

## New BACnet from Danfoss Drives listed by BTL



The VLT® BACnet option is a plug-and-play solution that optimises the use of VLT® HVAC Drive together with building management systems using the BACnet® fieldbus. The option makes it easy to control or monitor points required in typical HVAC applications.

### Improve system performance

VLT® HVAC Drive uses limited network bandwidth, and it requires less resources in the DDC controller due to the support of alarm and event notification. This can reduce traffic by more than 50% compared to other drives.

For VLT® HVAC Drive it is possible to read all analogue inputs and control all the analogue outputs on I/O options.

This means that when integrating a VLT® HVAC Drive into the control system it is possible to save more physical I/O points.

VLT® HVAC Drive has objects defined to accept 3 separate feedbacks transmitted over BACnet.

### Detailed information about warnings and alarms

VLT® HVAC Drive has points giving detailed information about alarms and warnings. DDC controllers can monitor these and see when an alarm

or warning occurs and see why it's occurred.

Examples: Earth fault, short circuit, over current, motor phase loss, motor thermal condition (thermistor or ETR), mains phase loss, live zero, Broken Belt, No Flow, Dry Pump, End of Curve etc.

### Read multiple points in a telegram

With the BACnet option DDC controllers can read or write multiple points in one telegram. This helps to reduce network traffic which improves network bandwidth and the effectiveness of the BACnet network.

It provides the ability to transfer all required points of the VLT® HVAC Drive in one request.

This is especially useful if the BMS regularly creates a "back-up" of the system.

### Simultaneous synchronisation of built-in clocks.

VLT® HVAC Drives have a built-in clock that can be synchronized with the BMS network clock via BACnet. This

## Listed by BTL

The VLT® BACnet solution is listed by BTL Testing Laboratory.

### BACnet Interoperability Building Blocks Supported

Data Sharing-ReadProperty-B	(DS-RP-B)
Data Sharing-ReadPropertyMultiple-B	(DS-RPM-B)
Data Sharing-WriteProperty-B	(DS-WP-B)
Data Sharing-WritePropertyMultiple-B	(DS-WPM-B)
Alarm and Event-ACK-B	(AE-ACK-B)
Alarm and Event-Notification Internal-B	(AE-N-I-B)
Alarm and Event-Information-B	(AE-INFO-B)
Device Management-Dynamic Device Binding-A	(DM-DDB-A)
Device Management-Dynamic Device Binding-B	(DM-DDB-B)
Device Management-Dynamic Object Binding-B	(DM-DOB-B)
Device Management-DeviceCommunicationControl-B	(DM-DCC-B)
Device Management-TimeSynchronization-B	(DM-TS-B)
Device Management-ReinitializeDevice-B	(DM-RD-B)

eliminates a major problem on drives with battery backed-up stand alone real-time clocks which must be manually updated.

**Built in and tested from factory**

The Danfoss BACnet option is available factory installed and tested or can be added to the VLT® HVAC Drive as a field installed upgrade in existing installations.

<b>Number of objects supported</b>	
Digital inputs	16
Digital outputs	32
Digital Values	200
Analogue inputs	7
Analogue outputs	7
Analogue values	46
Multistate output	1
Multistate input	1
<b>Total</b>	<b>310</b>

The VLT® HVAC Drive integrates and communicates seamlessly with all HVAC devices, mastered by Building Management Systems via the BACnet protocol. HVAC specific features make it economical, flexible and user friendly and makes HVAC operation child's play.

**Lowest cost of ownership**

The modular concept allows you to pay only for features you need and to customise your solutions and

minimise system costs. The HVAC Drive is maintenance free and still compact although everything is built in. The IP20 version can be mounted in an HVAC unit or panel. The high protected IP 66 version for harsh environments can be mounted anywhere.