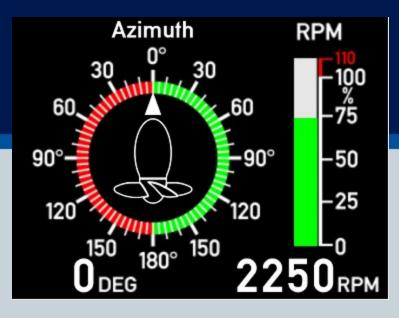


XDi 96 Dual

Standard Dual Azimuth



Library owner: DEIF STANDARD LIBLibrary number: 1Library version: 2012

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

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

Library is moved to XDi main software platform 2, this opens for dimming via the front buttons (Frontframe with buttons are ordered as option or as accessory).

Analogue input error (input lost/out of range) indication is implemented in all relevant VS profiles. With the upgrade to software Platform 2 it is possible to use dimmer from front buttons (Front button option is required) and it is also possible to make external pushbutton dimming using the NX1 module.

GENERAL FOR STANDARD DEIF LIBRARIES:

The default CANbus setup and Dimmer configuration are defined in the selected Product Profile (PP). In all PP's CAN1 and CAN2 are default set active for CANopen and XDi-net communication.

Library status symbols :

•	Released &	Locked
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~	Approved
	Appioveu

- Pending
- A Draft

ONOT approved

XDi Library Information



Timestamp 08-02-2023 12:31:25

Library Specification					
Library owner no. :	000001				
Library owner name :	DEIF STANDARD LIB				
Product type :	XDi 96				
Performance class :	Dual				
Library number :	1				
Library name :	Standard Dual Azimuth				
Library orientation :	Landscape				
Library status :	Released & Locked				
Library version :	2012				
Last changed :	08-02-2023 12:31:16				
Library default settings					
180 display rotation :	False				
CAN NodelD :	30				
Library notes :					
08 02 2022/IOL Var 201	09.02.2022/IOL Var. 2012: VDi main software undete to Ot v.2.06.1 and Cann software is				

08-02-2023/JOL, Ver. 2012: 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.

28-07-2022/JOL, v.2011: Product profile default dimmer level for menu is increased to 70%. Help text is updated for PP's.

VS profiles: Notes about changing analogue input type or range with respect to 4-20mA input lost is added.

07-06-2021/JOL, v.2010: Azi pointer day/night issue is also fixed in VI009 and 010 (Function was OK only a small graphic issue)

20-11-2020/JOL, v.2009: Azi pointer day/night issue is fixed in VI001, 2, 5, 6

07-05-2020/JOL, v.2008: New analogue input lost function is added to all 4-20mA inputs and new main software with display colour adjust function is added.

07-02-2020/JOL, V.2007: Library is moved to XDi software platform 2 and some small adjustments are made.

It is still backward compatible with previous platform 1 versions.

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 12:31:25
PP No.	PP Name	Description	Status	Notes
1	PP01 XDi-net	Front/XDi-net Dim Dimming via XDi-net and/or use front button option to dim from front buttons. Default settings: Dimmer group 1 Auto Day/Night Shift at 70% Monitoring supply voltage 1 XDi-net active		CANbus and Dimmer settings can be changed from XDi menu
2	PP02 Analogue	A Dimmer Required: AX1 module Dimmer potmeter (+ term 3, -term 1, wiper term 2) Can be reconfigured to voltage input Default settings: Dimmer group 1 Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% Shared on XDi-net Monitoring supply voltage 1		An external ref. voltage >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.
3	PP03 CAN	CAN Dimmer CANopen TPDO dimming Default settings: Dimmer group 1 Auto Day/Night Shift at 70%		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.
4	PP04 Digital	Monitoring supply voltage 1 Digital Dimmer Required: DX1 in Slot 1 Digital input 1 up (+term 11,- term 10) Digital input 2 down (+term 8,- term 7) Simultaneous activation of IN1 and IN2 for Day/Night Shift Default settings: Dimmer group 1 Shared on XDi-net Monitoring supply voltage 1	£	Digital input configuration can be changed from menu.

PP No.	PP Name	Description	Status	Notes
5	PP05 Lo Analog	Analogue Dimmer Local Required: AX1 in Slot 1 Dimmer potmeter(+ term 3 - term 1, wiper term 2) Can be reconfigured to voltage input Default settings: Dimmer group: Local Analogue Potmeter 0 to Vref (max. 30V) Auto Day/Night Shift at 70% (Local - Not shared XDi-net) Monitoring supply voltage 1	•	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 ECR Fixed	ECR Fixed Dimmer Fixed dimming setting adjust via setup buttons. Front button option can be used. Default settings: Dimmer group Local Dimmer level 80% to extend backlight life (Local - Not shared XDi-net) Auto Day/Night Shift at 20% Monitoring supply voltage 1		Default fixed dimmer level is reduced to 80% 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.

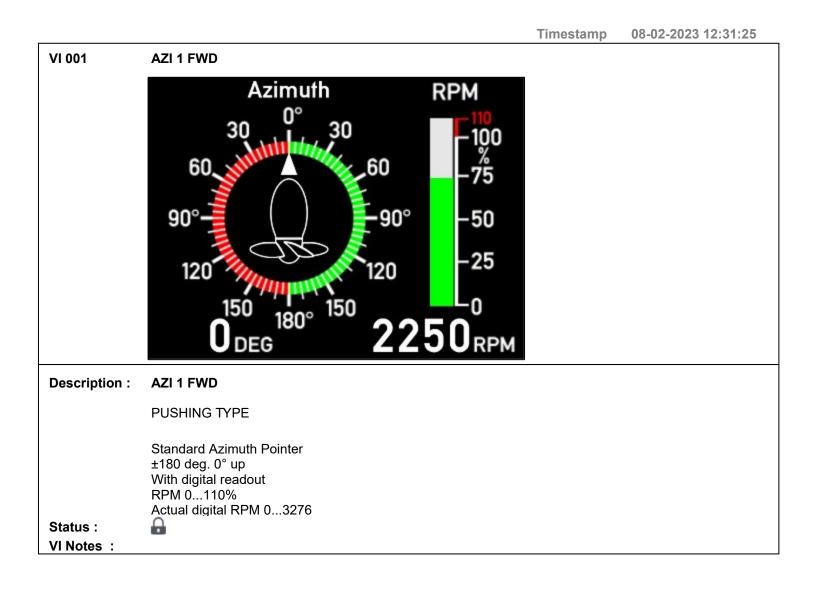
Each VI has at least one VI-setup profile (VS) that defines the input types and default parameter settings.

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VI No.	Name	VI-setup profiles (VS)	Approvals	Status
			, pprotuio	• iaiao
001	AZI 1 FWD	5	*	•
002	AZI 1 AFT	5	۵ 🛥	•
003	AZI 2 FWD	5	۵ 🛥	0
004	AZI 2 AFT	5	۵ 🛥	0
005	AZI 3 FWD	5	۵ 🛥	0
006	AZI 3 AFT	5	۵ 🛥	0
007	AZI 4 FWD	5	۵ 🛥	•
008	AZI 4 AFT	5	۵ 🛥	•
009	AZI 5 FWD	4	*	•
010	AZI 5 AFT	4	۵ 🛥	•
011	AZI 6 FWD	4	۵ 🛥	•
012	AZI 6 AFT	4	۵ 🛥	0

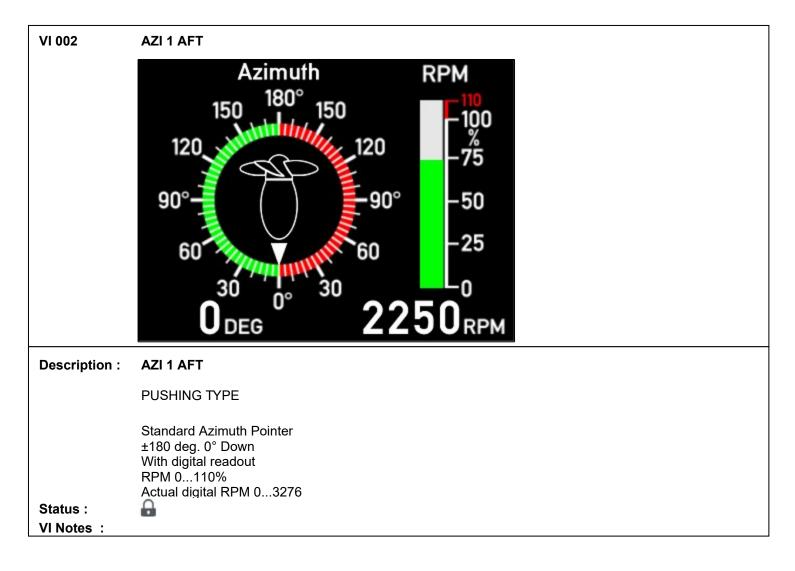
Approvals only apply for XDi 192.





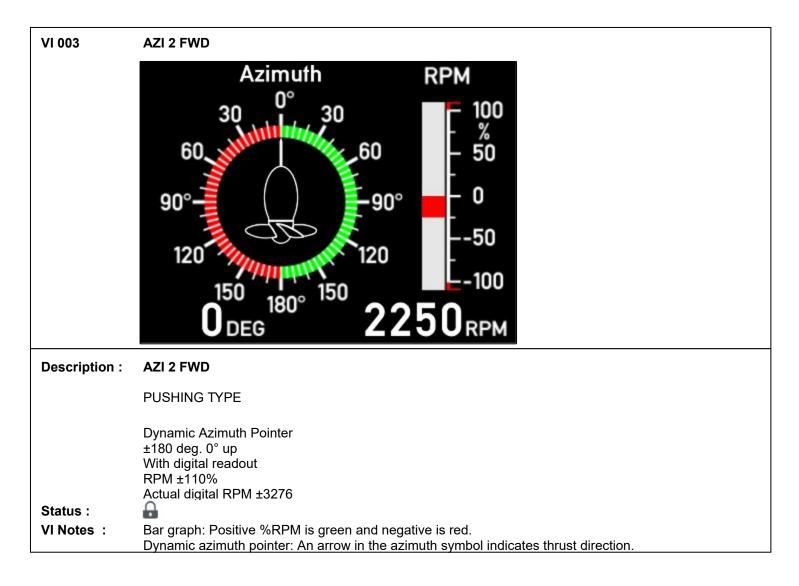
/S No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net Azimuth: XDi-net RPM/RPM%: XDi-net		The XDi-net profile is used when the indicator is a repeater, receiving data from other XDi units or from a CAN controller providing data in XDi-net format. Please note that TPDO's or RPDO's are not 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.
2	VS02 TPDO	Input TPDO Azimuth: TPDO (RTC) RPM/RPM%: TPDO		TPDO COBID can be changed to any valid TPDO or RPDO COBID via the XD installation menu. TPDO input can be scaled from menu. This profile can also be used for XDi-net input, if a combination of TPDO and XDi-net is used. TPDO input can be disabled to run pure XDi-net.
3	VS03 2 CAN	2 CAN/Analog Required: AX1 in Slot 1 Azimuth:TPDO(RTC)/XDi RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4) Input lost detection <3.5mA		COBID and input data scaling can be changed fro the XDi installation menu. Analogue input type and scaling can be changes fro XDi installation menu. If you change input type or input range remember to change input error value m and min. (Default set to 3500µA and 21000µA)
4	VS04 Analog	Analog inputs Required: AX1 in Slot 1 Azimuth: AX1 S1i1: 4-20mA (+term9, -term8) RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4) Input lost detection <3.5mA		Analogue input type and scaling can be changes from XDi installation menu. If you change input type or input range remember to change input error value ma and min. (Default set to 3500µA and 21000µA)

<u>VI-set</u> u	VI-setup profiles (VS) for VI001						
VS No.	Name	Description	Status	Notes			
5	VS05 RTC/RPM	RTC/RPM	0	COBID and input data			
		Required: DX1 in Slot 1		scaling can be changed from the XDi installation menu			
		Azimuth:TPDO(RTC)/XDi		Digital RPM input scaling can be changes from XDi			
		RPM/RPM%: DX1 S1i1: Signal (+term 11, -term10)		installation menu.			



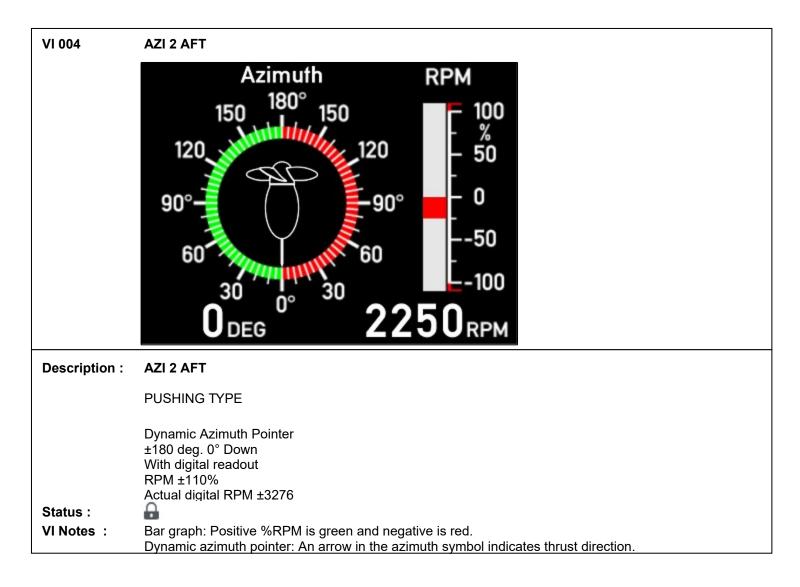
VI-setup profiles (VS) for VI002					
VS No.	Name	Description	Status	Notes	
1	VS01 XDi-net	Indput XDi-net	•	See similar VS profile for VI001	
		Azimuth: XDi-net			
		RPM/RPM%: XDi-net			
2	VS02 TPDO	Input TPDO	0	See similar VS profile for VI001	
		Azimuth: TPDO (RTC)			
		RPM/RPM%: TPDO			

VI-setup profiles (VS) for VI002					
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	0	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs		See similar VS profile for VI001	
		Required: AX1 in Slot 1		V1001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM		See similar VS profile for	
		Required: DX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: Signal (+term 11, -term10)			



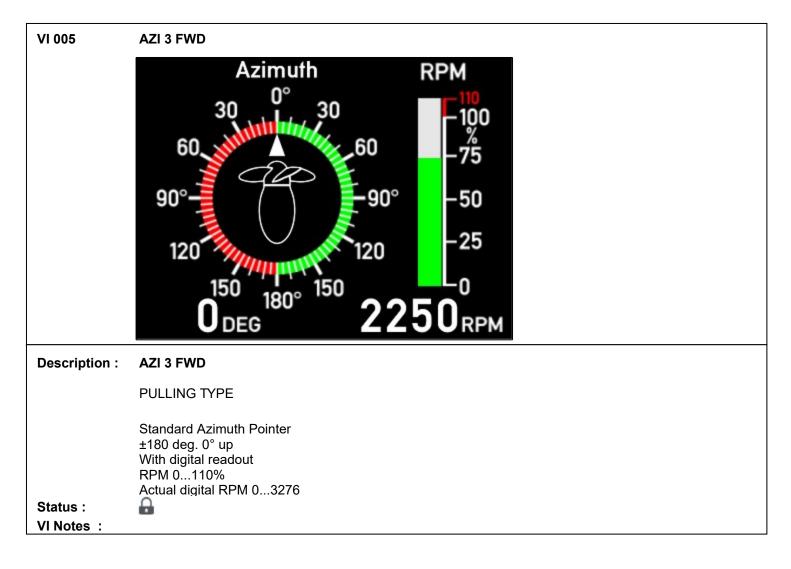
VI-setup profiles (VS) for VI003				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net		See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO		See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setı</u>	VI-setup profiles (VS) for VI003				
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	A	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	A	See similar VS profile for VI001	
		Required: AX1 in Slot 1			
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM	A	See similar VS profile for	
		Required: DX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: (+term 11, -term10) S1i2: (+term8,- term7)			



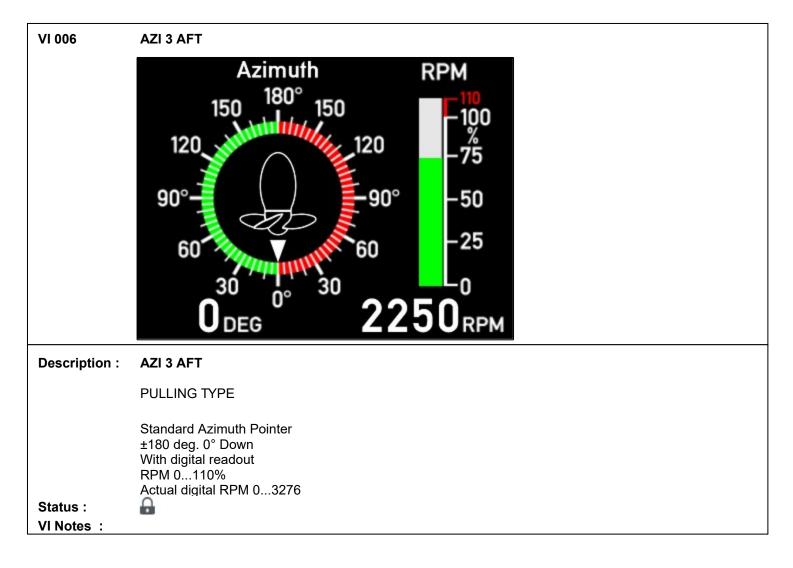
VI-setup profiles (VS) for VI004				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net	•	See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO	•	See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setı</u>	VI-setup profiles (VS) for VI004				
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	•	See similar VS profile for VI001	
		Required: AX1 in Slot 1			
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM	A	See similar VS profile for	
		Required: DX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: (+term 11, -term10) S1i2: (+term8,- term7)			



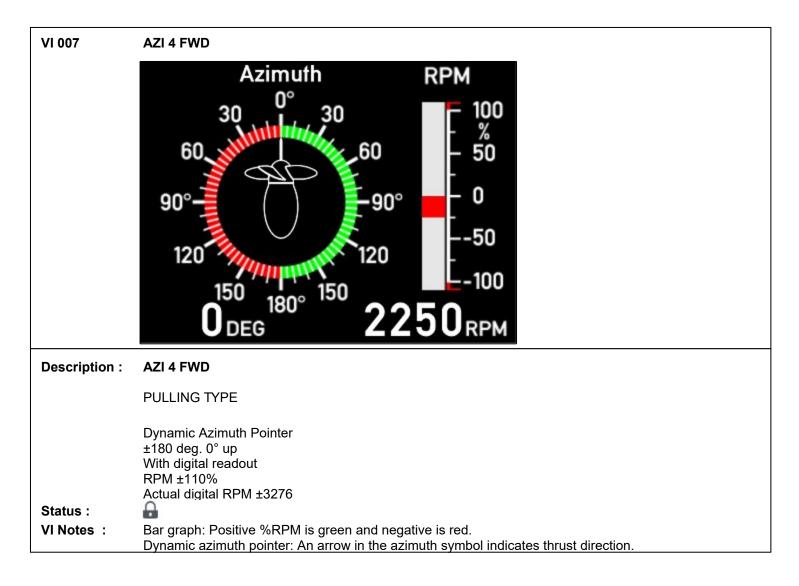
VI-setup profiles (VS) for VI005				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net	0	See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO	0	See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setu</u>	VI-setup profiles (VS) for VI005				
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	0	See similar VS profile for VI001	
		Required: AX1 in Slot 1			
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	0	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM	0	See similar VS profile for	
		Required: DX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: Signal (+term 11, -term10)			



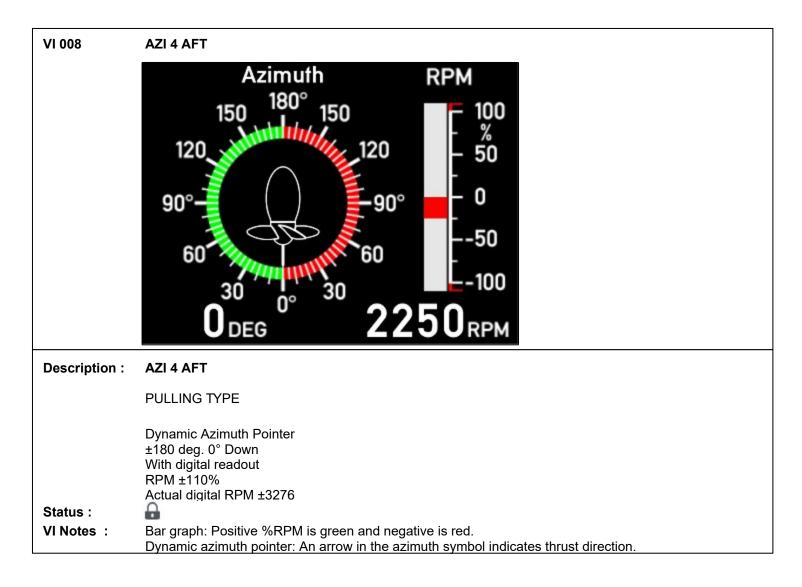
VI-setup profiles (VS) for VI006				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net		See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO		See similar VS profile for Vl001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setu</u>	VI-setup profiles (VS) for VI006				
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	Ĥ	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	0	See similar VS profile for VI001	
		Required: AX1 in Slot 1			
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM	•	See similar VS profile for	
		Required: DX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: Signal (+term 11, -term10)			



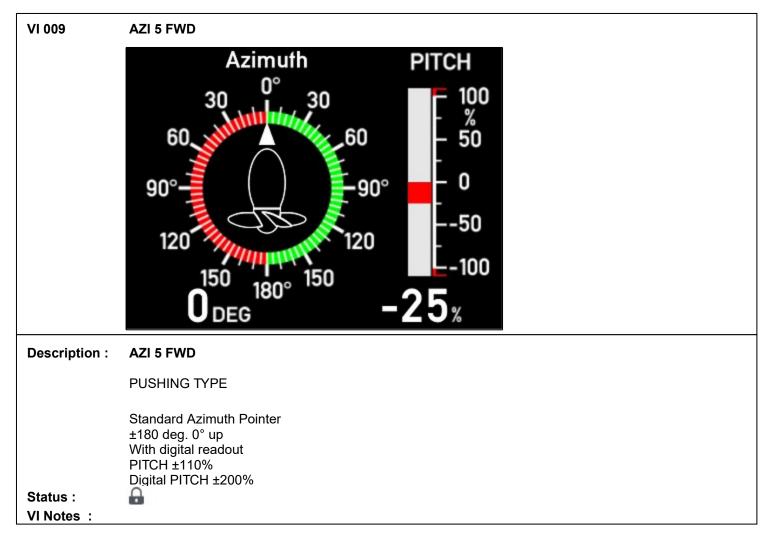
VI-setup profiles (VS) for VI007				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net	•	See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO	•	See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setı</u>	VI-setup profiles (VS) for VI007				
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog		See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	•	See similar VS profile for VI001	
		Required: AX1 in Slot 1			
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			
5	VS05 RTC/RPM	RTC/RPM	•	See similar VS profile for VI001	
		Required: DX1 in Slot 1		V1001	
		Azimuth:TPDO(RTC)/XDi			
		RPM/RPM%: DX1 S1i1: (+term 11, -term10) S1i2: (+term8,- term7)			



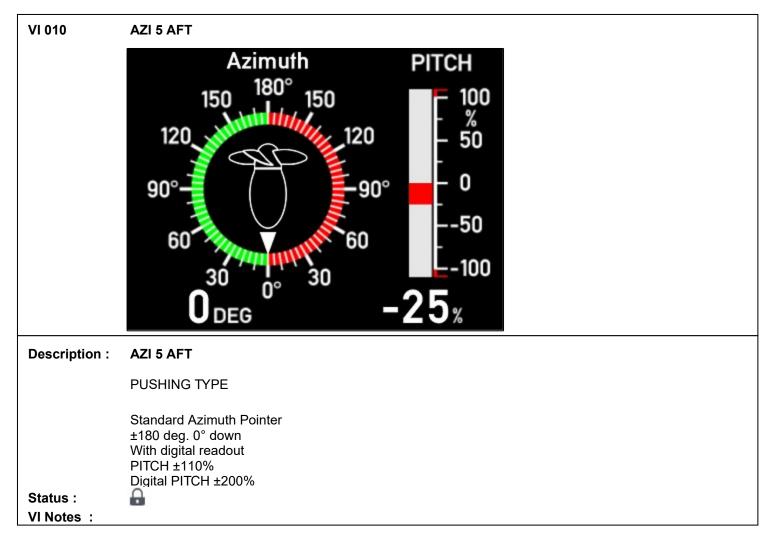
VI-setup profiles (VS) for VI008				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net	0	See similar VS profile for VI001
		Azimuth: XDi-net		
		RPM/RPM%: XDi-net		
2	VS02 TPDO	Input TPDO	Ĥ	See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		RPM/RPM%: TPDO		

<u>VI-setı</u>	up profiles (VS) f	or VI008		
VS No.	Name	Description	Status	Notes
3	VS03 2 CAN	2 CAN/Analog		See similar VS profile for
		Required: AX1 in Slot 1		VI001
		Azimuth:TPDO(RTC)/XDi		
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)		
		Input lost detection <3.5mA		
4	VS04 Analog	Analog inputs	0	See similar VS profile for VI001
		Required: AX1 in Slot 1		
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)		
		RPM/RPM%: AX1 S1i2: 4-20mA (+term5, -term4)		
		Input lost detection <3.5mA		
5	VS05 RTC/RPM	RTC/RPM	0	See similar VS profile for
		Required: DX1 in Slot 1		VI001
		Azimuth:TPDO(RTC)/XDi		
		RPM/RPM%: DX1 S1i1: (+term 11, -term10) S1i2: (+term8,- term7)		



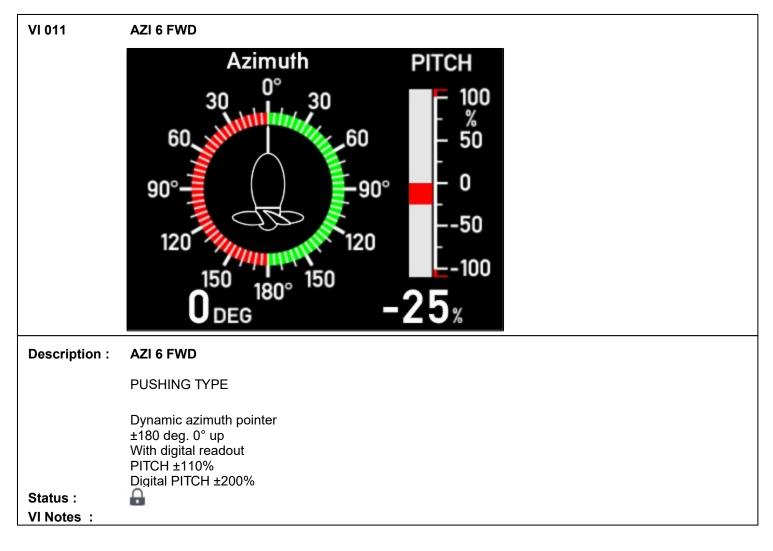
VI-setup profiles (VS) for VI009				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net		See similar VS profile for VI001
		Azimuth: XDi-net		
		PITCH%: XDi-net		
2	VS02 TPDO	Input TPDO		See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		PITCH%: TPDO		

VI-setup profiles (VS) for VI009					
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog		See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		PITCH%: AX1 S1i1: 4-20mA (+term9, -term8)			
		Input lost detection &It3.5mA			
4	VS04 Analog	Analog inputs		See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		PITCH%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection &It3.5mA			



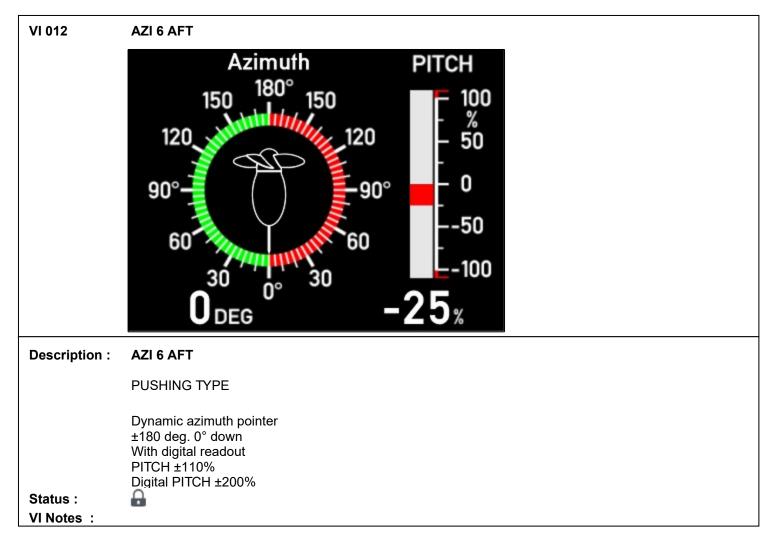
VI-setup profiles (VS) for VI010				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net	Ĥ	See similar VS profile for VI001
		Azimuth: XDi-net		
		PITCH%: XDi-net		
2	VS02 TPDO	Input TPDO	Ĥ	See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		PITCH%: TPDO		

VI-setup profiles (VS) for VI010					
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		PITCH%: AX1 S1i1: 4-20mA (+term9, -term8)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		PITCH%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection &It3.5mA			



VI-setup profiles (VS) for VI011					
VS No.	Name	Description	Status	Notes	
1	VS01 XDi-net	Indput XDi-net		See similar VS profile for VI001	
		Azimuth: XDi-net			
		PITCH%: XDi-net			
2	VS02 TPDO	Input TPDO		See similar VS profile for VI001	
		Azimuth: TPDO (RTC)			
		PITCH%: TPDO			

VI-setup profiles (VS) for VI011					
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	Ĥ	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		PITCH%: AX1 S1i1: 4-20mA (+term9, -term8)			
		Input lost detection <3.5mA			
4	VS04 Analog	Analog inputs	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		PITCH%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection <3.5mA			



VI-setup profiles (VS) for VI012				
VS No.	Name	Description	Status	Notes
1	VS01 XDi-net	Indput XDi-net		See similar VS profile for VI001
		Azimuth: XDi-net		
		PITCH%: XDi-net		
2	VS02 TPDO	Input TPDO		See similar VS profile for VI001
		Azimuth: TPDO (RTC)		
		PITCH%: TPDO		

VI-setup profiles (VS) for VI012					
VS No.	Name	Description	Status	Notes	
3	VS03 2 CAN	2 CAN/Analog	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth:TPDO(RTC)/XDi			
		PITCH%: AX1 S1i1: 4-20mA (+term9, -term8)			
		Input lost detection &It3.5mA			
4	VS04 Analog	Analog inputs	•	See similar VS profile for	
		Required: AX1 in Slot 1		VI001	
		Azimuth: AX1 S1i1: 4-20mA (+term9, -term8)			
		PITCH%: AX1 S1i2: 4-20mA (+term5, -term4)			
		Input lost detection &It3.5mA			