HART Termination Board

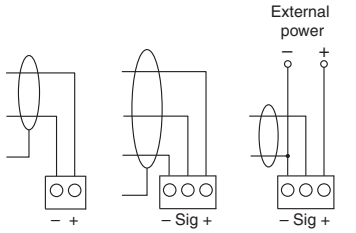
HiSHPTB/32/YOK-AI-R-02

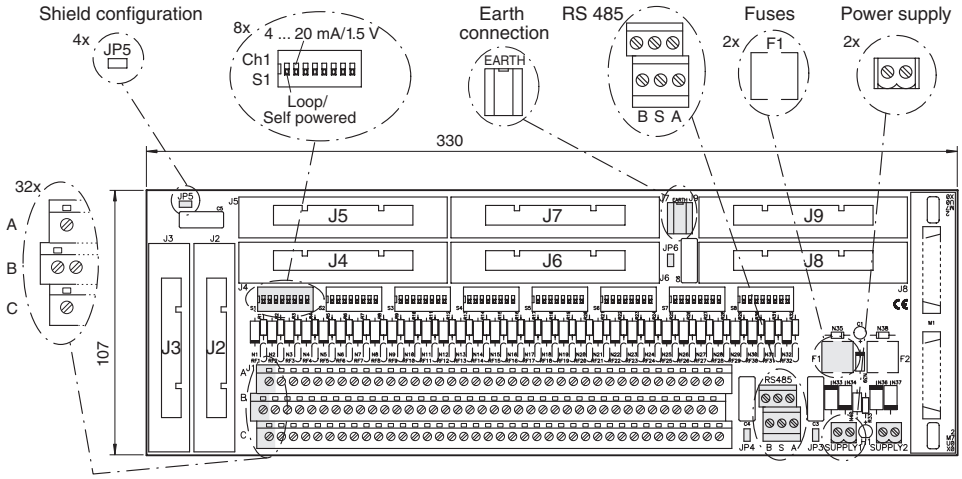
- Yokogawa Centum 3000 CS AAI135 replacement FTA
- 32 channels of I/O
- 2- or 3-wire or self powered transmitters
- Short-circuit protected
- Plug-n-play wiring capabilities

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		

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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 mm² (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	Channels
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	Channel	Switch	Field and DCS have the same signal (4 ... 20 mA or 1 ... 5 V)	Convert a 4 ... 20 mA signal from the field into the 1 ... 5 V signal for DCS	Switch	Self powered device	Loop powered device
S1	1	1	Off	On	2	Off	On
	2	3	Off	On	4	Off	On
	3	5	Off	On	6	Off	On
	4	7	Off	On	8	Off	On
S2	5	1	Off	On	2	Off	On
	6	3	Off	On	4	Off	On
	7	5	Off	On	6	Off	On
	8	7	Off	On	8	Off	On
S3	9	1	Off	On	2	Off	On
	10	3	Off	On	4	Off	On
	11	5	Off	On	6	Off	On
	12	7	Off	On	8	Off	On
S4	13	1	Off	On	2	Off	On
	14	3	Off	On	4	Off	On
	15	5	Off	On	6	Off	On
	16	7	Off	On	8	Off	On
S5	17	1	Off	On	2	Off	On
	18	3	Off	On	4	Off	On
	19	5	Off	On	6	Off	On
	20	7	Off	On	8	Off	On
S6	21	1	Off	On	2	Off	On
	22	3	Off	On	4	Off	On
	23	5	Off	On	6	Off	On
	24	7	Off	On	8	Off	On

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Additional Information

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

Yokogawa I/O I nterface

- AAI135

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