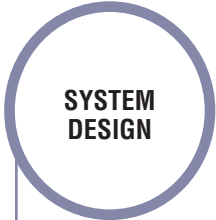
Johnson Electric solution examples

Concrete cutters, grass cutters
Switch in IP67 housing with special lever and cable harness
Function: Safety switch for motor stop

Professional power screwdriver
Switch with custom made harness, reinforced tubing and connector
Function: Electrical control



Johnson Electric Switches offer



- Professional & consumer solutions
- Custom made accessories and kits
- Medium to high volume applications



- Use of sealed switch products
- Harness assembly & seal
- Integration of electronic components



Healthcare & Medical Equipment Switches

Dialysis machines

Syringe pumps

Wheelchairs



Nebulizers

Mobility aids

Hospital beds

Market and application requirements:

Precision and safety is our daily business. Johnson Electric systems offers drug delivery & patient care solutions that ensure the correct position of cartridges, and help aid movement for the sick the elderly and disabled

Johnson Electric solution examples

Dialysis machine

Switch with cable harness, connector and customer made mounting hardware
 Function: Position detection

Hospital bed

Switch with cable harness, connector and integrated electronic components
 Function: Actuator position



Johnson Electric Switches offer

SYSTEM DESIGN

- Precise switch products
- Compatibility to medical standards
- Environmental protection

SYSTEM SOLUTIONS

- Harness assembly
- Integration of electronic devices
- Assembly of custom made accessories

Saia microswitch series

high precision switch operating position, small tolerance
 high operating speed / frequency
 high electrical ratings and longer life cycles
 wide range of switching characteristics and terminal options

| | | | | |
|--|---|---|---|--|
|  | <p>XC Saia Submini Micro switch 19.9 x 9.5 x 6.4 mm</p> <ul style="list-style-type: none"> ■ wide range of forces and variants ■ long mechanical and electrical life ■ solder, faston and PCB terminals | <p>Rating 250 VAC, 10 A max.</p> | <p>Actuators plunger mushroom plunger reset plain lever simulated roller lever / cam follower roller lever</p> | <p>Approvals/Quality ENEC UL cUL CSA</p> |
|  | <p>X4 Saia Submini Micro switch 19.9 x 9.7 x 6.4 mm</p> <ul style="list-style-type: none"> ■ thermoplastic housing ■ long mechanical and electrical life ■ solder, faston and PCB terminals | <p>Rating 250 VAC, 12 A max.</p> | <p>Actuators plunger plain lever cam follower lever roller lever</p> | <p>Approvals/Quality ENEC UL CSA CQC</p> |
|  | <p>V4N Saia Submini Micro switch 20 x 10.3 x 6.4 mm</p> <ul style="list-style-type: none"> ■ sealed IP67 ■ solder, faston and PCB terminals ■ 2.8 mm faston ■ pre-wired option | <p>Rating 250 VAC, 5 A</p> | <p>Actuators plunger plain lever roller lever simulated roller lever / cam follower</p> | <p>Approvals/Quality ENEC UL CSA</p> |
|  | <p>V4NC Saia Submini Micro switch 20 x 10.3 x 6.4 mm</p> <ul style="list-style-type: none"> ■ wide variety of levers ■ peg mounting option ■ pre-wired option ■ sealed IP6K7 ■ solder, faston and PCB terminals | <p>Rating 250 VAC, 5 A</p> | <p>Actuators plunger plain lever roller lever simulated roller lever</p> | <p>Approvals/Quality none</p> |
|  | <p>XG Saia Miniature Micro switch 27.8 x 15.9 x 10.3 mm</p> <ul style="list-style-type: none"> ■ wide range of forces and ratings ■ long mechanical and electrical life ■ solder, faston and PCB terminals | <p>Rating 250 VAC, 26 A max.</p> | <p>Actuators plunger plain lever roller lever simulated roller lever</p> | <p>Approvals/Quality ENEC UL cUL CSA</p> |
|  | <p>X3 Saia Miniature Micro switch 27.8 x 15.9 x 10.3 mm</p> <ul style="list-style-type: none"> ■ 8 mm creepage and clearance distance to the actuator ■ long mechanical and electrical life ■ solder, faston and PCB terminals | <p>Rating 250 VAC, 21 A max.</p> | <p>Actuators plunger straight lever roller lever simulated roller lever</p> | <p>Approvals/Quality ENEC UL cUL CSA CQC</p> |
|  | <p>G3 Saia Miniature Micro switch 28 x 15.9 x 10 mm</p> <ul style="list-style-type: none"> ■ low operating force, high current capacity ■ < 15 cn operating force option ■ > 3 mm contact gap, changeover mechanism option | <p>Rating up to 250 VAC, 18 A</p> | <p>Actuators plunger ramp plunger</p> | <p>Approvals/Quality ENEC UL CSA</p> |


Bär manually operated switch series


innovative switch solutions for home appliances


setting industry standards


rocker, push-button and door switches with customized styling


intelligent switch combined with electronic controller


| | | | | |
|--|--|---|---|---|
|  | 3670 Baer Rocker switch various | Rating 250 VAC, 6 (2) A 250 VAC, 12 (2) A 125 VAC, 12 A | Actuators rocker (different shapes/ colours) | Approvals/Quality ENEC cUL |
| | <ul style="list-style-type: none"> ■ single pole, on/off ■ illuminated/non-illuminated ■ snap-in mounting ■ faston terminals ■ momentary function (optional) ■ temp. 100/55° | | | |


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|--|---|---|---|--|
|  | 3672 Baer Rocker switch various | Rating 250 VAC, 6 (2) A 125 VAC, 7.5 A | Actuators rocker (different shapes/ colours) | Approvals/Quality ENEC UL |
| | <ul style="list-style-type: none"> ■ single pole ■ on/off ■ illuminated/non-illuminated ■ snap-in mounting ■ solder terminals ■ PCB terminals ■ faston terminals ■ momentary function ■ temp. 85/55° | | | |


| | | | | |
|---|--|--|---|---|
|  | 3673 Baer Rocker switch various | Rating 250 VAC, 6 (3) A 125 VAC, 10 A (for version with „zero“ position) | Actuators rocker (different shapes/ colours) | Approvals/Quality ENEC cUL |
| | <ul style="list-style-type: none"> ■ single pole ■ change-over (with or without „zero-position“) ■ snap-in mounting ■ faston terminals ■ µ-gap ■ temp. 100/55° | | | |


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|--|---|---|---|---|
|  | 3680 Baer Rocker switch various | Rating 250 VAC, 6 (2) A 125 VAC, 7.5 A | Actuators rocker (different shapes/ colours) | Approvals/Quality ENEC UL CSA |
| | <ul style="list-style-type: none"> ■ single pole ■ on/off ■ illuminated/non-illuminated ■ snap-in mounting ■ momentary function (optional) ■ temp. 85/55° | | | |


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|--|---|---|---|---|
|  | 3600 TIPPMATIC® Bar Auto Shutt off Rocker switch | Rating 250 VAC, 12 (4) A 125 VAC, 15 A | Actuators standard rocker 24.4 x 10.7 mm | Approvals/Quality ENEC cUL |
| | <ul style="list-style-type: none"> ■ integral timer function ■ different times available ■ single pole ■ on/off ■ illuminated/non-illuminated ■ snap-in mounting ■ temp. 100/55° | | | |


| | | | | |
|--|--|---|--|---|
|  | 3292 Baer Push Button switch 13.5 x 19 mm | Rating 250 VAC, 16 (4) A 1E4, T100 250 VAC, 10 (10) A, 1E4, T100 250 VAC, 8 (8) A, T125 125 VAC, 16 A, ¼ hp. T85 | Actuators plunger square 6 mm | Approvals/Quality ENEC cUL US |
| | <ul style="list-style-type: none"> ■ single/double pole ■ on/off ■ faston ■ PCB terminals ■ extended life (5E4) ■ customised mounting ■ momentary or latching | | | |


| | | | | |
|--|---|---|------------------------|--------------------------|
|  | 3293 | Rating | Actuators | Approvals/Quality |
| | Baer Push Button switch 13.5 x 19 mm <ul style="list-style-type: none"> ■ single/double pole ■ on/off ■ faston ■ PCB terminals ■ customised mounting ■ momentary or latching ■ μ-gap | 250 VAC, 8 (8) A, 1E4, T100 250 VAC, 10 (4) A, 1E4, T100 | plunger square 6 mm | ENEC |


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|--|---|---------------|------------------|--------------------------|
|  | 3200 | Rating | Actuators | Approvals/Quality |
| | Baer Push Button switch 12.5 x 12.5 x 19.5 mm <ul style="list-style-type: none"> ■ illumination optional ■ single pole ■ change-over ■ PCB terminals ■ customised mounting ■ momentary or latching ■ μ-gap | 12 VDC, 2 A | square 10.4 mm | none |

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|  | 1427 | Rating | Actuators | Approvals/Quality |
| | Baer Momentary switch various <ul style="list-style-type: none"> ■ single pole ■ faston ■ snap-in mounting or centre-fixing | 250 VAC, 0.2 [0.2] A 1E5 250 VAC, 0.25 A | plunger | ENEC cUL |

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|  | 1430 | Rating | Actuators | Approvals/Quality |
| | Baer Momentary switch various <ul style="list-style-type: none"> ■ single pole ■ faston ■ snap-in mounting | 250 VAC, 0.2 [0.2] A 5E4 | lever | ENEC |

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|--|---|--------------------------|------------------|--------------------------|
|  | 1429 | Rating | Actuators | Approvals/Quality |
| | Baer Momentary switch various <ul style="list-style-type: none"> ■ single pole ■ snap-action function ■ faston ■ snap-in mounting ■ type of protection according to IEC 60079-15:1987 | 250 VAC, 0.2 [0.2] A 2E5 | plunger | ENEC |

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|--|---|---------------------------|----------------------------|--------------------------|
|  | XKA | Rating | Actuators | Approvals/Quality |
| | Baer Momentary switch 28 x 20 x 15 mm <ul style="list-style-type: none"> ■ long overtravel ■ snap-action CO ■ snap-in mounting ■ type of protection according to IEC 60079-15:1987 | 250 VAC, 1 (1) A 5E4, T85 | plain lever round lever | ENEC UL CSA |

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|--|--|------------------------------------|--|--------------------------|
|  | 4022 | Rating | Actuators | Approvals/Quality |
| | Baer Rotary switch 30 x 14 x 15.3 <ul style="list-style-type: none"> ■ single pole with on/off or step function ■ double pole with on/off function ■ solder, faston and PCB terminals ■ high temp. 100° | 250 VAC, 12 (2) A 125 VAC, 10 A | cam square access hole 3.25 mm ² | ENEC UL CSA |

Burgess switch series

solid products fulfill high requirements in robustness
largest variety in switching technologies
expert in innovative switching solutions
strong in industrial automation

|  F1 Burgess Ultraminiature Micro switch 16 x 6 x 6.5 mm <ul style="list-style-type: none"> ■ small size ■ high current ■ long mechanical life ■ PCB mounting | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever simulated roller lever / cam follower</td> <td>UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA |
|--|---|-------------------|-----------|-------------------|---------------------|--|-------------------|
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA | | | | | |
|  F4 Burgess Ultraminiature Micro switch 12.8 x 10 x 5 mm <ul style="list-style-type: none"> ■ small size ■ long mechanical and electrical life ■ solder ■ PCB terminals | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever simulated roller lever / cam follower</td> <td>UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA |
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA | | | | | |
|  F5 Burgess Ultraminiature Micro switch 12.8 x 7 x 5 mm <ul style="list-style-type: none"> ■ small size ■ long mechanical and electrical life ■ PCB mounting | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever simulated roller lever / cam follower</td> <td>UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA |
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA | | | | | |
|  F1NS Burgess Ultraminiature Micro switch 16 x 6.5 x 6 mm <ul style="list-style-type: none"> ■ small size ■ low current ■ long mechanical life ■ PCB mounting ■ sealed IP54 (option) | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>up to 250 VAC, 1 A</td> <td>plunger plain lever simulated roller lever / cam follower</td> <td>none</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | up to 250 VAC, 1 A | plunger plain lever simulated roller lever / cam follower | none |
| Rating | Actuators | Approvals/Quality | | | | | |
| up to 250 VAC, 1 A | plunger plain lever simulated roller lever / cam follower | none | | | | | |
|  F6 Burgess Ultraminiature Micro switch 14.7 x 9 x 5.4 mm <ul style="list-style-type: none"> ■ small size ■ sealed IP6K7 ■ PCB mounting | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>12-30 VDC, 5-300 mA</td> <td>plunger plain lever</td> <td>none</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 12-30 VDC, 5-300 mA | plunger plain lever | none |
| Rating | Actuators | Approvals/Quality | | | | | |
| 12-30 VDC, 5-300 mA | plunger plain lever | none | | | | | |
|  FK4 Burgess Ultraminiature Micro switch 18 x 8 x 5 mm <ul style="list-style-type: none"> ■ double break switching ■ long mechanical and electrical life ■ solder, faston 2 mm and PCB mounting ■ snap-action | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever simulated roller lever / cam follower</td> <td>UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA |
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever simulated roller lever / cam follower | UL CSA | | | | | |
|  V4L Burgess Submini Micro switch 20 x 11 x 6.4 mm <ul style="list-style-type: none"> ■ long overtravel of 2.2 mm minimum ■ sealed to IP6K7 option ■ pre-wired option ■ solder terminals | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever ice break lever</td> <td>ENEC UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever ice break lever | ENEC UL CSA |
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever ice break lever | ENEC UL CSA | | | | | |
|  V3S Burgess Sealed Miniature Micro switch 32 x 24 x 10 mm <ul style="list-style-type: none"> ■ sealed IP67 ■ flying leads ■ robust construction | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Rating</th> <th style="background-color: #cccccc;">Actuators</th> <th style="background-color: #cccccc;">Approvals/Quality</th> </tr> </thead> <tbody> <tr> <td>250 VAC, 5 A</td> <td>plunger plain lever roller lever</td> <td>ENEC UL CSA</td> </tr> </tbody> </table> | Rating | Actuators | Approvals/Quality | 250 VAC, 5 A | plunger plain lever roller lever | ENEC UL CSA |
| Rating | Actuators | Approvals/Quality | | | | | |
| 250 VAC, 5 A | plunger plain lever roller lever | ENEC UL CSA | | | | | |

| | | | | |
|--|---|--|---|--|
|  | <p>PN4 Burgess Standard Micro switch 49 x 22 17.5 mm</p> <ul style="list-style-type: none"> ■ precision switching ■ long mechanical life ■ screw terminals | <p>Rating 250 VAC, 15 A</p> | <p>Actuators plunger plain lever roller lever</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>3BR Burgess Sealed Standard Micro switch 53.1 x 20.6 x 30.8 mm</p> <ul style="list-style-type: none"> ■ choice of IP54 or IP67 sealed versions ■ precise movements and exceptional repeat accuracy ■ flying lead version available ■ long overtravel | <p>Rating 250 VAC, 10 A max.</p> | <p>Actuators plunger</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>K5 Burgess Standard Double Break Switch 41 x 19 x 15.5 mm</p> <ul style="list-style-type: none"> ■ double break switching ■ long mechanical life ■ high electrical rating ■ faston terminals | <p>Rating 250 VAC, 16 A</p> | <p>Actuators plunger plain lever roller lever ramp plunger</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>V9N Burgess Sealed Miniature Limit switch 42 x 24.5 x 15.5 mm</p> <ul style="list-style-type: none"> ■ sealed IP67 ■ metal housed ■ screw terminals or flying leads | <p>Rating 250 VAC, 10 A max.</p> | <p>Actuators plunger plain lever roller lever reverse action lever</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>4BR Burgess Sealed Limit switch 53.1 x 20.6 x 29.2 mm</p> <ul style="list-style-type: none"> ■ choice of IP54 or IP67 sealed versions ■ precise movements and exceptional repeat accuracy ■ robust metal housing ■ flying lead version available ■ long overtravel | <p>Rating 250 VAC, 15 A max.</p> | <p>Actuators plunger</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>BVM3 Burgess Positive Action Momentary Switch 28 x 16 x 10.5 mm</p> <ul style="list-style-type: none"> ■ positive-action (forced break) contacts ■ > 3 mm contact gap at full travel ■ internationally recognized V3 housing ■ faston terminals | <p>Rating 250 VAC, 10 A</p> | <p>Actuators plunger plain lever roller lever</p> | <p>Approvals/Quality ENEC cUL CSA</p> |
|  | <p>KB5 Burgess Positive Action Double Break Momentary Switch 41 x 19.5 x 15.5 mm</p> <ul style="list-style-type: none"> ■ positive-action forced double break switching ■ > 3 mm contact gap at full travel ■ high electrical rating ■ faston terminals | <p>Rating up to 250 VAC, 25 A</p> | <p>Actuators plunger plain lever roller lever</p> | <p>Approvals/Quality UL CSA</p> |



XP

Burgess Double Break Momentary Switch
30 x 32 x 12 mm

- double break switching
- positive-action force break (option)
- > 3 mm contact gap at full travel (option)
- faston terminals

| Rating | Actuators | Approvals/Quality |
|---------------|---|-------------------|
| 400 VAC, 16 A | plain plunger mushroom plunger reset plunger with external spring (for increased reset security) | ENEC UL CSA |



XT


Burgess Double Break Momentary Switch
30 x 32 x 12 mm


- 8 mm contact gap, creepage and clearance distances
- double break contacts


| Rating | Actuators | Approvals/Quality |
|----------------------|---|--------------------------|
| 400 VAC, 16.5 A max. | shrouded plunger optional key plain plunger | ENEC UL cUL CSA |


th-contact panel mounted products


th-contact panel mounted switches such as illuminated push-button and keylock, joysticks and emergency stop switches for control panels
th-contact with best modular design so that various permutations can easily be assembled
th-contact has worldwide reseller channels

| | TP2 | Rating | Actuators | Approvals/Quality |
|--|---|--------------|--|-------------------|
|  | th-contact Push Button panel switch 18 x 24 mm 18 x 18 mm Ø 18 mm Ø 25 mm | 250 VAC, 5 A | lenses in different shapes and colours | UL CSA VDE |
| | <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ momentary or latching ■ sealed IP40, IP65 or IP67 ■ wide range of bezels ■ with/without illumination ■ NO, NC, CO ■ gold plated single or double pole contact blocks | | | |


| | TP5 | Rating | Actuators | Approvals/Quality |
|--|---|--------------|--|-------------------|
|  | th-contact Push Button panel switch 18 x 24 mm 18 x 18 mm Ø 18 mm Ø 25 mm | 250 VAC, 5 A | lenses in different shapes and colours | UL CSA VDE |
| | <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ momentary or latching ■ sealed IP40 or IP65 ■ wide range of bezels ■ shallow mounting depth ■ with/without illumination ■ NO, NC ■ gold plated contact blocks | | | |


| | TP4 | Rating | Actuators | Approvals/Quality |
|--|--|--------------|--|-------------------|
|  | th-contact Push Button panel switch 18 x 24 mm 24 x 24 mm Ø 24 mm Ø 30 mm | 250 VAC, 5 A | mushroom cap in different shapes and colours | UL CSA VDE |
| | <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ mushroom ■ momentary or latching ■ sealed IP40 or IP65 ■ wide range of bezels ■ NO, NC ■ gold plated contact blocks | | | |


| | TP8 | Rating | Actuators | Approvals/Quality |
|--|--|--------------|---|-------------------|
|  | th-contact Push Button panel switch Ø 25 mm | 230 VAC, 6 A | button and housing in different colours | none |
| | <ul style="list-style-type: none"> ■ panel cut-out Ø 22.5 mm ■ momentary ■ sealed IP67 ■ round metal bezels ■ 1 NO + 1 NC, 2 NC, 2 NO ■ gold plated contact blocks | | | |


| | TP9 | Rating | Actuators | Approvals/Quality |
|--|---|-------------------|---|-------------------|
|  | th-contact Push Button panel switch Ø 18 mm Ø 25 mm | 50 VAC/VDC, 50 mA | button and housing in different colours | none |
| | <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ momentary short stroke switch ■ sealed IP65 or IP67 ■ round metal bezels ■ NO ■ snap-in mounting option Ø 22.5 mm (IP65 only) | | | |


| | | | | |
|--|---|--|--|--|
|  | <p>TP7 th-contact Push Button panel switch Ø 18 mm Ø 36 mm Ø 25 mm Ø 48 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5/30.3/43.3 ■ piezo technology ■ momentary ■ sealed IP68 ■ with/without illumination, two colours ■ solid state output ■ NO | <p>Rating 3 to 35 VAC/VDC, 200 mA</p> | <p>Actuators housing in different colours</p> | <p>Approvals/Quality none</p> |
|  | <p>TE8 th-contact Emergency Stop panel switch Ø 27 mm Ø 40 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ meets EN418 directives (Ø 27 mm only) ■ sealed IP66 or IP67 ■ rotary pull or key reset ■ yellow disk bezel (optional) ■ 1 NO + 1 NC or 2 NC | <p>Rating 250 VAC, 6 A</p> | <p>Actuators red mushroom cap (Ø 27 mm only) reset by KABA key (Ø 40 mm only)</p> | <p>Approvals/Quality IEC947-5-1/947-5-5 (Ø 27 mm only)</p> |
|  | <p>TE1 th-contact Emergency Stop panel switch Ø 25 mm Ø 30 mm Ø 40 mm (on request)</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm with adapter option ■ NC contact with 3 mm contact gap ■ < 20 mm behind panel depth ■ rotary, reset mechanism ■ sealed IP65 ■ 1 NO + 1 NC or 2 NC | <p>Rating 250 VAC, 2 A</p> | <p>Actuators red mushroom cap</p> | <p>Approvals/Quality EN 60947-1 EN 60947-5-1 EN 60947-5-5</p> |
|  | <p>TI2 th-contact Indicator for panel 18 x 24 mm Ø 18 mm 18 x 18 mm Ø 25 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ illuminated ■ sealed IP40, IP65 or IP67 ■ wide range of bezels ■ midget groove lamp/LED | <p>Rating 60 VAC/VDC max.</p> | <p>Actuators lenses in different shapes and colours</p> | <p>Approvals/Quality UL CSA VDE</p> |
|  | <p>TI5 th-contact Indicator for panel 18 x 24 mm Ø 18 mm 18 x 18 mm Ø 25 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ illuminated ■ sealed IP40, IP65 or IP67 ■ wide range of bezels ■ midget groove lamp/LED | <p>Rating 60 VAC/VDC max.</p> | <p>Actuators lenses in different shapes and colours</p> | <p>Approvals/Quality UL CSA VDE</p> |
|  | <p>TI9 th-contact Indicator for panel Ø 25 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 22.5 mm ■ illuminated ■ sealed IP67 ■ round metal bezels ■ red LED ■ green LED ■ red-green LED | <p>Rating 24 VDC, 20 mA</p> | <p>Actuators aluminium housing in different colours</p> | <p>Approvals/Quality none</p> |





| | Rating | Actuators | Approvals/Quality |
|---|--------------|----------------|-------------------|
|  <p>TK2 th-contact Key switch for panel 18 x 24 mm 18 x 18 mm Ø 18 mm Ø 25 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ 2 and 3 position ■ sealed IP40 or IP65 ■ wide range of plastic or aluminium bezels ■ NO, NC ■ gold plated single or double pole contact blocks ■ key trapping options | 250 VAC, 5 A | key KABA MICRO | UL CSA VDE |

| | Rating | Actuators | Approvals/Quality |
|---|-----------------|-------------|-------------------|
|  <p>E1 th-contact Key switch for panel 18 x 16 mm</p> <ul style="list-style-type: none"> ■ panel cut-out 15.1 x 15.1 mm ■ tamper proof ■ 2 positions ■ key trapping options ■ gold plated contacts ■ PCB terminals | 250 VAC, 100 mA | plastic key | none |

| | Rating | Actuators | Approvals/Quality |
|---|-----------------|-------------------------|-------------------|
|  <p>M1 th-contact Key switch for panel 18 x 16 mm body style A 18 x 18 mm body style E</p> <ul style="list-style-type: none"> ■ panel cut-out 15.1 x 15.1 mm ■ double pole change-over or three circuit selector switching functions ■ key trapping options ■ two body style options ■ gold plated contacts ■ PCB terminals | 250 VAC, 100 mA | key (common or differs) | none |

| | Rating | Actuators | Approvals/Quality |
|--|--------------------|-------------------------|-------------------|
|  <p>K2 th-contact Key switch for panel Ø 22 mm</p> <ul style="list-style-type: none"> ■ panel cut-out 19.1 mm ■ choice of on/off or change-over centre off or spring return options ■ key trapping options ■ solder terminals | up to 250 VAC, 2 A | key (common or differs) | UL CSA |

| | Rating | Actuators | Approvals/Quality |
|--|--------------|-------------------------|-------------------|
|  <p>P2 th-contact Key switch for panel Ø 22 mm</p> <ul style="list-style-type: none"> ■ panel cut-out 19.1 mm ■ up to 12 contact pairs ■ 2 security options with key actuation ■ from 2 to 4 switch positions ■ key trapping options ■ solder terminals | 250 VAC, 2 A | key (common or differs) | UL (optional) |

| | | | | |
|--|---|--|--|---|
|  | <p>P5 th-contact Key switch for panel Ø 38.1 off-on Ø 38.1 CO</p> <ul style="list-style-type: none"> ■ panel cut-out 20.6 mm ■ high electrical rating ■ key trapping options ■ choice of off/on, change-over with spring return or change-over with separate circuits | <p>Rating up to 125 VAC, 10 A up to 250 VAC, 5 A</p> | <p>Actuators key (common or differs)</p> | <p>Approvals/Quality UL CSA</p> |
|  | <p>TR2 th-contact Rotary switch for panel 18 x 24 mm 18 x 18 mm Ø 18 mm Ø 25 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 16.2/22.5 mm ■ 2 and 3 position rotary switch ■ sealed IP40 or IP65 ■ plastic or aluminium bezels ■ NO, NC ■ gold plated single or double pole contact blocks | <p>Rating 250 VAC, 5 A</p> | <p>Actuators black knob with white indicating bar</p> | <p>Approvals/Quality UL CSA VDE</p> |
|  | <p>700 th-contact Joystick with Micro switch 55 x 55 x 57.2 mm miniature microswitches 41.3 x 41.3 x 57.2 mm subminiature microswitches</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 22 x 20 mm ■ single/double pole ■ choice of directional gating options ■ miniature or subminiature microswitch types | <p>Rating up to 250 VAC, 15 A miniature microswitches up to 250 VAC, 6 A subminiature microswitches</p> | <p>Actuators knob</p> | <p>Approvals/Quality ENEC UL CSA (switch only)</p> |
|  | <p>J8 th-contact Joystick with Micro switch up to 74.5 x 74.5 x 105 mm up to Ø 60 x 60 x 103.5 mm</p> <ul style="list-style-type: none"> ■ panel cut-out Ø 22.5 mm ■ choice of directional gating options ■ choice of microswitch functions | <p>Rating up to 250 VAC, 16 A up to 250 VAC, 5 A</p> | <p>Actuators knob</p> | <p>Approvals/Quality ENEC UL CSA (switch only)</p> |



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