

High Efficiency Dehumidifier Defrost System.

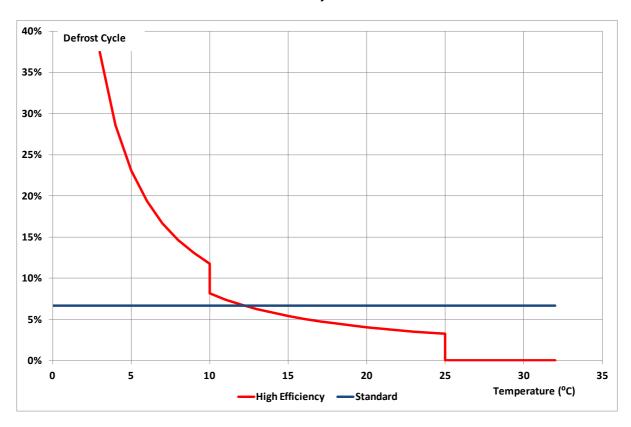
TECHNICAL BULLETIN

OAS0049A

Standard OASIS Hot Gas dehumidifiers use a timer circuit to trigger operation of the hot gas valve. At all ambient temperatures the defrost cycle lasts for 2 minutes and is actuated at 28 minute intervals. This means that at all operating temperatures, the dehumidifier is in the defrost mode for 6.67% of the time.

OASIS have now developed a high efficiency defrost system where the defrost cycle varies in duration and frequency based on ambient temperature. The key characteristics of this new defrost system are as follows:

- When ambient temperatures are below 3°C, operation of the dehumidifier is disabled automatically. This prevents freeze up of the evaporator
- When ambient temperatures are between 3°C and 25°C, variable defrost cycle takes place (see graph below)
- When ambient temperatures are above 25°C, the defrost cycle is disabled and the unit will function continuously.



The advantages of this system are as follows:

- Unit can be left switched on and unattended when low ambient temperatures are expected without any risk of the evaporator freezing over
- Unit will dehumidify (i.e. remove moisture from the air) when ambient temperatures are as low as 3°C, compared to 6°C for a standard unit
- When temperatures exceed 12°C, the new defrost system increases the capacity of the dehumidifier as can be seen from the graph above, the proportion of time that a standard unit is in defrost mode is always 6.7%. With

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the high efficiency system the defrost time adjusts based on ambient temperature – at low temperatures it defrosts for longer than a standard unit and when the ambient temperature exceeds 25°C there is no defrost.

Models with high efficiency defrost system installed are identified with the code "EF" – following models are available:



Please contact your local Customer Services representative for pricing and ordering information

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