

HART Termination Board

HiSHPTB/32/YOK-AIO-R-02



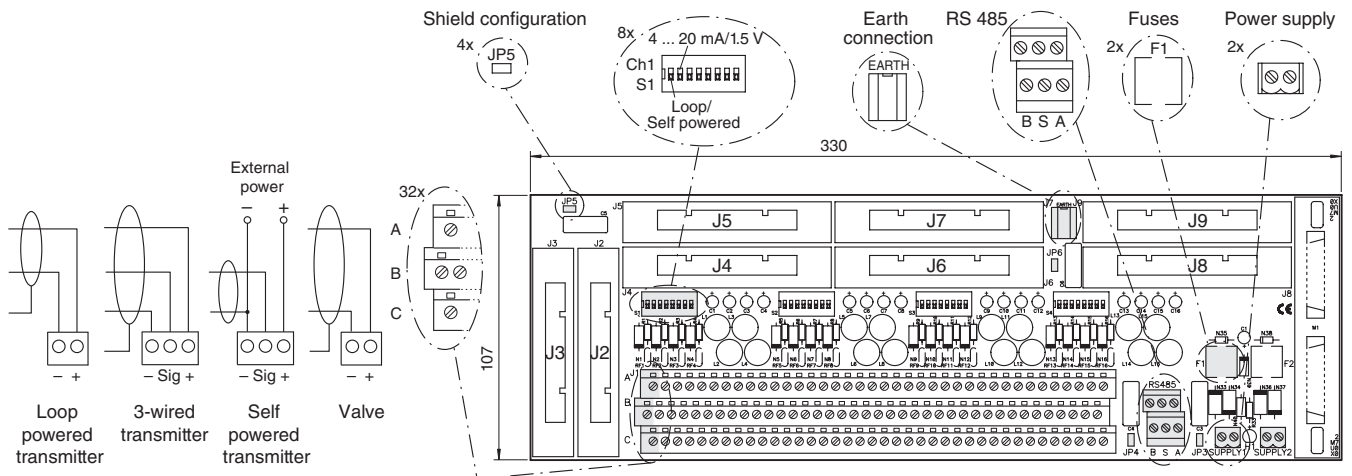
- Yokogawa Centum 3000 CS AAI835 replacement FTA
- 32 channels of I/O
- 16 channels AI and 16 channels AO
- 2- or 3-wire or self powered transmitters or valves
- Short-circuit protected
- Plug-n-play wiring capabilities



Function

The Termination Board designed for easy HiDMux2700 Multiplexer integration with the Yokogawa Centum 3000 CS system. With the Multiplexer integrated into the board and plug-n-play option for the DCS equipment, this provides a very clean access to the HART signals, while reducing the need for marshalling cabinets and reducing equipment that require extra cabinet space. The HART Termination Board provides a robust solution for on-line HART communications, interfaces up to 32 field located HART devices, and, it allows the user to replace standard DCS field termination panels.

Connection



Technical Data

Supply	
Rated voltage	U_r 20 ... 30 V DC
Fusing	3.15 A , 5 x 20 mm (0.2 x 0.8 inch)
Power dissipation	0.7 W , with Multiplexer
Reverse polarity protection	no
HART signal channels (intrinsically safe)	
HART signal channels	
Number of channels	32 unbalanced signal loops
Redundancy	
Supply	no
Galvanic isolation	

Release date: 2023-06-01 Date of issue: 2023-06-01 Filename: 907237_eng.pdf

Technical Data

HART signal channels	30 V DC
Ambient conditions	
Ambient temperature	0 ... 55 °C (32 ... 131 °F)
Relative humidity	5 ... 90 %, non-condensing
Mechanical specifications	
Core cross section	2.5 mm ² (16 AWG)
Connection	field side: screw terminals control side: KS connector (proprietary) RS 485 interface: removable screw terminals power: removable screw terminals
Mass	approx. 500 g
Dimensions	330 x 107 x 208 mm (12.9 x 4.2 x 8.2 inch) (W x H x D) , depth including module assembly with HiDMux2700
Mounting	DIN rail mounting
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .

Additional Information

Connection Assignment

Connector	Channel
J1	1 ... 32
J2	1 ... 8, primary
J3	1 ... 8, secondary
J4	9 ... 16, primary
J5	9 ... 16, secondary
J6	17 ... 24, primary
J7	17 ... 24, secondary
J8	25 ... 32, primary
J9	25 ... 32, secondary

Configuration

		Switch	Field and DCS have the same signal (4 ... 20 mA or 1 ... 5 V)	Converts a 4 ... 20 mA signal from the field into the 1 ... 5 V signal for DCS	Switch	Self powered device	Loop powered device
S1	Channel 1	1	Off	On	2	Off	On
	Channel 2	3	Off	On	4	Off	On
	Channel 3	5	Off	On	6	Off	On
	Channel 4	7	Off	On	8	Off	On
S2	Channel 5	1	Off	On	2	Off	On
	Channel 6	3	Off	On	4	Off	On
	Channel 7	5	Off	On	6	Off	On
	Channel 8	7	Off	On	8	Off	On
S3	Channel 9	1	Off	On	2	Off	On
	Channel 10	3	Off	On	4	Off	On
	Channel 11	5	Off	On	6	Off	On
	Channel 12	7	Off	On	8	Off	On
S4	Channel 13	1	Off	On	2	Off	On
	Channel 14	3	Off	On	4	Off	On
	Channel 15	5	Off	On	6	Off	On
	Channel 16	7	Off	On	8	Off	On
S5	Channel 17	1	Off	On	2	Off	On
	Channel 18	3	Off	On	4	Off	On
	Channel 19	5	Off	On	6	Off	On
	Channel 20	7	Off	On	8	Off	On
S6	Channel 21	1	Off	On	2	Off	On
	Channel 22	3	Off	On	4	Off	On
	Channel 23	5	Off	On	6	Off	On
	Channel 24	7	Off	On	8	Off	On

Additional Information

		Switch	Field and DCS have the same signal (4 ... 20 mA or 1 ... 5 V)	Converts a 4 ... 20 mA signal from the field into the 1 ... 5 V signal for DCS	Switch	Self powered device	Loop powered device
S7	Channel 25	1	Off	On	2	Off	On
	Channel 26	3	Off	On	4	Off	On
	Channel 27	5	Off	On	6	Off	On
	Channel 28	7	Off	On	8	Off	On
S8	Channel 29	1	Off	On	2	Off	On
	Channel 30	3	Off	On	4	Off	On
	Channel 31	5	Off	On	6	Off	On
	Channel 32	7	Off	On	8	Off	On

Jumper	Analog input	Galvanic grounding	Capacitive grounding
JP3	RS-485	closed	opened
JP4	Field side channels 1 ... 32	closed	opened
JP5	DCS side channels 1 ... 16	closed	opened
JP6	DCS side channels 17 ... 32	closed	opened

Interface

Yokogawa I/O interface

- AA1835