

Technical Notes Comparing the Original and New Elkay Polyamide Terminal Blocks

In essence we have had to change three types in our range of Terminal Blocks due to tooling and manufacturing issues. The ranges affected are:-

- 1512 (1.5mm² Raised Base) and 1512L (1.5mm² Level Base) Range
- 4012 (2.5 and 4mm² Raised Base) and 4012L (2.5 and 4mm² Level Base) Range
- 6012 (6mm² Raised Base) and 6012L (6mm² Level Base) Range

Tooling and manufacture on the 10mm² and 16mm² sizes are not affected, and will therefore continue to be manufactured as they have been. We have included dimensional information for these two sizes in the attached table for information purposes only.

The new range of Polyamide Terminal Blocks are tested and rated considering the requirements of EN 60998-2-1:2004 "Connecting devices for low-voltage circuits for household and similar purposes – Particular requirements for connecting devices as separate entities with screw-type clamping units" and EN 60335-1:2002 "Household and similar electrical Appliances – Safety".

Temperature Range

The original Elkay blocks were rated at 110°C continuous and 150°C short term. This has been replaced by a more sophisticated rating system where the actual maximum ambient temperature is quoted (85°C) and then tests are conducted at higher temperatures to allow for heating due to current passing through the block.

Dimensions

The dimensions of the original and new blocks are generally very similar; the exact differences can be seen in the attached drawings and table.

The tiny difference in the size of the conductor entry hole is not noticeable in use and does not affect the conductor acceptance range.

Resistance to Heat and Fire

The new Terminal Blocks are moulded from a specially developed Polyamide 6/66 Copolymer, which meets the more arduous glow-wire tests, namely IEC 60695-2-11 and IEC 60695-2-12 which are specified in the Appliance Standard EN 60335-1:2002.

Current Rating

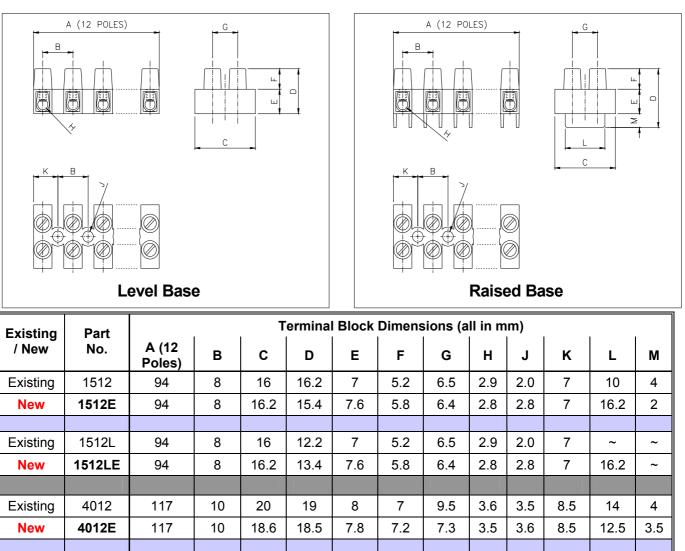
Clamping areas and current ratings for Elkay terminal blocks according to EN 60998:

Terminal Block Type:	Camping Area:	Max. Current:
1.5 mm ²	1-4mm ²	32A
4.0 mm ²	1,5-6mm²	41A
6.0 mm ²	2,5-10mm ²	57A
16.0 mm ²	6-16mm ²	76A

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Please find listed below a dimensional comparison between the existing blocks and the new versions that are now available.



New	4012E	117	10	18.6	18.5	7.8	7.2	7.3	3.5	3.6	8.5	12.5	3.5
Existing	4012L	117	10	20	15	8	7	9.5	3.6	3.5	8.5	2	~
New	4012LE	117	10	18.6	15	7.7	7.3	7.3	3.5	3.6	8.5	2	~
Existing	6012	141	12	24	22.2	9	8	10	4	4.2	10.5	16	5.2
New	6012E	134	11.5	22.2	20.8	8.8	8.5	10	4.2	3.6	9.5	15	3.5
Existing	6012L	141	12	24	17	9	8	10	4	4.2	10.5	2	~
New	6012LE	134	11.5	22.2	17.3	8.8	8.5	10	4.2	3.6	9.5	2	~
Existing	10012	180	15.5	27	28	11.5	10.5	12.5	4.9	4.5	12.5	17.5	6
Existing	10012L	180	15.5	27	22	11.5	10.5	12.5	4.9	4.5	12.5	2	~
Existing	16012	180	15.5	27	28	11.5	10.5	12.5	5.5	4.5	12.5	17.5	6
Existing	16012L	180	15.5	27	22	11.5	10.5	12.5	5.5	4.5	12.5	~	~