

## **INSTALLATION INSTRUCTIONS FOR CROWCON AIR SAMPLING UNIT 86ASU**

The Air Sampling Unit is designed for use with Crowcon Remote Gas Detecting Heads when monitoring air in ventilation ducts.

Part No.	S01—088
Duct Widths	300mm to 1500mm
Air Speeds	5m/s to 20m/s
Operating Temperature Range	0°C to 60°C

### **INSTALLATION**

1. To avoid the adverse effects of turbulence, the air sampling unit should be installed in the centre of a straight section of duct which has a length at least six times its width.
2. Check the air flow direction in the air duct system.
3. Apply the drilling template onto the centre line of the air duct parallel to the air flow. Check that the directional arrow on the drilling template is the same as the direction of the flow in the air duct.
4. Using a centre punch, punch the two centres indicated for the drilling template.
5. Drill out to 25mm (1 inch) diameter. Remove burrs and sharp edges around the two holes.
6. Remove the cover of the unit.
7. Fit the elbows with rubber washers on the inside and outside of the sampling chamber. Fit the nuts and tighten.
8. Remove the grip nuts and olives from both elbows. Place the olives over the tubes at the dot end and fit them into the elbows. Replace grip nuts and tighten.
9. Check that the dot Indicators are on the centre line of the sampling chamber pointing away from the chamber, also ensure that the sampling tube is mounted with air inlet holes remote from the sampling chamber. This is to ensure that the holes in the inlet tube face the oncoming air and that the chamfer of the exhaust tube faces away from the direction of the air flow.
10. Check the thickness of the air duct metalwork and fit the black rubber grommets into the two duct holes.
11. Fit the air sampling unit probes through the two grommets checking that the inlet and outlet probes are correctly installed and push until the unit has sealed.
12. Mark off the fixing holes on the air duct system and drill holes for fixing. Fix the unit.
13. Connect electrical wiring.
14. CHECK THAT THERE IS NO AIR LEAKAGE INTO THE SAMPLING CHAMBER FROM OUTSIDE THE DUCT, THROUGH THE PROBE JOINTS. CABLE GLANDS DR COVER GASKET.

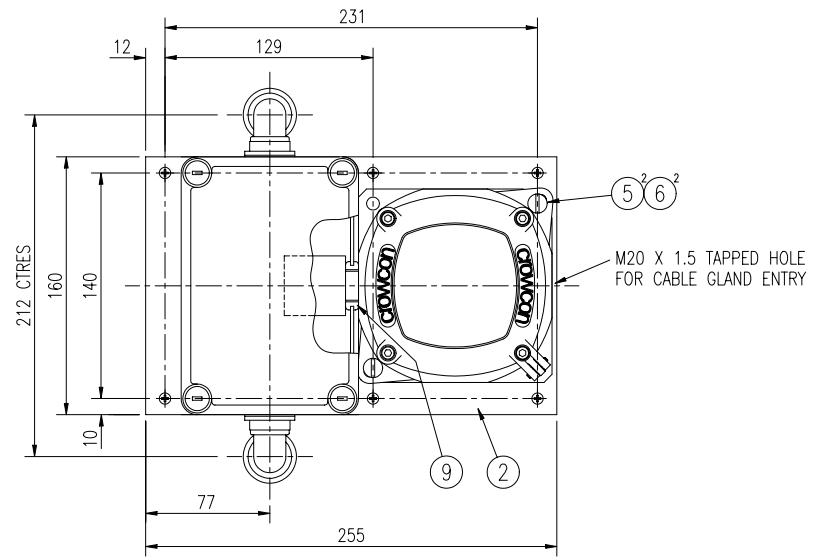
### **Test and Commissioning**

Adequate testing should be carried out by introducing gas into the duct system.

Crowcon Detection Instruments Limited  
2 Blacklands Way  
Abingdon Business Park  
Abingdon  
Oxon, OX14 1DY

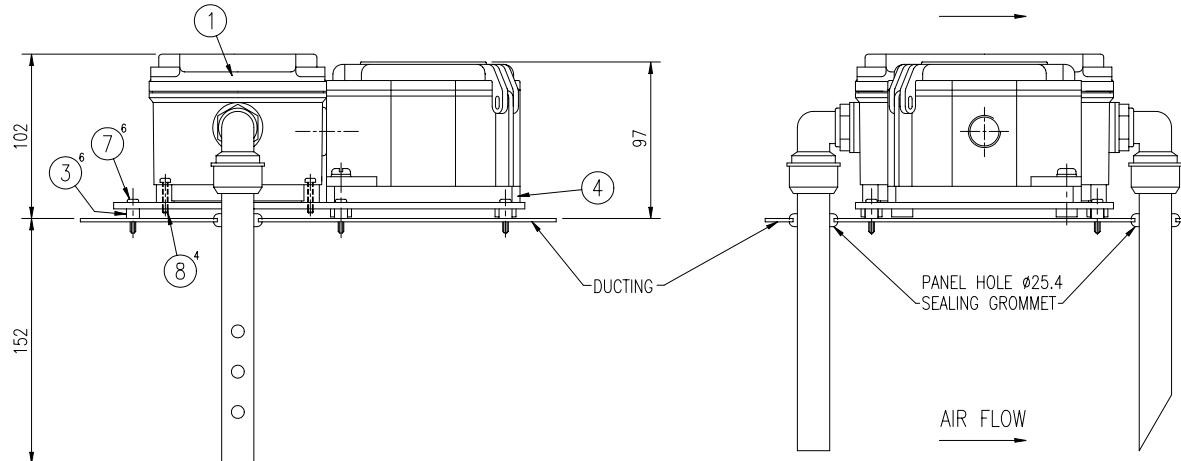
Stock No. M07047  
Issue: 11 03/01  
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Telex: 837688 Crocon G

DRG. No.	86ASU-1764-A2	ISS. 4
USED ON	STOCK No.	S01-088



#### ITEM LIST

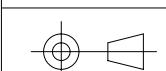
ITEM	PART No.	DESCRIPTION	QTY.
1	M01-138	AIR SAMPLING UNIT	1
2	M01-139	MOUNTING PLATE	1
3	M01-209	SPACER	6
4	M01-498	SPACER PLATE	1
5	M03-431	M6 X 25 PAN.HD.SCREW	2
6	M03-437	M6 WASHER	2
7	M03-683	No.6 X 3/4" SELF TAPPING SCREW	6
8	M03-687	4BA X 3/4" PAN.HD.SCREW	4
9	M04-141	GROMMET (25.4mm x 20.6mm)	1



4	1145D	9/98
ISSUE	D.C.I. No.	DATE

NOTE - WHEN MOUNTING UNIT TO DUCTING,  
MAKE SURE SPACERS (ITEM 3) ARE IN PLACE.

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IF IN DOUBT ASK.  
DRAWN TO B.S. 308/3939  
PROJECT No

MATERIAL  
SEE ITEM LIST

FINISH  
—

DRN SD CHKD APPR

TOLERANCES  
GEN= —  
ANG= —

DIMS mm  
SHT SIZE A2

ORIGINAL SCALE 1:2

**CROWCON**  
2 Blacklands Way, Abingdon Business Park,  
Abingdon, Oxfordshire OX14 1DY

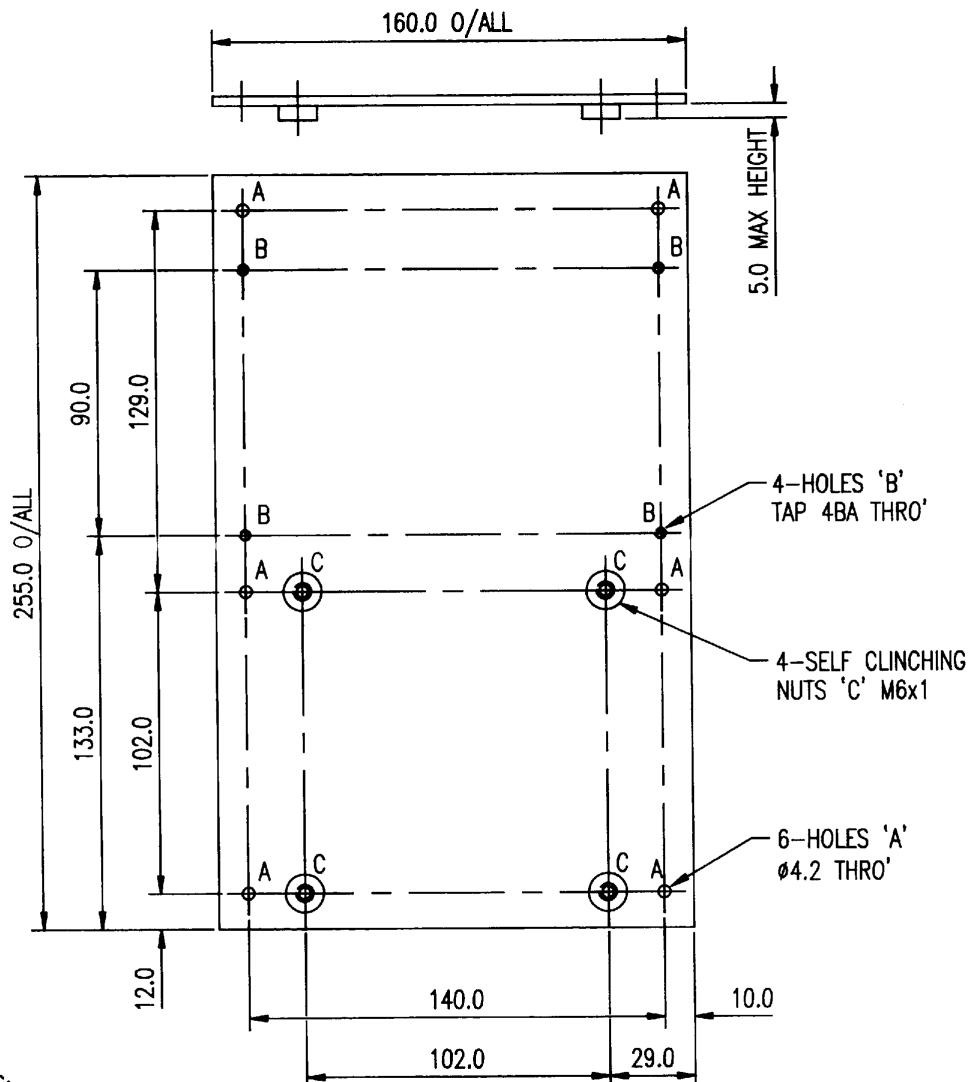
TITLE G.A. DUCT SAMPLING  
UNIT - PLASTIC

DRG. No. 86ASU-1764-A2 ISS. 4

DRG.  
No. 86ASU-711-A4 ISS. 5  
USED ON STOCK No.  
S01-088 M01-139

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DOUBT ASK  
DRAWN TO  
B.S.308/3939



NOTES:-

1. REMOVE ALL BURRS
2. ENSURE ALL THREADS ARE PAINT FREE
3. FINISH - 1 COAT OF ZINC BASED PRIMER , 1 INTERMEDIATE & 2 COATS OF BLACK PAINT

			MATERIAL 10 SWG (3.25 mm) MILD STEEL PLATE	TOLERANCES GEN= $\pm 0.2$ ANG= -	<b>CROWCON</b> 2 Blacklands Way, Altringham Business Park, Altringham, Cumbria CA14 5TY	
5	977D	5/97	FINISH SEE DRG	DIMS mm	TITLE 86ASU BASEPLATE (FOR PLASTIC VERSIONS)	
4	731D	12/94	PROJECT No.	SHT SIZE A4		
ISSUE	D.C.I.	DATE	DRN CN	CHKD APPR DLO	ORIGINAL SCALE 1:2	DRG. No. 86ASU-711-A4 ISS. 5