

TA series Site Transformers

TA Series Construction Site Transformers comply with BS4363:1998 and provide a 110V Reduced Low Voltage supply per BS7671 (18th Edition). Available in single-phase (5 & 10 kVA) and three-phase (7.5, 10 & 20 kVA) versions, they offer various enclosures and distribution setups with 16A/32A 110V sockets, MCBs, optional RCDs, and plug-in mains inlets. Lighting transformer models with time clocks and contactors for automated control are also available.

Key benefits:

- √ Available in 4 ranges:
 - Standard site transformers - with socket outlets
 - Site Lighting transformers - with hardwired lighting connection
 - Power & lighting transformers - with socket outlets & hardwired connections
 - Slim line site transformers - compact units with side mounted sockets and/or hard wired connections
- √ RCD protection options are available
- √ Windings are continuously rated and in accordance with BS EN 61558 Parts 1,2-4 and 2-23. Offered in single phase (230:110v CTE) and three phase (400:110v NE)

Standard Transformers



Enclosure



Material	Mild Steel
Ingress Protection	IP44
Exterior Finish	Phosphate pre-treated prior to polyester powder coating
Colour	Traffic Yellow (RAL 1023)
Lifting Handles	Type tested at a safe working load of 300kgs each
Security	MCBs are protected by a steel hinged cover with quick release fastener

Experts in **high performance**
power and lighting products

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Part Number	kVA Rating	Phase	Incoming MCB	Distribution			Overcurrent Protection	RCD Protection	Supply	Additional Information
				16A Sockets	32A Sockets	16A Lighting				
Standard Site Transformers										
S210237	5	SP	25A DP	4	1		MCB	n/a	Hardwire	
S210237E	5	SP	25A DP	4	1		MCB	Overall 100mA	Hardwire	
S210338	5	SP	25A DP	4	1		MCB	n/a	Plug in	
S210338E	5	SP	25A DP	4	1		MCB	Overall 100mA	Plug in	
S210238	10	SP	50A DP	4	2		MCB	n/a	Hardwire	
S210238E	10	SP	50A DP	4	2		MCB	Overall 100mA	Hardwire	
S210230	10	TP	16A TP	4	2		MCB	n/a	Hardwire	
S210230E	10	TP	16A TP	4	2		MCB	Overall 100mA	Hardwire	
S210339	10	TP	16A TP	4	2		MCB	n/a	Plug in	
S210339E	10	TP	16A TP	4	2		MCB	Overall 100mA	Plug in	
S210340	10	TP	16A TP	4	2		MCB	n/a	Plug in	32A 5P through socket
S210340E	10	TP	16A TP	4	2		MCB	Overall 100mA	Plug in	32A 5P through socket
S210374	10	TP	16A TP	4	2		MCB	30mA RCCBs	Hardwire	IP 55 rated unit
S210122	20	TP	25A TP	8	4		MCB	n/a	Hardwire	
S210122E	20	TP	25A TP	8	4		MCB	Overall 300mA	Hardwire	
S120318	Appliance inlet cowl kit for plug in transformers - can be fitted by customer or factory fitted									
Site Lighting Transformers										
S210259	10	SP	50A DP			6	MCB	n/a	Hardwire	
S210302	10	SP	50A DP			6	MCB	30mA RCCBs	Hardwire	
S210260	10	TP	16A TP			6	MCB	n/a	Hardwire	
S210303	10	TP	16A TP			6	MCB	30mA RCCBs	Hardwire	
S210078	10	TP	16A TP			6	MCB	n/a	Hardwire	4C time clock control
S210305	10	TP	16A TP			6	MCB	30mA RCCB	Hardwire	4C time clock control
Power & Lighting Transformers										
S210214	10	SP	50A DP	4	2	2	MCB	n/a	Hardwire	
S210306E	10	SP	50A DP	4	2	2	MCB	Overall 100mA	Hardwire	16A DP 30mA RCBO protection of lighting glands
S210231	10	TP	16A TP	4	2	2	MCB		Hardwire	
S211285	10	TP	16A TP	4	2	2	30mA RCBOs		Hardwire	
S210307E	10	TP	16A TP	4	2	2	MCB	Overall 100mA	Hardwire	16A DP 30mA RCBO protection of lighting glands

Part Number	kVA Rating	Phase	Incoming MCB	Distribution			Overcurrent Protection	RCD Protection	Supply	Additional Information
				16A Sockets	32A Sockets	16A Lighting				
Slim Line Transformers										
S210341	5	SP	25A DP	4	1		MCB		Hardwire	
S210341E	5	SP	25A DP	4	1		MCB	Overall 100mA	Hardwire	
S210342	5	SP	25A DP	2	1	2	MCB		Hardwire	
S210343E	5	SP	25A DP	2	1	2	MCB	Overall 100mA	Hardwire	30mA RCCB protection of lighting glands
S210344	5	SP	25A DP			4	MCB		Hardwire	
S210345	5	SP	25A DP			4	30mA RCBOs		Hardwire	
S210354	7.5	TP	10A TP	4	2		MCB		Hardwire	
S210354E	7.5	TP	10A TP	4	2		MCB	Overall 100mA	Hardwire	
S210355	7.5	TP	10A TP	4	2	2	MCB		Hardwire	
S210356E	7.5	TP	10A TP	4	2	2	MCB	Overall 100mA	Hardwire	RCCB protection of lighting glands
S210357	7.5	TP	10A TP			6	MCB		Hardwire	
S210358	7.5	TP	10A TP			6	30mA RCBOs		Hardwire	

Enclosure	Dimensions (H x W x D)	Weight
5 kVA single-phase	512 x 442 x 444mm	59kg
10 kVA single-phase	512 x 442 x 444mm	82kg
10 kVA three-phase	590 x 542 x 527mm	89kg
20 kVA three-phase	680 x 708 x 610 mm	190kg
5 kVA Slim Line	575 x 450 x 285 mm	49kg
7.5 kVA Slim Line	670 x 600 x 285mm	85kg

- 16A sockets in three phase transformers are individually protected
- All 32A sockets are individually protected
- Lighting circuits without RCD are protected by 16A DP MCBs
- Incoming MCBs are type 'D'
- 16A Sockets in single phase transformers are protected in pairs

Converting Existing Site Transformers - 110V RCBOs

110V RCBOs compliant with BS EN 61009 can replace MCBs to upgrade circuits with both overcurrent and earth leakage protection. This ensures RCD protection and helps achieve the required 5-second disconnection time for fault protection.

Part Number	Rating	Dimensions	Weight	Mounting	Max cable size
S190466	16A	96mm x 36mm x 75mm	0.17kg	DIN rail	25mm ²
S190467	32A	96mm x 36mm x 75mm	0.17kg	DIN rail	25mm ²

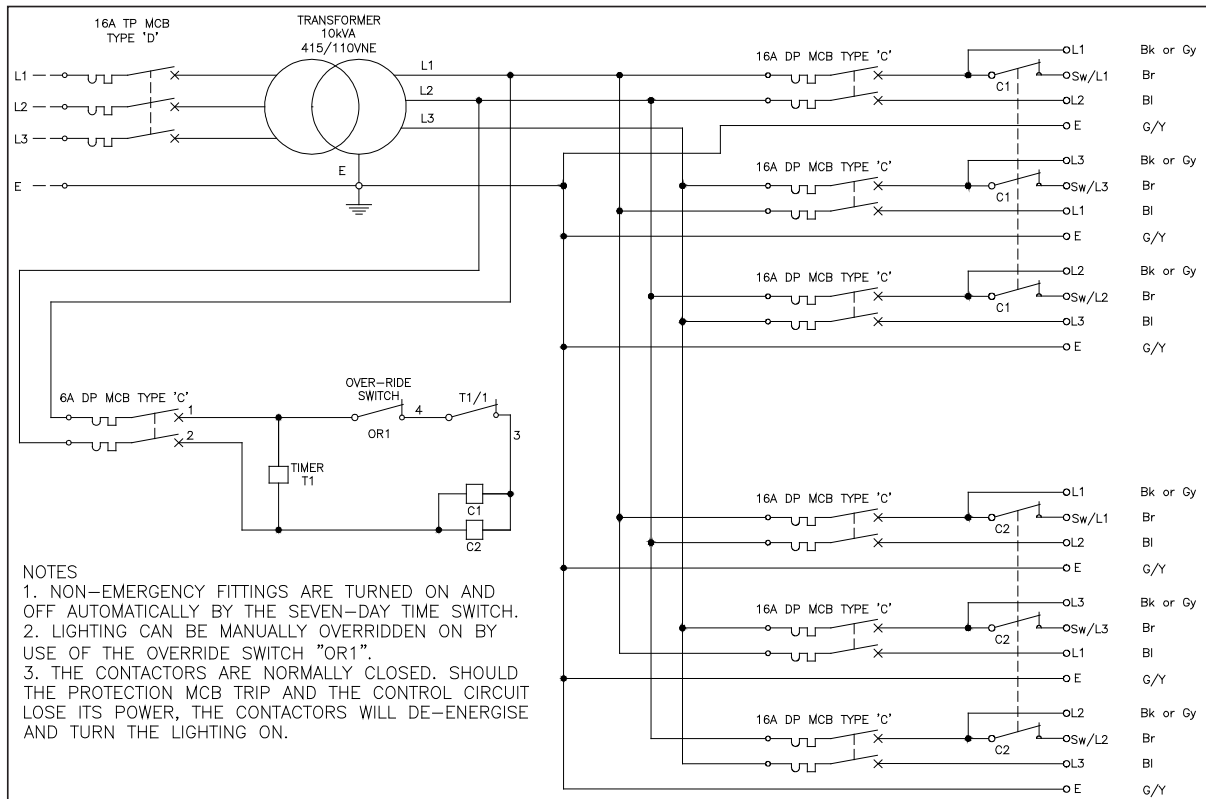
RCD protected options

To meet BS7671 Regulation 411.8.3 (5-second disconnection time) we offer units with sockets group protected by a single 100mA RCCB and 30mA RCDs are used for lighting circuits. Part S211285 however has individual 30mA RCBOs protecting each socket. RCCBs are to BS EN 61008 and RCBOs to BS EN 61009. Both types of device are double-pole and suitable for 110V operation. Although the low voltage reduces the effect of electric shock, MCBs alone may not clear earth faults beyond 10–20 metres from the transformer. RCDs resolve this without needing larger conductors.

Tech datasheet TDS19 offers design guidance for compliance, while TDS10 gives general RLV system background. Also refer to our Blakley Calculator for guidance on 110V systems.

Time clock control

Lighting transformers with built-in time clocks and contactors are designed for 4-core lighting circuits (such as our Flori-67/4P plug-in lighting system), allowing all circuits to incorporate Emergency and non-Emergency fittings. All circuits are time clock-controlled, with a manual override. For energy efficiency, LED arrays are powered by the switched supply, while emergency light batteries use the unswitched supply. If needed, certain emergency lights can stay on by powering their arrays from the unswitched supply for safety or security.



Configuration of a Site Lighting transformer with time clock control (part no. S210078)

Why Choose Blakley?



Cutting edge manufacturing experience

- Over 65 years' specialist expertise in sheet metal fabrication and electrical assembly
- Ongoing commitment to investment in leading edge production technology and machinery

Quality + Environmental assurance



- Our ISO 9001:2015 quality accreditation covers the design and manufacture of low voltage electrical distribution, protection and associated products for industrial applications
- All products approved to exacting industry and/or customer specific standards
- ISO 14001:2015 accredited with commitment to consider and reduce environmental impacts



Customer focus

- We are committed to a high level of customer service, product quality and on-time delivery
- We offer detailed application and installation advice on all Blakley products
- Choose from a wide range of stocked products or we are happy to discuss specialist projects