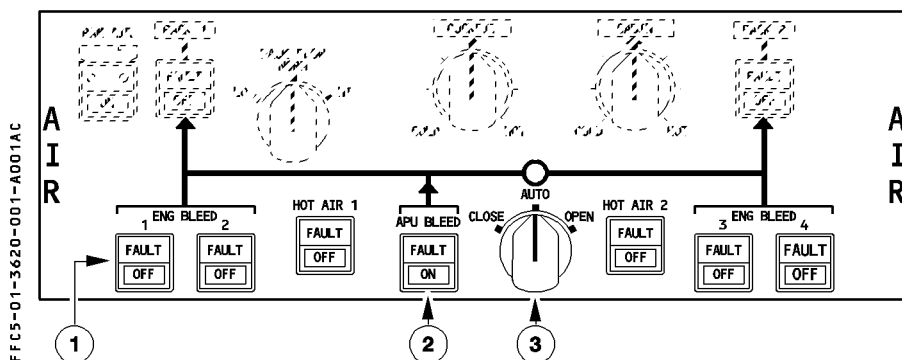


OVERHEAD PANEL



①ENG 1 (2, 3 or 4) BLEED pb sw

- On :
- Bleed valve opens provided :
 - Upstream pressure is above 8 psi.
 - APU BLEED pushbutton is at OFF, or, APU bleed valve is closed.
 - There is no onside wing or pylon leak, overpressure or overtemperature detected.
 - ENG FIRE pushbutton not released out
 - Eng start valve closed
- FAULT It :
- illuminates amber, associated with ECAM caution, in case of :
 - Bleed valve not closed during engine start
 - Bleed valve not closed with APU bleed ON (and for RH engine X-bleed open)
 and additionally associated with autoclosure of the bleed and HP valves :
 - Overpressure downstream of the bleed valve.
 - Bleed overheat
 - Wing or engine leak on the related side
- It extinguishes when the ENG BLEED pushbutton sw is at OFF provided the failure has disappeared
- OFF :
- Bleed valve and HP valve close. OFF light illuminates white. FAULT light and autoclosure signal are reset.

	PNEUMATIC CONTROLS AND INDICATORS		1.36.20	P 2
			SEQ 105	REV 15

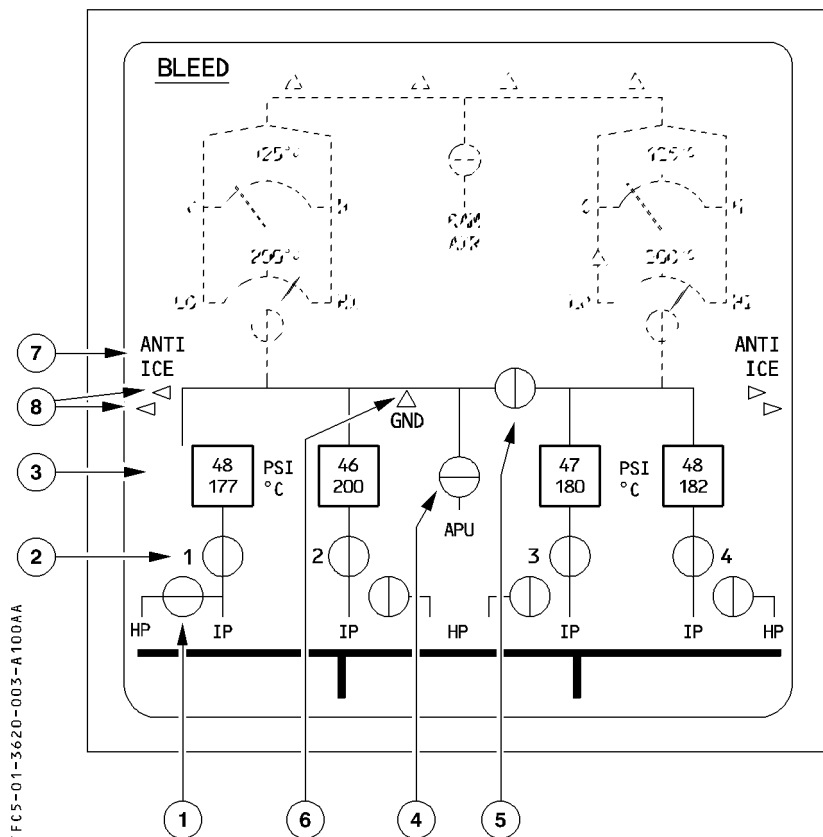
② APU BLEED pb

- ON : It opens provided :
- N is greater than 95 %
 - Altitude is less than 25000 ft climbing, or less than 23000 ft descending.
 - No leak is detected on APU or LH bleed. (Should a leak occur on the RH side, the X–bleed would close).
- The ON light comes on in blue.
- Off : APU valves closes.
- FAULT It : The amber light and the ECAM caution come on when :
- APU leak is detected.

③ X-BLEED sel

- AUTO : Valve is open, if the APU bleed valve is open.
Valve is closed, if the APU bleed valve is closed.
- OPEN : Valve is open.
- CLOSE : Valve is closed.

ECAM BLEED PAGE



FFCS-01-3620-003-A100AA

① HP VALVES

Crossline	- Green	:	HP valve fully closed.
In line	- Green	:	HP valve not fully closed.
Crossline	- Amber	:	HP valve disagree in closed position, or when HP valve is fully closed and the respective engine is not running, or when HP valve is fully closed and the respective bleed system is OFF.
In line	- Amber	:	HP valve not fully closed, and the respective engine is not running, or when HP valve is not fully closed and the respective bleed system is OFF.

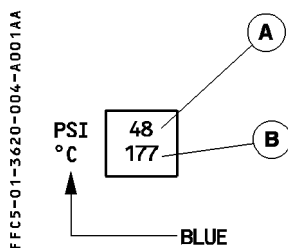
	PNEUMATIC CONTROLS AND INDICATORS	1.36.20	P 4
		SEQ 001	REV 07

②ENGINE BLEED VALVES

- ⓐ green : bleed valve normally open.
- ⓑ green : bleed valve fully closed (by manual or automatic control)
- ⓐ amber : bleed valve disagree in open position
- ⓑ amber : bleed valve disagree in closed position
or the bleed valve is fully closed and the respective engine is not running.

Note : Under certain circumstances such as different engine setting or one bleed valve minor regulation drift, it is possible that one bleed valve on one side closes and will be indicated on ECAM BLEED page closed and green. There is no operational consequence on bleed system provided there is no ECAM warning "AIR ENG i BLEED FAULT" associated.

③ENGINE BLEED INDICATIONS



ⓐprecooler inlet pressure

normally green, becomes amber if lower than 4 psi or in case of overpressure detected by the BMC (above 60 psi).

ⓑprecooler outlet temperature

normally green, becomes amber in case of overheat or low temperature detection by BMC.

Overheat is detected if the temperature exceeds :

- 290°C for more than 5 seconds or,
- 270°C for more than 15 seconds or,
- 257°C for more than 55 seconds.

Low temperature is detected if bleed temperature drops below 150°C and if wing anti ice is on.

	PNEUMATIC CONTROLS AND INDICATORS		1.36.20	P 5
			SEQ 100	REV 09

④ APU BLEED VALVE

Displayed only if APU MASTER SW is ON.

- ⊖ green : APU valve not fully open and the APU BLEED pushbutton is OFF
- ⊖ amber : APU valve is not fully open and APU BLEED pushbutton is ON.
- ⓪ green : APU valve fully open.

⑤ CROSS BLEED VALVE

- ⓪ green : crossbleed valve is normally closed.
- ⊖ green : crossbleed valve is normally open.
- ⓪ amber : crossbleed valve disagrees in closed position.
- ⊖ amber : crossbleed valve disagrees in open position.
- ⊗ amber : crossbleed valve in transit

⑥ GND HP ground connection indication

△ : displayed in white on the ground
 GND

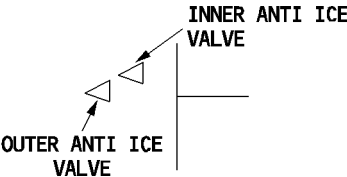
⑦ ANTI ICE indication

Displayed in white if the WING pushbutton on the ANTI ICE panel is ON and both valves on the related side are open. The associated anti ice indication becomes amber if :

- the position of at least one valve of the related side disagrees with the anti ice selection
- at least one arrow symbol is amber on the related side.

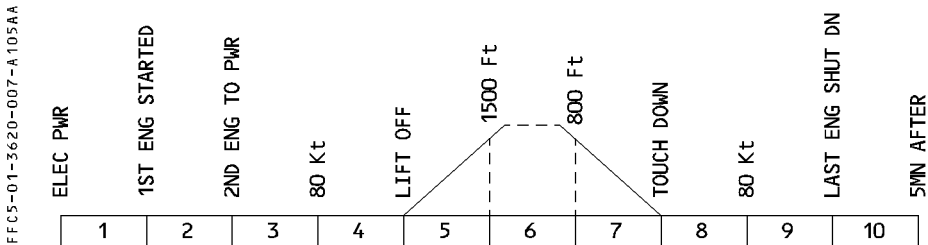
⑧ Arrows

FF 65-01-3620-006-A001AA



ARROW DISPLAY	
not displayed	Valve closed
Green	Valve normally open
Amber	Valve open and at least one of the following condition is met : – bleed air pressure high or low – wing anti-ice pushbutton is at OFF position – open for more than 35 seconds while aircraft is on ground.

WARNINGS AND CAUTIONS



E / WD: FAILURE TITLE conditions	AURAL WARNING	MASTER LIGHT	SD PAGE CALLED	LOCAL WARNING	FLT PHASE INHIB		
ABNORM BLEED CONFIG configuration of bleed system has to be changed	SINGLE CHIME	MASTER CAUT	BLEED	NIL	3, 4, 5, 8		
ENG 1 (2) (3) (4) BLEED FAULT Bleed air pressure overheat, or low pressure*, or hi pressure or loss of the back flow protection function, or HPV failed open and airflow temp. more than 450°C.				ENG BLEED FAULT It	1, 3, 4, 5, 7, 8, 10		
L (R) WING LEAK temperature > 124° C detected by the loops					3, 4, 5, 7, 8		
ENG 1 (2) (3) (4) BLEED LEAK temperature > 154° C detected by the loop							
ENG 1 (2) (3) (4) BLEED NOT CLSD Bleed valve not automatically closed during engine start or with APU bleed selected							
APU BLEED FAULT APU available and valve disagree				NIL			
APU BLEED LEAK temperature > 124° C detected by the loops				APU BLEED FAULT It			
PACK 1(2) LEAK Temperature > 124°C detected by the loops				NIL	1 to 5 8 to 10		
X BLEED FAULT Valve disagree					3, 4, 5, 7, 8		
BLEED LO TEMP Bleed air below 150°C with wing anti ice selected on.							
ENG 1 (2) (3) (4) HPV NOTOPEN HP valve is abnormally closed	NIL	NIL	3, 4, 5, 7, 8				
BMC 1(2) FAULT Computer failure							
L (R) WING LEAK DET FAULT Both detection loops inoperative in one wing							
PACK 1(2) LEAK DET FAULT Both detection loops inoperative in one wing							
APU LEAK DET FAULT Both detection loops inoperative in one section							

* Local warning is not triggered in case of low pressure.

	PNEUMATIC CONTROLS AND INDICATORS		1.36.20	P 8
			SEQ 001	REV 15

MEMO DISPLAY

- APU BLEED message appears in green if the APU is available and the APU BLEED pushbutton is ON.