



4	
pa	age)

CONTENTS

2	Introduction
3	Weathershield®'s Wide Range of Products
4	How to order Weatherprotected switches
8	Chemical resistance
10	WSF Series switches
11	WS Series switches
12	WS & WSR Series switches
13	Pushbutton control stations
14	Weathershield® Isolating Switches
16	Switched sockets
18	Flush Mounted Switched Sockets
19	WSC227 Switched Sockets
20	Mounting enclosures
21	Adaptable enclosures & boxes
22	Time delay switch
23	IP66 Rated Weatherproof Switches
25	Clipsal's Great Range of Colours
26	International Protection Ratings
27	Schematic Wiring Diagrams
28	Mounting Accessories Cross Reference Chart

Why is Clipsal's Weatherproof Series No. 1?

Easy! It's the largest range of Weatherproof switchgear designed to suit Australian conditions.



- Fast fit-off
- Superior sealing
- Chemically resistant (some models)

Brilliant Wet Weather Performance

Australia is a country of extremes. Scorching hot summers and lashing winter rain can quickly take its toll on outdoor switchgear. To combat the effects of the harsh Australian environment, Clipsal has developed the Weathershield® range – perfect for use in wineries, factories, exterior walls, on illuminated signs and around swimming pools. Anywhere switchgear needs protection from the elements.

Weathershield® is impact and corrosion resistant/ UV protected and features a stylish new look. The flush mounting models fit direct to standard pattern mounting accessories.

Weathershield® has chemical resistant properties for use in food processing plants and laboratories. For detailed information on Chemical Resistant models, see page 9.



WEATHERSHIELD®'S WIDE RANGE OF PRODUCTS

WSC227/2X



Surface Switched Socket

- Robust Protected Switch Mechanisms
- Extra Switch Available
- Excellent wiring room
- 1 piece mechanism on twin.

WS226/2



Surface Switch

- M-Rating.
- Robust Protected Switch mechanisms.
- Two Gang.

WHB120



Isolating Switch

- M-Rating.
- 1, 2, 3 and 4 Pole
- Padlockable. a 3 sizes.
- Industry Standard.

WS229



Surface Switch

The most compact at 65 x 50 x 45mm.

319HP



Time Delay Switch

Easy to set timer switch.

WSCF227/1



Flush Switched Socket

- For Wall Boxes and Brackets.
- Surface Mounting Shallow Mounting Flange.
- 84mm Centres
- 1 piece mechanism on twin.

W226JB



Junction Box

3 x 563 Connectors Provided.

CSS320



Isolating Switch

- M-Rating.
- Padlockable.
- 1, 2, 3 and 4 Pole.

WS226/2PB



Control Stations

- Large Activators can't be missed.
- Start/stop and press types.

255



Mounting Enclosure

 Weatherproof standard range flush switches and switched socket.

WSF226



Flush Switch

- 84mm Centres.
- For wall boxes and brackets
- Deep backbox version
- 1, 2 and 3 gang.

WSR226



Surface Switch

- Compact Dimensions.
- Fits 240 Series conduit boxes.

WSC228



♦IP66

10A

240V

Compact Surface Switched Socket

- Compact Dimensions.
- Suit 75mm columns.
- Flush version.

2032V66



Flush Switch

- 84mm centres
- For wall boxes and brackets.

HOW TO ORDER WEATHERPROTECTED SWITCHES

Weathershield® Surface Switches

W S 2 2 6 / 2

Weatherprotected Switch

226 Series Product

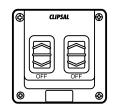
/2 = Twin /20 = 20 Amp D = Double Pole

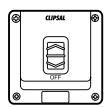
I = Intermediate

PB = Push button PBS = Push Button Stop

/2PB = Double Push Button Start Stop







Weathershield® Flush Switches

Weatherprotected Switch

Flush

226 Series Product

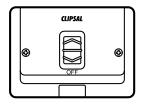
SF226/2B

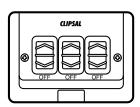
with Base

/2 = Twin D = Double Pole

/3 = Triple I = Intermediate SMA = Retro fit new covers /20 = 20 Amp (suit WSC existing backbox)







Weathershield® Switched Socket Outlets

Weatherprotected

Switched Socket Combination

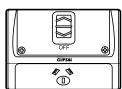
227 Series Product

WS C227/2

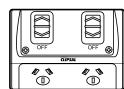
/1 = Single /2 = Twin X = Extra Switch F = Flap IP54 rating

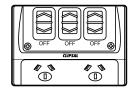
/15 = 15 Amp





WSC227/1 V





WSC227/2

WSC227/2X

HOW TO ORDER WEATHERPROTECTED SWITCHES



HOW TO ORDER WEATHERPROTECTED SWITCHES

Weathershield® Flush Switched Socket Outlets

Weatherprotected **Switched Socket** Combination

Flush

1 = Single/2 = Twin

X = Extra Switch F = Flap IP54 rating

/15 = 15 Amp

227 Series Product



Weatherprotected Compact Switched Socket Outlets

W S C 2 2 8

Weatherprotected **Switched Socket Combination** 228 Series Product



Weatherprotected Compact Flush Switched Socket Outlets

WSCF(228)

Weatherprotected **Switched Socket Combination** 228 Series Product



Weatherprotected Horse Shoe

Switched Socket Outlets

Weatherprotected Switched Socket Combination D Double Pole 15 Amps

227 Series Product



Weatherprotected Caravan Inlet Range

4 3 5 V F S

Weatherprotected Inlet 435 Series Product

15 Amps

VFS = Vertical Flush Socket Inlet VSFM = Vertical Flush Socket Inlet Mounting Flange VFS15Flap = Vertical Flush socket inlet Flap



HOW TO ORDER WEATHERPROTECTED SWITCHES

Weatherprotected Caravan Outlet Range

415VF

Weatherprotected Outlet 415 Series Product

15 Amps

VF = Vertical Flush Socket VF15Flap = Vertical Flush socket Flap



Weatherprotected Mounting Enclosures

Weatherprotected
Mounting Enclosure

Z = Surround recessing brickwork



Weatherprotected Plug and Socket Sets with Coupling

4 3 7 P S A

Weatherprotected plug and socket 437 Series

255 Series Product

PSA = Plug Socket assembled

PS = Plug Socket less plugs

PR = Plug Ring

SR = Socket Ring

P = Plug

S = Socket



Weatherprotected Adaptable Boxes

265/1

Weatherprotected Adaptable Boxes 265 Series 76X Series 1 = Size 1 5 = Size 5 3 = Size 3 7 = Size 7

4 Ci-o 4 7D Ci-o 7D

4 = Size 4 7D = Size 7 Deep



Weatherprotected Switches 2000 Series

2032H66

Hoseproof Switch 2000 Series

V66 = Vertical IP66 H66 = Horizontal IP66



CHEMICAL RESISTANCE

For those environments where harsh chemicals are used that require special chemical resistant properties, Clipsal offers the new Weathershield® Range:

Chemical Resistant Grey (RG)

Chemical Resistant White (RW)

Chemical Resistant Cream (RC)

Chemical Resistant Terracotta (RT)

This range has been developed by leading plastic material manufacturers and offers greater resistance to chemical attack than common plastic materials. To make selection of the correct product easy, we provide the following information and table as a guide.

This range offers resistance to a wide range of chemical types. It is ideal for corrosive and industrial chemicals, animal fats, oils, solvents and lubricants. This material has excellent UV resistance for use outside.

Temperature Resistance

The temperature range of the Weathershield® products are limited by two aspects:

- 1) The material used in mouldings
- 2) The operating temperature of the electrical components. The material type limits the use of the standard product to -25°C to +75°C.

For temperatures outside of these limits, and for information on the heat generated by the electrical components, please contact your Clipsal representative.

Plastic Comparison Chart

	WEATHERSHIELD®
OUTDOOR USE - MECHANICAL PROPERTIES	А
OUTDOOR USE - COLOUR PROPERTIES	В
INDOOR USE	А
SALTWATER ENVIRONMENTS	А
THERMAL PROPERTIES	А
LIGHTWEIGHT	А
HIGH RIGIDITY	В
IMPACT RESISTANT	А

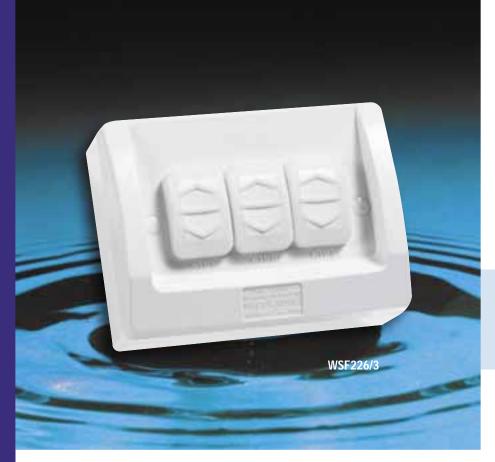
This table should be used as a guide only. Any end user should test to evaluate the suitability of any product in a specific application.

Chemical Comparisons

Product Type (Colour)	Standard Weatherproof	New Weathershield®			
Acids	Wedther proof				
Weak Solutions					
Hydrochloric 10%	А	А			
Nitric 10%	A	А			
Concentrate					
Sulphuric 100%	D	D			
Alkalis					
Weak Solutions					
Sodium Hydroxide 10% (Caustic Soda)	D	В			
Concentrate					
Potassium Hydroxide 100%	D	D			
Automotive					
Petroleum	D	А			
Lubricating Oils	D	А			
Hydraulic Oil	D	Α			
Solvents					
Aliphatic Hydrocarbons (Alkanes)					
Methane	А	А			
Propane	A	Α			
Alcohols					
Ethylene Glycol	А	А			
Glycerol (Glycerin)	С	В			
Methyl Alcohol (Methanol)	D	В			
Ethyl Alcohol (Ethanol)	A	A			
Amines					
Aniline	D	D			
Aromatic Hydrocarbons					
Methyl Benzene	D	В			
Xylene	D	В			
Ethers					
Dimethyl Ethyl	А	А			
Ketones					
Acetone	D	С			
Acetophenone	D	С			
Ethyl Methyl Ketone	D	С			
Miscellaneous					
Detergent	А	А			
Inorganic Salts					
Magnesium Sulphate	А	А			
Oxidising Agents – Weak Solution					
Sodium Hypochlorite (5%)	А	А			
Oxidising Agents – Strong Solution					
Hydrogen Peroxide 30%	А	А			
Water					
Ambient	А	А			
Hot > 60°C	А	В			
Steam	D	D			
This table should be used as a quide or					

This table should be used as a guide only. Any end user should test to evaluate the suitability of any chemical with any plastic.

- A EXCELLENT Recommended: no C FAIR Marginal acceptability: loss adverse effects after extended exposure. of mechanical properties after long **B - GOOD** - Acceptable: minimal loss of mechanical properties after long periods of exposure.
- periods of exposure.
 - **D POOR** Not recommended for use.



New Co-injection sealing, **Chemical Resistant and new** soft touch switches.

WSF SERIES SWITCHES WEATHERSHIELD®

The impact resistant flush mounting Weatherprotected switches are designed to fit standard pattern mounting accessories with 84mm mounting centres (as listed in the Mounting Accessories section).

Cover plates measure 115 x 85mm unless specified otherwise. Overall height from mounting face is 28mm on fully recessed option or 37mm on the shallow mounting option. Single, Two and Three Gang models are available. Conventional Clipsal 30 Series switch mechanisms are used and are marked ON and OFF. They come complete with a Weathershield® coinjection gasket and a mechanism shroud for additional protection. For maximum weather protection the cable entry in the shroud should face downward.

Standard product has chemical resistant properties (see special section this catalogue – page 9) Mounting position is horizontal only. All units are designed for general outdoor lighting e.g. gardens, tennis courts, carports and illuminating signs.

Products are Authority approved and comply with AS60529 'Degrees of Protection' and all relevant tests specified in AS/NZS 3133 and IEC 60669.1 Mines and Energy South Australia Approval S/1.

Standard colours are chemically resistant Grey, White, Cream and Terracotta.

Weathershield® Flush Mounted WSF

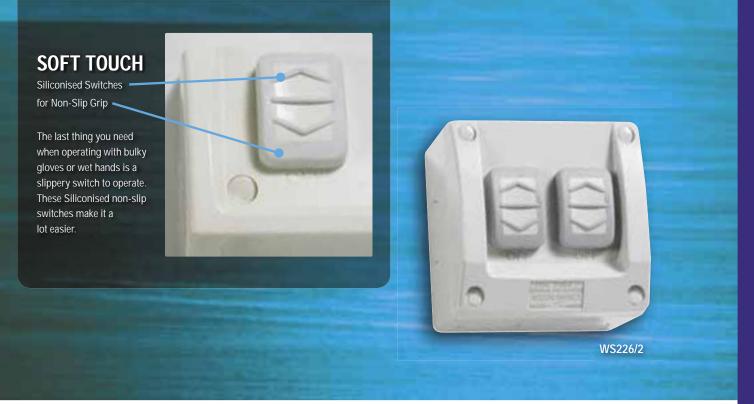
Cat No.	Description	M- Rating	IP Rating
WSF226	16A 250V ~ 1 way/2 way flush mounting, Single Gang Switch with looping terminal	M100	66
WSF226/2	16A 250V ~ 1 way/2way flush mounting, Two Gang Switch with looping terminal	M100	66
WSF226/3	16A 250V ~ 1 way/2way flush mounting, Three Gang Switch with looping terminal	M100	66
WSF226/20	20A 250V ~ 1 way/2way flush mounting, Single Gang. Switch with looping terminals	M100	66

For neon version use field fitted WNK (Weatherproof Neon Kit)

Base Projection - 20mm Terminal Detail - 1 way/2 way and looping terminal

Terminal Bore - 4.1mm

Maximum Cables - 3 x 2.5mm²



Weathershield® Surface Mounted WSFXXXB

For surface mount version simply add B to catalogue number i.e. WSF226 becomes as WSF226B. Features are as WSF series with larger wiring room over WS226 and a 3 Gang Switch is available.

Depth of mounting base is 45mm.

There are ample entries in the backbox which is common with WSC227/2 switched sockets. Four 25mm plain, and one 25mm screwed entry as well as two 25mm rear entry cut outs and one 25mm push out for back wiring.

Cat No.	Description	M- Rating	IP Rating
WSF226B	16A 250V ~ 1 way/2 way Single Gang Switch with looping terminal	M100	66
WSF226/2B	16A 250V ~ 1 way/2way Two Gang Switch with looping terminal	M100	66
WSF226/3B	16A 250V ~ 1 way/2way Three Gang Switch with looping terminal	M100	66
WSF226/ 20B	20A 250V ~ 1 way/2way Single Gang. Switch with looping terminals	M100	66

For neon version use field fitted WNK (Weatherproof Neon Kit) 2 Gang Box available quote WSF226E2
Terminal Detail - 1 way/2 way and looping terminal
Terminal Bore - 4.1mm
Maximum Cables - 3 x 2.5mm²

WS SERIES SWITCHES WEATHERSHIELD®

Cat No.	Description	M- Rating	IP Rating
WS226	16A 250V ~ Single Gang	M100	66
WS226D	16A 250V ~ Single Gang Double Pole	M100	66
WS226I	16A 250V ~ Single Gang Intermediate	NA	66
WS226/20	20A 250V ~ Single Gang	M100	66
WS226/2	16A 250V ~ Two Gang	M100	66

Weathershield® WS226 Series

The impact resistant WS226 Series Surface Mounting Switches measure 85 x 85mm. Overall height is 64mm. General applications include outdoor lighting, illuminated signs etc. There are ample entries in the base. Two 25mm plain, two 20mm plain, one 25mm plain and one 20mm plain on each side of box as well as one 25mm rear entry for back wiring. A 20mm plain to screwed adapter is provided for screwed entries.

The parts pack includes conduit plug, screw caps and a 563/2 connector. Screw caps must be fitted to ensure IP Rating and side plugs sealed to box enclosure.

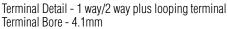
Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified in AS/NZS 3133 and IEC 60669.1. Standard colours are chemically resistant Grey, White, Cream and Terracotta.

WS229 SURFACE SWITCH

Weatherprotected WS229 Series

The most compact and versatile weatherproof switch available is the WS229. The enclosure has 20mm knock out entries on two sides for surface cabling, and one in the rear for back wiring. A highly durable UV stabilized membrane covers an aperture that accepts any 30 Series mechanism but excludes dust and moisture to IP66. It is available standard with a 15A mechanism or as an enclosure only to allow for other mechanism requirements. Products are Authority approved and comply with AS 60529 'Degrees of Protection' and Mines and Energy South Australia Approval S/1. Standard colours are White and Grey.

Cat No.	Description	M- Rating	IP Rating
WS229VH	Enclosure only	NA	66
WS229	15 Amp 250V ~ 1 way/2 way Switch	M100	66



Maximum Cables - 3 x 2.5mm2



WSR226 SWITCH

Weatherprotected WSR Series

WSR Series switches are designed to fit 240 Series conduit boxes. Flush plate diameter is a compact 70mm while the overall height from the mounting face is 25mm. The WSR226 comes complete with a weatherseal gasket and a mechanism shroud for additional protection. For maximum weather protection the cable entry in the shroud should face downward.

Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified in AS/NZS3133 and AS/NZS3100. Mines and Energy South Australia Approval S/1. Standard colours are White and Grey.

Weatherprotected Surface Switches

Cat No.	Description	M- Rating	IP Rating
WSR226	15A 250V ~ Single Gang	M100	55
WSR226/20	20A 250V ~ Single Gang	M100	55

Terminal Detail - 1 way/2 way plus looping terminal Terminal Bore - 4.1mm Maximum Cables - 3 x 2.5mm2



PUSH-BUTTON CONTROL STATIONS WEATHERSHIELD®



Cat No.	Description	AC15	IP Rating
WS226PB	10A 600V N.O. Single Mechanism	3A 240V/1.2A 415V	66
WS226PBS	10A 600V N.C. Single Mechanism	3A 240V/1.2A 415V	66
WS226/ 2PB	10A 600V N.O./N.C. Two Mechanism STOP-START station	3A 240V/1.2A 415V	66

New Co-injection sealing, Chemical Resistant.

Clipsal offer three STOP-START stations, all ruggedly built and practical. Ideal in dusty or dirty conditions for controlling motor starters on all types of equipment. The Mounting Box dimensions are 85mmx85mm, overall height is 70mm. Each switch is supplied with co-injection gasket to ensure perfect sealing. There are ample entries in the base.

Two 25mm plain, two 20mm plain, one 25mm plain and one 20mm plain on each side of box as well as one 25mm rear entry for back wiring. A 20mm plain to screwed adapter is provided for screwed entries. Mechanisms come complete with: start button N/O contact, stop button N/C contact and are rated at 600V. Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified in IEC 60947.4. Mines and Energy South Australia Approval S/1. Standard colours are chemically resistant Grey.

Mechanisms Terminal Detail - N.O. or /N.C. Maximum Cables - 2 x 2.5mm2

JUNCTION BOX WEATHERSHIELD®

The Clipsal Junction Box enables quick and easy termination of cables on exterior walls.

Two single screw (563/1) and one two screw (563/2) insulated connectors are supplied. Two 25mm plain, two 20mm plain, one 25mm plain and one 20mm plain on each side of box as well as one 25mm rear entry for back wiring. A 20mm plain to screwed adapter is provided for screwed entries. The box matches Clipsal WS226PB Series Push-Buttons. Products are Authority approved and comply with AS 60529 'Degrees of Protection'. Mines and Energy South Australia Approval S/1. Standard colours are chemically resistant Grev.

Cat No.	Description	IP Rating
W226JB	Junction Box. The unit measures 85x85mm and overall height is 64mm. Mounting details are the same as WS226PB Series	66



ISOLATING SWITCHES WEATHERSHIELD®

The WHA/WHB/WHC Series of Weatherprotected Isolating Switches is a robust range of switches suitable for virtually any external application. Included in the range are single, double, triple and four pole switches from 10 to 80 Amps. The base mounted mechanism on WHB and WHC provides for easier termination and more wiring room.

Switch dimensions are:

WHA =85mm x 85mm with an overall height of 84mm. WHB =165mm x 94mm with an overall height of 85mm. WHC =230mm x 130mm with an overall height of 114mm. WHB and WHC fixed Earth and Neutral connector bars with dual clamping screws per tunnel provide equal stripping lengths and secure clamping for all cables. Terminal bore size is 6mm for WHB and 7mm for WHC.

A safety feature for mounting switches to metal structures is the insulating caps that cover base mounting screws to totally protect them from any live cables.

WHA there are ample conduit entries in the base. Two 25mm plain, two 20mm plain, one 25mm plain and one 20mm plain on each side of box as well as one 25mm rear entry for back wiring. A 20mm plain to screwed adapter is provided for screwed entries.

WHB dual 25mm screwed conduit entries top and bottom (up to 55 amp.) allows four ways to surface wire the switch. 55 amp. and above are also available with 32mm entries top and bottom.

One 25mm cut out and one 25mm push out is provided in the rear. Each unit is supplied with screwed conduit plugs and screwed reducers for easy connection to 25mm or 20mm conduits and screw caps. Screw caps must be installed to ensure IP Rating.

WHC dual 32mm screwed conduit entries top and bottom (up to 63 amp.) allows four ways to surface wire the switch. 80 amp. available with 40mm entries top and bottom. Two 32/40mm cut out is provided in the rear.



The Impact Resistant base and cover will survive the hardest knocks in almost any installation. The two sections are sealed with a Co-injection gasket on WHA and WHB products and a one-piece gasket for WHC product. For security, a 8mm diameter hole is provided for padlocking the lever in the OFF position. Deep moulded barriers protect the operating lever from physical abuse or accidental switching. Clipsal No 9 Series 'Identicaps' will fit all screw holes for circuit identification. Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified to AS/NZS 60947.3 and IEC 60669.1. All units are approved to AS/NZS3947-3 AC23. Mines and Energy South Australia Approval S/1. Standard colours are chemically resistant Grey and White.

- 1. Cables looped in and out from overhead
- 2. In and out from underground
- 3. In and out straight through the switch
- 4. Cables in through side and out through bottom
- 5. Two 25mm rear knockouts are moulded in the base for surface mounting with concealed wiring (one push out).

Cat No.	Description	M Rating	IP Rating
WHA110	10A 250V ~ Single pole surface switch	M100	66
WHA116	16A 250V ~ Single pole surface switch	M100	66
WHA120	20A 250V ~ Single pole surface switch	M100	66
WHA135	35A 250V ~ Single pole surface switch	M160	66
WHA210	10A 250V ~ Double pole surface switch	M100	66
WHA220	20A 250V ~ Double pole surface switch	M100	66

For neon version use field fitted WNK (Weatherproof Neon Kit) Terminal Detail - 1 way plus looping terminal Terminal Bore - 4.1mm

Maximum Cables - 3 x 2.5mm²

ISOLATING SWITCHES WEATHERSHIELD®

Cat No.	Description	AC23/M Rating	IP Rating
WHB120	20A 250V ~ Single pole surface switch	16A M220	66
WHB140	40A 250V ~ Single pole surface switch	16A M220	66
WHB220	20A 440V ~ Double pole surface switch	16A M180	66
WHB240	40A 440V ~ Double pole surface switch	16A M180	66
WHB320	20A 440V ~ Triple pole surface switch	16A M180	66
WHB340	40A 440V ~ Triple pole surface switch 16A M180		66
WHB355	55A 440V ~ Triple pole surface switch Terminals accommodate 25mm² cable		66
WHB355/32	55A 440V ~ Triple pole surface switch (2x32mm conduit) Terminals accommodate 25mm² cable	ce switch 2mm conduit) 20A M160 inals accommodate	
WHB420	20A 500V ~ Four pole surface switch Terminals accommodate 10mm² cable		66
WHB440	40A 500V ~ Four pole surface switch Terminals accommodate 10mm² cable		66

Terminals accommodate 16mm² cable unless noted otherwise.

Cat No.	Description	AC23/M Rating	IP Rating
WHC363	63A 415V ~ Triple pole surface switch	40A M330	66
WHC363/40	63A 415V ~ Triple pole surface switch (2x40mm conduit)	40A M330	66
WHC380	80A 415V ~ Triple pole surface switch	55A M330	66
WHC463	63A 415V ~ Four pole surface switch	40A M330	66
WHC463/40	63A 415V ~ Four pole surface switch (2x40mm conduit)	40A M330	66
WHC480	80A 415V ~ Four pole surface switch	55A M330	66

Terminals accommodate 25mm² cable.



SWITCHED SOCKETS WEATHERSHIELD®

Designed to complement the Clipsal range of Weathershield® Switches, these sockets are ideal 'all weather' units.

Surface Switched Sockets

Both Single and Twin Gang Outlet models are available. An extra switch variation is also available in the Twin Outlet model. The single and double unit features an all-in-one switch socket mechanism that eliminates the usual forest of wires looping the socket. There are ample entries in the base and this base is common with WSC227/2 switched sockets. Four 25mm plain, and one 25mm screwed entry as well as two 25mm rear entry cut outs and one 25mm push out for back wiring.

Plugs, fixing screw caps and caps for cover mounting screws are provided. Screw caps must be in place to ensure maximum IP Rating. All outer mouldings are impact resistant. Overall dimensions fully assembled are 115mm x 85mm. Height from wall is 80mm. Outlet terminals accommodate 3 x 2.5mm² cables. Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified to AS/NZS 3112. Mines and Energy South Australia Approval S/1. Available in chemically resistant Grey, White, Cream or Terracotta.

New Co-injection sealing, Chemical Resistant.

Cat No.	Description	IP Rating
WSC227/1	10A 250V ~ Surface Mounting Single Switched Socket	53
WSC227/1/15	15A 250V ~ Surface Mounting Single Switched socket	53
WSC227/2	10A 250V ~ Surface Mounting Twin Switched Socket	53
WSC227/2/15	15A 250V ~ Surface Mounting Twin Switched Socket	53
WSC227/2X	10A 250V ~ Surface Mounting with extra switch Twin Switched Socket	53
WSC227/2X15	15A 250V ~ Surface Mounting with extra switch Twin Switched Socket	53
WSF226SMA	Adapter fits new Weathershield to existing standard base	
WSF226E2	Two gang box to suit 84mm centre covers	

For neon version use field fitted WNK (Weatherproof Neon Kit) Terminals accommodate 3 x 2.5mm² cables.



Surface Switched Sockets with IP54 Flap

For applications near the sea or areas where environment becomes aggressive, Clipsal offers an IP54 flap for use with the above socket outlet.

Cat No.	Description	IP Rating
WSC227F1	10A 250V ~ Surface Mounting Single Switched Socket with flap	54
WSC227F1/15	15A 250V ~ Surface Mounting Single Switched Socket with flap	54
WSC227F2	10A 250V ~ Surface Mounting Twin Switched Socket with flap	54
WSC227F2/15	15A 250V ~ Surface Mounting Twin Switched Socket with flap	54
WSC227F2X	10A 250V ~ Surface Mounting Twin Switched Socket with extra switch & flap	54

For neon version use field fitted WNK (Weatherproof Neon Kit) Terminals accommodate 3 x 2.5mm² cables.



Packed Full of Features



New integral base with inline terminals

- Co-injection sealing
- No more forest of loop wires between sockets
- Big 3 x 2.5mm² inline terminals for easy wiring

FLUSH SWITCHED SOCKETS WEATHERSHIELD®

Flush Mounted Switched Sockets

The surface range of switched sockets is also available in flush mounting. These models have a shallow mounting box for back wiring and a mechanism shroud for mounting directly onto mounting accessories such as brackets and wall boxes. Fixing screw caps and caps to cover mounting screws are provided. Screw caps must be in place to ensure maximum IP Rating. Overall dimensions fully assembled with shallow mounting box is 115 x 82 x 55mm, without mounting box 115 x 82 x 47mm.

Products are Authority approved and comply with AS 60529 'Degrees of Protection' and all relevant tests specified to AS/NZS 3112 Mines and Energy South Australia Approval S/1. Available in chemically resistant Grey, White, Cream and Terracotta.

Cat No.	Cat No. Description	
WSCF227/1	10A 250V ~ Surface Mounting Single Switched Socket	53
WSCF227/1/15	15A 250V ~ Surface Mounting Single Switched Socket	53
WSCF227/2	10A 250V ~ Surface Mounting Twin Switched Socket	53
WSCF227/2/15	15A 250V ~ Surface Mounting Twin Switched Socket	53
WSCF227/2X	10A 250V ~ Surface Mounting Twin Switched Socket with extra switch	53

For neon version use field fitted WNK (Weatherproof Neon Kit) Terminals accommodate 3 x 2.5mm² cables.

Compact Single Switched Socket

Clipsal also offers the most compact weatherproofswitched outlet, small enough to mount onto 75mm² columns. The design includes a clear spring-loaded flap to ensure IP54 Rating when not in use. The surface mounted version has a mounting box with 3 x 25mm plain entries (plugs fitted) and a 25mm cut out in the base for back wiring. Overall dimensions 65 x 78 x 87mm. Overall dimensions flush 65 x 78 x 54mm. Terminals accommodate 4 x 2.5mm² cables. Fixing screw caps and caps to cover mounting screws are provided. Screw caps must be in place to ensure maximum IP Rating. Mines and Energy South Australia Approval S/1. Available in Grey, White or Brown.

Cat No.	Description	IP Rating
WSC228	10A 250V ~ Surface Mounted Single Switched Socket	54
WSCF228	10A 250V ~ Flush Mounted Single Switched Socket	54



Surface Switched Sockets with IP54 Flap

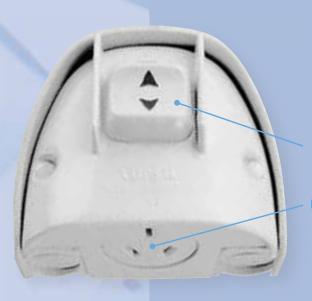
For applications near the sea or areas where environment becomes aggressive, Clipsal offers an IP54 spring-loaded flap for use with the above socket outlet.

Cat No.	Description	IP Rating
WSCF227F/1	10A 250V ~ Surface Mounting Single Switched Socket with flap	54
WSCF227F/2	10A 250V ~ Surface Mounting Twin Switched Socket with flap	54

For neon version use field fitted WNK (Weatherproof Neon Kit)

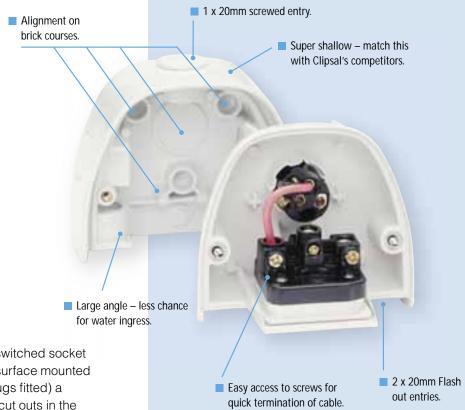


WEATHERPROTECTED WSC227



- Robust and protective switch mechanisms.
- Backwards mounting keyway suits transformers and accessories.

Packed full of features!



Surface Mounted Switched Socket

The most time proven weatherproof switched socket is the original Clipsal WSC227. This surface mounted outlet has 4 x 20mm plain entries (plugs fitted) a threaded 20mm entry at the top and cut outs in the base for back wiring. Overall dimensions 102 x 85 x 65mm. Terminals accommodate 3 x 2.5mm² cables. Fixing screw caps and caps to cover mounting screws are provided. Screw caps must be in place to ensure maximum IP Rating. Mines and Energy South Australia Approval S/1. Available in Grey, White or Brown.

Cat No.	Description	IP Rating
WSC227	10A 250V ~ Single Switched Socket	53
WSC227D	10A 250V ~ Single Double Pole Switched Socket	53
WSC227/15	15A 250V ~ Single Switched Socket	53



MOUNTING ENCLOSURES

The 255 Weatherproof Mounting Enclosure Boxes convert standard range flush switches and switch sockets into Weatherprotected equivalents for permanent exterior use. Clipsal 255 Series moulded boxes are all insulated and do not require earthing. A clear impact resistant padlockable flap is provided to prevent unauthorised use of the enclosed accessory. Boxes can be surface mounted or semi-recessed. A special rigid P.V.C. surround (255Z) is available for use where boxes are semi-recessed into finished brickwork. Installation of the 255 Series can be completed by back wiring and surface wired through 20mm and 25mm screwed conduit entries in the top or bottom of box. Back wire through rear entry cutouts. Spare insulated plugs are provided with each box to seal entries not in use. Washers are supplied in both entries to ensure perfect sealing. The Catalogue Number 225 provides similar protection to architrave outlets and intermediate switch plates. Mines and Energy South Australia Approval S/1. Standard colours are Grey & White.

225	Rigid P.V.C. Weatherprotected Shroud. Suits Clipsal 16 Switched Socket and No.s 31BA and 32BA Switches. Also suits Flush Plates up to 99 x 49mm with either 55mm or 78mm mounting centres	
255	Rigid P.V.C. Weatherprotected Enclosure with clear flap. Suits Flush Plates 115 x 73mm with 84mm mounting centres	
Rigid P.V.C. Enclosure Surround for recessing bo brickwork. Overall size 150 x 107mm		
223H	Rigid Weatherprotected Shroud suits Standard Range and 2000 Series	

CARAVAN INLET AND OUTLET RANGE

The new inlet and outlet range comes with an IP34 rating and is available in the standard colours white and black. Overall dimension is 101 x 80 x 38mm.

Cat. No.	Description	IP Rating
435VFS15	250V 15A Caravan Inlet	34
415VF15	250V 15A Caravan Outlet	34
415VF	250V 10A Caravan Outlet	34
435VFSM Mounting Flange		NA
435VFS15FLAP	Flap to suit 435VFS15	NA
415VFFLAP	Flap to suit 415VF	NA

ADAPTABLE ENCLOSURES

These adaptable enclosures have an International Protection Rating of IP56 when suitable silicon sealant is used. (Acid Cure Silicon Sealants recommended). Supplied complete with P.V.C. mounting panel incorporating earth terminal. Standard colour Grey. For details of Industrial adaptable enclosures see the '56 Series Industrial Range Technical Manual'.

	Adaptable Enclosure with rigid P.V.C. Box. Deep transparent cover and sealing gasket		
763	Overall dimensions	108 x 108 x 139mm	
	Internal dimensions	92 x 92 x 117mm	
	Adaptable Enclosure with rigid P.V.C. Box. Deep transparent cover and sealing gasket		
764	Overall dimensions	163 x 108 x 142mm	
	Internal dimensions	142 x 92 x 122mm	
	Adaptable Enclosure with rigid P. Deep transparent cover and seali		
765	Overall dimensions	211 x 108 x 139mm	
	Internal dimensions	195 x 92 x 117mm	

RIGID P.V.C. ADAPTABLE BOXES

These adaptable boxes are rated IP56 when suitable silicon sealant is used. (Acid Cure Silicon Sealants recommended). Standard colour Grey.

Cat. No.	Overall Dimensions mm		
Cat. NO.	Length	Width	Height
265/1	77	77	54
265/3	108	108	76
265/4	163	108	81
265/5	211	108	81
265/7	300	200	152
265/7D	300	200	200
265/7D,TR	300	200	200
763	108	108	139
764	163	108	142
765	211	108	139

265/1	Rigid P.V.C. Adaptable Box. Supplied with sealing gasket	Internal dimensions 70 x 70 x 43mm
265/3	Rigid P.V.C. Adaptable Box. Supplied with sealing gasket	Internal dimensions 96 x 96 x 64mm
265/4	Rigid P.V.C. Adaptable Box. Supplied with sealing gasket	Internal dimensions 140 x 95 x 68mm
265/5	Rigid P.V.C. Adaptable Box. Supplied with sealing gasket	Internal dimensions 196 x 95 x 68mm
265/7	Rigid P.V.C. Adaptable Box. Supplied with sealing gasket	Internal dimensions 276 x 176 x 133mm
265/7,TR	Rigid P.V.C. Adaptable Box with clear lid. Supplied with sealing gasket.	Internal dimensions 276 x 176 x 133mm
265/7D	Deep rigid P.V.C. Adaptable Box with sealing gasket	Internal dimensions 276 x 176 x 183mm

265GT1	Sealing Gasket. Suits 265/1 Box.	77 x 77 x 3mm
265GT3	Sealing Gasket. Suits 265/3 and 763 Boxes.	108 x 108 x 3mm
265GT4	Sealing Gasket. Suits 265/4 and 764 Boxes.	163 x 108 x 3mm
265GT5	Sealing Gasket. Suits 265/5, 252/63 and 765 Boxes.	211 x 108 x 3mm
265GT7	Sealing Gasket. Suits 265/7 and 265/7D Boxes.	300 x 200 x 3mm

TIME DELAY SWITCH

The 319HP fits all 84mm centre mounting accessories. Standard operation N.O. (N.C. also available). This product is primarily designed for settings up to 10 minutes, but with care, longer delays of up to 20 minutes may be attainable. The factory setting is approximately 2 minutes.

This time switch operates on the air bleed principle and therefore it is not possible to calibrate it too exactingly. The timing will vary slightly with manufacturing tolerances, air temperatures, relative humidity, and barometric pressure.

It is ideal for timed operation of lighting, fans etc., from switch points exposed to the elements. A sturdy neoprene boot protects the timer mechanism and a gasket is included to seal between the flushplate and mounting surface.



Cat. No.	Description	IP Rating
319HP	10A 250V standard pattern flush mounting time 65 delay switch M Rating 40 Base Projection - 32mm Terminal Detail - 1 way plus looping terminal Terminal Bore - 3.7mm Maximum Cables - 2 x 2.5mm ²	IP65

PLUG & SOCKET SETS WITH COUPLING

Extension cable disconnections can be annoying and hazardous. Clipsal threaded couplings prevent separation by locking the plug and socket firmly in place. They also keep Clipsal 439 and 438 Series Plug and Socket Connections weatherprotected. These couplings suit most Plug/Socket connections. Moulded in bright orange impact resistant transparent polycarbonate.

For further information refer to the Technical Catalogue 'Clipsal Plug Sockets and Adaptors'.

PLUG & SOC	KET SET COUPLINGS			437PSAS
Cat. No.	Diameter	Depth	437PSAS	-
437PSAS	66mm Ø	110mm		
437PS	64mm Ø	56mm		-
437PR	62mm Ø	33mm		437PR
437SR	66mm Ø	56mm	437PR	
437P	53mm Ø	38mm		All the last
437S	64mm Ø	40mm		
437PSAS		Cord Extension Socket & Plug, 250V, 10A, three insulated pins, with weatherprotected threaded coupling, unbreakable, recommended for 1mm ² ordinary duty three core flexible cord.		437SR
437PS		Plug & Socket Threaded Coupling Set, weatherprotected, male and female threads 2" B.S.P. (11 T.P.I.) (437PR & 437SR).		(Citation)
437PR	suits 439 Series, 437R Coupling Ring, Single	Plug Top Coupling Ring, weatherprotected, female threads 2" B.S.P (11 T.P.I.), suits 439 Series, 437R Coupling Ring, Single Phase 56SO310 Series sockets, 56C310 Series combinations and SS15 Series suspension switch sockets.		
437SR	Cord Extension Socket Coupling Ri B.S.P. (11 T.P.I.), suits 438 Series & 4			
437P	Plug Coupling Ring, weatherproted	ted, suits 437S socket coupling.		
437S	Cord Extension Socket Coupling Ri coupling only.	ng, weatherprotected, suits 437P plug		

IP66 RATED 2000 SERIES SWITCHES

For many years, the Clipsal 56 Series and Weatherprotected range have provided the industry standard for weatherproof electrical accessories.

Now Clipsal combines the stylish good looks of the 2000 and C2000 Series with the weatherprotected properties of the 56 Series to bring you a range of switches for domestic installations, including the restricted zones of kitchens, bathrooms, laundries and other wet areas.

A unique membrane between the switch dolly and the mechanism, together with a low profile neoprene gasket ensures a consistent IP66 rating when installed on a suitable surface.

These barriers ensure safety when the switches are used with wet hands or installed near sinks, basins, taps and showers in areas where space is limited such as en suites, laundries and bars.

Their hardwearing UV stabilised polycarbonate surface also makes them suitable for a wide range of outdoor areas, such as carports and pergolas. All models have a base projection of 17mm.

Note: Clipsal IP66 rated flush switches have been designed to achieve IP66 on a smooth, flat, non porous surface. Care should be taken when mounting to ensure that water cannot bypass the perimeter gasket and come in contact with live parts.

For more information, check the Clipsal IP66 Rated Switches brochure.



IP66 RATED WEATHERPROOF FLUSH SWITCHES							
Cat. No.	Le	ngth	Width	Depth	Mounting Centres		
All Products	11	6mm	76mm	30mm	84mm apart		11011
2031V66 C2031V66	А	1 Gang Weathe surround comp	1 Gang Weatherproof Switch, 250V/10A - standard size gridplate and surround complete with one 30M switch in vertical format with IP66 rating.			_	
2031H66 C2031H66	В		atherproof Switch, 250V/10A - standard size gridplate and surround with one 30M switch in horizontal format with IP66 rating.			B	
2032V66 C2032V66	С	2 Gang Weathe	erproof Switch, 250V/10A - standard size gridplate and surround two 30M switches in vertical format with IP66 rating.			6	0
2032H66 C2032H66	D	2 Gang Weathe complete with t	rproof Switch, 250V/ wo 30M switches in h	10A - standard size gr orizontal format with	idplate and surround IP66 rating.		

Note: images shown are 2000 Series

ISOLATING SWITCHES AQUASEAL

Clipsal's Aquaseal is a breakthrough in weatherproof isolator technology, it measures 162 x 82 x 65mm. It's the first product of its kind to feature an integral co-moulded sealing system that ensures IP66 protection is maintained and there are no gaskets to get lost or damaged. Match this with Clipsal's innovations in isolator switch design and you have the ideal product for every isolator application.

Aquaseal's modern design is neat and compact and the large actuator switch is easy to use with gloved hands. It also has a locking off facility.

Aquaseal CSS Series Isolators come in 20A, 32A and 40A ratings and are available in single, double, triple pole and four pole versions. Two 25mm threaded entries at the top and 2x20mm at the bottom enable easy conduit access, there are also 25mm cut-out guides at the back of the unit. Large 8mm diameter terminals and fixed looping terminals also make Aquaseal easy to install.

Features

- Captive Combination Head Screws for your choice of Screwdriver
- Self threading screws will not work into backbox during transit
- Large 10mm² Cable Conductor Terminals
- Steel plated terminal screws will never break
- Co-moulded sealing system so no gaskets will get lost or damaged
- Large padlocking capacity suit industry
 6mm padlock
- Back box comes complete with 2x20mm and 2x25mm. Simply rotate the back box to suit application
- Premium moulding materials, chemically resistant and UV stabilised (see your Clipsal representative for a detailed table)
- Also available in Neon version
- AS/NZS60947-3.





Base Mounted Switch

Cat No.	Description	M- Rating	AC21A	AC22A	AC23A
CSS420	Isolator 4P 20A 415V	M100	20	20	20
CSS432	Isolator 4P 32A 415V	M100	32	32	20
CSS440	Isolator 4P 40A 415V	M100	40	40	20

Cover Mounted Switch

Cat No.	Description	M-Rating
CSS120	Isolator 1P 20A 250V	M120
CSS132	Isolator 1P 32A 250V	M120
CSS140	Isolator 1P 40A 250V	M120
CSS220	Isolator 2P 20A 500V	M100
CSS232	Isolator 2P 32A 500V	M100
CSS240	Isolator 2P 40A 500V	M100
CSS320	Isolator 3P 20A 500V	M100
CSS332	Isolator 3P 32A 500V	M100
CSS340	Isolator 3P 40A 500V	M100



Colour range to suit most popular brick styles.



Chemical Resistant Grey

General All Rounder



Chemical Resistant White/Cream

For rendered and Cream textured brick walls



Chemical Resistant Terracotta

For red brick walls

Colour – Unlike switches and sockets installed on internal walls the Weathershield® product often is installed on external walls that are solid brick and do not change in the life of the building. Therefore rather than install White product Clipsal offers more colours than any other supplier to suit the different applications.

Cream and White for rendered Walls and the most common brick selections today.

Terracotta for the dark reds common today but also in the previous decades.

INTERNATIONAL PROTECTION RATINGS

PROTECTION AGAINST SOLIDS

	TEST	PROTECTION
	.20.	
x	No test applied	No specific protection
0	No test applied	Inherent degree of protection
1		Protected against solid objects equal to or greater than 50mm diameter. (eg. accidental contact with hand)
2		Protected against solid objects equal to or greater than 12.5mm diameter. (eg. contact with finger)
3		Protected against solid objects equal to or greater than 2.5mm diameter. (eg. tools and wires)
4		Protected against solid objects equal to or greater than 1mm diameter. (eg. fine tools and wires)
5	0	Protected against quantities of dust that could intefere with satisfactory operation.
6		Completely protected against dust.

Defined by IEC 60529 DIN 40050 CEI 70-1

To Australian standards AS 60529-2004 Degrees of protection provided by enclosures. (IP Code)

PROTECTION AGAINST LIQUIDS

	TEST	PROTECTION
x	No test applied	No specific protection
0	No test applied	Inherent degree of protection
1	•	Protected against drops of water falling vertically.
2		Protected against drops of water falling at up to 15 degrees from the vertical.
3		Protected against spraying water at up to 60 degrees from the vertical.
4		Protected against splashing water from all directions.
5	52232	Protected against jets of water from all directions.
6		Protected against jets of water of similar force to heavy seas.
7		Protected against the effects of temporary immersion.
8		Protected against the effects of continuous immersion.

Defined by IEC 60529

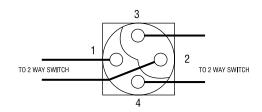
PROTECTION AGAINST IMPACT

	TEST	PROTECTION
x	No test applied	No specific protection
1	150g † 15cm	Resistant to impacts of weight up to 150g falling from 15cm.
3	250g † 20cm	Resistant to impacts of weight up to 250g falling from 20cm.
5	500g † 40cm	Resistant to impacts of weight up to 500g falling from 40cm.
7	1.5kg †40cm	Resistant to impacts of weight up to 1.5kg falling from 40cm.
9	5kg	Resistant to impacts of weight up to 5kg falling from 40cm.

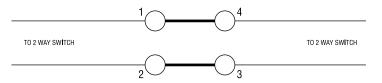
Defined by UTE 20010

SCHEMATIC WIRING DIAGRAMS

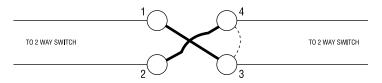
Intermediate Mechanism



Position 1 (Up)

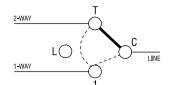


Position 2 (Down)

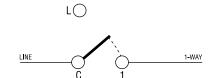


One-Way/Two-Way Mechanisms

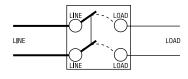


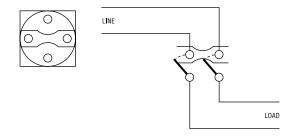






Double Pole Mechanisms





MOUNTING ACCESSORIES CROSS REFERENCE CHART

WSF226 WSCF227/2 Comes complete with standard WSF226/2 WSCF227/2X mounting shroud and suits the WSF226/3 WSCF227/2/15 below mounting accessories. WSCF227/1 WSCF227F1 Two other shrouds are available: WSCF227/1/15 WSCF227F2 WSF226 shroud and 90BI shroud.

Note: 'NO' indicates not suitable

-L 2S	Cat. No.	Standard Shroud	WSF226 Shroud	90BI Shroud
WALL CLIPS	154	YES	YES	YES
	154RM	YES	YES	YES
ETS S	155PRM	YES	YES	NO
ACK ATE	155P	YES	YES	NO
WALL BRACKETS & PLATES	155	YES	YES	YES
WAI	155NA	YES	YES	YES
	157/1P	YES	YES	YES
	257	YES		
	257D	YES		
WALL BOXES	157	YES	YES	NO
L BC	157/1	YES	YES	NO
NAL	157/1X	YES	YES	NO
	160	YES	YES	NO
	164	YES	YES	NO
	164/1	YES	YES	NO



Product of Clipsal Australia Pty Ltd

ABN 27 007 873 529

Head Office

12 Park Terrace, Bowden South Australia 5007 Telephone (08) 8269 0511 Facsimile (08) 8340 1724 Internet clipsal.com E-Mail plugin@clipsal.com.au

National Customer Service Enquiries:

1300 2025 25

National Customer Service Facsimile:

1300 2025 56

Area Representatives

NSW	Albury	(02) 6051 2377
	Central	0418 430 361
	Coffs Harbour	0418 653 183
	Dubbo	0418 822 564
	Newcastle	0407 298 792
		0418 434 169
		0418 686 040
	Tamworth	0417 714 339
	Wagga Wagga	0418 578 903
	Wollongong	0418 423 581
ACT	Canberra	0419 238 824
		0418 164 070
VIC	Bendigo	0418 570 213
	Ballarat	0418 336 291
	Mornington Peninsula	0407 795 291
	Geelong	0418 527 233
	Gippsland	0418 512 680
	Western Victoria	0419 380 444
QLD	Cairns	0418 773 254
	Mackay	0418 752 134
	Maryborough	0418 664 338
	Northern Rivers	0418 768 902
	Rockhampton	0419 869 752
	Sunshine Coast	0418 711 786
	Toowoomba	0418 726 394
	Townsville	0418 180 372
WA	Bunbury	0418 931 684
	Kalgoorlie &	0417 928 981
	Eastern Gold Fields	
	Karratha	0418 937 249
SA	Riverland/Mildura/	
	Broken Hill	0418 596 145
NT	Darwin	0417 454 411

0400 979 340

International Enquiries

International Sales and Marketing

Telephone + 61 8 8269 0587 Facsimile + 61 8 8340 7350 E-Mail export@clipsal.com.au

New Zealand

Clipsal Industries (NZ) Ltd Telephone (09) 576 3403

Facsimile (09) 576 1015 E-Mail headoffice@clipsal.co.nz

Customer Service

Free Fax (0508) 250 305 Auckland/Mobile Phone (09) 572 0014 Free Phone (0508) CLIPSAL 2547725

You can find this brochure and many others online in PDF format at: **clipsal.com**

Follow the links off the home page or access the following page directly: clipsal.com/wat_lib_pdf.cfm

clipsal.com

Double switched outlet Reg. Design No. 308728

Clipsal Australia Pty Ltd reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

©Copyright Clipsal Australia Pty Ltd 2006. All rights reserved.

This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Clipsal Australia Pty Ltd.

TAS