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EMBEDDED BACNET PROTOCOL DATA POINTS SUMMARY │ DATA SHEET

ANALOG VALUES

OBJECT ID	OBJECT NAME	READ/WRITE	UNITS
AV:3	Output speed	READ	% [Note 1]
AV:4	Sensorless pressure	READ	% [Note 2]
AV:5	Motor current	WRITE/READ	Amps
AV:6	Power	READ	kW
AV:21	Operating hours	READ	Hours
AV:22	Running hours	READ	Hours
AV:24	Motor voltage	READ	Volts
AV:25	Frequency	READ	Hz
AV:30	Setpoint 1	WRITE/READ	%
AV:51	Fault code	READ	None
AV:58	Sensorless flow	READ	None

NOTES

1 This value is not directly available in the frequency converter. The value is calculated as follows: $\text{AV\# }3 = \dfrac{\text{Par. 16 - 17}}{\text{Par. 4 - 13}} \times 100\%$

2 This value is not directly available in the frequency converter. The value is calculated as follows: $\text{AV\# }4 = \dfrac{\text{Par. 16 - 52}}{\text{Par. 20 - 14}} \times 100\%$

BINARY VALUES

OBJECT ID	OBJECT NAME	READ/WRITE
BV:1	RUN/STOP command	WRITE/READ
BV:3	Fault reset command	WRITE/READ
BV:6	HAND/AUTO reference	READ
BV:21	Warning	READ
BV:22	Trip	READ
BV:33	Running	READ

EXAMPLE OF A SIMPLE SETUP OF BACNET

This example shows the necessary steps to set up the FC102 BACnet interface with the following system requirements:

- MS/TP running at 38,400 Baud
- MAC address 20 for the FC102 on the MS/TP network
- Device Instance number 1025 for the FC102
- Highest number of a Master device is 35
- Start/stop of FC from BACnet only
- Reference from BACnet
- Read status of FC (Actual speed)

Set the following parameters:

PARAMETER	VALUE
8-30 Protocol	BACnet [5]
8-31 Address	20
8-32 Baud rate	38,400 Baud [4]
8-50 Coasting select	Bus [1]
8-70 BACnet device instance	1025
8-72 MS/TP max masters	35

After the parameters have been set according the table above, the drive has to be unpowered and repowered before the changes take effect. When the frequency converter is detected by the BMS, the drive can be controlled by BV:1, which will start the motor if set to [1]. Setting AV:1 will set the speed reference of the drive. The actual speed can be monitored via AV:3. See also Analog Input- and Output Objects section.

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