PROGRAM DESCRIPTION
TAD 3

Program: T121A240

This description is valid for:

Weight indicator **TAD 3** with application program **T121A240**

See also the following descriptions

Weight indicator TAD 3, Technical Manual (www.vishaypg.com/doc?35184)
Weight indicator TAD 3, Operating instructions, Quick installation

If these descriptions in any case are contradictory, this description is valid.

Option codes

This program requires program option code(s) for
07: Option 7

Function

This special program adds an external BCD function with a special hardware type ‘ADAM 5511’ with two output modules ‘ADAM 5056D’ or Wago 750-315 with four Wago 750-530 or eight Wago 750-519 connected via TAD3’ s COM2 port.
NOTE.
Not possible to connect any ANA or DIO units in this special software.

General, BCD outputs

The BCD outputs are updated with the speed of approx. 5 Hz. The ‘Data valid’ signal is normally at a high level, indicating that data on the BCD outputs are stable. Before any change is made to the outputs, the ‘Data valid’ signal is set at low level. The weight value and other outputs are then changed. When all the changes have been made ‘Data valid’ is once again set at high level.

The time from setting ‘data valid’ at low level until data are changed is at least 15 ms and the time from data having been changed until ‘Data valid’ is set at high level is at least 15 ms. Time during which the ‘Data valid’ signal is low is at least 30ms.

Outputs ADAM 5056D are open collector type, max 30V, 100mA. (sink) or
Wago 750-530, max 24 VDC, 0,5A (source)

The BCD outputs represent displayed weight, it could be net or gross depending of what’s shown on TAD3 display.

New parameters

Menu 'Special menu'
Inverted **Modbus: 41338 (46338)**

Range:	Invert all BCD outputs.
0 – 1	1 = Inverted
<0>	0 = Not inverted

Menu 'Special menu'
Instr. mode **Modbus: 41340 (46340)**

Range:	Type of BCD output
0 – 1	1 = Compatible with 4315 (see connection table)
<0>	0 = Compatible with E-1-TAD (see connection table)

BCD Input connection

TAD3	Input signal	Comments
11 (IN1)	Hold	hold = 'high' = 20 - 28 VDC

When the 'Hold' input is activated all values on the outputs are frozen. These outputs remain frozen as long as the 'Hold' signal (IN1) is 'high'. The 'Hold acknowledge' signal is always activated when the outputs are frozen. The outputs are activated from when the 'Hold' signal has gone 'low'.

BCD Output connection for ‘E-1-TAD’ mode with ADAM modules.

I/O modules	Output signal		Comments
D08 (mod.2)	Not Used		
D09	Not Used		
			Note ‘LED On’ = sink
D010 (mod.2)	Error		‘LED On’ = error
D011	Net/Gross		‘LED On’ = net
D012	Hold acknowledge		‘LED On’ = hold
D013	Sign		‘LED On’ = negative weight
D014	Motion		‘LED On’ = motion
D015	Data valid		‘LED On’ = data valid
D04 (mod.2)	1st digit	x1	Least significant digit (LSD)
D05		x2	active ‘LED On’ (applies to all digits)
D06		x4	
D06		x8	
D00 (mod.2)	2nd digit	x1	
D01		x2	
D02		x4	
D03		x8	
D012 (mod.1)	3rd digit	x1	
D013		x2	
D014		x4	
D015		x8	
D08 (mod.1)	4th digit	x1	
D09		x2	
D010		x4	
D011		x8	
D04 (mod.1)	5th digit	x1	
D05		x2	
D06		x4	
D07		x8	
D00 (mod.1)	6th digit	x1	Most significant digit (MSD)
D01		x2	
D02		x4	
D03		x8	

BCD Output connection for ‘4315’ mode with ADAM modules.

I/O modules	Output signal		Comments
D08 (mod.2)	Not Used		
D09	Not Used		
			Note ‘LED On’ = sink
D010 (mod.2)	Error		‘LED On’ = error
D011	Net/Gross		‘LED Off’ = net
D012	Hold acknowledge		‘LED Off’ = hold
D013	Sign		‘LED On’ = negative weight
D014	Motion		‘LED On’ = motion
D015	Data valid		‘LED Off’ = data valid
D04 (mod.2)	1st digit	x1	Least significant digit (LSD)
D05		x2	active ‘LED Off’ (applies to all digits)
D06		x4	
D06		x8	
D00 (mod.2)	2nd digit	x1	
D01		x2	
D02		x4	
D03		x8	
D012 (mod.1)	3rd digit	x1	
D013		x2	
D014		x4	
D015		x8	
D08 (mod.1)	4th digit	x1	
D09		x2	
D010		x4	
D011		x8	
D04 (mod.1)	5th digit	x1	
D05		x2	
D06		x4	
D07		x8	
D00 (mod.1)	6th digit	x1	Most significant digit (MSD)
D01		x2	
D02		x4	
D03		x8	

BCD Output connection for ‘E-1-TAD’ mode with Wago modules (750-530, 24 VDC).

I/O modules	Output signal		Comments
D0 1 (mod.4)	Not Used		
D0 2	Not Used		
			Note ‘LED On’ = source
D0 3 (mod.4)	Error		‘LED On’ = error
D0 4	Net/Gross		‘LED On’ = net
D0 5	Hold acknowledge		‘LED On’ = hold
D0 6	Sign		‘LED On’ = negative weight
D0 7	Motion		‘LED On’ = motion
D0 8	Data valid		‘LED On’ = data valid
D0 5 (mod.3)	1st digit	x1	Least significant digit (LSD)
D0 6		x2	active ‘LED On’ (applies to all digits)
D0 7		x4	
D0 8		x8	
D0 1 (mod.3)	2nd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 5 (mod.2)	3rd digit	x1	
D0 6		x2	
D0 7		x4	
D0 8		x8	
D0 1 (mod.2)	4th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 5 (mod.1)	5th digit	x1	
D0 6		x2	
D0 7		x4	
D0 8		x8	
D0 1 (mod.1)	6th digit	x1	Most significant digit (MSD)
D0 2		x2	
D0 3		x4	
D0 4		x8	

BCD Output connection for ‘4315’ mode with Wago modules (750-530, 24 VDC).

I/O modules	Output signal		Comments
D0 1 (mod.4)	Not Used		
D0 2	Not Used		
			Note ‘LED On’ = source
D0 3 (mod.4)	Error		‘LED On’ = error
D0 4	Net/Gross		‘LED Off’ = net
D0 5	Hold acknowledge		‘LED Off’ = hold
D0 6	Sign		‘LED On’ = negative weight
D0 7	Motion		‘LED On’ = motion
D0 8	Data valid		‘LED Off’ = data valid
D0 5 (mod.3)	1st digit	x1	Least significant digit (LSD)
D0 6		x2	active ‘LED Off’ (applies to all digits)
D0 7		x4	
D0 8		x8	
D0 1 (mod.3)	2nd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 5 (mod.2)	3rd digit	x1	
D0 6		x2	
D0 7		x4	
D0 8		x8	
D0 1 (mod.2)	4th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 5 (mod.1)	5th digit	x1	
D0 6		x2	
D0 7		x4	
D0 8		x8	
D0 1 (mod.1)	6th digit	x1	Most significant digit (MSD)
D0 2		x2	
D0 3		x4	
D0 4		x8	

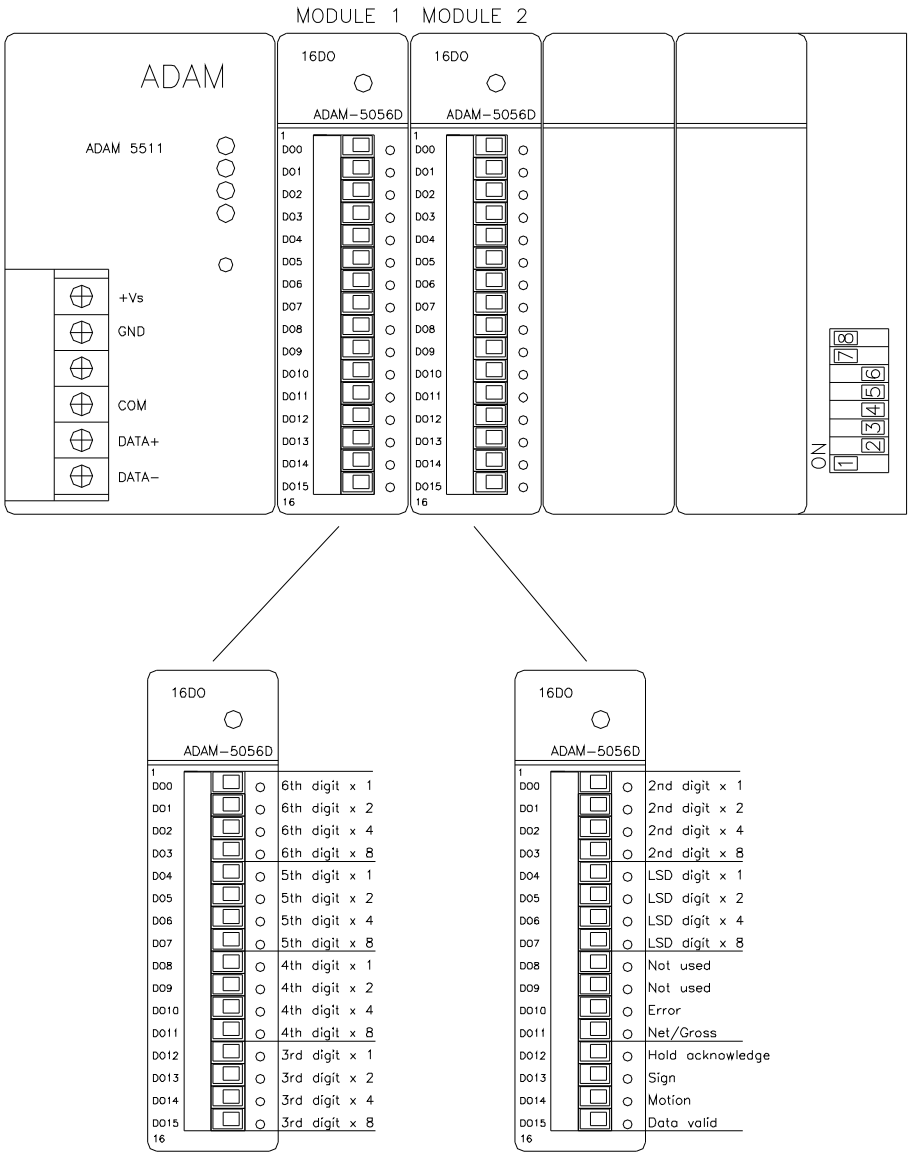
BCD Output connection for ‘E-1-TAD’ mode with Wago modules (750-519, 5 VDC).

I/O modules	Output signal		Comments
			Note ‘LED On’ = source
D0 1 (mod.8)	Hold acknowledge		‘LED On’ = hold
D0 2	Sign		‘LED On’ = negative weight
D0 3	Motion		‘LED On’ = motion
D0 4	Data valid		‘LED On’ = data valid
D0 1 (mod.7)	Not Used		
D0 2	Not Used		
D0 3	Error		‘LED On’ = error
D0 4	Net/Gross		‘LED On’ = net
D0 1 (mod.6)	1st digit	x1	Least significant digit (LSD)
D0 2		x2	active ‘LED On’ (applies to all digits)
D0 3		x4	
D0 4		x8	
D0 1 (mod.5)	2nd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.4)	3rd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.3)	4th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.2)	5th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.1)	6th digit	x1	Most significant digit (MSD)
D0 2		x2	
D0 3		x4	
D0 4		x8	

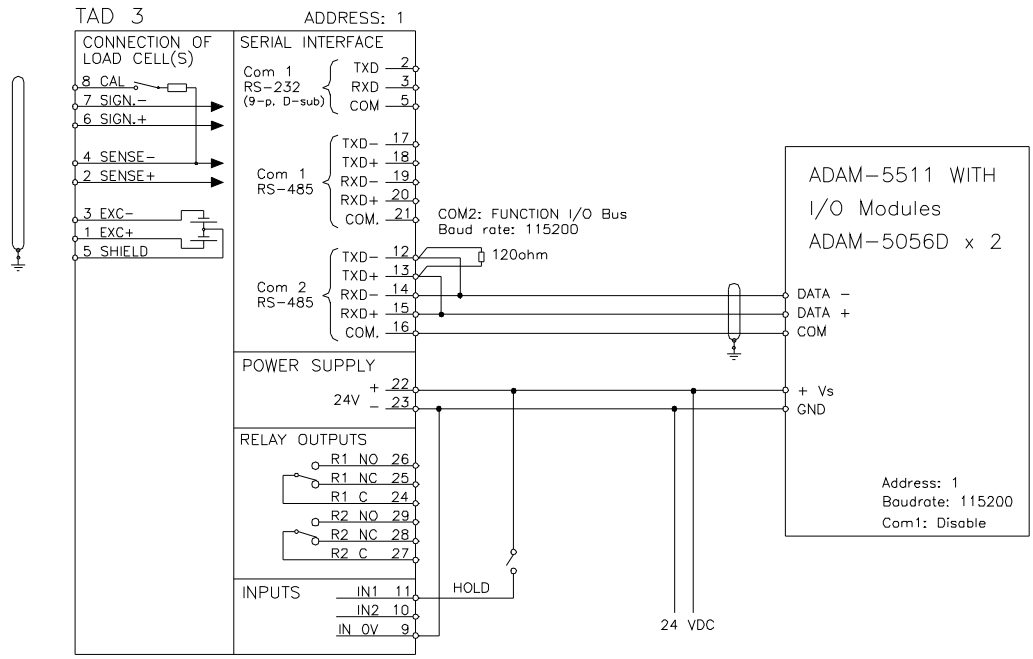
BCD Output connection for ‘4315’ mode with Wago modules (750-519, 5 VDC).

I/O modules	Output signal		Comments
			Note ‘LED On’ = source
D0 1 (mod.8)	Hold acknowledge		‘LED Off’ = hold
D0 2	Sign		‘LED On’ = negative weight
D0 3	Motion		‘LED On’ = motion
D0 4	Data valid		‘LED Off’ = data valid
D0 1 (mod.7)	Not Used		
D0 2	Not Used		
D0 3	Error		‘LED On’ = error
D0 4	Net/Gross		‘LED Off’ = net
D0 1 (mod.6)	1st digit	x1	Least significant digit (LSD)
D0 2		x2	active ‘LED Off’ (applies to all digits)
D0 3		x4	
D0 4		x8	
D0 1 (mod.5)	2nd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.4)	3rd digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.3)	4th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.2)	5th digit	x1	
D0 2		x2	
D0 3		x4	
D0 4		x8	
D0 1 (mod.1)	6th digit	x1	Most significant digit (MSD)
D0 2		x2	
D0 3		x4	
D0 4		x8	

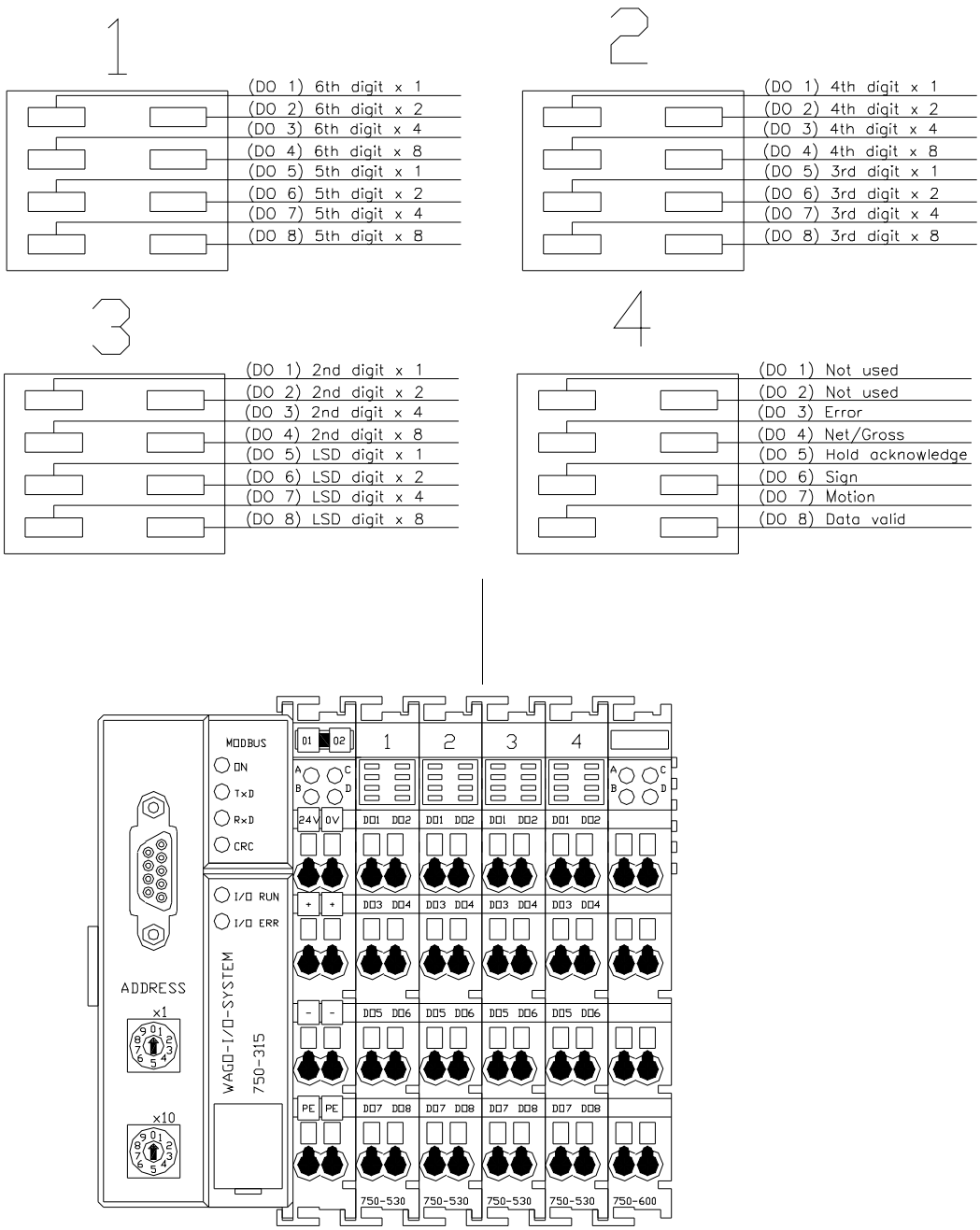
Connector Location
ADAM modules



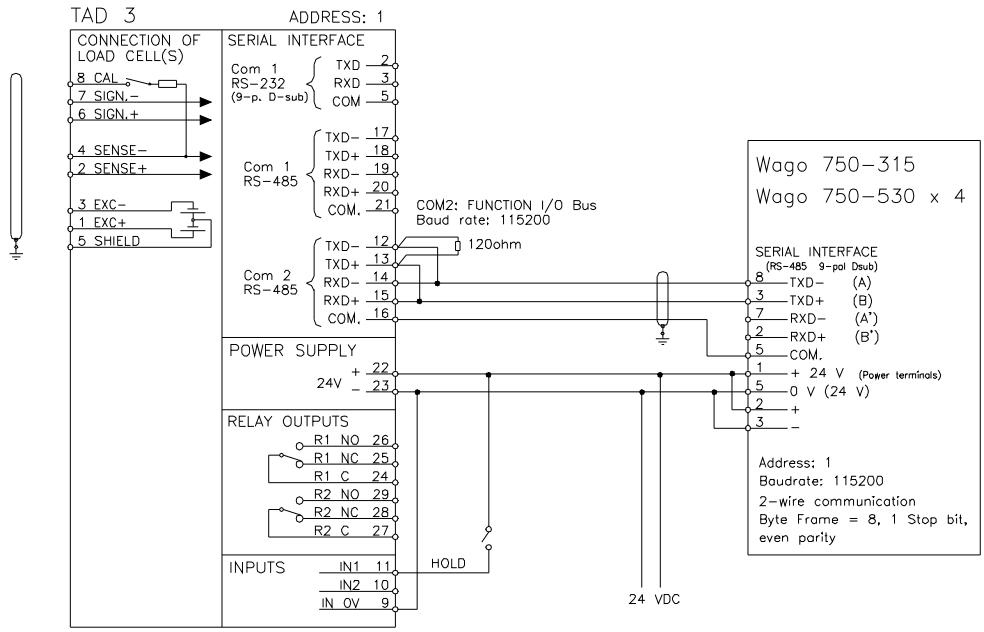
Connections
ADAM modules



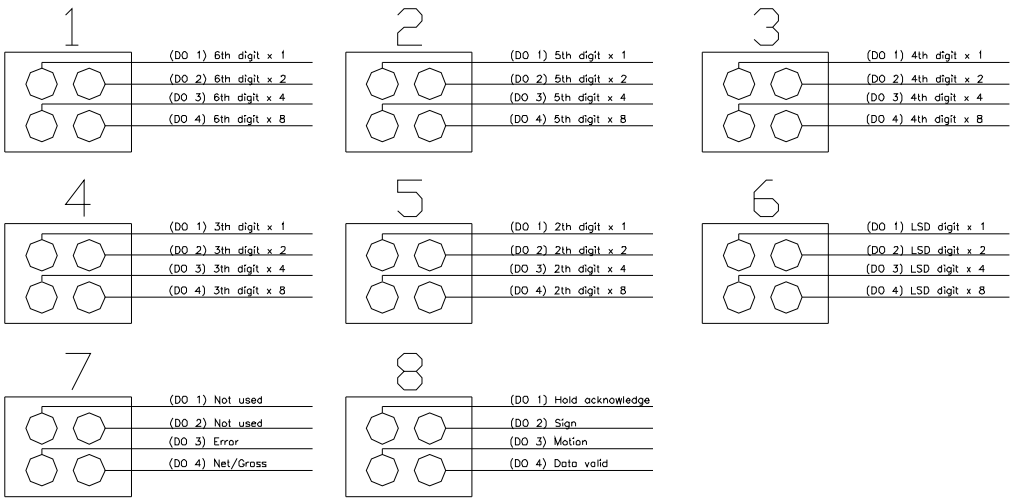
Connector Location
Wago modules (750-530, 24 VDC).

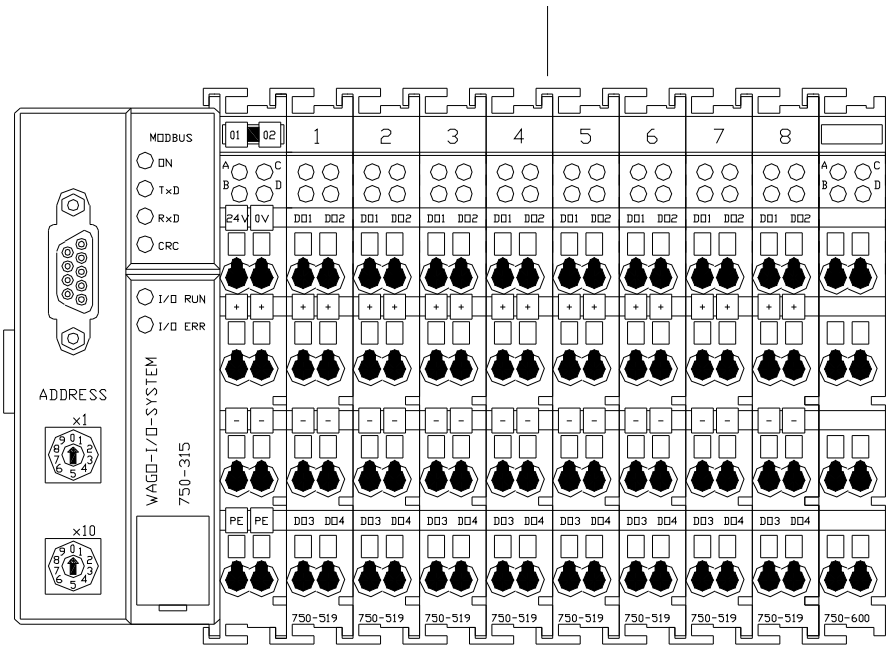


Connections
Wago modules (750-530, 24 VDC).

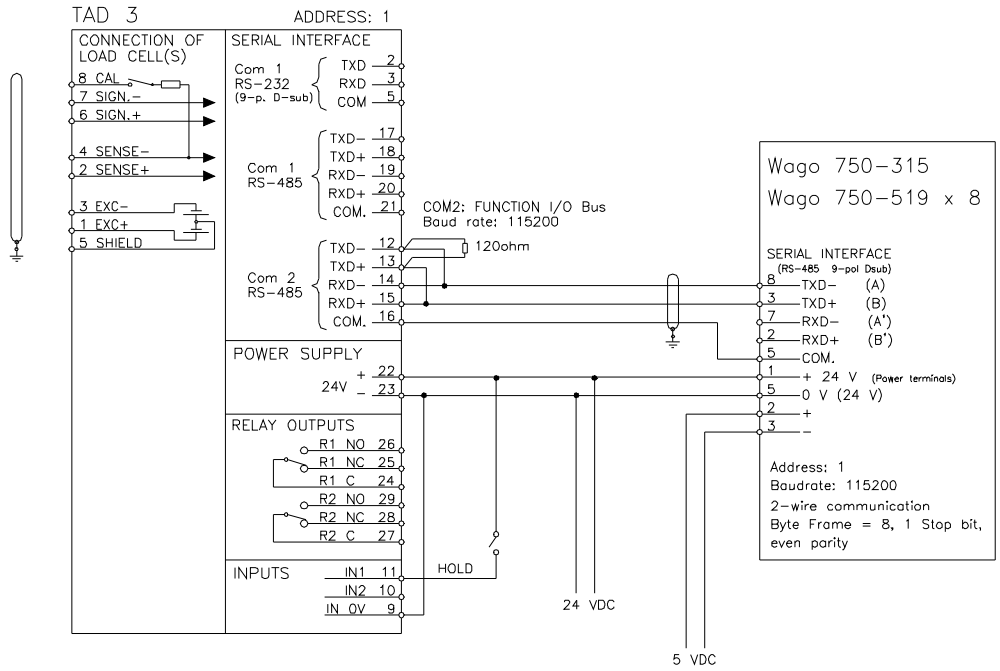


Connector Location
Wago modules (750-519, 5 VDC).





Connections
Wago modules (750-519, 5 VDC).



Document no. 35068
T121V5E
© Vishay Nobel AB, 2011-10-21
Subject to changes without notice, set forth at www.vishaypg.com/doc?63999.

Vishay Nobel AB

Box 423, SE-691 27 Karlskoga, Sweden

Phone +46 586 63000 · Fax +46 586 63099

pw.eur@vishaypg.com

www.weighingsolutions.com