

## Standard Mains Distribution Assemblies, 400A to 1600A

Blakley Mains Distribution Assemblies (MDAs) are in use on construction sites across the UK and beyond. To meet the demand for short lead times, we stock a standard range with incoming devices rated up to 1600A. On this data sheet we focus on high current assemblies with incoming devices rated at 400A, 630A, 800A and 1600A. Please refer to data sheet DDS101 for details of MDAs with incomers rated up to 200A, to data sheet DDS100 for non-standard MDAs with incomers rated up to 4000A and to data sheet DDS118 for MDAs with socket outlets. GA drawings of standard MDAs can be found on our website: [www.blakley.co.uk](http://www.blakley.co.uk)

The incoming MCCBs and the main outgoing MCCBs in the standard MDAs detailed below all incorporate electronic trips, which can be set on site and have a minimum adjustment range of 100% to 40% of the nominal rating (In). All outgoing MCCBs incorporate MRCD series variable RCDs, which have adjustable sensitivity and adjustable time delay settings. We also offer versions with optional test sockets, which allow RCDs to be tested with an independent test set but without the need to remove shield plates or terminal covers, which greatly enhances on-site safety when carrying out periodic testing.

As most temporary supplies have TT earthing arrangements, the main switchgear is all 4 pole, which has the added benefit of ensuring neutral-earth faults do not trip upstream RCD devices (providing time delay settings are co-ordinated), which would occur if MCCB / RCDs were triple-pole with solid neutral connections.



S140290TSR - Mains Distribution Assembly, 400A  
Optional stand available



S140308TSR - Mains Distribution Assembly, 1600A  
Stand extension not shown in image (supplied as a separate item)

Part No.	Incoming MCCB	MDA Enclosure	IP Rating	MCCB / RCD Distribution	MCB Distribution	MCCB / RCD Test Sockets
S140290R	400A 4 pole	B4 series	IP54	See Page 2	8 way TP&N pan	No
S140290TSR	400A 4 pole	Wall Mounting	IP54	See Page 2	8 way TP&N pan	Yes
S140809	Stand for S140290R / S140290TSR wall mounting 400A Mains Distribution Assemblies.					
S141459	400A 4 pole	B5 series	IP44	1 x 250A 4P	2 x 12 way TP&N	No
S141459TS	400A 4 pole	Free-standing	IP44	MCCB/RCD	pan assemblies	Yes
S140261R	630A 4 pole	B52 series	IP44	See Page 2	8 way TP&N pan	No
S140261TSR	630A 4 pole	Free-standing	IP44	See Page 2	8 way TP&N pan	Yes
S140285R	800A 4 pole	B6 series	IP44	See Page 2	12 way TP&N pan	No
S140285TSR	800A 4 pole	Free-standing	IP44	See Page 2	12 way TP&N pan	Yes
S140308R	1600A 4 pole	B7 series	IP44	See Page 2	12 way TP&N pan	No
S140308TSR	1600A 4 pole	Free-standing	IP44	See Page 2	12 way TP&N pan	Yes
S140308SE	Stand extension for S140308R / S140308TSR, required to increase ground clearance to 900mm					

## Distribution Arrangements

Part Number #	Incoming MCCB, 4P ##	Distribution MCCB / Variable RCD, Nominal Ratings ##					MCB Pan Assembly ###
		160A 4P MCCB/RCD	250A 4P MCCB/RCD	400A 4P MCCB/RCD	630A 4P MCCB/RCD	800A 4P MCCB/RCD	
S140290R	400A	1 no.	1 no.	n/a	n/a	n/a	8 way TP MCB pan fed from an MCCB / MRCD
S140290TSR							
S140261R	630A	2 no.	2 no.	n/a	n/a	n/a	
S140261TSR							
S140285R	800A	2 no.	2 no	2 no.	n/a	n/a	12 way TP MCB pan fed from a 160A MCCB / MRCD
S140285TSR							
S140308R	1600A	1 no.	2 no.	2 no.	1 no.	1 no.	
S140308TSR							

# Part numbers ending TSR incorporate optional test sockets (see data sheet DDS120 for further details)

## MCCBs incorporate electronic trips and can be adjusted on site within the following ranges:

160A: Adjustable from 160A to 58A

250A: Adjustable from 250A to 90A

400A: Adjustable from 400A to 144A

630A: Adjustable from 630A to 225A

800A: Adjustable from 800A to 320A

1600A: Adjustable from 1600A to 640A

The adjustability of the MCCBs enables the above MDAs to meet a very wide range of requirements. For instance, if a 400A MDA is required with 4 no. 125A outgoing ways, the incoming and outgoing MCCBs in an S140261 series can be set on site to meet this requirement.

### MCB pan assemblies are fed from a dedicated 4P MCCB / MRCD with thermal magnetic trips. The "pan" MCCB in the 400A MDA wall mounting MDA is rated at 125A and at 160A in all other MDAs. At 630A and above, pans are mounted in segregated end boxes. MCBs are available in ratings from 1A to 63A; SP, DP or TP; with B, C or D trips.

MRCD series RCDs have a sensitivity adjustment range from 0.1A to 30A and a time delay adjustment range from 0 to 10 seconds. Please note: on a TT supply, the time delay should not be set at greater than 1 second.

### Spare ways, 630A to 1600A standard MDAs

S140261 series 630A MDAs have space for up to 3 no. additional MCCB / RCDs, each rated up to 250A.

S140285 series 800A MDAs have space for up to 4 no. additional MCCB / RCDs, each rated up to 250A. One MCCB rated at 400A or 630A can also be accommodated, which takes the space of 2 x 250A ways.

S140308 series 1600A MDAs have space for up to 2 no. MCCB / RCDs to be fitted, each up to 250A or 1 no. MCCB / RCD at 400A or 630A.

### Retrofit MCCB / RCD kits for 630A to 1600A standard MDAs

Each kit comprises of a 4P MCCB with electronic trip, 230V shunt trip, MRCD series variable RCD and CT, auxiliary fuses, tails and bracketry. Part numbers are as follows:

S141617 - 160A (suitable for S140261, S140285 and S140308 series)

S141618 - 250A (suitable for S140261, S140285 and S140308 series)

S140116R - 400A (suitable for S140285 and S140308 series only)

S140950R - 630A (suitable for S140285 and S140308 series only)

Standard kits do not include test sockets but these can be supplied for MDAs originally configured with test sockets (MDAs not originally configured for test sockets cannot have them retrofitted on site).

### Weights and Dimensions

Part Number	Height, mm	Width, mm	Depth, mm	Weight, kg	Ground Clearance	Max Incoming Cable
S140290R	1050 (1600 on stand)	980	332	100 (120 on stand)	550mm (on stand)	1 x 240mm <sup>2</sup> 4C
S141459	1374	1351	562	190	500mm #	2 x 120mm <sup>2</sup> 4C
S140261R	1480	1559	562	190	500mm #	2 x 240mm <sup>2</sup> 4C
S140285R	1645	1972	688	290	630mm #	2 x 300mm <sup>2</sup> 4C
S140308R	1770	2127	824	520	300mm #	24 x 400mm <sup>2</sup> 1C

# Bolt-on stand extensions are available to increase the ground clearance of free-standing MDAs.