

Tech Tips

ACTPM TEST

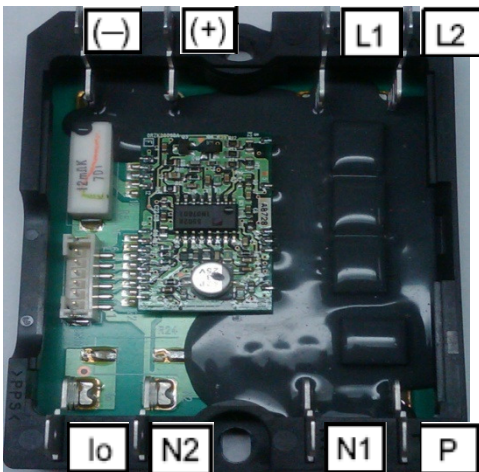
The Active Filter Module (ACTPM) is a PCB that filters the harmonic current . Its output is supplied to the Inverter Power Module (IPM) PCB. If the unit has a **Communication error** or **ACTPM error**. You must first perform a communication test to see if it is the outdoor condenser or indoor evaporator unit that is not communicating. Once you have determined that the outdoor condenser unit is not communicating, proceed to check the ACTPM.

- First turn off power to the outdoor unit and wait 5 minutes.
- Unplug all the wires to the ACTPM
- Perform the test below with a meter that is capable of reading at least 10 Mega Ohms
- If the readings are wrong replace the ACTPM.
- Once ACTPM is tested also test the Diode bridge rectifier. See diode bridge rectifier tech tip for more information.

Check Point 1 : Check Open or Short-circuit :



Remove connector, check the open or short-circuit and the diode in the module



Check the open or short-circuit

Tester (+)	Tester (-)		
(+)	(-)	360 kΩ	+/- 20%
(-)	N1	0	
P	(+)	720 kΩ	+/- 20%
L1	L2	500 kΩ or above	
P	N1	360 KΩ	+/- 20%
L1,L2	Control Box	∞	
L2	N2	800 kΩ or above	

Check the diode

Terminal		Resistance Value	
Tester (+)	Tester (-)		
L2	P	500 kΩ or above	
P	L2	500 kΩ or above	

>> If it is abnormal,replace **ACTIVE FILTER MODULE**

For the error code ACTPM ERROR.

Check the Output DC voltage (between P and N1) after the compressor stopped.

If the output DC voltage is less than the input AC voltage between L1 and L2, the Active Filter Module is defective.