

## TIMESHEET REPORT

CUSTOMER NAME HARTFORD CARE LTD		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) GLENN - FACILITIES			SHEET NUMBER <b>12428</b>
SITE NAME & ADDRESS (PLANT OWNER F-GAS) HARTFORD COURT, CATHERINGTON PLACE, PORTSMOUTH. PO3 6GN		ENGINEER DANIEL CONDELLO	MATE CHARLIE ORLANDO		CLIENT ASSET NUMBER <b>00934</b>
REASON FOR VISIT QUOTED REPAIRS	MANUFACTURER ROBUR	MODEL	GAHP-A HT S		
JOB NUMBER J:N/ 3585. REF. ANGELA MERRICK	SERIAL No. 353860028	YEAR INSTALLED	03/06/2016		
PLANT LOCATION GROUND FLOOR NEXT TO MAIN PLANT ROOM OUTSIDE	REFRIGERANT TYPE R717	TOTAL REF. CHARGE	7.0 KG		
PLANT REFERENCE ABSORPTION PRE-HEAT DHW	REFRIGERANT GWP 0	IND. REF SYS. CHARGE	10KG H2O		
LOADS SERVED PRIMARY BUFFER TANK	EQUIV. TONNES CO2E 0	FGAS LEAK CHECK FREQ.	NOT REQUIRED		

WORK CARRIED OUT:

CARRIED OUT REPLACEMENT OF PRESSURE RELIEF VALVE ON ROBUR HEAT PUMP

DATE OF REPLACEMENT: 08/06/2020

RECOVERED AMMONIA SOLUTION FROM SEALED CIRCUIT, REPLACED HIGH PRESSURE RELIEF VALVE KIT, RECHARGED WITH EXISTING SOLUTION PURGED FOR NON CONDENSABLE TESTED OK.

IN NEXT 5 YEARS NO NEED TO RECOVER AMMONIA, JUST REPLACE MAIN VALVE.

### ENGINEERS TIME ON SITE & TRAVEL

### MATERIALS USED

DAY	DATE	START	FINISH	TRAVEL	TOTAL	COMPLETE Y/N	MILEAGE	No. ENG	QUANTITY	DESCRIPTION
MON	08/06/2020	08:00	14:00	2	8	Y	122	2	1	HIGH PRESSURE RELIEF VALVE KIT 32 BAR RATED
TUES										
WED										
THUR										
FRI										
SAT										
SUN										

CUSTOMER TO SIGN FOR ENGINEERS TIME ON SITE

ENGINEER SIGNATURE: Daniel Condello

CUSTOMERS SIGNATURE: \_\_\_\_\_

F-GAS QUALIFICATION: C&G 2079 PART 1

CUSTOMER NAME: GLENN

SIGNATURE DATE: 08/06/2020

CUSTOMERS JOB TITLE: FACILITIES

ADDITIONAL WORKS RECOMMENDED / REQUIRED:

ISO9001:2008. CUSTOMER SATISFACTION:

1= UNSATISFIED 2= BELOW AVERAGE 3= MET EXPECTATION 4= ABOVE AVERAGE 5= EXCELLENT

CUSTOMER COMMENTS ABOUT PERFORMANCE ON THIS JOB / CONTRACT:

# PPM REPORT - ROBUR AMMONIA ABSORBER

CUSTOMER NAME HARTFORD CARE LTD		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) GLENN - FACILITIES		SHEET NUMBER <b>12428</b>
SITE NAME & ADDRESS HARFORD COURT, CATHERINGTON PLACE, PORTSMOUTH. PO3 6GN		ENGINEER DANIEL CONDELLO	CLIENT ASSET NUMBER <b>00934</b>	
REASON FOR VISIT QUOTED REPAIRS	F-GAS QUALIFICATION C&G 2079 PART 1	COMPANY GAS SAFE. 0	ENGINEER GAS SAFE NO. 3814612	
JOB NUMBER J:N/ 3585. REF. ANGELA MERRICK	MANUFACTURER ROBUR	MODEL GAHP-A HT S		
PLANT LOCATION GROUND FLOOR NEXT TO MAIN PLANT ROOM OUTSIDE	SERIAL No. 353860028	YEAR INSTALLED 03/06/2016		
PLANT REFERENCE ABSORPTION PRE-HEAT DHW	REFRIGERANT R717	QUANTITY (KG) 7.0 KG		
CLG / HTG LOAD SERVED PRIMARY BUFFER TANK	REFRIGERANT GWP 0	EQUIV. TONNES CO2E 0		

BOX CODES  Y YES  N NO  G GOOD  F FAIR  P POOR  B BAD  N/A NOT APPLICABLE

### COMBUSTION CHAMBER Min

- Check Seals / Silicon Gaskets
- Check Fixings
- Check Burner
- Check Flame Sensor
- Check Ignitor
- Check Leads

### COMBUSTION CHAMBER Maj

- Check Chamber
- Replace Burner Silicon Gasket
- Check Condense Discharge Gas Valve Oper.
- Clean Combustion Chamber
- Clean Burner
- Clean Electrodes
- Clean Flame Sensor

### GAS FUEL CHECKS Min

- Gas Pressure from Meter
- Gas Pressure to the Burner
- Gas Pressure After Gas Valve
- CO2 % Value
- Check Flue Cleanliness

### GAS FUEL CHECKS Maj

- Gas Pressure from Meter
- Gas Pressure to the Burner
- Gas Pressure After Gas Valve
- O2
- CO2 % Value
- CO PPM
- Flue Temp
- Inlet
- Net
- Eff
- Losses
- Xair %
- CO/CO2
- Drop Test

### GENERAL COND. Min/Maj

- G Panelling
- G Drive Belt Condition
- 1.5 BarG Chilled Water Circ Press.
- 1.5 BarG Expansion Vessel Press.
- G Hydraulic Oil Cond.
- G Hydraulic Oil Level.
- N Hydraulic Oil Replaced.
- 0.3 BarG Hydraulic Oil Pressure.
- G AV Mounts

### ROBUR UNIT SAFETIES Min/Maj

- 3.035 PCB Firmware release
- 160.0 Deg C Gen H.T Cut-Out
- 2.2 Deg C LTL Cut-Out
- 160.0 Deg C Generator Max Cut Out Temp
- 400.0 Deg C Flue Max Cut out Temp
- G Air Pressure Switch Operation
- 45.0 Deg C High Ambient Cut-out Temp
- 25.0 Deg C Low Ambient Cut-out Temp
- 160.0 Deg C Generator Temp High Limit
- G Chilled Water Flow Switch Oper.
- G Oil Pump Rotation Sensor Check.

### DDC CONTROLS Min/Maj

- G Check Electrical Harnesses
- G Check Main Controller
- N Schedule Timer Updated
- 4.018 DDC Firmware Release
- G Check xRAM Board
- Y Service Checker Downloaded
- 24.0 VAC Record DDC Supply Voltage
- N Correct CanBus Cable Used
- G BRAM Battery Operation
- G Fuse F1 - F4 Condition

### DDC CONTROLS CAL. CHECKS Min/Maj

- Check Chilled Water Inlet Sensor
- Check Chilled Water Outlet Sensor
- Check Ambient Sensor
- Check Condenser Outlet Sensor
- Check Generator Temp Sensor

### UNIT RUN LOG Min/Maj

- CHW Inlet Temperature
- CHW Outlet Temperature
- 51.2 DegC LTHW Inlet Temperature
- 61.5 DegC LTHW Outlet Temperature
- 107.0 DegC Generator Temperature
- 16.9 DegC Ambient Air Temp
- 14.1 DegC Condenser Air Off Temperature
- 12.3 DegC Condenser Ref Out Temperature
- Condenser Fan Motor Amps
- Blower Motor Amps
- Hydraulic Pump Motor Amps
- N/A 17 Way Valve Condition
- 2600 L/H Chilled Water Flow Rate
- 24.3 BAR High Side Pressure
- 4.6 BAR Low Side Pressure
- 4.2 BAR Hydraulic Pump Deflection Pressure
- 287 Hours Run

\*1 **IS FURTHER WORK NEEDED. (Identify Below)**

### SOLUTION MAKE UP

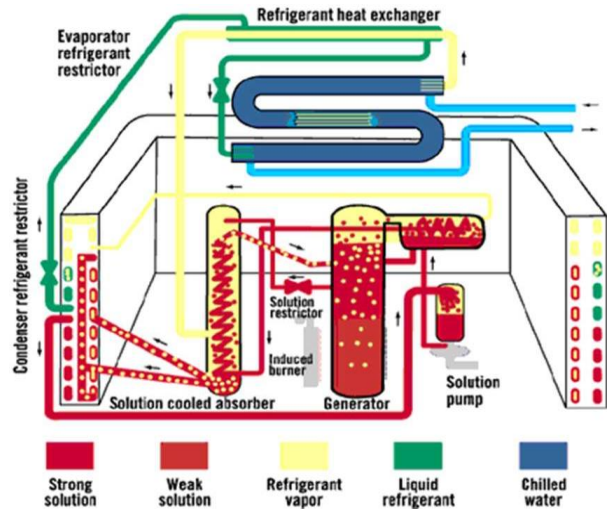
- 10.0 KG Refrigerant (H2O)
- 7.0 KG Ammonia R717
- 360.0 CC Inhibitor (Chromate)

### CHILLED WATER MAKE UP

- N/A Glycol %
- Inhibitor %
- N/A Defoam Agent
- N Water Leaks Present
- N Check CW Strainer

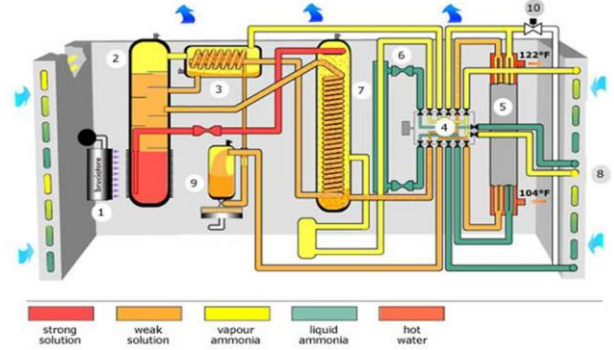
### UNIT STYLE ACF SERIES

X



### UNIT STYLE GAHP SERIES

X



### FAULTS FOUND:

\*1 PLEASE NOTE THESE ARE THE UPDATED RUN HOURS FROM LAST FIRMWARE UPDATE.

ENGINEER SIGNATURE: Daniel Condello

CUSTOMERS SIGNATURE: \_\_\_\_\_

DATE: 08/06/2020

## LOG - SITE DATA CAPTURE

CUSTOMER NAME		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE)		SHEET NUMBER	
HARTFORD CARE LTD		GLENN - FACILITIES		12428	
SITE NAME & ADDRESS		ENGINEER	DANIEL CONDELLO		CLIENT ASSET NUMBER
HARFORD COURT, CATHERINGTON PLACE, PORTSMOUTH. PO3 6GN		F-GAS QUALIFICATION	C&G 2079 PART 1		
REASON FOR VISIT	QUOTED REPAIRS	MANUFACTURER	ROBUR	MODEL	GAHP-A HT S
JOB NUMBER	J:N/ 3585. REF. ANGELA MERRICK	SERIAL No.	353860028	YEAR INSTALLED	03/06/2016
PLANT LOCATION	GROUND FLOOR NEXT TO MAIN PLANT ROOM OUTSIDE	REFRIGERANT TYPE	R717	QUANTITY (KG)	7.0 KG
PLANT REFERENCE	ABSORPTION PRE-HEAT DHW	CLG LOAD SERVED	PRIMARY BUFFER TANK		

## CONTROLLER LOG CAPTURE

**NUOVA GENERAL INSTRUMENTS s.r.l.**  
LOC. CAMPANO - 36030 PIANELLO VALTIGNONE (PD) Italy - Tel. +39 042944429 - Fax +39 042997919  
http://www.nuovageneral.it - Email: info@nuovageneral.it - P. IVA 0337604369 - CF 01116190460  
REA PD 11793 - Reg. Imp. PD 0117636661 - Capitale Sociale € 100.000,00 I.V.

N. from **06/2020**  
Tipo: **D7/S INOX**  
(Typ.):  
Dis. N° 041-1 Rev. 20/05/08

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**DICHIARAZIONE DI CONFORMITÀ** Allegato IV D. E. 2014/68/UE  
**DECLARATION OF CONFORMITY** Annex IV, E. D. 2014/68/UE  
**KONFORMITÄTSERKLÄRUNG** Anlage IV Richtlinie 2014/68/UE  
**DECLARATION DE CONFORMITÉ** Annexe IV D. E. 2014/68/UE

PROGETTO, COSTRUZIONE E COLLAUDO CONFORME ALLA DIRETTIVA 2014/68/UE - 15/05/14 CATEGORIA IV Modulo H1  
DESIGN, MANUFACTURE AND TEST ACCORDING TO 2014/68/UE DIRECTIVE - 15/05/14 CLASS IV Modulo H1  
PROJEKT, KONSTRUKTION UND ABNAHMEPRÜFUNG GEMÄß EG-RICHTLINIE 2014/68/UE - 15/05/14 KATEGORIE IV Formblatt H1  
PROJET, FABRICATION ET VERIFICATION CONFORME A LA DIRECTIVE 2014/68/UE-15/05/14 CATEGORIE IV Module H1

Garanzia qualità totale Nr.: Full quality assurance system Nr.:  
Garantie gesamt Qualität Nr.: Garantie qualité totale Nr.:  
Module H1: DGR-0036-QS-1180-15

Norme e spec. utilizzate: (Codes or spec.ref.): (Angewandte normen und spezifikationen): (regulements et spec. utilise):  
AD-Merkblatt A2 - VdTUV-Merkblatt Sicherheitsventil 100 / Racc. "E" ed.1979 / ISO 4126 - 1 / AS1271-2003 / EN-378 / EN13136

Organismo notificato: TÜV SÜD Industrie Service GmbH  
(Notified body): Westendstraße 199  
(Meldestelle): D 80686 Munich  
(Organisme agréé):

**VALVOLA DI SICUREZZA -- SAFETY VALVE**  
**SICHERHEITSVENTIL -- SOUPAPE DE SURETE**

- P.N.: 60 (Nenndruck)  
- D.N.: (Nominal Diameter)  
- h/dø: 0,28571 (D. N.):

- Emissa: (l/m): 1/4" NPT (Entrée):  
- Uscita (Out): (Ausgang): (Sortie):  
- Area (Area): (Öffnung): (Surface): 0,385 cm<sup>2</sup>

- Limite di temperatura di esercizio dei materiali utilizzati a pressione ambiente  
Operating temperature limits for materials used at atmospheric pressure:  
(Betriebs-temperaturgrenze der unter Luftdruck verwendeten Materialien):  
-196 / +250 °C  
(Limite de température de fonctionnement des matériaux utilisés sous pression atmosphérique):

- Coefficiente di effluvio ridotto (Reduced flow coefficient): (Reduzierter Ausfließkoeffizient): (Coefficient d'écoulement réduit):  
KdR = 0,9xKd = 0,81

- Variabilità campo di taratura: (Variability Setting Field): (Abgleichungsbereich):  
30 - 40 bar

- Scario di chiusura: (Closing variation): (Unterdruck): 15% (% Abgleichungsdruck)

- Sovrappressione: (% della pressione di taratura) (Overpressure): (Über-Unterdruck): 10% (% Abgleichungsdruck)

- Scarico in atmosfera: (Discharge in Atmosphere): (Abfluß gegen Atmosphäre):  
992,91 kg/h 768,03 Nm<sup>3</sup>/h 12800,54 l/min.

- Scarico in atmosfera: (Discharge in Atmosphere): (Abfluß gegen Atmosphäre):  
744,36 kg/h 965,45 Nm<sup>3</sup>/h 16090,84 l/min.

- Scarico in atmosfera: (Discharge in Atmosphere): (Abfluß gegen Atmosphäre):  
kg/h Nm<sup>3</sup>/h l/min.

1- UNI EN 10088 1.4404  
3- UNI EN 10088 1.4404  
5- UNI EN 10088 1.4404  
8- UNI EN 10088 1.4404  
9- UNI EN 10270-3 1.4310  
10 PTFE (-196 / +250 °C)

Anno costruzione: (Year of manufacture): (Baujahr):  
(Année de fabrication):

Nr.Ord.: oa-2017-003630 S.V. Code: GVLV095

Date:

## LOG - SITE PICTURES

CUSTOMER NAME HARTFORD CARE LTD		SITE CONTACT (OPERATOR RESPONSIBLE FOR F-GAS COMPLIANCE) GLENN - FACILITIES		SHEET NUMBER <b>12428</b>
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### SITE PICTURE LOG

