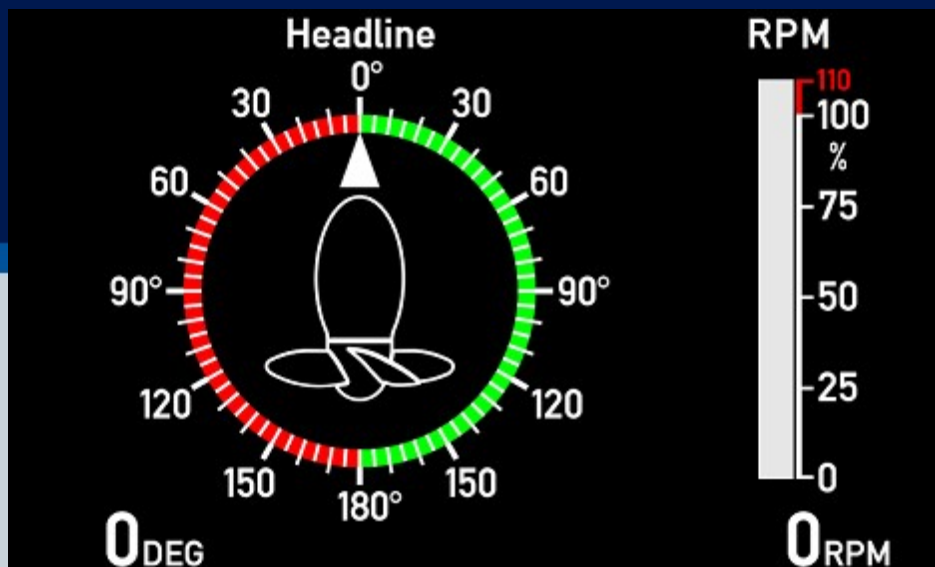




# XDi 144/192 Dual

## Standard Dual Azimuth



Library owner: DEIF STANDARD LIB

Library number: 1

Library version: 2009

# Table of Contents

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## Library description :


This XDi Dual library contains a selection of Azimuth indicators (VI), respectively for forward and aft bridge applications.

Each virtual indicators has a selection of input/output setup profiles (VS) covering the most common used combination of XDi-net, CANopen, AX1 analogue and DX1 digital inputs. Some VS profile also supports the NX NMEA extension module.

Default CAN setup and dimmer input configurations are available in the selection of product profiles (PP).


Select the VS and PP profiles that fits your need for CAN, Analogue or Digital inputs and make the necessary adjustments via the XDi installation menu or user menu.


## Library status symbols :

 Released & Locked

 Approved

 Pending

 Draft

 Not approved

## Library Specification

**Library owner no. :** 000001  
**Library owner name :** DEIF STANDARD LIB  
**Product type :** XDi 144/192  
**Performance class :** Dual  
**Library number :** 1  
**Library name :** Standard Dual Azimuth  
**Library orientation :** Landscape  
**Library status :** Released & Locked  
**Library version :** 2009

**Last changed :** 08-02-2023 15:47:37

### Library default settings :

**180 display rotation :** False  
**CAN NodeID :** 30

### Library notes :

08-02-2023/MAP, Ver. 2009: XDi main software update to Qt v.3.06.1 and Capp software is updated to v.3.06.0, this version supports presentation of UK MER flag mark in surveyor menu in addition to the wheel marking, no other changes are made.

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 12-07-2022/JOL, Ver.2008: AX1 4-20mA input lost detection is added to all relevant VS profiles. New VS profiles with Double linear potentiometer input (0-10V) for azimuth is added.

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 01-09-2021/JOL, Ver.2007: This is the first version of this lib. on XDi Platform 2 sw. it is copied from Platform 1 v.0006  
 VS07 with Azi. SIN/COS input and RPM Pickup sensor input are added to VI001 to VI008.




# Product profiles (PP)



Default settings of product and system related parameters, as dimmer and CANbus settings are stored in a product profile.

Timestamp 08-02-2023 15:47:39

PP No.	PP Name	Description	Status	Notes
1	PP01 XDi-net/Front	<p><b>Dim XDi-net/Front button</b> Dimmer via XDi-net (CAN) and/or via front buttons, Requires option: Front frame with buttons</p> <p>Default settings: XDi-net is active Dimmer group 1 Dimming via XDi-net Auto Day/Night Shift at 70% Monitoring supply voltage 1</p>		CANbus and Dimmer settings can be changed from XDi menu
2	PP02 Aalogue	<p><b>Analogue Dimmer</b></p> <p>Required: AX1 in Slot 1</p> <p>Dimmer potmeter (+ term 3, - term 1, wiper term 2) Can be reconfigured to voltage input</p> <p><b>Default settings:</b></p> <p>Dimmer group 1 Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% Shared on XDi-net Monitoring supply voltage 1</p>		<p>An external ref. voltage &gt;7.5V can be connected to Vref out overwriting the internal Vref. From the user menu, you can alternatively reconfigure the analogue dimmer input to a normal voltage input.</p>
3	PP03 CAN	<p><b>CAN Dimmer</b></p> <p>CANopen TPDO dimming</p> <p><b>Default settings:</b></p> <p>Dimmer group 1 Auto Day/Night Shift at 70% Monitoring supply voltage 1</p>		<p>DEIF default TPDO's are predefined and used in all standard libraries. The default TPDO's for dimmer group control can be changed to any TPDO or RPDO via user menu.</p>

PP No.	PP Name	Description	Status	Notes
4	PP04 Digital	<p><b>Digital Dimmer</b></p> <p>Required: DX1 in Slot 1</p> <p>Digital input 1 up (+term 11,- term 10) Digital input 2 down (+term 8,- term 7)</p> <p>Simultaneous activation of IN1 and IN2 for Day/Night Shift</p> <p><b>Default settings:</b></p> <p>Dimmer group 1 Shared on XDi-net Monitoring supply voltage 1</p>		Digital input configuration can be changed from menu.
5	PP05 Analogue	<p><b>Analogue Dimmer Local</b></p> <p>Required: AX1 in Slot 1</p> <p>Dimmer potmeter (+ term 3, - term 1, wiper term 2) Can be reconfigured to voltage input</p> <p><b>Default settings:</b></p> <p>Dimmer group: Local Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% (Local - Not shared on XDi-net) Monitoring supply voltage 1</p>		The dimmer group is "Local" and the dimmer input will only affect this unit, dimmer level will not be shared on XDi-net.
6	PP06 Fixed	<p><b>ECR Fixed Dimmer</b></p> <p>Dimmer level can be adjusted via front buttons. Option: Front frame with buttons can be used.</p> <p>To extend the backlight life fixed backlight should not be &gt;90%</p> <p>Default settings: XDi-net active Dimmer group: Local Dimming via XDi-net Auto Day/Night Shift at 70% Monitoring supply voltage 1</p>		Default fixed dimmer level is reduced to 75% to extend backlight life. Dimmer level and Day/Night colour can be changed from user menu.

























# Virtual Indicators (VI)




The VI contains the graphical layout of and indicator and defines all data types that are presented on the indicator.

Each VI has at least one VI-setup profile (VS) that defines the input types and default parameter settings.

Timestamp 08-02-2023 15:47:39

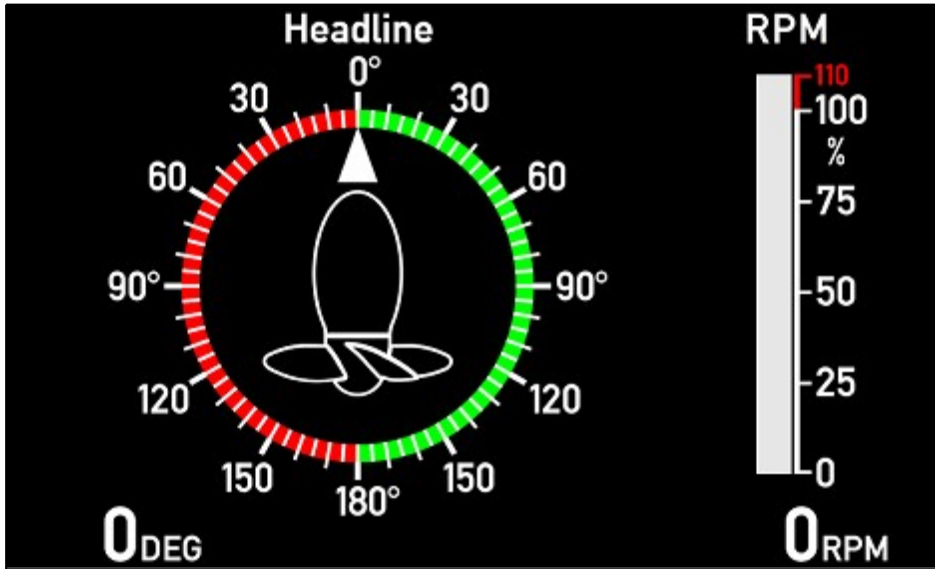
VI No.	Name	VI-setup profiles (VS)	Approvals	Status
001	AZIMUTH 1 FWD	9	 	
002	AZIMUTH 1 AFT	9	 	
003	AZIMUTH 2 FWD	9	 	
004	AZIMUTH 2 AFT	9	 	
005	AZIPULL 3 FWD	9	 	
006	AZIPULL 3 AFT	9	 	
007	AZIPULL 4 FWD	9	 	
008	AZIPULL 4 AFT	9	 	

 Approvals only apply for XDi 192.

Timestamp 08-02-2023 15:47:39


VI 001

AZIMUTH 1 FWD







Description : AZIMUTH 1 FWD

Azimuth  $\pm 180$  deg. 0°up with digital readout  
RPM 0...110%  
Actual RPM Range 0-3000 with digital readout

Status : 





VI Notes :

## VI-setup profiles (VS) for VI001


VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	<p><b>All input data via XDi-net</b></p> <p>Azimuth: XDi-net</p> <p>RPM/RPM%: XDi-net</p>		<p>The XDi-net profile is used when the indicator is a repeater, receiving data from other XDi units or from a CAN controller providing data in XDi-net format.</p> <p>Please note that TPDO's or RPDO's are not retransmitted in XDi-net format, but are used directly by all indicators (e.g. Angle transmitted CAN data), zero or scaling adjustments can be synchronized via XDi-net. Use VS02 if a combination of XDi-net and TPDO inputs (e.g. CAN encoder) are used.</p>
2	VS02 TPDO	<p><b>All input data via TPDO or XDi-net</b></p> <p>Azimuth: TPDO</p> <p>RPM/RPM%: TPDO</p>		<p>TPDO COB ID can be changed to any valid TPDO or RPDO COB ID via the XDi installation menu.</p> <p>TPDO input can be scaled from menu.</p> <p>This profile can also be used for XDi-net input, if a combination of TPDO and XDi-net is used.</p> <p>TPDO input can be disabled to run pure XDi-net.</p>
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		<p>COBID and input data scaling can be changed from the XDi installation menu</p> <p>Analogue input type and scaling can be changes from XDi installation menu.</p>
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		<p>Analogue input type and scaling can be changes from XDi installation menu.</p>



## VI-setup profiles (VS) for VI001

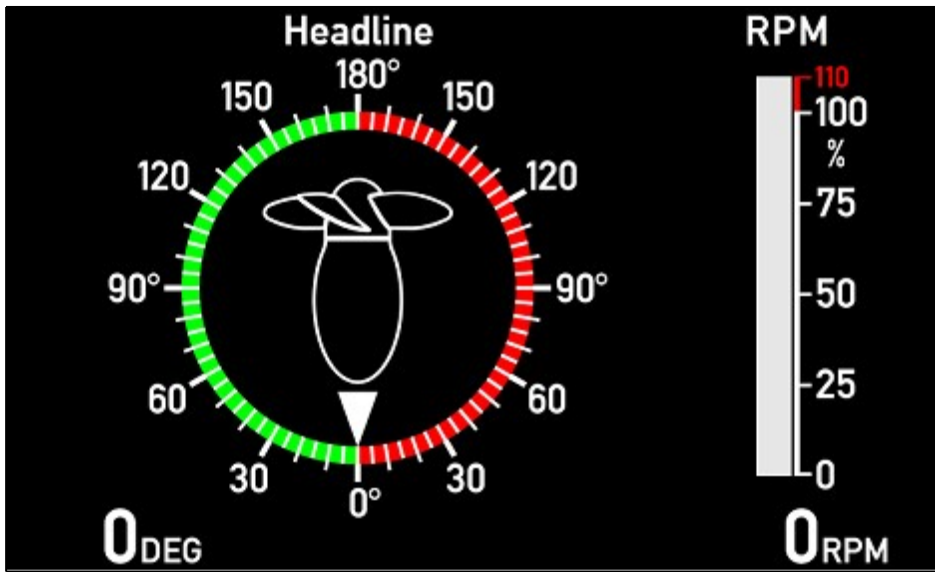
VS No.	Name	Description	Status	Notes
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		<p>SIN/COS input can be adjusted from menu and zero point can be changed. The SIN/COS input voltage level is automatically adjusted from +/-5 to 15V, it can be extended to +/-30V via XDi installation menu. The analogue input type can also be changed from V to mA from the menu. Analogue input type and scaling can be changes from XDi installation menu.</p>
6	VS06 RTC/RPM	<p><b>RTC/RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10)</p>		<p>COBID and input data scaling can be changed from the XDi installation menu Digital RPM input scaling can be changes from XDi installation menu.</p>
7	VS07 SIN/COS, Pickup	<p><b>SIN/COS, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		<p>The SIN/COS input voltage level is automatically adjusted from +/-5 to 15V, it can be extended to +/-30V via XDi installation menu. The analogue input type can also be changed from V to mA from the menu. Digital RPM input scaling can be changes from XDi menu.</p>
8	VS08 2 x Lin.potm.	<p><b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		<p>Default Azi. settings: Azimuth: Voltage input (HV1, HV2): 0deg=(0V,5V), +90deg(SB)=(5V,0V), -90deg(PS)=(5V,10V), 180deg=(10V,5V) Default settings can be changed via XDi menu. Analogue input type and scaling can be changes from XDi installation menu.</p>

## VI-setup profiles (VS) for VI001

VS No.	Name	Description	Status	Notes
9	VS09 2xLinPot/Pickup	<b>Azi Dual lin.potm, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		Default settings: Azimuth: Voltage input (HV1,HV2): 0deg=(0V,5V), +90deg(SB)=(5V,0V), -90deg(PS)=(5V,10V), 180deg=(10V,5V) Default settings can be changed via XDi menu. Analogue input type and scaling can be changes from XDi installation menu. Digital RPM input scaling can be changes from XDi menu.

VI 002

AZIMUTH 1 AFT



Description : AZIMUTH 1 AFT

Azimuth  $\pm 180$  deg. 0° down with digital readout  
RPM 0...110%  
Actual RPM Range 0-3000 with digital readout





Status :

VI Notes :




### VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	<b>All input data via XDi-net</b>  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	<b>All input data via TPDO or XDi-net</b>  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI002

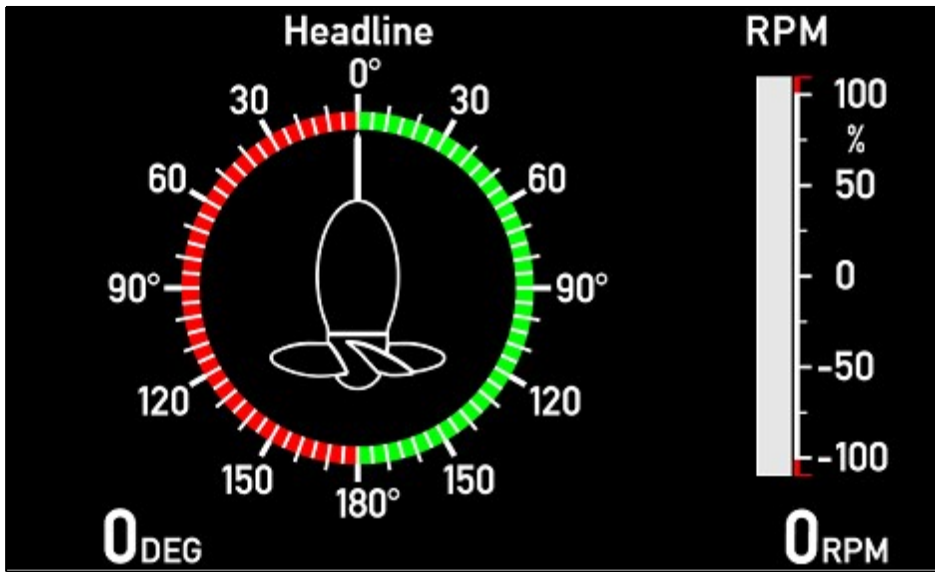
VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		COBID and input data scaling can be changed from the XDi installation menu Analogue input type and scaling can be changes from XDi installation menu.
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		Analogue input type and scaling can be changes from XDi installation menu.
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		SIN/COS input can be adjusted from menu and zero point can be changed. The SIN/COS input voltage level is automatically adjusted from +/-5 to 15V, it can be extended to +/-30V via XDi installation menu. The analogue input type can also be changed from V to mA from the menu. Analogue input type and scaling can be changes from XDi installation menu.u.
6	VS06 RTC/RPM	<p><b>RTC/RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10)</p>		COBID and input data scaling can be changed from the XDi installation menu Digital RPM input scaling can be changes from XDi installation menu.

## VI-setup profiles (VS) for VI002

VS No.	Name	Description	Status	Notes
7	VS07 SIN/COS, Pickup	<p><b>SIN/COS, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		The SIN/COS input voltage level is automatically adjusted from +/-5 to 15V, it can be extended to +/-30V via XDi installation menu. The analogue input type can also be changed from V to mA from the menu. Digital RPM input scaling can be changes from XDi menu.
8	VS08 2 x Lin.potm.	<p><b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		Default Azi. settings: Azimuth: Voltage input (HV1,HV2): 0deg=(0V,5V), +90deg(SB)=(5V,0V), -90deg(PS)=(5V,10V), 180deg=(10V,5V) Default settings can be changed via XDi menu. Analogue input type and scaling can be changes from XDi installation menu.
9	VS09 2xLinPot/Pickup	<p><b>Azi Dual lin.potm, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		Default settings: Azimuth: Voltage input (HV1,HV2): 0deg=(0V,5V), +90deg(SB)=(5V,0V), -90deg(PS)=(5V,10V), 180deg=(10V,5V) Default settings can be changed via XDi menu. Analogue input type and scaling can be changes from XDi installation menu. Digital RPM input scaling can be changes from XDi menu.

VI 003

AZIMUTH 2 FWD



Description : AZIMUTH 2 FWD

Azimuth  $\pm 180$  deg. 0° up with digital readout  
 RPM  $\pm 110\%$   
 Actual RPM Range 0-3000 with digital readout






Status :

VI Notes : Bar graph: Positive %RPM is green and negative is red.  
 Dynamic azimuth pointer: An arrow in the azimuth symbol indicates thrust direction.



**VI-setup profiles (VS) for VI003**

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	All input data via XDi-net  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	All input data via TPDO or XDi-net  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/ $\pm$ RPM	<p><b>RTC/<math>\pm</math>RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7)</p>		See similar VS profile for VI001
7	VS07 SIN/COS/ $\pm$ RPM	<p><b>SIN/COS,<math>\pm</math>RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001

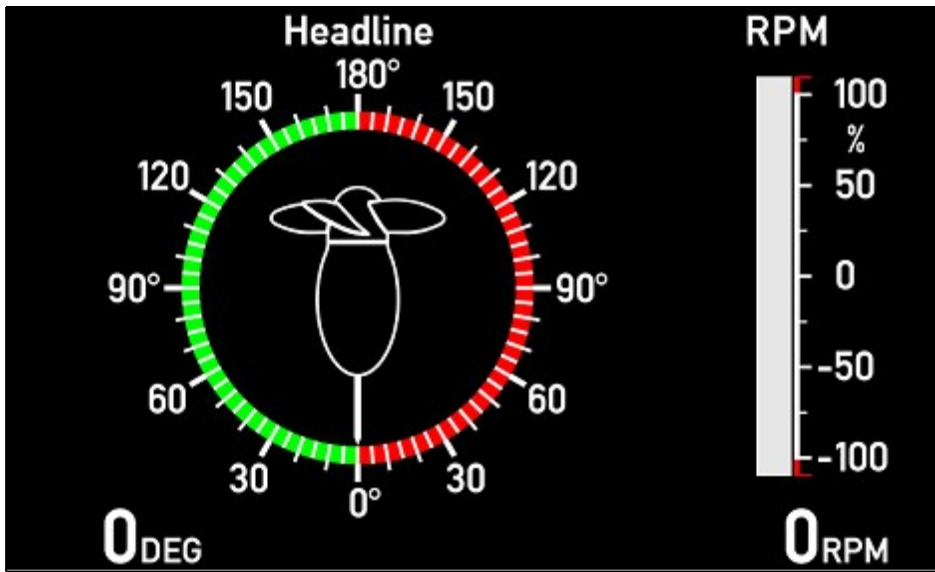
## VI-setup profiles (VS) for VI003

VS No.	Name	Description	Status	Notes
8	VS08 2 x Lin.potm.	<b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
9	VS09 2xLinPot/±RPM	<b>Azi Dual lin.potm,±RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		See similar VS profile for VI001



VI 004

AZIMUTH 2 AFT



Description : AZIMUTH 2 AFT

Azimuth  $\pm 180$  deg. 0° Down with digital readout  
 RPM  $\pm 110\%$   
 Actual RPM Range 0-3000 with digital readout






Status :

VI Notes : Bar graph: Positive %RPM is green and negative is red.  
 Dynamic azimuth pointer: An arrow in the azimuth symbol indicates thrust direction.



**VI-setup profiles (VS) for VI004**

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	All input data via XDi-net  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	All input data via TPDO or XDi-net  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI004

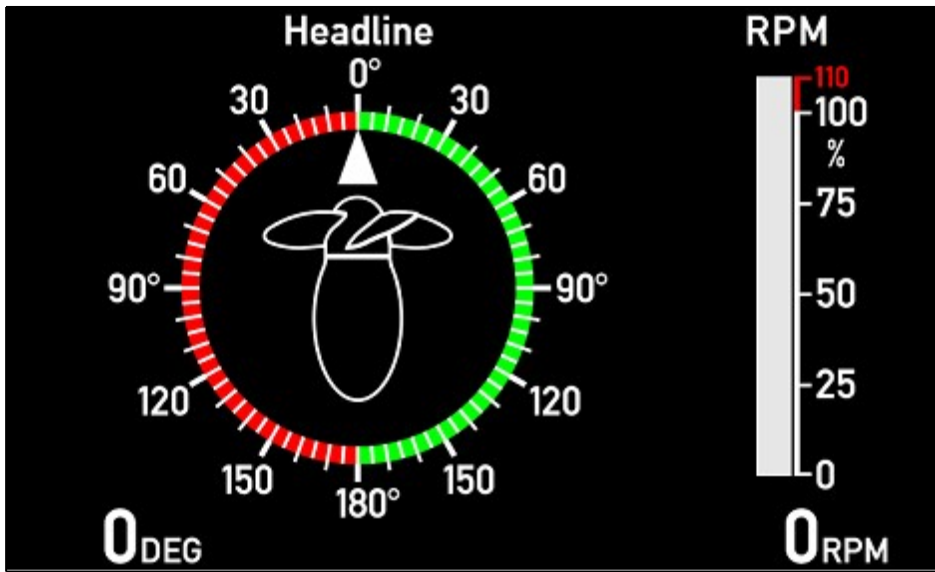
VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/ $\pm$ RPM	<p><b>RTC/<math>\pm</math>RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7)</p>		See similar VS profile for VI001
7	VS07 SIN/COS/ $\pm$ RPM	<p><b>SIN/COS,<math>\pm</math>RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001

## VI-setup profiles (VS) for VI004

VS No.	Name	Description	Status	Notes
8	VS08 2 x Lin.potm.	<b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
9	VS09 2xLinPot/±RPM	<b>Azi Dual lin.potm,±RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		See similar VS profile for VI001

VI 005

AZIPULL 3 FWD





Description : AZIPULL 3 FWD

Azipull ±180 deg. 0°up with digital readout  
RPM 0...110%  
Actual RPM Range 0-3000 with digital readout






Status : 

VI Notes :



### VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	<b>All input data via XDi-net</b>  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	<b>All input data via TPDO or XDi-net</b>  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI005

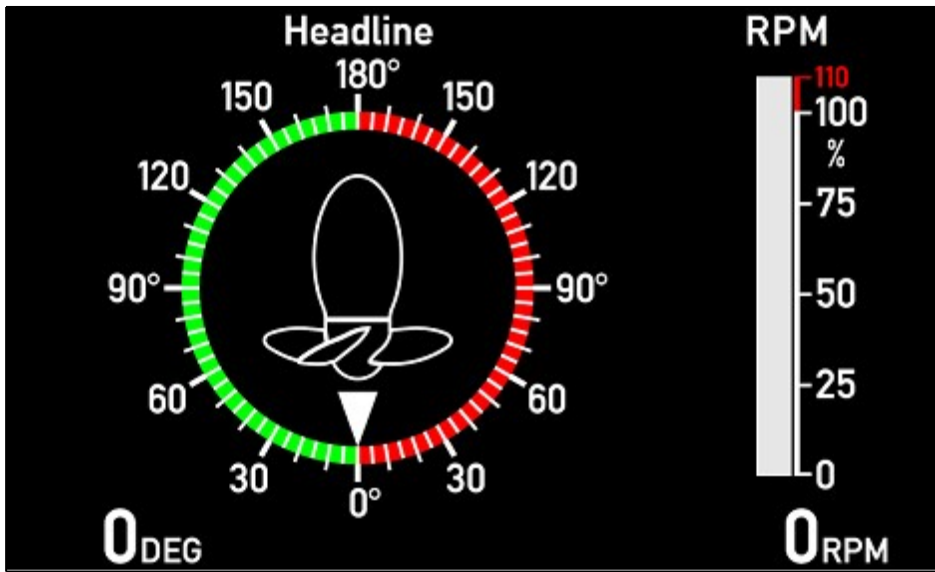
VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4 -20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/RPM	<p><b>RTC/RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10)</p>		See similar VS profile for VI001
7	VS07 SIN/COS, Pickup	<p><b>SIN/COS, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001menu.

## VI-setup profiles (VS) for VI005

VS No.	Name	Description	Status	Notes
8	VS08 2 x Lin.potm.	<b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
9	VS09 2xLinPot/Pickup	<b>Azi Dual lin.potm, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		See similar VS profile for VI001

VI 006

AZIPULL 3 AFT



Description : AZIPULL 3 AFT

Azipull  $\pm 180$  deg. 0° down with digital readout  
RPM 0...110%  
Actual RPM Range 0-3000 with digital readout






Status :

VI Notes :

**VI-setup profiles (VS) for VI006**



VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	<b>All input data via XDi-net</b>  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	<b>All input data via TPDO or XDi-net</b>  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4 -20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/RPM	<p><b>RTC/RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10)</p>		See similar VS profile for VI001
7	VS07 SIN/COS,Pickup	<p><b>SIN/COS, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001

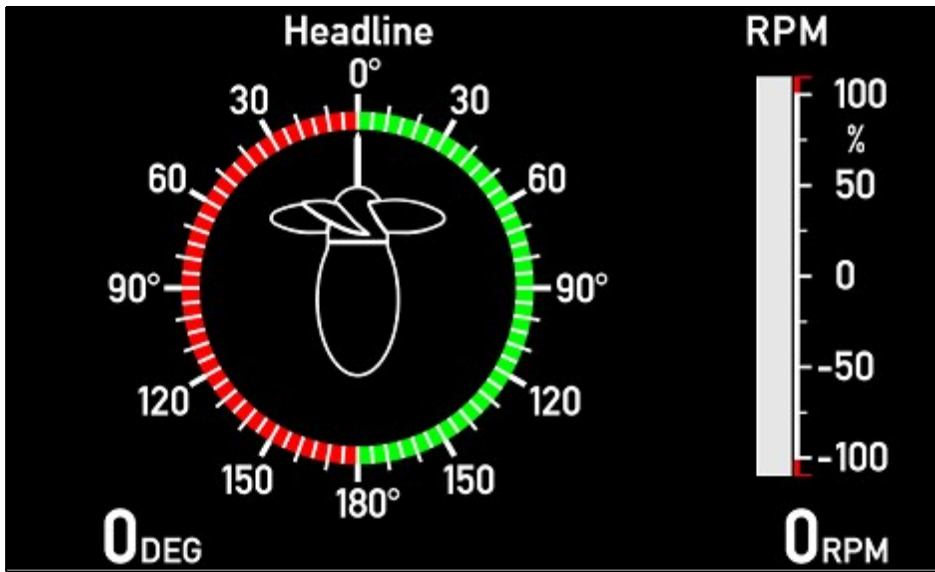


## VI-setup profiles (VS) for VI006

VS No.	Name	Description	Status	Notes
8	VS08 2 x Lin.potm.	<b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
9	VS09 2xLinPot/Pickup	<b>Azi Dual lin.potm, RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: Signal (+term 11, -term10) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		See similar VS profile for VI001

VI 007

AZIPULL 4 FWD



Description : AZIPULL 4 FWD

Azipull ±180 deg. 0°up with digital readout  
 RPM ±110%  
 Actual RPM Range 0-3000 with digital readout






Status :

VI Notes : Bar graph: Positive %RPM is green and negative is red.  
 Dynamic azimuth pointer: An arrow in the azimuth symbol indicates thrust direction.



**VI-setup profiles (VS) for VI007**

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	<b>All input data via XDi-net</b>  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	<b>All input data via TPDO or XDi-net</b>  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI007

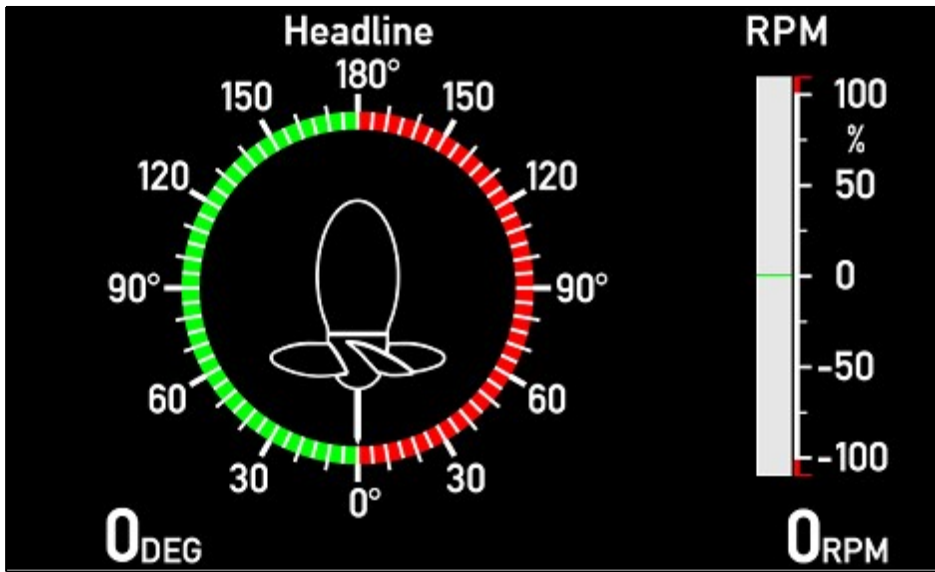
VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b></p> <p>Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/ $\pm$ RPM	<p><b>RTC/<math>\pm</math>RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7)</p>		See similar VS profile for VI001
7	VS07 SIN/COS/ $\pm$ RPM	<p><b>SIN/COS,<math>\pm</math>RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: <math>\pm 10V</math> SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001

## VI-setup profiles (VS) for VI007

VS No.	Name	Description	Status	Notes
8	VS08 2xLin.potm.	<b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA		See similar VS profile for VI001
9	VS09 2xLinPot/Pickup	<b>Dual linear potm./±RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2  Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.  RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)		See similar VS profile for VI001

VI 008

AZIPULL 4 AFT



Description : AZIPULL 4 AFT

Azipull  $\pm 180$  deg. 0° Down with digital readout  
RPM  $\pm 110\%$   
Actual RPM Range 0-3000 with digital readout






Status :

VI Notes : Bar graph: Positive %RPM is green and negative is red.  
Dynamic azimuth pointer: An arrow in the azimuth symbol indicates thrust direction.



### VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	All input data via XDi-net  Azimuth: XDi-net  RPM/RPM%: XDi-net		See similar VS profile for VI001
2	VS02 TPDO	All input data via TPDO or XDi-net  Azimuth: TPDO  RPM/RPM%: TPDO		See similar VS profile for VI001

## VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
3	VS03 CAN/Analogue	<p><b>CAN/Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p>		See similar VS profile for VI001
4	VS04 Analogue	<p><b>Full Analogue system</b> Required: AX1 in Slot 1</p> <p>Azimuth: AX1 S1i2: 4-20mA (+term5, -term4)</p> <p>RPM/RPM%: AX1 S1i1: 4-20mA (+term9, -term8)</p> <p>AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
5	VS05 SIN/COS	<p><b>Analogue SIN/COS</b></p> <p>Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
6	VS06 RTC/±RPM	<p><b>RTC/±RPM Pickup system</b> Required: DX1 in Slot 2</p> <p>Azimuth: CAN TPDO (RTC)/(XDi-net)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7)</p>		See similar VS profile for VI001
7	VS07 SIN/COS/±RPM	<p><b>SIN/COS,±RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2: ±10V SIN/COS (SIN term11, COS term7, GND term1)</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001

## VI-setup profiles (VS) for VI008

VS No.	Name	Description	Status	Notes
8	VS08 2xLin.potm.	<p><b>Dual linear potmeter for azi.</b> Required: AX1 in Slot 1 and 2</p> <p>Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.</p> <p>RPM/RPM%: AX1 S2i2: 4-20mA(+term5, -term4) AX1 input lost below 3.5mA</p>		See similar VS profile for VI001
9	VS09 2xLinPot/Pickup	<p><b>Dual linear potm./±RPM Pickup</b> Required: AX1 in Slot 1 and DX1 in Slot 2</p> <p>Azimuth: AX1 S1i1+2 (Voltage): 2 x linear potmeter 0 to 10V. Wiper1: trm.11, Wiper2: +trm.7, Potentiometer 0V to trm.1 AGND.</p> <p>RPM/RPM%: DX1 S2i1: (+term11, -term10) S2i2: (+term8,- term7) Default: 1000 pulses per 100 rotations 100%=1000.0RPM (10000)</p>		See similar VS profile for VI001