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## THREE PHASE POWER/ENERGY METERING INTERFACE ADAPTOR

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### FEATURES

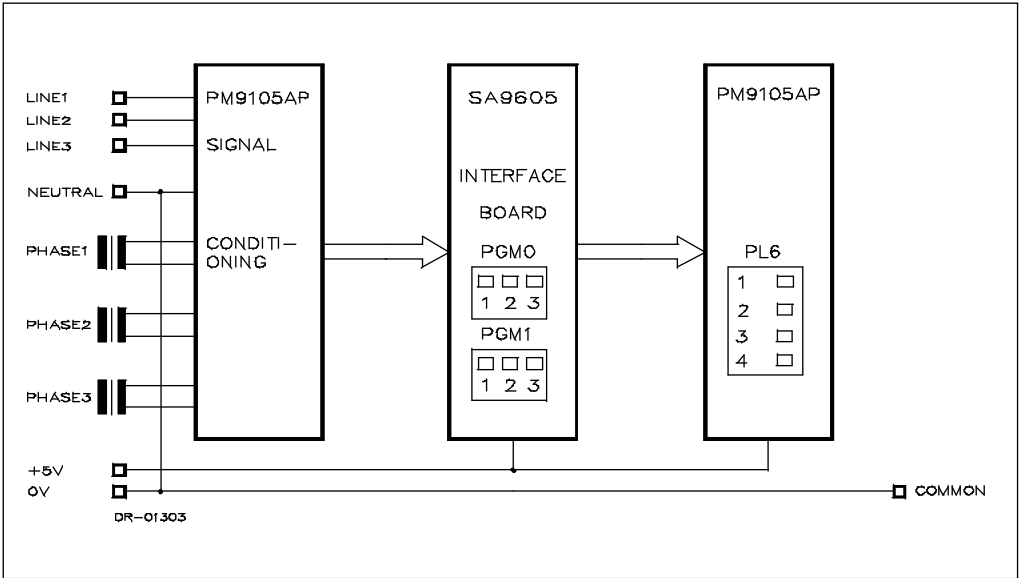
- Demonstration of the SA9605APA device using a PM9105APE module
- Meets the accuracy requirements for Class 1 AC Watt hour meters
- Pulse rate selectable via jumper leads
- Energy direction indicator provided

### DESCRIPTION

The PA9605AP interface adaptor converts the SA9605APA (DIP-20) package to a SA9105XP (DIP-40) footprint. This enables the evaluation of the SA9605APA using the PM9105AP evaluation module.

It is advised that this Application Note should be read in conjunction with the PM9105AP Application Note.

**BLOCK DIAGRAM**



**CONNECTION DESCRIPTION**

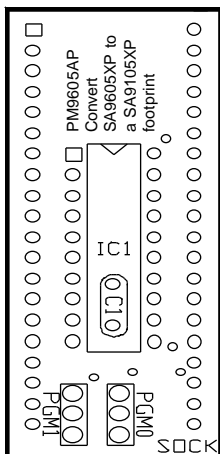
Designation	Location	Description
PL5	PM9105AP	Voltage Supply connected to Phase 1 Voltage Supply connected to Phase 2 Voltage Supply connected to Phase 3 Voltage Supply connected to Neutral Line (Common)
PL6.1 PL6.2 PL6.3	PM9105AP	Power Output: FOUT1 Power Output: FOUT2 Direction Indication: DIR
PL4	PM9105AP	5V DC Supply Voltage 0V DC Supply Voltage
CT1 CT2 CT3	PM9105AP	Phase 1 (Direction indicated on PCB) Phase 2 (Direction indicated on PCB) Phase 3 (Direction indicated on PCB)
PGM0 PGM1	PA9605AP	FOUT2 Frequency select Refer to Table in part 2

## FUNCTIONAL DESCRIPTION

### 1. Interface Board

The PA9605AP interface adaptor board (see Fig. 1) allows the connection of a SA9605APA (DIP-20) device to an evaluation board of type PM9105AP. This Interface Board inserts into the dual-in-line socket of the PM9105AP module in the same orientation that the SA9105XPA (DIP-40) device is normally inserted.

**Figure 1: Connection Diagram**



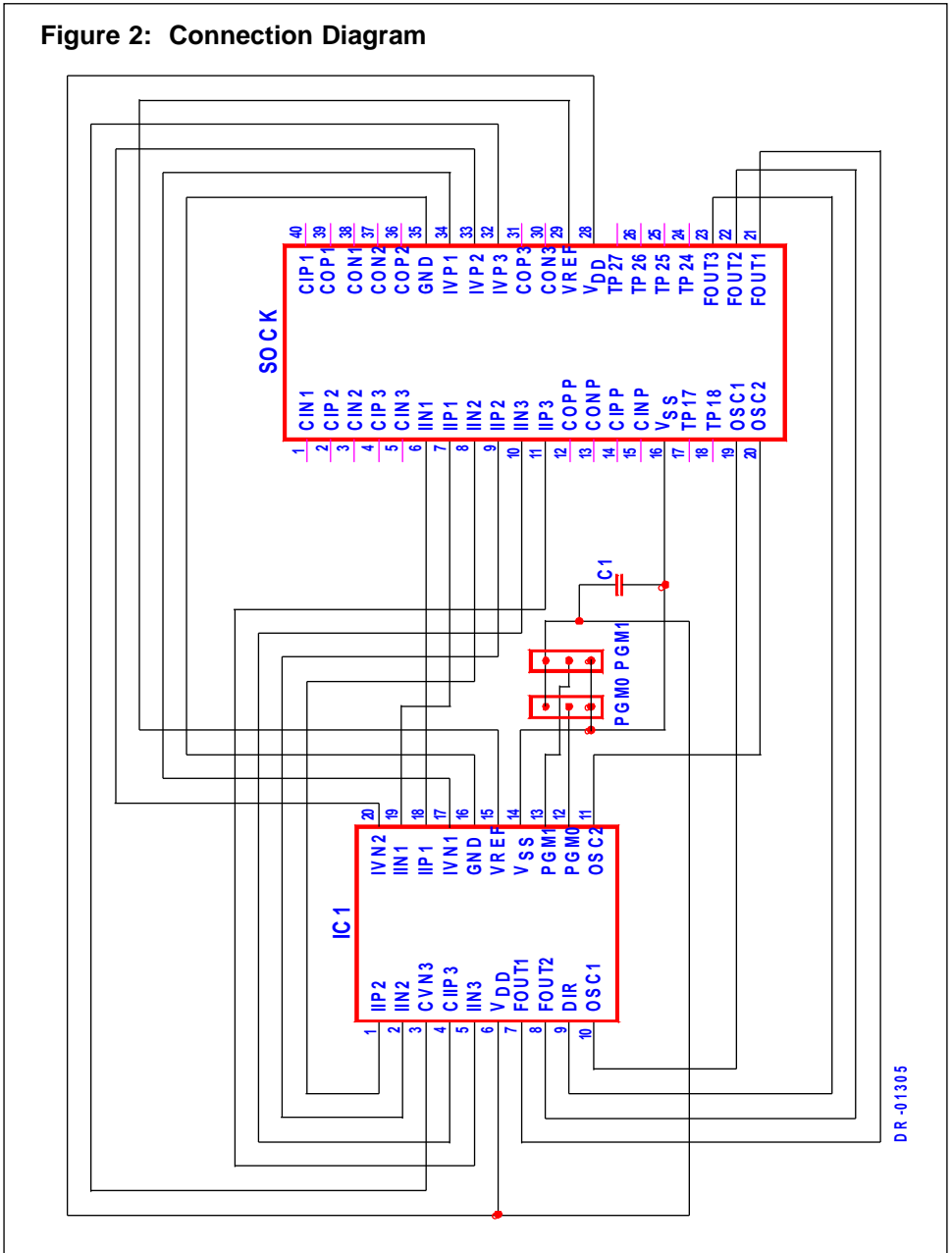
### 2. Frequency Select Output, FOUT2

Although FOUT1 has a fixed frequency output of 1160Hz for rated conditions, the table below shows the various frequencies selectable for rated conditions, on FOUT2.

User Selectable Output Frequency				
PGM1		PGM0		FOUT2 (Hz)
Connection	Level	Connection	Level	
1-2	0	1-2	0	5.11
1-2	0	1-2	1	3.83
2-3	1	2-3	0	2.55
2-3	1	2-3	1	n/a

- The connection details of the PA9605AP for conversion from the SA9605APA (DIP-20) outline to SA9105XPA (DIP-40) outline, is shown in Fig. 2.

Figure 2: Connection Diagram



DR -01305

**ORDERING INFORMATION**

<b>Part Number</b>	<b>Description</b>
PA9605AP	Adaptor Module



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