



# SHM COMMUNICATIONS LTD

**Engineering Energy Information**

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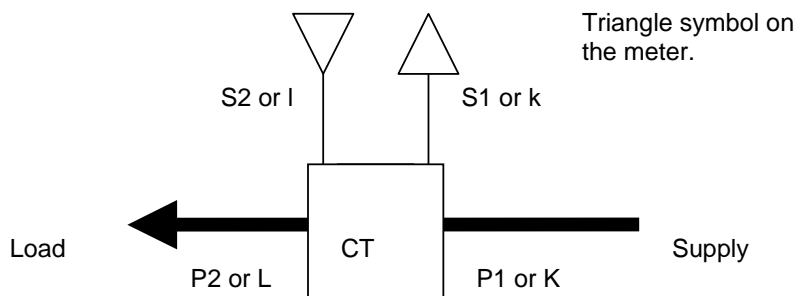
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## Application note: Current Connections to Carlo Gavazzi meters

This note clarifies the connections of Carlo Gavazzi meters, and should be read in conjunction with the handbook of the appropriate meter.

Check the label of the meter very carefully, for instance the WM2 has the terminals of voltage and current have phase 1 to the right, not left.

**⚡ The polarity of the CT connections DOES matter!**



### WM2-DIN Current connections

	I3		I2		I1	
	S2	S1	S2	S1	S2	S1
Terminal	12	13	15	16	17	18

### EM24-DIN Current connections

	I3		I2		I1	
	S1	S2	S1	S2	S1	S2
Terminal	8	9	10	11	12	13

### Troubleshooting

Too often, the CTs are incorrectly connected. If this is wrong, low or negative energy kW is shown. To troubleshoot, short 2 of the CTs, and disconnect from the meter, check there is positive power. Do this for the other 2 phases until you have positive power on each phase.

**CT ratio** - The meter must also be configured to suit the CT ratio – in the Carlo Gavazzi meters, the meter is configured with the RATIO of the CT (unlike ND meters) so a 100A CT requires  $100/5=20$  set into the meter. To check the ratio, it is advised to use a clamp meter to check the true current against the phase current shown on the meter (if this is shown on your model of the meter). Otherwise, one must estimate the current, multiplied by voltage to give Watts, and check that matches the value shown on the meter