

## HIGH INTEGRITY EARTHING - BS 7671: 1992 Regulation 607-02

'High Integrity Earthing' is a method of making doubly sure that protection against electric shock is adequate when operating stationary equipment known to have 'High Earth Leakage' currents. Usually the need for extra protective measures arises when several such items are installed on a given circuit and the combined leakage becomes high. It is unlikely that the normal household will need this extra requirement.

The wiring regulations for buildings (British standard BS 7671: - 1992) regulation 607 states that no special earthing arrangements are necessary unless the leakage current of a single item exceeds 3.5 mAmps or where a number of items have a combined leakage of more than 10 mAmps. It must also be recognised that high earth leakages (in excess of 3.5 mAmps) will cause an RCD to operate.

The regulations allow a single item of equipment with a known leakage exceeding 3.5 mAmps to be

permanently connected to the fixed wiring. Alternatively it must be connected by an industrial plug and socket (BS EN 60309). Where it is greater than 10 mAmps, it may be connected by a plug and socket to BS EN 60309 provided that a further separate protective conductor of not less than 4mm<sup>2</sup> is connected to the fixed wiring. (See regulation 607-02-05).

Where several pieces of equipment are to be used and the combined earth leakage will be in excess of 10 mAmps, there are various means of achieving adequate protection.

Regulation 607-02-06 allows for a dedicated ring circuit supplying a number of socket outlets, there shall be no spurs and the supply ends of the 1.5 mm<sup>2</sup> minimum protective conductors must be separately connected to the distribution board. Alternatively any of the arrangements of regulation 607-02-07 may be applied.

Regulation 607-02-07 requires that a single item of stationary equipment with an earth leakage current in excess of 10 mAmps. (i) Shall be provided with a single protective conductor of not less than 10mm<sup>2</sup> cross sectional area. (ii) Separate duplicated protective conductors of not less than 4mm<sup>2</sup> and having independent connections. (iii) Duplicate protective conductors of not less than 10 mm<sup>2</sup> incorporated in a multi core cable. (iv) Duplicate protective conductors formed by the metal conduit or the like and by a conductor of 2.5 mm<sup>2</sup> cross sectional area installed within the conduit and connected in parallel with it. (v) An earth monitoring device (vi) Connection of the equipment to the supply by a double wound transformer or other unit. The protective conductor(s) between the equipment and the transformer shall comply with one of the arrangements as described in (i) to (iv) above.

## CLEAN EARTHING ARRANGEMENTS

Modern 'IT' equipment which incorporates delicate electronics are increasingly affected by electromagnetic interference (noise on the mains).

Whilst strict limitations are placed on equipment to minimise this electromagnetic interference there are many other causes of noise, such as switching, capacitance, filters and voltage spikes, even the information technology equipment itself affects other business machines on the same circuit.

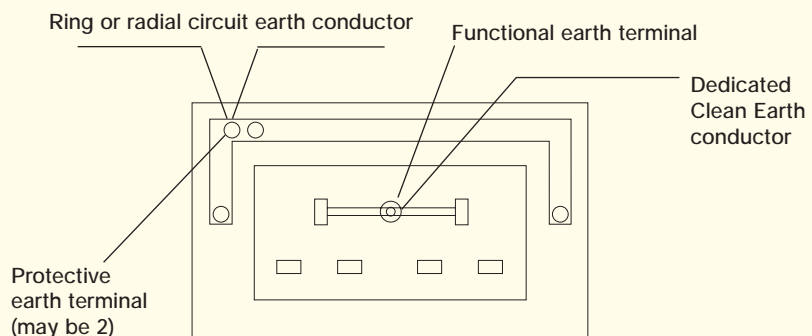
The regulations for electrical installations (BS 7671:-1992) require that electrical equipment does not cause harmful effect to other equipment, therefore under regulation 607-02-01, the use of a 'low noise' earth (CLEAN EARTH) is specified. Within the regulations where a clean earth is provided it must be arranged so that it is suitable for functional purposes and that protective earthing is strictly maintained. This can only be achieved with the installation of a dedicated 'clean

earth socket-outlet' where provision is made for the connection of an additional separate functional earthing conductor of equal cross-sectional area to that of the ring or radial protective conductors, this functional earthing conductor must also be connected to the earthing terminal at the consumer unit.

For the householder with problems of electrical equipment malfunction the

installation of a dedicated CLEAN EARTH supply is usually all that is required. For the installer where a number of items of electrical equipment are being catered for, a clean earth and reference to regulation 607-05-01 requires that exposed metal work of such equipment must also be earthed.

The following sketch explains the above requirements.

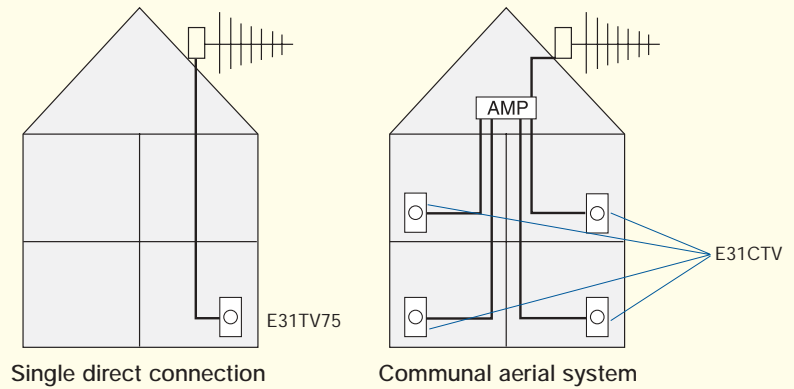


Back of socket-outlet

NOTE: It is of utmost importance that the correct circuit is connected to the appropriate socket-outlet terminal.

## CO-AXIAL SOCKET OUTLET

Non isolated products are intended for direct connection to a single or two separate TV/FM aerial co-axial down leads. These devices must NOT be used in a multi-outlet aerial distribution system. Isolated products E31CTV & E2031CTV are intended for such use and provide the necessary safety isolation, rated at 2000V.a.c. against a fault occurring within any mains powered device used elsewhere within the system.

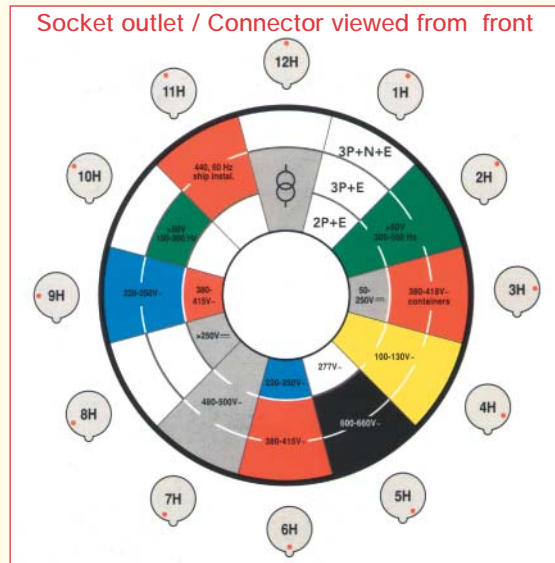


## BS EN 60309 - CLOCK DIAGRAM

Earth contact position (h)

For all the products except extra low voltage i.e. all colour codes except white and violet the position given is that of the earth pin when the socket outlet/connector is viewed from the front with the keyway at the bottom.

**Important Note:** When viewing a plug from the front, the position of the earth pin is reversed i.e. 4h (4 o'clock) appears as 8h (8 o'clock).



**Key**

- Supply from an isolating transformer
- a.c.
- d.c.

## E31ETR - ADJUSTABLE ELECTRONIC TIMERS

### Operation

The timer turns the load ON when the push button is initially pressed once. At the same time the dual colour LED shows green to indicate the timer is in operation. This situation remains until the preset time delay has elapsed, at which time the load turns OFF automatically and the LED changes to red to indicate the timer is now in the standby state. The red standby LED also assists the user to operate the timer in the dark.

If the push button is pressed once more before the time delay has completely elapsed, the timer will reset and again go into standby state. In other words, the timer also works like an ON-OFF switch when the push button is successively operated.

There are two models available:  
 E31ETR60 - 1 - 60 minutes  
 E31ETR720 - 1 - 12 hours

### Moveable Link Arrangement Details

To achieve different time ranges, rearrange the links as shown below.

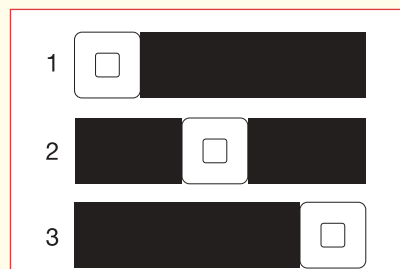
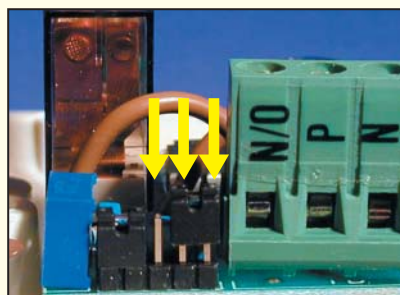
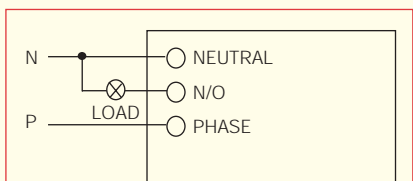
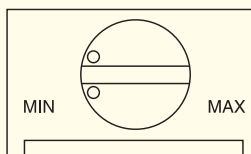


Figure	E31ETR60	E31ETR720
1	1-5 minutes	1-3 hours
2	4-20 minutes	2-6 hours
3	15-60 minutes	4-12 hours

### Trim Pot Adjustment Details

The time delay is adjusted from the minimum to the maximum in the clockwise direction.



Wiring Diagram

## INFASCAN - PASSIVE INFRARED SENSORS (PIR)

Clipsal Infrascans are motion sensors that provide automatic light switching for convenience and security.

Another important benefit of Infrascans is the significant energy savings they offer by automatically switching the load off when no one is occupying the detection area.

Clipsal Infrascans use passive infrared (PIR) detectors to pick up body movement to turn on lighting for a preset period. They do this by sensing the infrared (IR) energy that is naturally radiated by any object.

Clipsal Infrascans detect the band of IR energy that is produced by objects that are about skin temperature (approx. 30°C) passing through the detection zones.

Infrascans can be adjusted to turn a load on at preset light levels, from complete darkness to full sunlight. Therefore lights are only turned on when needed.

### 751 Series (Internal)

Clipsal 751 Series Infrascans feature a lensless design with 12 overlapping zones forming a continuous detection field.

This means that uniform sensitivity is achieved across the whole of the detection field with no dead zones (areas that the Infrscan is insensitive to movement). This feature allows wall or ceiling mounting of the 751 Series.

### 750WP Series (External)

Clipsal 750WP Series Infrascans feature a multi-segmented Fresnel lens with 48 detection zones.

The lens provides optical gain for achieving excellent long

range performance.

Detection zones are located on four levels. These provide superior close range detection coverage and a relatively high level of sensitivity to movement directly towards or away from the Infrscan.

### Sensor Features

Clipsal Infrascans incorporate the following features as standard.

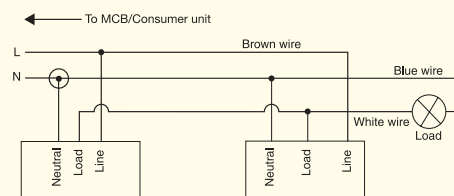
1. An electrostatic and electromagnetic shield around the sensor elements that reduces false tripping from radio frequency interference (RFI).
2. High performance pyroelectric ceramic sensors with excellent signal to noise ratio (751 Series only).
3. An optical bandpass filter that minimises unwanted light and heat sources triggering the circuitry.
4. Dual element detectors that minimise false tripping due to rapid environmental temperature changes.

## E750WPR Full Technical Specification

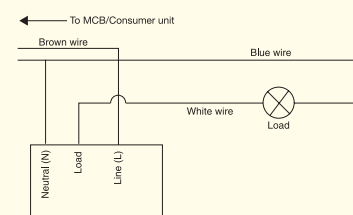
Catalogue Numbers	E750WPR GY
Input Voltage	200-265 V a.c. 50Hz
Maximum Load Current	10 AX
Detection Method	Passive infrared detection of thermal radiation
Compatible Lighting	Incandescent or fluorescent
Time Delay	5 secs to 8 mins (nominal), infinitely variable within this range
Ambient Light Level Adjustment	From full daylight to below 1 lux
Detection Area	18m x 110'
Number of Detection Zones	18 Long range 16 Intermediate range 10 Short range 4 Ultra short range
Installation Height	2.4m Optimum height
Operating Temperature	0°C to 50°C
Standard Colour	GY - Grey

### Note:

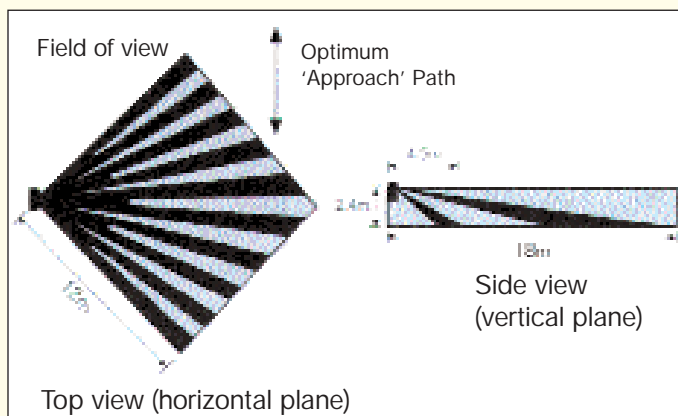
This is a typical specification. There may be noticeable differences in the range due to differing conditions such as ambient temperature, speed of movement and type of clothing worn.



Multiple PIR sensors controlling load(s)



Single PIR sensor controlling load(s)

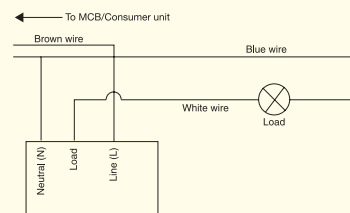


### E751R Full Technical Specification

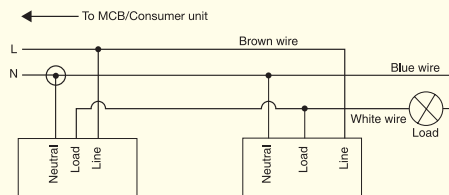
Catalogue Number	E751R WE
Input Voltage	192-264V a.c. 50Hz
Maximum Load Current	10 AX
Detection Method	Passive infrared detection of thermal radiation
Compatible Lighting	Incandescent or fluorescent
Time Delay	5 secs to 20mins (nominal), infinitely variable within this range
Ambient Light Level Adjustment	From full daylight to below 1 lux
Detection Area	6m x 6m, 90° from sensor head. Sensor head rotatable 120° when installed
Installation Height	2.4m optimum mounting height. Unit may be wall or ceiling mounted. Other installation heights may result in decreased scanning areas.
Operating Temperature	0°C to 40°C
Overall Dimensions	108mm diameter by 70mm high
Mounting Centres	60.3, 84 and 50mm
Standard Colour	WE- white electric
Terminals	Line, load, neutral, loop Accepts 3 x 2.5mm <sup>2</sup> cable

**Note:**

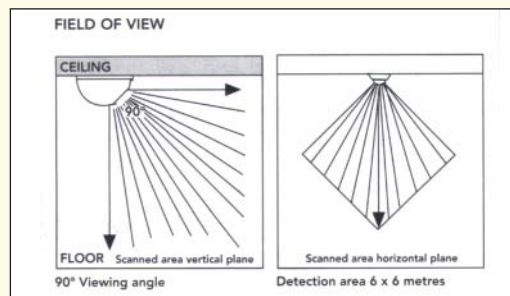
This is a typical specification. There may be noticeable differences in the range due to differing conditions such as ambient temperature, speed of movement and type of clothing worn.



**Single PIR sensor controlling load(s)**



**Multiple PIR sensors controlling load(s)**

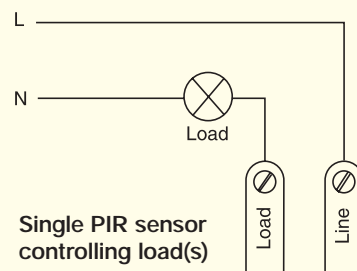


### E751 Full Technical Specification

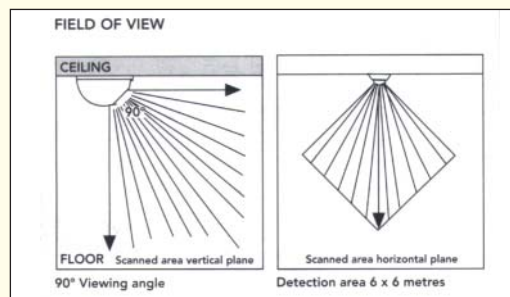
Catalogue Number	E751 WE
Input voltage	192-264V a.c. 50Hz
Maximum Load Current	2AX
Minimum Load Current	20mA
Detection Method	Passive infrared detection of thermal radiation
Compatible Lighting	Incandescent or fluorescent
Time Delay	5 secs to 20mins (nominal), infinitely variable within this range
Ambient Light Level Adjustment	From full daylight to below 1 lux
Detection Area	6m x 6m, 90° from sensor head. Sensor head rotatable 120° when installed
Installation Height	2.4m optimum mounting height. Unit may be wall or ceiling mounted. Other installation heights may result in decreased scanning areas.
Leakage Current in the OFF State	2.0mA (max) @ 25°C
Operating Temperature Range	0°C to 40°C
Overall Dimensions	108mm diameter by 70mm high
Mounting Centres	60.3, 84 and 50mm
Standard Colour	WE- white electric
Terminals	Line, load, 2 x loop Accepts 3 x 2.5mm <sup>2</sup> cable

**Note:**

This is a typical specification. There may be noticeable differences in the range due to differing conditions such as ambient temperature, speed of movement and type of clothing worn.



**Single PIR sensor controlling load(s)**



## 56 & WEATHERPROOF CHEMICAL RESISTANCE

It is well documented that Clipsal's standard grey (GY) products are ideal for most applications, however, for those environments where harsh chemicals are

used which require special properties, Clipsal offers a chemical resistant orange (RO) range as an option.

### CHEMICAL COMPARISONS

Product type (colour)	All mounting enclosures (i.e. Back boxes)	Grey Transparent Covers & plugs	Resistant Orange (RO) Covers & plugs
<b>ACIDS</b>			
<b>Weak Solutions</b>			
Hydrochloric 10%	A	A	A
Nitric 10%	A	A	A
<b>Concentrate</b>			
Sulphuric 100%	A	C	C
<b>Alkalis</b>			
<b>Weak Solutions</b>			
Sodium Hydroxide 10% (Caustic Soda)	A	C	B
<b>Concentrate</b>			
Potassium Hydroxide 100%	A-B	C	C
<b>AUTOMOTIVE</b>			
Petroleum	A	C	A
Lubricating Oils		C	A
Hydraulic oil		C	A
<b>SOLVENTS</b>			
<b>Aliphatic Hydrocarbons (Alkanes)</b>			
Methane	B	A	A
Propane	A	A	A
<b>Alcohols</b>			
Ethylene Glycol	A	A	A
Glycol (Glycerin)	A	C	B
Methyl Alcohol (Methanol)	A	C	B
Ethyl Alcohol (Ethanol)	A	A	A
<b>Amines</b>			
Aniline	C	C	C
<b>Aromatic Hydrocarbons</b>			
Methyl Benzene	C	C	B
Xylene	C	C	B
<b>Ethers</b>			
Dimethyl Ethyl	A	A	A
<b>Ketones</b>			
Acetone	A	C	C
Acetophenone	C	C	C
Ethyl Methyl Ketone	C	C	C
<b>MISCELLANEOUS</b>			
Detergent	A	A	A
<b>Inorganic salts</b>			
Magnesium Sulphate	A	A	A
<b>Oxidising Agents</b>			
<b>Weak Solution</b>			
Sodium Hydrochlorite 5%	A	A	A
<b>Strong Solution</b>			
Hydrogen Peroxide 30%	A	A	A
<b>Water</b>			
Ambient	A	A	A
Hot > 60°C	C	A	B
Steam	C	C	C

#### Key

A:- Recommended - No Adverse effects after extended exposure

B:- Good - Minimal loss of mechanical properties after long periods of exposure

C:- Not Recommended - Not recommended for use

#### Note:















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

## INTERNATIONAL PROTECTION (IP) RATINGS - BS EN 60529

The vast majority of the products shown in this catalogue carry an IP (international protection rating). This notation signifies the suitability of the product for its intended application. The first digit gives the degree of protection against the ingress of solids (i.e. dust particles) and the second digit the degree of protection against the Ingress of liquids.

**Note:**

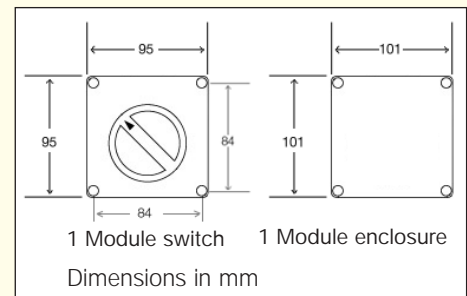
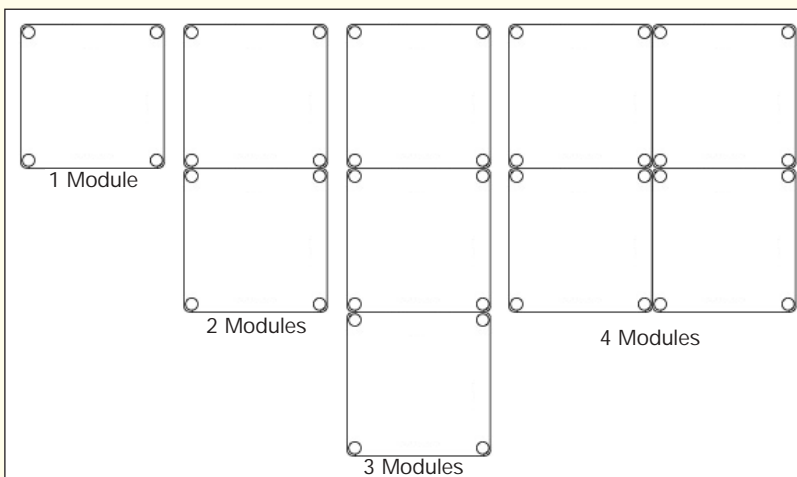
Use this table for guidance only, refer to BS EN 60529 for full information.

PROTECTION AGAINST SOLIDS			PROTECTION AGAINST LIQUIDS		
	TEST	PROTECTION		TEST	PROTECTION
X	No test applied.	No specific protection.	X	No test applied.	No specific protection.
0	No test applied.	Inherent degree of protection.	0	No test applied.	Inherent degree of protection.
1		Protected against solid objects larger than 50mm (eg. accidental contact with hand).	1		Protected against drops of water falling vertically.
2		Protected against solid objects larger than 12mm (eg. contact with finger).	2		Protected against drops of water falling at up to 15° from the vertical.
3		Protected against solid objects larger than 2.5mm (eg. tools and wires).	3		Protected against spraying water at up to 60° from the vertical.
4		Protected against solid objects larger than 1mm (eg. fine tools and wires).	4		Protected against splashing water from all directions.
5		Protected against quantities of dust that could interfere with satisfactory operation.	5		Protected against jets of water from all directions.
6		Completely protected against dust.	6		Protected against jets of water of similar force to heavy seas.
			7		Protected against the effects of immersion.
			8		Protected against the effects of submersion.

## 56 MODULAR SYSTEM

The 56 series has been specifically designed to 'mix & match' to suit the varied requirements of different applications.

Mounting boxes (enclosures) range in size from 1 gang to 4 gang as standard, 4 gang (vertical), 6,8,9 and 16 gangs available by special order. One 56 Module equals 1 gang.



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			E2000 SB	E2000 replacement frame	45
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E2031DFSGMS WE	Switched fuse connection unit	40			
E2031DFSGS WE	Switched fuse connection unit	40			
E2031DFSGN WE	Switched fuse connection unit	40			
E2031DNFSGS WE	Switched fuse connection unit	40			
E2031D20GEA WE	DP switch	40			
E2031D45N WE	45A DP cooker switch	40			
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30RJ88SMA5 WE	Communications-mechanism only	48	E31KT WE	DP keytag switch (key not supplied)	55
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30RJ88SMD WE	Communications-mechanism only	49	E32TV75 WE	TV socket outlet-coaxial	56
30RJ84SM WE	Communications-mechanism only	49	E32TV75FMS WE	TV/FM socket outlet	56
30RJ64SM WE	Communications-mechanism only	49	E31X WE	Blank plate	56
30RJ88SMA5SH WE	Communications-mechanism only	49	E31/2X WE	Blank plate	56
30N RD	Neon indicator-mechanism only	49	E449AS WE	Conversion pattress	56
30N AM	Neon indicator-mechanism only	49	EP2 WE	Round pin plug	56
30N GR	Neon indicator-mechanism only	49	EP5 WE	Round pin plug	56
30N BU	Neon indicator-mechanism only	49	EP15 WE	Round pin plug	56
30N TR	Neon indicator-mechanism only	49	EP13 TR	Plug	56
30TK-3 N/A	Key-spare for 30TKM	49	EP13 WE	Plug	56
31J N/A	Security screw-for mechanisms	49	E238SE WE	Surface mounting box (moulded)	56

## Electrical Accessories - E Series 50

E25/1 BP WE	"CONVERTA" single to double	51	E238/2 WE	Surface mounting dual box (moulded)	57
E25DF3/2BP WE	"CONVERTA" double to triple	51	70/1 WE	Architrave surface mounting box (moulded)	57
GEL4/2MEXL WE	Extension Lead	51	70/2 WE	Architrave surface mounting box (moulded)	57
E15 WE	Switched socket outlet	51	158	Architrave flush mounting box (metal)	57
E25 WE	Switched socket outlet	51	158/2	Architrave flush mounting box (metal)	57
E15D WE	DP switched socket outlet	51	E94 WE	BC batten lampholder T2 rated	57
E25D WE	DP switched socket outlet-high integrity	51	E93PS6 WE	Pendant set 6 T2 rated	57
E426 WE	Socket outlet-unswitched	51	E93PS9 WE	Pendant set 9 T2 rated	57
ET426 WE	Socket outlet-unswitched	51	E93 WE	Ceiling rose	57
E25SF WE	Socket outlet-surge/ filter	51	E501SS WE	BC pendant lampholder T2 rated	57
E25CESF WE	Socket outlet-surge/ filter with clean earth	51	E31 WE	Switchplate	58
E25X WE	Socket outlet + mechanism aperture	51	E32 WE	Switchplate	58
E426/2 WE	Socket outlet-unswitched	52	E33 WE	Switchplate	58
E426/5 WE	Socket outlet-unswitched	52	E34 WE	Switchplate	58
E426/15 WE	Socket outlet-unswitched	52	E35 WE	Switchplate	58
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E727 WE	Universal shaver supply unit (dual voltage)	52	E31WP WE	Switchplate (splashproof)	58
E30FSG WE	Fuse connection unit	52	31 WE	Switchplate (architrave)	58
E30FSGMS WE	Fuse connection unit	52	32 WE	Switchplate (architrave)	58
E30FSGS WE	Fuse connection unit	52			
E30NFSGS WE	Fuse connection unit	52			
E31DFSG WE	Switched fuse connection unit	52			
E31DFSGMS WE	Switched fuse connection unit	52			
E31DFSGS WE	Switched fuse connection unit	52			
E31DNFSG WE	Switched fuse connection unit	53			
E31DNFSGS WE	Switched fuse connection unit	53			
E31D20GE WE	DP switch	53			
E32D20NGE WE	DP switch	53			
ED45N WE	45A DP cooker switch	53			
ED45/13N WE	Cooker control unit	53			
E554 WE	Cooker connection unit	53			
E31TB WE	25A connection unit	53			
E31/1SA WE	Plateswitch	53			
E31/2SA WE	Plateswitch	53			
E32/2SA WE	Plateswitch	53			
E33/2SA WE	Plateswitch	53			
E34/2SA WE	Plateswitch	54			
E35/2SA WE	Plateswitch	54			
E31PD400 WE	Dimmer switch - push on/ off	54			
E32E400 WE	Dimmer switch soft start - rotary	54			
E31RD400 WE	Dimmer switch - rotary	54			
E32RD250 WE	Dimmer switch - rotary	54			
E31RD250LV WE	Dimmer switch - rotary	54			
E32RD160LV WE	Dimmer switch - rotary	54			
E31IA WE	Switch-intermediate	54			
E31BPA WE	Plateswitch-bell press	54			
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E1920/30MI WE	Switch-intermediate polished brass	61
E1920/30 BK	Switch polished brass	61
E1920/30MI BK	Switch-intermediate polished brass	61
E1920R30 WE	Switch polished brass	61
E1920R30MI WE	Switch-intermediate polished brass	61
E1920R30 BK	Switch polished brass	61
E1920R30MI BK	Switch-intermediate polished brass	61
E1920A30 WE	Switch antique brass	61
E1920A30MI WE	Switch-intermediate antique brass	61
E1920A30 BK	Switch antique brass	61
E1920A30MI BK	Switch-intermediate antique brass	61
E1920AR30 WE	Switch antique brass	62
E1920AR30MI WE	Switch-intermediate antique brass	62
E1920AR30 BK	Switch antique brass	62
E1920AR30MI BK	Switch-intermediate antique brass	62
E1920C30 WE	Switch chrome	62
E1920C30MI WE	Switch-intermediate chrome	62
E1920C30 BK	Switch chrome	62
E1920C30MI BK	Switch-intermediate chrome	62
E1920CR30 WE	Switch chrome	62
E1920CR30MI WE	Switch-intermediate chrome	62
E1920CR30 BK	Switch chrome	62
E1920CR30MI BK	Switch-intermediate chrome	62
E1920MBR1 PN	Mounting block pine	63
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TSC363	MCB 63A 6kA 3DIN mods 50/60Hz	73	WDT/30	Time clock digital	78
TSD101	MCB 1A 10kA 1DIN mod 50/60Hz	74	T16	Switch-stairway lighting	78
TSD102	MCB 2A 10kA 1DIN mod 50/60Hz	74	T16G	Switch-stairway lighting	79
TSD104	MCB 4A 10kA 1DIN mod 50/60Hz	74	RCD001	Plug-in RCD adaptor	79
TSD106	MCB 6A 10kA 1DIN mod 50/60Hz	74	A1	Adaptable box (round),press fit lid	79
TSD110	MCB 10A 10kA 1DIN mod 50/60Hz	74	A2	Adaptable box (round),press fit lid	79
TSD116	MCB 16A 10kA 1DIN mod 50/60Hz	74	A3	Adaptable box (square),press fit lid	79
TSD120	MCB 20A 10kA 1DIN mod 50/60Hz	74	AS1	Adaptable box, screw fit lid	79
TSD125	MCB 25A 10kA 1DIN mod 50/60Hz	74	AS2	Adaptable box, screw fit lid	79
TSD132	MCB 32A 10kA 1DIN mod 50/60Hz	74	AS15	Adaptable box, screw fit lid	79
TSD201	MCB 1A 10kA 2DIN mods 50/60Hz	74	AS25	Adaptable box, screw fit lid	79
TSD202	MCB 2A 10kA 2DIN mods 50/60Hz	74	AS35	Adaptable box, screw fit lid	79
TSD204	MCB 4A 10kA 2DIN mods 50/60Hz	74	AS45	Adaptable box, screw fit lid	79
TSD206	MCB 6A 10kA 2DIN mods 50/60Hz	74	AS55	Adaptable box, screw fit lid	79
TSD210	MCB 10A 10kA 2DIN mods 50/60Hz	74	TCF	Blanking plate, strip	80
TSD216	MCB 16A 10kA 2DIN mods 50/60Hz	74	M04	Terminal block	80
TSD220	MCB 20A 10kA 2DIN mods 50/60Hz	74	M08	Terminal block	80
TSD225	MCB 25A 10kA 2DIN mods 50/60Hz	74	M10	Terminal block	80
TSD232	MCB 32A 10kA 2DIN mods 50/60Hz	74	M12	Terminal block	80
TSD301	MCB 1A 10kA 3DIN mods 50/60Hz	74	M14	Terminal block	80
TSD302	MCB 2A 10kA 3DIN mods 50/60Hz	74	CTR3	Terminal block support to fit CT5G	80
TSD304	MCB 4A 10kA 3DIN mods 50/60Hz	74	CTR4	Terminal block support to fit CT8G-CT12G	80
TSD306	MCB 6A 10kA 3DIN mods 50/60Hz	74	CTR5	Terminal block support to fit CT3G	80
TSD310	MCB 10A 10kA 3DIN mods 50/60Hz	74	S1L1000/10	Phasebar-insulated	80
TSD316	MCB 16A 10kA 3DIN mods 50/60Hz	74	S1L1000/16	Phasebar-insulated	80
TSD320	MCB 20A 10kA 3DIN mods 50/60Hz	74	S3L1000/10	Phasebar-insulated	80
TS 325	MCB 25A 10kA 3DIN mods 50/60Hz	74	S3L1000/16	Phasebar-insulated	81
TSD332	MCB 32A 10kA 3DIN mods 50/60Hz	74	G1L1000/10	Phasebar-insulated	81
TF220008	Bell transformer 8 volt	75	G1L1000/16	Phasebar-insulated	81
HSC10X38	Fuse disconnecter	75	G1L90/16	Phasebar-insulated	81
HSC10X38/2	Fuse disconnecter	75	G1L126/16	Phasebar-insulated	81
HSC10X38/3	Fuse disconnecter	75	G1L162/16	Phasebar-insulated	81
T2216010	RCD DP 230/400V 16A 10mA 10kA 2DIN	75	G1L198/16	Phasebar-insulated	81
T2225030S	RCD DP 230/400V 25A 30mA 10kA 2DIN	75	G1L210/16	Phasebar-insulated	81
T2240030S	RCD DP 230/400V 40A 30mA 10kA 2DIN	75	G1L228/16	Phasebar-insulated	81
T2263030S	RCD DP 230/400V 63A 30mA 10kA 2DIN	75	G3L1000/10	Phasebar-insulated	81
T2280030S	RCD DP 230/400V 80A 30mA 10kA 2DIN	75	G3L1000/16	Phasebar-insulated	81
T2225100S	RCD DP 230/400V 25A 100mA 10kA 2DIN	75	GA1	Phasebar-end cap	81
T2240100S	RCD DP 230/400V 40A 100mA 10kA 2DIN	75			
T2263100S	RCD DP 230/400V 63A 100mA 10kA 2DIN	75			
T2280100S	RCD DP 230/400V 80A 100mA 10kA 2DIN	76			
T4425030S	RCD 4P 230/400V 25A 30mA 10kA 4DIN	76	56SW110LE GY	SP 250V 10A AC21 1 way 1 mod 50Hz	83
T4440030S	RCD 4P 230/400V 40A 30mA 10kA 4DIN	76	56SW115LE GY	SP 250V 15A AC21 1 way 1 mod 50Hz	83
T4463030S	RCD 4P 230/400V 63A 30mA 10kA 4DIN	76	56SW110/2LE GY	SP 250V 10A AC21 2 way 1 mod 50Hz	83
T4480030S	RCD 4P 230/400V 80A 30mA 10kA 4DIN	76	56SW115/2LE GY	SP 250V 15A AC21 2 way 1 mod 50Hz II	83
T4425100S	RCD 4P 230/400V 25A 100mA 10kA 4DIN	76	56SW110/ILE GY	SP 250V 10A AC21 inter 1 mod 50Hz	83
T4440100S	RCD 4P 230/400V 40A 100mA 10kA 4DIN	76	56SW120LE GY	SP 250V 20A AC21 1 way 1 mod 50Hz	83
T4463100S	RCD 4P 230/400V 63A 100mA 10kA 4DIN	76	56SW132LE GY	SP 250V 32A AC22 1 mod 50Hz	83
T4480100S	RCD 4P 230/400V 80A 100mA 10kA 4DIN	76	56SW220LE GY	DP 500V 20A AC23 1 mod 50Hz	83
TCU6	RCBO DP 110/230V 6A 30mA 4.5kA 2DIN	76	56SW232LE GY	DP 500V 32A AC22 1 mod 50Hz	83
TCU10	RCBO DP 110/230V 10A 30mA 4.5kA 2DIN	76	56SW263LE GY	DP 500V 63A AC22 1 mod 50Hz	83
TCU16	RCBO DP 110/230V 16A 30mA 4.5kA 2DIN	76	56SW310LE GY	TP 500V 10A AC23 1 mod 50Hz	83
TCU20	RCBO DP 110/230V 20A 30mA 4.5kA 2DIN	77	56SW320LE GY	TP 500V 20A AC23 1 mod 50Hz	83
TCU25	RCBO DP 110/230V 25A 30mA 4.5kA 2DIN	77	56SW332LE GY	TP 500V 32A AC22 1 mod 50Hz	83
TCU32	RCBO DP 110/230V 32A 30mA 4.5kA 2DIN	77	56SW363LE GY	TP 500V 63A AC22 1 mod 50Hz	83
TCU40	RCBO DP 110/230V 40A 30mA 4.5kA 2DIN	77	56SW420LE GY	4P 415V 20A AC23 1 mod 50Hz	83
TIS2100S	Switch disconnecter 100A 25kA 2DIN	77	56SW320CLE GY	TP 500V 20A AC23 1 mod 50Hz	83
TIS3100S	Switch disconnecter 100A 25kA 3DIN	77	56SW332CLE GY	TP 500V 32A AC22 1 mod 50Hz	83
AD240	Time clock	77	56SW363CLE GY	TP 500V 63A AC22 1 mod 50Hz	83
AQD240	Time clock	77	56SW420CLE GY	4P 415V 20A AC23 1 mod 50Hz	83
AS240	Time clock	77	56SW363/2LE GY	TP 500V 63A AC22 1 mod 50Hz	83
AQS240	Time clock	77	56SW120RKLE GY	SP 250V 20A AC23 1 mod 50Hz	83
D240	Time clock	77	56SW132RKLE GY	SP 250V 32A AC22 1 mod 50Hz	83
UD240	Time clock	77	56SW220RKLE GY	DP 500V 20A AC23 1 mod 50Hz	83
UQD240	Time clock	78	56SW232RKLE GY	DP 500V 32A AC22 1 mod 50Hz	83
UQS240	Time clock	78	56SW320RKLE GY	TP 500V 20A AC23 1 mod 50Hz	83
DM2240	Time clock-digital	78	56SW332RKLE GY	TP 500V 32A AC22 1 mod 50Hz	83
DM1240	Time clock-digital	78	56SW420RKLE GY	4P 415V 20A AC23 1 mod 50Hz	83
CPU35U	Time clock digital	78	56K2SW120LE GY	SP 250V 20A AC23 1 mod 50Hz	83
CPU35WU	Time clock digital	78	56K2SW132LE GY	SP 250V 32A AC22 1 mod 50Hz	83
CPU35W2U	Time clock digital	78	56K2SW220LE GY	DP 500V 20A AC23 1 mod 50Hz	83
CPU72U	Time clock digital	78	56K2SW232LE GY	DP 500V 32A AC22 1 mod 50Hz	83
CPU72WU	Time clock digital	78	56K2SW263LE GY	DP 500V 63A AC22 1 mod 50Hz	83
DDT/30	Time clock digital	78	56K2SW320LE GY	TP 500V 20A AC23 1 mod 50Hz	83

## Industrial Switchgear - 56 Series 82

56SW110LE GY	SP 250V 10A AC21 1 way 1 mod 50Hz	83
56SW115LE GY	SP 250V 15A AC21 1 way 1 mod 50Hz	83
56SW110/2LE GY	SP 250V 10A AC21 2 way 1 mod 50Hz	83
56SW115/2LE GY	SP 250V 15A AC21 2 way 1 mod 50Hz II	83
56SW110/ILE GY	SP 250V 10A AC21 inter 1 mod 50Hz	83
56SW120LE GY	SP 250V 20A AC21 1 way 1 mod 50Hz	83
56SW132LE GY	SP 250V 32A AC22 1 mod 50Hz	83
56SW220LE GY	DP 500V 20A AC23 1 mod 50Hz	83
56SW232LE GY	DP 500V 32A AC22 1 mod 50Hz	83
56SW263LE GY	DP 500V 63A AC22 1 mod 50Hz	83
56SW310LE GY	TP 500V 10A AC23 1 mod 50Hz	83
56SW320LE GY	TP 500V 20A AC23 1 mod 50Hz	83
56SW332LE GY	TP 500V 32A AC22 1 mod 50Hz	83
56SW363LE GY	TP 500V 63A AC22 1 mod 50Hz	83
56SW420LE GY	4P 415V 20A AC23 1 mod 50Hz	83
56SW320CLE GY	TP 500V 20A AC23 1 mod 50Hz	83
56SW332CLE GY	TP 500V 32A AC22 1 mod 50Hz	83
56SW363CLE GY	TP 500V 63A AC22 1 mod 50Hz	83
56SW420CLE GY	4P 415V 20A AC23 1 mod 50Hz	83
56SW363/2LE GY	TP 500V 63A AC22 1 mod 50Hz	83
56SW120RKLE GY	SP 250V 20A AC23 1 mod 50Hz	83
56SW132RKLE GY	SP 250V 32A AC22 1 mod 50Hz	83
56SW220RKLE GY	DP 500V 20A AC23 1 mod 50Hz	83
56SW232RKLE GY	DP 500V 32A AC22 1 mod 50Hz	83
56SW320RKLE GY	TP 500V 20A AC23 1 mod 50Hz	83
56SW332RKLE GY	TP 500V 32A AC22 1 mod 50Hz	83
56SW420RKLE GY	4P 415V 20A AC23 1 mod 50Hz	83
56K2SW120LE GY	SP 250V 20A AC23 1 mod 50Hz	83
56K2SW132LE GY	SP 250V 32A AC22 1 mod 50Hz	83
56K2SW220LE GY	DP 500V 20A AC23 1 mod 50Hz	83
56K2SW232LE GY	DP 500V 32A AC22 1 mod 50Hz	83
56K2SW263LE GY	DP 500V 63A AC22 1 mod 50Hz	83
56K2SW320LE GY	TP 500V 20A AC23 1 mod 50Hz	83



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