

Maximum length in meters between DB and consumer unit, single phase, voltage drop of 2%.

DB in amps <i>courant assigné</i>	Size in mm <sup>2</sup> (copper)							
	10	16	25	35	50	70	95	120
45 amps	22	36	56	78	111	156	211	267
60 amps	-	27	42	58	83	117	158	200
90 amps	-	-	28	39	56	78	106	133

Maximum length in meters between DB and consumer unit, three-phase, voltage drop of 2%.

DB in amps <i>courant assigné</i>	Size in mm <sup>2</sup> (copper)							
	10	16	25	35	50	70	95	120
30 amps	66	107	166	233	332	465	631	800
60 amps	31	52	81	115	166	233	315	399

Consumer unit.

Looking at cable sizes in the consumer unit and the most common cable lengths between main breaker (DB=*disjoncteur de branchement*) and consumer unit (*tableau principal*), the RCDs (ID=*interrupteurs différentiel*) and the MCBs (*disjoncteurs*) we get this:

Minimum cable size for single phase between main breaker and consumer unit:

- 15/30/45 amps : 10mm<sup>2</sup> for a max of 22m
- 30/45/60 amps : 16mm<sup>2</sup> for a max of 27m
- 60/75/90 amps : 25mm<sup>2</sup> for a max of 28m .

Minimum wire size inside your consumer unit between terminal bars (*borniers*) and RCDs (IDs):

- 10mm<sup>2</sup> for a RCD of 40 amps
- 16mm<sup>2</sup> for a RCD of 63 amps

The latest consumer range of *tableaux électriques* by legrand has a vertical busbar system (63 A).

Minimum wire size from RCDs to feed MCBs:

- 10mm<sup>2</sup> for a RCD of 40 amps
- 16mm<sup>2</sup> for a RCD of 63 amps

The standard horizontal *peignes de raccordement* (busbars) to connect RCDs and MCBs of legrand, Hager, MerlinGerin, Schneider and others have been designed to carry a maximum current of 63 A. Much better than wiring.