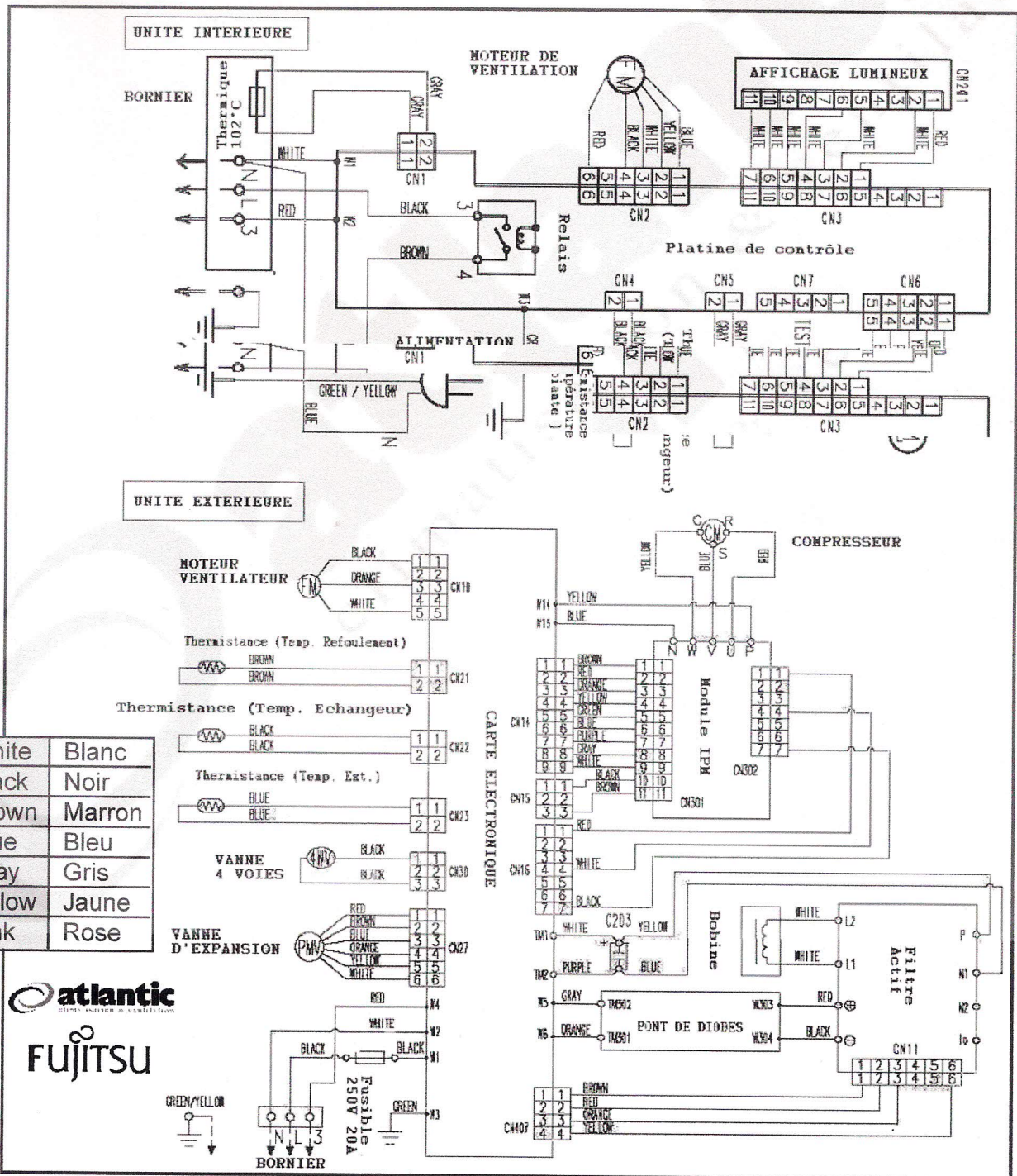


• Le climatiseur se met-il régulièrement en sécurité HP ?  
 Si ce phénomène est observé pour des températures basses ( $\leq 5^{\circ}\text{C}$ ), il y a lieu de contrôler si l'unité intérieure n'est pas influencée par une reprise d'air chaud (chauffage d'appoint à proximité de l'appareil ou implantation favorisant le recyclage de l'air soufflé par exemple).

- La charge est-elle bonne (entre 20 et 40 bars) ?
  - Une charge trop faible explique une prise en glace fréquente ;
  - une charge trop importante explique une mise en sécurité HP fréquente.
- (Si le doute sur la charge subsiste, chargez à la balance).

## 4. Schémas de Fonctionnement

### A Schémas électriques



## SERVICE PARTS INFORMATION 6

Active filter module

Check Point 1 : Check Open or Short-circuit and Diode (D1)



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

Check the open or short-circuit

Table.1 Each type standard value

Terminal		Resistance value	
		Type A	Type B
multimeter (+)	multimeter (-)	SACT32010 [ HITACHI ] LACT33020 [ HITACHI ]	PM-604 [ FGEL ] PM-703 [ FGEL ]
		PM-601 [ FGEL ] <b>LOT No. - 1302931395</b>	PM-601 [ FGEL ] <b>LOT No. 1302931396 -</b>
+	(+IN)*	360kΩ ± 20%	360kΩ ± 20%
-	(-IN)*	0 Ω	0 Ω
	N1 (N)*		
※	P	720kΩ ± 20%	900kΩ ± 20%
	(+IN)*		
L1	L2	1.01MΩ / 0.76MΩ (Ref. value 1) (Ref. value 2)	1.01MΩ / 0.76MΩ (Ref. value 1) (Ref. value 2)
P	N1 (N)*	360kΩ ± 20%	540kΩ ± 20%
L1, L2	Control Box	∞ Ω	∞ Ω
※	L2	1.65MΩ / 1.14MΩ (Ref. value 1) (Ref. value 2)	1.65MΩ / 1.14MΩ (Ref. value 1) (Ref. value 2)
	N1 (N)*		

\* ( ) is FGEL terminal name.

Table.2 Standard value is changed by the tool specification  
(Type A and B are the same value)

Terminal		Resistance value
multimeter (+)	multimeter (-)	
※	L2	1.32MΩ / 0.66MΩ (Ref. value 1) (Ref. value 2)
※	P	1.01MΩ / 0.76MΩ (Ref. value 1) (Ref. value 2)

※ By kind of multimeter, the value may change significantly.

Ref. value 1

Specifications for Multimeter  
Manufacturer : FLUKE  
Model name : FLUKE11  
Power source : DC9V.

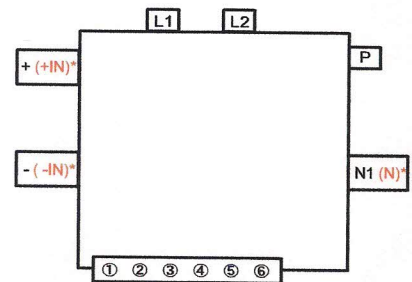
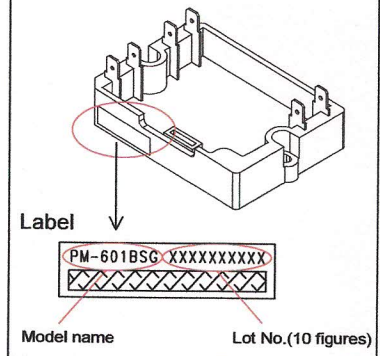
Ref. value 2

Specifications for Multimeter  
Manufacturer : SANWA  
Model name : PM3  
Power source : DC3V.

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

LOT No. of PM-601 [ FGEL ] type

Label position



Check Point 2 : Check the Output DC voltage (between P and N)



Check the Output DC voltage (between P and N) of compressor stopping and operating.

>> If the output voltage of compressor operating is less than the output voltage of compressor stopping, Active Filter Module is defective. >> **Replace Active Filter Module**

## SERVICE PARTS INFORMATION 7

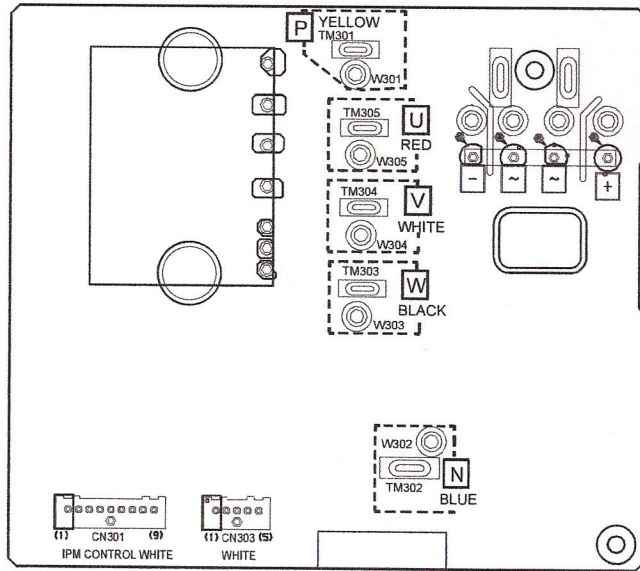
IPM

(Mounted on Transistor PCB)

### Check Point 1

- ① Disconnect the connection wires between the Transistor PCB - Capacitor PCB and Transistor PCB - Inverter Compressor.
- ② Set the tester to the "Resistance" mode, and measure the resistance between the following terminals.  
 TM301 (P) - TM305(U) / TM304(V) / TM303(W)  
 TM302 (N) - TM305(U) / TM304(V) / TM303(W)
- ③ Judge the result of ② as follows:

Terminal		Resistance value
Tester(+)	Tester(-)	
P	U	Over 2k $\Omega$ (Including $\infty\Omega$ )
	V	
	W	
U	P	Over 20k $\Omega$ (Including $\infty\Omega$ )
V		
W		
N	U	
	V	
	W	
U	N	Over 2k $\Omega$ (Including $\infty\Omega$ )
V		
W		



### Check Point 2

- ④ Set the tester to the "Diode" mode, and measure the voltage value between the following terminals.
- ⑤ Judge the result of ④ as follows:

Terminal		Tester display
Tester(+)	Tester(-)	
P	U	$\infty$
	V	
	W	
U	P	0.3V~0.7V
V		
W		
N	U	
	V	
	W	
U	N	$\infty$
V		
W		

