

GMW Series

Underceiling Fan Coil Units

Installation & Maintenance

GENERAL

The GMW Underceiling fan coil units are available with Standard (-S) or High (-H) capacity motor/s, e.g.

- GMW 140-S, standard cap. 6 pole motors
- GMW 140-H, high capacity 4 pole motors

The GMW Underceiling units must be installed in accordance with all national and local safety codes.

Components

The GMW carton includes:

1. GMW fan coil unit.
2. Insulated condensate drain extension kit (not necessary with heating only units).

A remotely positioned control switch is not included but is required.

INSTALLATION

Positioning & Mounting

The GMW is designed to be installed suspended horizontally beneath a level or sloping ceiling. For an extra low profile the unit can be recessed into the ceiling.

Note: GMW units are not suitable for mounting on a wall.

Preparation

Prior to mounting the GMW the mounting brackets must be detached from each end of the unit.

1. Open the end filter panel and locate the screw securing the unit endcaps (refer figure 3).
2. Remove the endcap securing screw and retain.

3. Remove the endcap by first sliding it forward approx. 20 mm, then pull outwards away from end of the unit.
4. Release each mounting bracket from behind the two bolts securing them to the unit.

Mounting

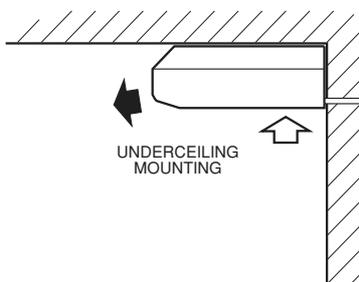
Locate the GMW near a wall to take full advantage of the long supply air throw and to hide the condensate drain pipe (and other connections) exiting at the rear of the unit.

Installation

1. If an extra low profile installation is preferred, first cut the required ceiling aperture.
2. Install four M8 threaded hanging rods (not supplied) to protrude no more than 30 mm below the level of the mounting bracket flange (refer figure 2).
3. Thread on and tighten the lower washer and locknut sets (not supplied) to secure the left and right mounting brackets.

Note: Mounting bracket flanges face inwards.
4. Adjust distance between mounting brackets to match dimensions in figure 4.
5. Lift the unit to the mounting brackets locating the two protruding bolts, at each end of the unit, securely into the two slots provided in each mounting bracket, then tighten bolts to secure the GMW unit.
6. Check that the secured GMW is installed level to facilitate condensate drainage.
7. Complete all water piping connections.
8. If the unit is to be used for cooling, fit the insulated condensate drain extension, orientated so that the drain vent tube is at the highest point in the condensate line.
9. After completing all piping connections replace the GMW unit's left and right endcaps as follows:
 - a. Place each endcap slightly forward of the appropriate end of the unit,
 - b. Compress the endcap at its centre and slide back hooking the endcaps hook under the 'U' shaped bracket on the unit and into position .
 - c. Secure each with the screws removed earlier from behind the filter panels.

Fig. 1 Positioning



Note: GMW units are not suitable for mounting on a wall.

Fig. 2 Mounting Detail

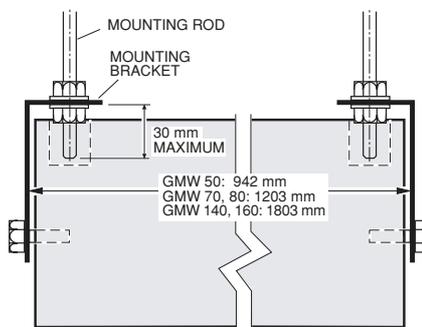
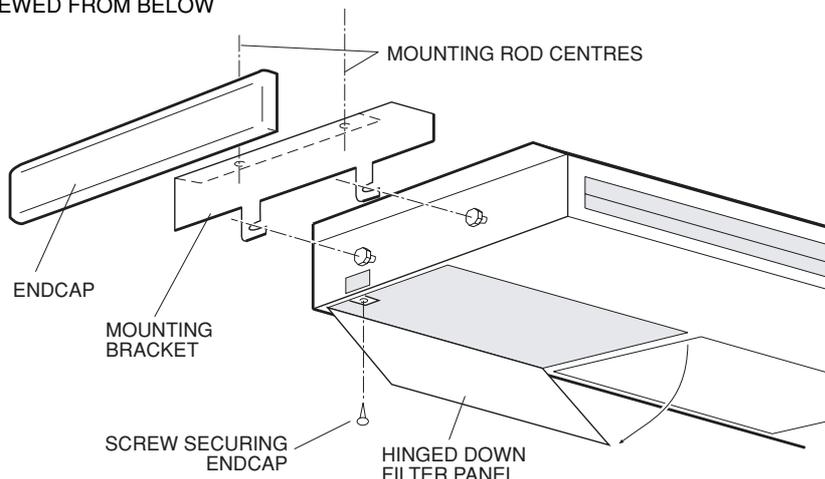


Fig. 3 Mounting Bracket Detachment

VIEWED FROM BELOW



CONDENSATE DRAIN

A condensate drain is required for all cool only or cool/heat units. Connect a 19 mm ID drain pipe (not supplied) to the GMW's drain connection. Maintain a downwards slope of at least 1 in 50 (20 mm/m) along the drain line. No 'U' trap is necessary.

ELECTRICAL WIRING

The electrical supply required (including voltage fluctuation limits) is:
1 phase 200–252 V a.c. 50 Hz.

Electrical work must be carried out by a qualified electrician in accordance with local supply authority regulations and the wiring diagram.

INDOOR FAN SPEED

The GMW is shipped with the fan speed set on MED for single speed operation, but has been wired to accommodate a remote switch (not supplied) to change between the three available speeds.

COMMISSIONING

Indoor Unit

1. Check that the thermostat is correctly wired and set at the desired temperature.
2. Check that the air filter is clean.
3. Check that the fan runs freely without vibration.
4. Check condensate drain (if fitted) for free drainage.
5. Run the unit in cooling mode.

6. Run the motorised louvre to check up/down air distribution.

Note: Use motor switch to set up/down louvre in **fixed** position, if required. Do not try to set up/down louvre manually.

7. With the motorised louvre switched off, manually adjust the left/right louvre to throw the air in the required direction.

MAINTENANCE

Weekly For First Four Weeks

1. Check air filter; vacuum clean as necessary.
2. Check condensate drains for free drainage.

Monthly

Check air filter; vacuum clean as necessary.

Six Monthly

1. Check condensate drain (if fitted) for free drainage.
2. Check the tightness of the fan.
3. Check that fan motor is free running.
4. Check tightness of electrical connections.
5. Check air supply at louvre.

NOTE

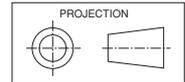
The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimensions available on request.

This pamphlet replaces the previous issue no. 2109 dated 04/02.
Wiring revision A - cap. wire colour.

DIMENSIONS (mm)

Fig. 4 GMW 50, 70, 80, 140, 160

Not to Scale



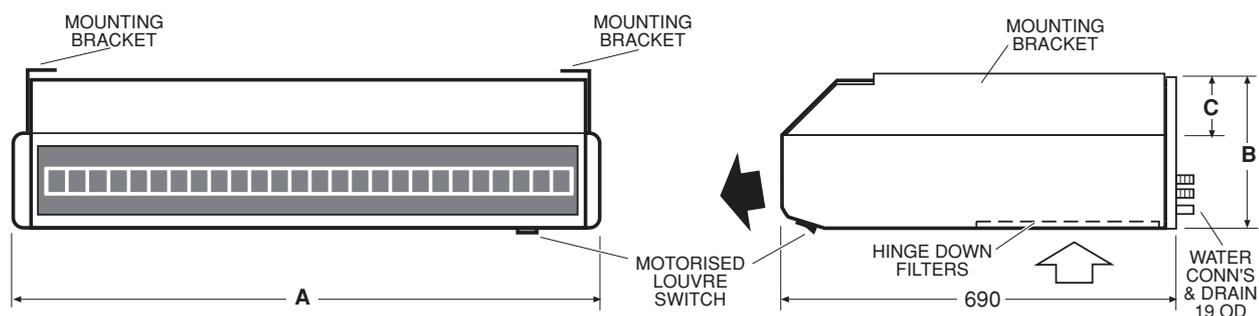
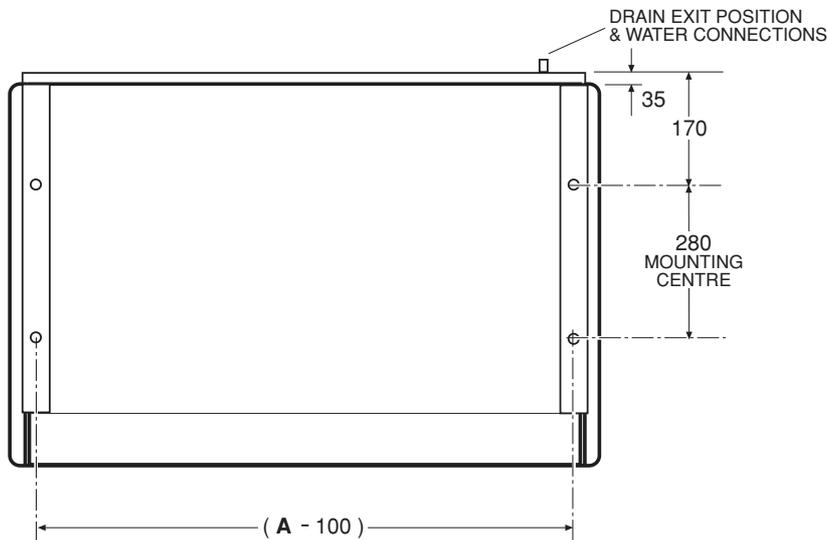
MODEL	A	B	C
GMW 50	1000	190	35
GMW 70	1260	190	35
GMW 80	1260	255	100
GMW 140	1860	255	100
GMW 160	1860	255	100

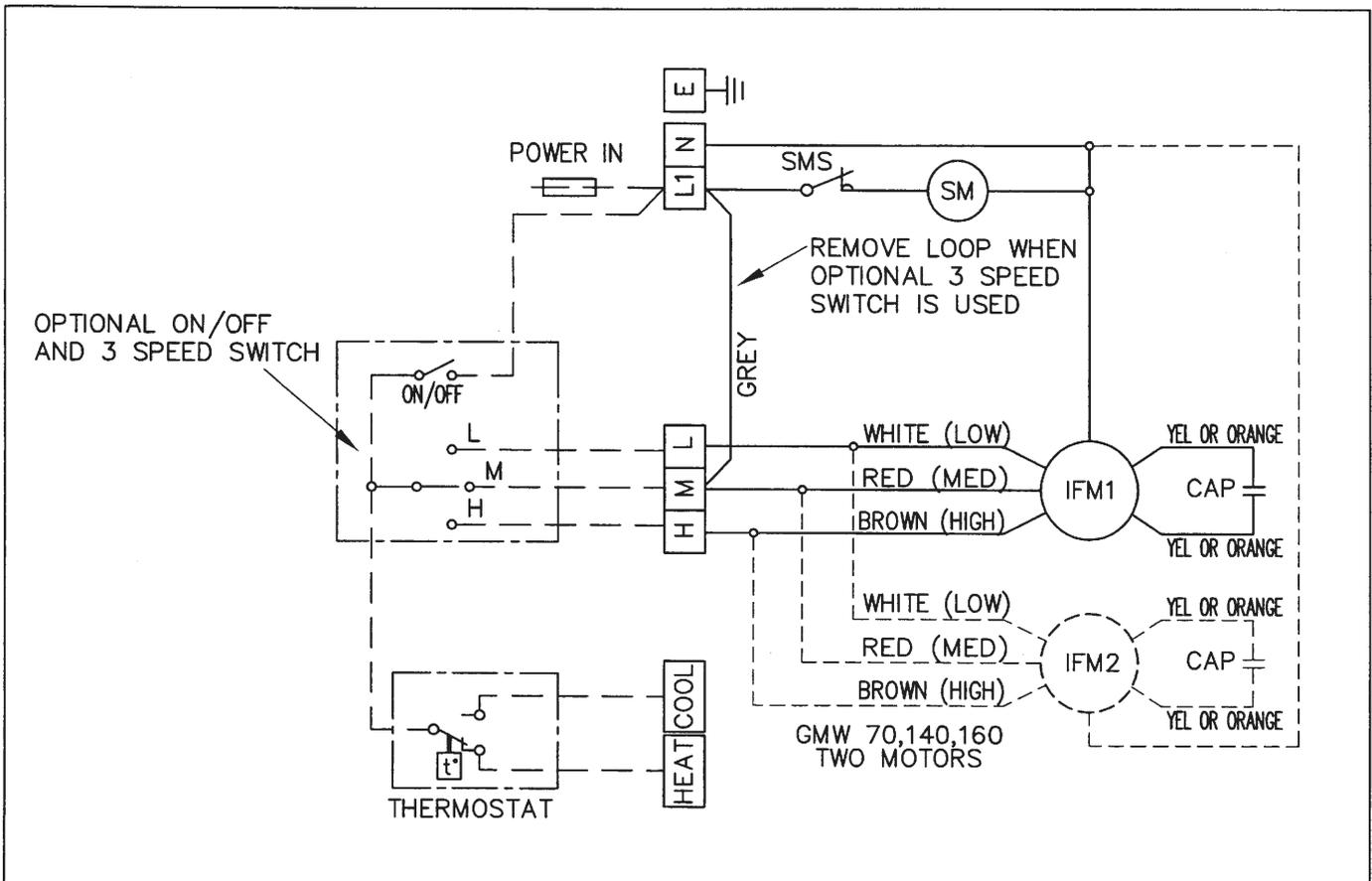
WATER CONNECTIONS BSP male

COIL:	3R	2R + 1R	
	COLD	COLD	HOT
GMW 50	15	15	15
GMW 70	20	15	15
GMW 80	20	20	15
GMW 140	20	20	15
GMW 160	25	20	15

Net Weight (excl. water):

GMW 50 27 kg
GMW 70 38 kg
GMW 80 48 kg
GMW 140 74 kg
GMW 160 74 kg





CAP	CAPACITOR
IFM1	INDOOR FAN MOTOR
IFM2	INDOOR FAN MOTOR
SM	SWING MOTOR
SMS	SWING MOTOR SWITCH

CLIENT WIRING ————
 Interconnections between units by clients.
 Double insulated multi-core cable.

NOTE: CHECK WIRING BEFORE SWITCHING ON.
 INCORRECT CONNECTION WILL DAMAGE MOTOR.

NOTE: GMW 70,140 & 160 amps given are for both fans.

MODEL	GMW	50-S	70-S	80-S	140-S		Title			
INDOOR FAN MOTOR RUNNING AMPS	LOW	0.24	0.40	0.26	0.54		GMW 50-160 WIRING SCHEMATIC			
	MED	0.30	0.58	0.32	0.65					
	HIGH	0.40	0.76	0.42	0.85					
MODEL	GMW	50-H	70-H	80-H	140-H	160-H				
INDOOR FAN MOTOR RUNNING AMPS	LOW	0.17	0.32	0.42	0.90	1.72				
	MED	0.22	0.38	0.53	1.07	1.91				
	HIGH	0.28	0.42	0.7	1.42	2.30				
Drawn L.H.Z.		Date 02-10-01		Drawing No.		318-124-002		A		
Scale		Aprvd <i>L.H.Z.</i>								

