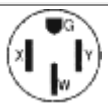
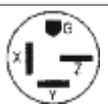
NEMA Plug & Receptacle Configurations

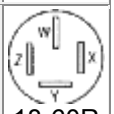
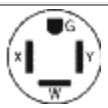
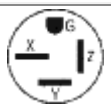
15 AMP	2 pole 2 wire		2 pole 3 wire grounding			3 pole 3 wire		3 pole 4 wire grounding		4 wire
	125V	250V	125V	250V	277V	125/250V	30 250V	125/250V	30 250V	30 120/ 208V
Receptical	 1-15R		 5-15R	 6-15R	 7-15R		 11-15R	 14-15R	 15-15R	 18-15R
Plug	 1-15P	 2-15P	 5-15P	 6-15P	 7-15P		 11-15P	 14-15P	 15-15P	 18-15P

20 AMP	2 pole 2 wire		2 pole 3 wire grounding			3 pole 3 wire		3 pole 4 wire grounding		4 wire
	125V	250V	125V	250V	277V	125/250V	30 250V	125/250V	30 250V	30 120/ 208V
Receptical		 2-20R	 5-20R	 6-20R	 7-20R	 10-20R	 11-20R	 14-20R	 15-20R	 18-20R
Plug		 2-20P	 5-20P	 6-20P	 7-20P	 10-20P	 11-20P	 14-20P	 15-20P	 18-20P

30 AMP	2 pole 2 wire		2 pole 3 wire grounding			3 pole 3 wire		3 pole 4 wire grounding		4 wire
	125V	250V	125V	250V	277V	125/250V	30 250V	125/250V	30 250V	30 120/ 208V
Receptical		 2-30R	 5-30R	 6-30R	 7-30R	 10-30R	11-30R	14-30R	15-30R	18-30R
Plug		2-30P	5-30P	6-30P	7-30P	10-30P	11-30P	14-30P	15-30P	18-30P

	2 pole 3 wire grounding	3 pole 3 wire	3 pole 4 wire grounding	4 wire

50 AMP	2 pole 3 wire grounding			3 pole 3 wire		3 pole 4 wire grounding		4 wire
50 AMP Receptical	 5-50R	 6-50R	 7-50R	 10-50R	 11-50R	 14-50R	 15-50R	 18-50R
Plug	 5-50P	 6-50P	 7-50P	 10-50P	 11-50P	 14-50P	 15-50P	 18-50P

60 AMP	3 pole 4 wire grounding		4 wire
	125/250V	30 250V	30 120/ 208V
Receptical	 14-60R	 15-60R	 18-60R
Plug	 14-60P	 15-60P	 18-60P

Decoding NEMA plugs and receptacles

If you've ever had trouble figuring out the NEMA (National Electrical Manufacturers Association) pattern and numbering system on a particular device, you aren't alone. Comprised of four major identifiers, the combination of numbers and letters can appear more like alphabet soup than a structured electrical specification.

Rest assured, there is a simple way to decode plug patterns and connections, making proper specification a breeze. The first identifier, which is either a blank space or an "L," indicates whether the plug is a straight or locking blade device (with "L" being locking).

The second identifier, which is a number, assigns the voltage rating; for example, a "5" represents a voltage rating of 125 Vac and a "6" denotes a rating of 250 Vac. The rating given is the highest voltage allowed for the device. Please refer to the accompanying chart to see other voltage ratings.

The third identifier, also a number, identifies the highest amperage rating allowed for use with the device.

Finally, the fourth identifier is a letter that determines whether the device is a plug ("P") or a receptacle/outlet ("R").

For a printable pdf of this chart, please refer to the Sales Tools section of our web site.

Table 1 - NEMA Nomenclature

NEMA x5 - 15P

- **P** indicates plug or receptacle
  - P is plug
  - R is receptacle or socket
- **15** indicates the current rating and standard values are
  - 15 amps
  - 20 amps
  - 30 amps
- **5** indicates the voltage*
  - 2 indicates 115 VAC, ungrounded for Class II connections
  - 5 indicates 125 VAC, grounded for Class I connections
  - 6 indicates 250 VAC, grounded for Class II connections
  - 7 indicates 277 VAC, grounded for Class II connections
  - 8 indicates 480 VAC, grounded for Class I connections
  - 9 indicates 600 VAC, grounded for Class I connections
  - 14 indicates 125/250 VAC, single phase, four wire, three pole
  - 15 indicates 250 VAC, three phase, four wire, three pole
  - 16 indicates 480 VAC, three phase, four wire, three pole
  - 17 indicates 600 VAC, three phase, four wire, three pole
  - 21 indicates 120/208 VAC, three phase, four wire, four pole
  - 22 indicates 277/480 VAC, three phase, five wire, four pole
  - 23 indicates 347/600 VAC, three phase, five wire, four pole
- **x** is the position occupied by L for locking devices. If no tester is present device is nonlocking, straight blade.

*excludes Class II connections