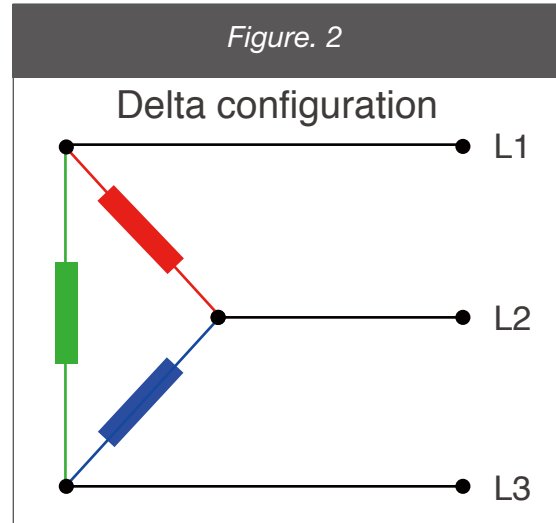
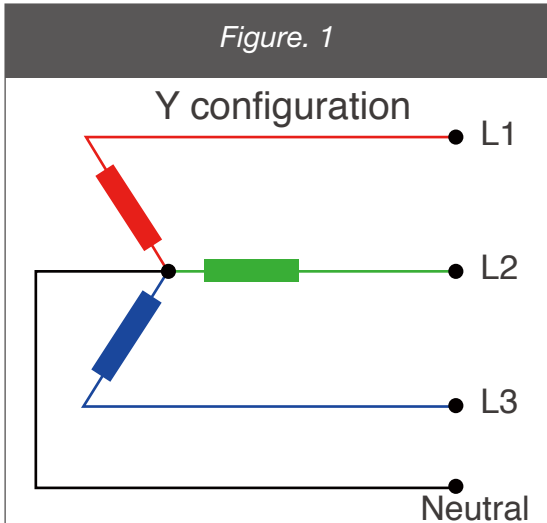


Compatibility With Different Grid Types

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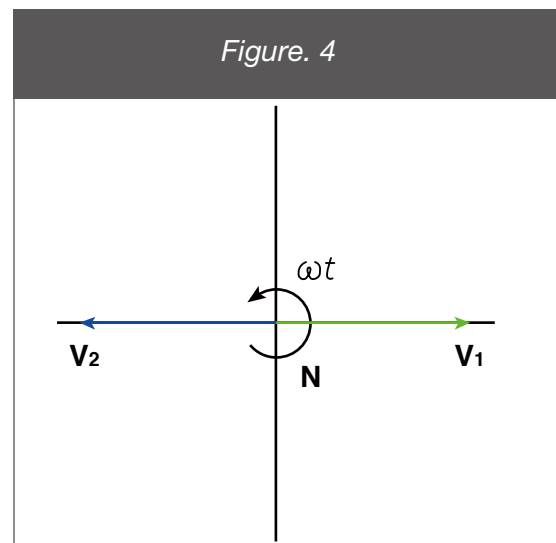
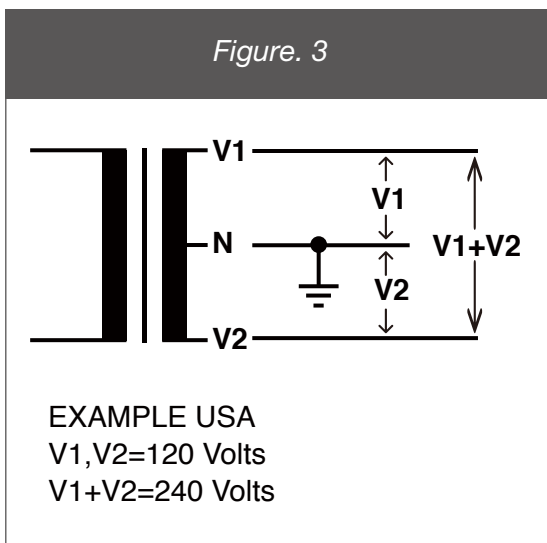
Most of the world population (Europe, Africa, Asia, Australia, New Zealand) and much of South America use a supply of standard 230 V (phase voltage) and 400V (line voltage) with neutral cables at 50Hz or 60Hz. Or there might be a Delta grid pattern for power transportation and industrial use for special machines. And as a corresponding result, most of the solar inverters for house use or commercial rooftops are designed on such basis.



But there are exceptions. Here we will talk how to use the normal solar inverters in such exception grid types.

1.SPLIT-PHASE SUPPLY

Like in the United States and Canada they use a supply voltage of 120 volts \pm 6%. Japan, Taiwan, North America, Central America and some parts of northern South America use a voltage between 100 V and 127 V for normal house supply. For house use, the grid supply pattern we call it split-phase electricity supply.



Compatibility With Different Grid Types

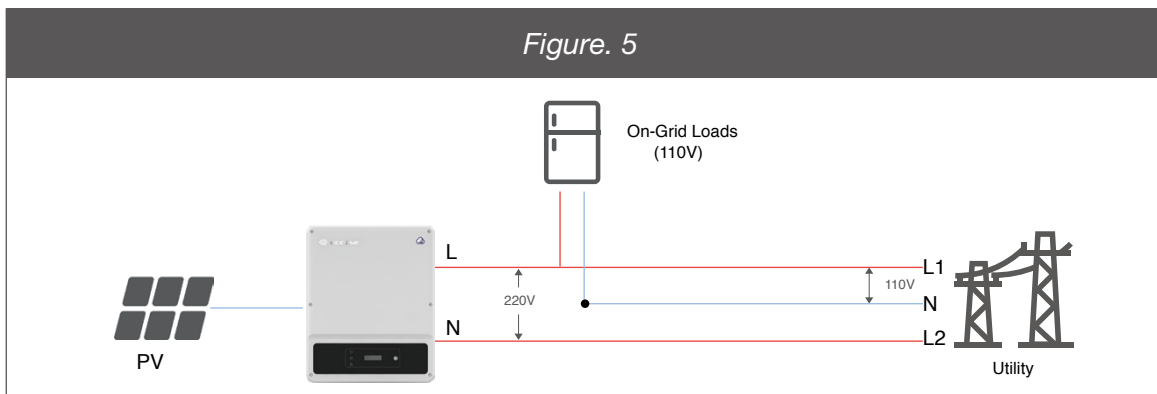
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● Solar Inverter Connections

As the nominal output voltage of most GoodWe single-phase solar inverters are 230V with neutral wire, so it does not connect as usual.

Solutions as below:

By connecting two phases of the grid (phase voltage is 100V, 110V, 120V, or 170V etc.) to the inverter to fit for a 220V/230Vac voltage, the solar inverter could work normally.



Note:

A. This solution is only suitable for single-phase grid-tied or hybrid inverters.

B. If it has requirement for special functions like zero export function, please contact GoodWe for details.

2.230V THREE PHASE GRID

Like in North America and part South American countries, there also use three phase 230Vac grid as below. And it could be delta connection or wye connection depending on different use.

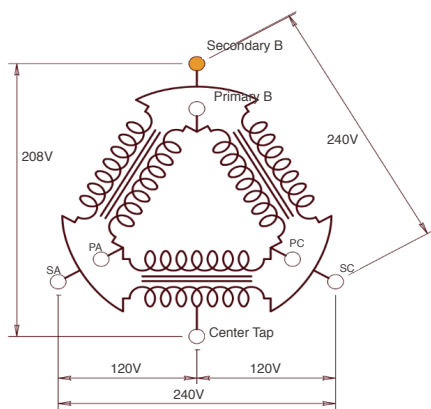


Figure.6



Figure.7

Compatibility With Different Grid Types

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● **GoodWe Solutions**

To fit for such electricity system, GoodWe provides a solution by LV version grid-tied 3-phase solar inverters, which include GW12KLV-DT, GW15KLV-DT, GW30KLV-MT, GW35KLV-MT and GW50KLV-MT, which could use with both Star Grid or Delta Grid (Fig.7) by commissioning on inverter display.

Technical Data		GW30KLV-MT	GW35KLV-MT
AC Output Data	Max. Output Power(W) [240VAC]	33000	39900
	Max. Output Apparent Power(VA)	33000	39900
	Nominal Output Voltage (V)	150-300	150-300
	Nominal Output Frequency (Hz)	50/60	50/60
	Max.Output Current (A)	80	96
	Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8lagging)	

Figure.8

In a short future, GoodWe will also have single-phase solar inverters with standard output voltage 120V, which is totally fit for SPLIT grid with no special wiring. Let us keep updated.

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 Please check with GoodWe Solar Academy 'academy@goodwe.com' for the latest version.