

## **1 INTRODUCTION**

Background check-up :

- On **Air Conditioning Units of tents (ZHENDRE)** of **EUROCORPS**
- Done in **November 2018, weeks 47 & 48**  
**December 2018, week 49**
- In Quartier Aubert de Vincelles Strasbourg

## **2 ABBREVIATIONS**

ACU            Air Conditioning Unit

## **3 PURPOSE OF THE INTERVENTION**

- ACU maintenance
- Types of our ACUs to be checked:
  - a) Zhendre CTZ 12V50/97
  - b) Zhendre CTZ 16V50/10
- Place of service:  
Strasbourg or location of contractor's workshop
- Duration, schedule, timeline:  
To be defined in the offer

## **4 ACU MAINTENANCE**

### **4.1 OPERATIONS TO BE DONE – PREVENTIVE MAINTENANCE**

- General inspection
- Leak test according to EC regulation n° 1516/2007 with sticker on the machine
- Check of the inspection glass (moisture in refrigerant liquid)
- Check of ACU running: refrigeration mode and heating mode
- Check of electrical panel: aspect of components (breakers, contactors, terminals, wiring, tightening of terminals...)
- State and cleaning of air filter if necessary
- Cleaning of ACU exchanger (evaporator)
- Lubrication
- If needed, replacement of the refrigerant liquid and disposal of old liquids

- If needed, changing of refrigerant dryer
- In case of gas leak: research of leak point: if it is a coupling: tightening of the coupling, addition of gas R407c\*
- In case of pressure check not correct: addition of gas R407c\*
- Report of all work executed and test result

(\*): quantity of gas R407c mentioned in the report.

#### 4.2 **CORRECTIVE MAINTENANCE**

107 tents ACU have been checked last year, and some needed reparations appeared;  
The detail for each ACU is mentioned in the table of following pages

Defects have been discovered during preventive maintenance:

- Some of them have been treated,
- Some defects remain to be treated.

13 ACU are fully operational

22 ACU are not operational

72 ACU are operational but with repair or part replacement to be done: from filter locks broken or missing (43 ACU concerned) to more important repair or replacement to be done

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Total 107 ACU

See table here under

ACU model	Serial Nr	Check result	ACU OK fully operational	ACU running but with repair to be done	ACU not running	Refrigerant gaz added kg	Repair done	Filter locks to be replaced	Damaged filter to be replaced	Pressostatic variator (VP1) to be replaced	Replacement of remote thermostat missing	Replacement of thermostat B4	Light indicator to be replaced	Other repair to be done
CTZ16V50	C1	OK		X				2						
CTZ16V50	C2	OK		X				1						
CTZ16V50	C3	OK		X				2						
CTZ16V50	C4	NOK			X			3			1	1	1 (heating)	
CTZ16V50	C5	NOK			X			1						- Condenser heat exchanger to be refixed - Replacement of supply cable
CTZ16V50	C6	NOK			X	9	Partial repair Tightening of a coupling Not working after			1		1		- Replacement of service valve - Replacement of of dryer - Replacement of Pressure switch B6
CTZ16V50	1024581-1	OK		X				2						
CTZ16V50	C8	NOK			X			1					1 (heating)	- Condenser exchanger to be refixed
CTZ16V50	C9	OK	X											
CTZ16V50	C10	OK		X		9	Re-setting up of service valve				1			
CTZ12V50	C12	OK	X											
CTZ12V50	C13	OK		X				2		1				- Setting of rivets for pannel fixation
CTZ12V50	C14	OK		X				1						
CTZ12V50	C15	OK		X				3						
CTZ12V50	C16	OK		X				2						- Replacement of 2 cable duct cover
CTZ12V50	C17	OK		X					1	1				
CTZ12V50	C18	OK		X				3						
CTZ12V50	C19	NOK			X							1		
CTZ12V50	C20	OK	X			6	Tightening of service valve							

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CTZ12V50	C21	NOK			X			2		1				
CTZ12V50	C22	OK		X				2						
CTZ12V50	C23	OK		X				1						
CTZ12V50	C24	OK		X				2			1		1 (heating)	
CTZ12V50	C25	OK		X				1						
CTZ12V50	C26	NOK			X			2						- Replacement of 2 heat exchangers (condenser) - Filling with refrigerant gaz
CTZ12V50	C27	OK		X				1	1					
CTZ12V50	C28	NOK			X			1						- Replacement of 2 service valves
CTZ12V50	C29	OK		X				1	1					
CTZ12V50	C30	OK		X				1						
CTZ12V50	C31	OK		X				1						- Replacement of HP discharge valve - Filling with refrigerant gaz - Replacement of cable of remote thermostat
CTZ12V50	C32	OK		X				2		1				
CTZ12V50	C33	OK		X				2						
CTZ12V50	C34	OK		X				3						- Replacement of a copper pipe (condensate evacuation)
CTZ12V50	C35	OK		X				2	1					
CTZ12V50	C36	OK		X				1						- Repair of cable connection of remote thermostat - Replacement of an elastomer attaching part for air hose
CTZ12V50	C37	OK		X				1						
CTZ12V50	C38	OK		X				1					2 (heating, ON)	
CTZ12V50	C39	OK		X				1					1 (heating)	

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CTZ12V50	C40	OK		X				2						
CTZ12V50	C41	OK		X				1						
CTZ12V50	C42	OK		X				2						
CTZ12V50	C43	OK		X			Tightening of couplings							- Intallation of HP discharge valve and LP suction valve (missing)
CTZ12V50	C44	OK		X				2						
CTZ12V50	C45	OK	X											
CTZ12V50	C46	OK		X				1	1					
CTZ12V50	C47	OK	X											
CTZ12V50	C48	OK		X				3						
CTZ12V50	C49	NOK			X			2		1		1		- Cleaning of condenser exchanger with pressurized water after dismounting of fan
CTZ12V50	C50	OK		X				2						
CTZ12V50	C51	OK		X				1						
CTZ12V50	C52	OK		X				2		1				
CTZ12V50	C53	OK		X				1						
CTZ12V50	C54	OK		X										- Repair of cable connection of remote thermostat
CTZ12V50	C55	OK	X											
CTZ12V50	C56	NOK			X							1		- Mastic sealing for cable compartment water tightness
CTZ12V50	C57	OK		X				2						
CTZ12V50	C58	OK	X											

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CTZ12V50	C59	NOK			X			2						- Replacement of condenser fan
CTZ12V50	C60	OK		X				1					1 (heating)	
CTZ12V50	C61	OK		X				2						
CTZ12V50	C62	OK		X				2						
CTZ12V50	C63	OK	X											
CTZ12V50	C64	NOK			X				1	1		1		- Replacement of HP discharge valve and LP suction valve - Suppression of mechanical interference between condenser and pannel
CTZ12V50	C65	OK	X											
CTZ12V50	C66	NOK			X				1					- Shortening of supply cable (damaged part 2,5m) - Replacement of phasis inverter S4 - Replacement of phasis controller CPH1 - Repair of cable connection of remote
CTZ12V50	C67	OK		X				2						
CTZ12V50	C68	OK		X				2						
CTZ12V50	C70	OK	X											
CTZ12V50	C71	OK		X				2						
CTZ12V50	C72	OK		X						1				- Repair of cable connection of remote thermostat
CTZ12V50	C73	OK		X				2	1				1 (heating)	- Replacement of copper pipe (condensate evacuation)
CTZ12V50	C74	OK	X											
CTZ12V50	C75	NOK			X			3		1				
CTZ12V50	C76	OK		X				1						
CTZ12V50	C77	NOK			X			1	1	1				- Replacement of condenser fan

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CTZ12V50	C78	OK		X			Elimination of unstucked foam pieces	2						
CTZ12V50	C79	OK		X				2					1 (heating)	
CTZ12V50	C80	OK		X				1			1			
CTZ12V50	C81	NOK			X			2						- Straightening of roof panel side (interfering with fan)
CTZ12V50	C82	OK		X				2						
CTZ12V50	C83	OK	X											
CTZ12V50	C84	OK		X						1				
CTZ12V50	C85	OK		X				2						
CTZ12V50	C86	NOK			X			2	1					- Elimination of foam tips on evaporator exchanger - Replacement of evaporator fan - Repair of cable connection of remote thermostat
CTZ12V50	C87	OK		X				1						
CTZ12V50	C88	OK		X				1						
CTZ12V50	C89	OK		X				1						
CTZ12V50	C90	OK		X				2						
CTZ12V50	C91	NOK			X			1						- Replacement of condenser fan (2° stage) supply cable
CTZ12V50	C92	NOK			X			2		1				- Replacement of thermostat of remote thermostat module
CTZ12V50	C93	OK		X					1					
CTZ12V50	C94	OK		X				2						
CTZ12V50	C95	OK		X				2						
CTZ12V50	C96	OK		X						1				

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CTZ12V50	C97	OK		X				1		1				
CTZ12V50	C98	OK		X				1						
CTZ12V50	C99	OK		X				1						
CTZ12V50	C100	NOK			X			1						- Replacement of compressor casing heater
CTZ12V50	C101	OK		X						1				
CTZ12V50	C102	OK		X				1		1				Cleaning of air filter with pressurized water
CTZ12V50	C103	OK		X				2	1					
CTZ12V50	C104	NOK			X			1	1	1	1	1		- Replacement of condenser fan - Replacement of breaker Q4 - Replacement of mode selector S3
CTZ12V50	C105	NOK			X				1			1		
CTZ12V50	C106	OK		X				2						
CTZ12V50	C107	OK		X				2					1 (heating)	
CTZ12V50	1024582-016/40	OK		X				3						
CTZ12V50	1025042-022/022	OK	X											
			ACU OK fully operational	ACU running but with repair to be done	ACU not running	Refrigerant gaz added kg	Repair done	Filter locks to be replaced	Damaged filter to be replaced	Pressostatic variator (VP1) to be replaced	Replacement of remote thermostat missing	Replacement of thermostat B4	Light indicator to be replaced	Other repair to be done (Qty of concerned ACU)
		Total	13	72	22	24	5	132	14	18	5	8	10	27
		Total Qty ACU		107										



