

Industrial Transformers to Sellafeld Standard ES_1_2223_2

Blakley Electrics produces a range of single-phase, double wound transformers, in ratings from 2 kVA to 10 kVA, approved by Sellafeld Limited to their Engineering Standard ES_1_2223_2, for permanent installation at the Sellafeld nuclear reprocessing and storage facility in Cumbria.

All of the transformers in the range have 110V secondary windings but there are two distinct types. The first has a centre-tapped to earth secondary winding, which provides a Reduced Low Voltage 110V supply for power tools and other portable items, such as inspection handlamps. The second provides a Low Voltage 110V neutral earthed output and provides an isolated supply for control and instrumentation applications. Both types are available with either a 240V single phase and neutral primary winding or a 415V "2 wire" primary winding (connected to any two phases of a three-phase supply). The standard models in the range are detailed below.

In accordance with the Sellafeld Specification, all transformers incorporate double-pole mains isolators (padlockable in the off position) and HRC fuse protection on the output (fuse ratings detailed below). These thermally sensitive components are housed in separate, vented chambers fitted to the fronts of the main enclosures. There are air gaps between the main enclosures and the chambers to minimise the effect of heat from the transformer cores.

In addition to meeting the Sellafeld Limited Engineering Standard, all models meet the requirements of BS EN 61558 part 1 and part 2-4 but with an earthed secondary winding. Models with a centre-tapped to earth secondary provide a supply in accordance with BS EN 61558 part 2-23.

Transformers are continuously rated, of low inrush design (<5 times full load current), incorporate tapped primary windings and utilise Class F insulation materials. Windings are housed in robust, wall / floor mounting enclosures, vented to IP31. Knock outs are incorporated to simplify installation. Enclosures have a high quality, outdoor duty paint finish, shade Dark Admiralty Grey. General arrangement drawings of the assemblies listed below are available on our website.

To complement the Sellafeld range of transformers, we manufacture the SMB series of single and twin, 16A and 32A, surface mounting socket outlet assemblies. We also manufacture SP&N, DP and TP&N fuse boards to Sellafeld requirements, incorporating BS88 Red Spot fuse banks rated at 20A, 32A, 63A and 100A.



S210411 with covers and lid in place



S210411 with covers and lid removed

Part No.	Type	Rating	Voltage Ratio	Earthing	Fuse Rating	Dimensions, W x D x H	Weight
S210410	TH/1/2/240-110/CTE/SELLAFIELD	2 kVA	240:110V	CTE	20A DP	441 x 508 x 429 mm	47 kgs
S210411	TH/1/3/415-110/CTE/SELLAFIELD	3 kVA	415:110V	CTE	32A DP	441 x 508 x 429 mm	64 kgs
S210412	TH/1/3/415-110/NE/SELLAFIELD	3 kVA	415:110V	NE	32A SP	441 x 508 x 429 mm	64 kgs
S210413	TH/1/5/240-110/CTE/SELLAFIELD	5 kVA	240:110V	CTE	50A DP	441 x 508 x 429 mm	75 kgs
S210414	TH/1/5/240-110/NE/SELLAFIELD	5 kVA	240:110V	NE	50A SP	441 x 508 x 429 mm	75 kgs
S210415	TH/1/5/415-110/CTE/SELLAFIELD	5 kVA	415:110V	CTE	50A DP	441 x 508 x 429 mm	75 kgs
S210416	TH/1/5/415-110/NE/SELLAFIELD	5 kVA	415:110V	NE	50A SP	441 x 508 x 429 mm	75 kgs
S210417	TH/1/10/415-110/CTE/SELLAFIELD	10 kVA	415:110V	CTE	100A DP	640 x 525 x 581 mm	128 kgs
S210418	TH/1/10/415-110/NE/SELLAFIELD	10 kVA	415:110V	NE	100A SP	640 x 525 x 581 mm	128 kgs

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