

# TA314 MDR50 Cable Kit

**Cable Kit for Modules with 50-pin MDR type Connector**

Version 1.0

## **User Manual**

Issue 1.0.0

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## **TA314-10R**

Cable Kit for Modules with 50-pin MDR type connector

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## Document History

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# **1 Product Description**

The TA314 combines the TA209-10R MDR50 Terminal Block and the TA116-10R MDR50 cable. It is used to build a standard interface for a switch cabinet to connect a lot of TEWS modules with other system devices. The MDR50 Cable Kit is therefore an essential wiring interface for prototyping and in the same way for machines and peripheral equipment.

The TA116 is a 50-pin cable that provides a direct connection to the TEWS product range with MDR50 type connectors in the front panel (for example TPMC151, and more). It establishes a one to one connection between the MDR50 type connectors at both sides of the shielded cable. Always two wires are constructed as twisted pairs (1 and 26, 2 and 27, ..., 25 and 50).

The length of the cable is at least 1.8m. The permissible maximum voltage for the TA116 is 30V DC.

The TA209 has a universal socket and may simply mount on standard EM mounting rails as a compact terminal strip. The screw connections of the used terminal block have a nominal cross section of 2.5 mm<sup>2</sup>.

An additional screw connector on the TA209 provides a possibility to connect the shield of the 50pin MDR type connector to external case ground.

## 2 Pin Assignment

### 2.1 TA116 Cable

The cable provides a one to one connection between the MDR50 connectors X1 and X2.

The “∞” symbol denotes the wires that are constructed as twisted pairs (i.e. wires 1 & 26 form a twisted pair, 2 & 27 etc)

MDR50 #1 Pin	MDR50 #2 Pin		MDR50 #1 Pin	MDR50 #2 Pin
1	1	∞	26	26
2	2	∞	27	27
3	3	∞	28	28
4	4	∞	29	29
5	5	∞	30	30
6	6	∞	31	31
7	7	∞	32	32
8	8	∞	33	33
9	9	∞	34	34
10	10	∞	35	35
11	11	∞	36	36
12	12	∞	37	37
13	13	∞	38	38
14	14	∞	39	39
15	15	∞	40	40
16	16	∞	41	41
17	17	∞	42	42
18	18	∞	43	43
19	19	∞	44	44
20	20	∞	45	45
21	21	∞	46	46
22	22	∞	47	47
23	23	∞	48	48
24	24	∞	49	49
25	25	∞	50	50

Table 2-1 : TA116 Cable Pin Assignment

## 2.2 TA209 Terminal Block

Terminal	MDR50 Pin	Terminal	MDR50 Pin
1	1	26	26
2	2	27	27
3	3	28	28
4	4	29	29
5	5	30	30
6	6	31	31
7	7	32	32
8	8	33	33
9	9	34	34
10	10	35	35
11	11	36	36
12	12	37	37
13	13	38	38
14	14	39	39
15	15	40	40
16	16	41	41
17	17	42	42
18	18	43	43
19	19	44	44
20	20	45	45
21	21	46	46
22	22	47	47
23	23	48	48
24	24	49	49
25	25	50	50

Table 2-2 : TA209 Terminal Block Pin Assignment

X2 Terminal Block	X1 Female MDR
1	e.g.
2	Case Ground or Shield

Table 2-3 : TA209 Additional Terminal Pin Assignment

### 3 Assembly Drawing

#### 3.1 TA116 Cable

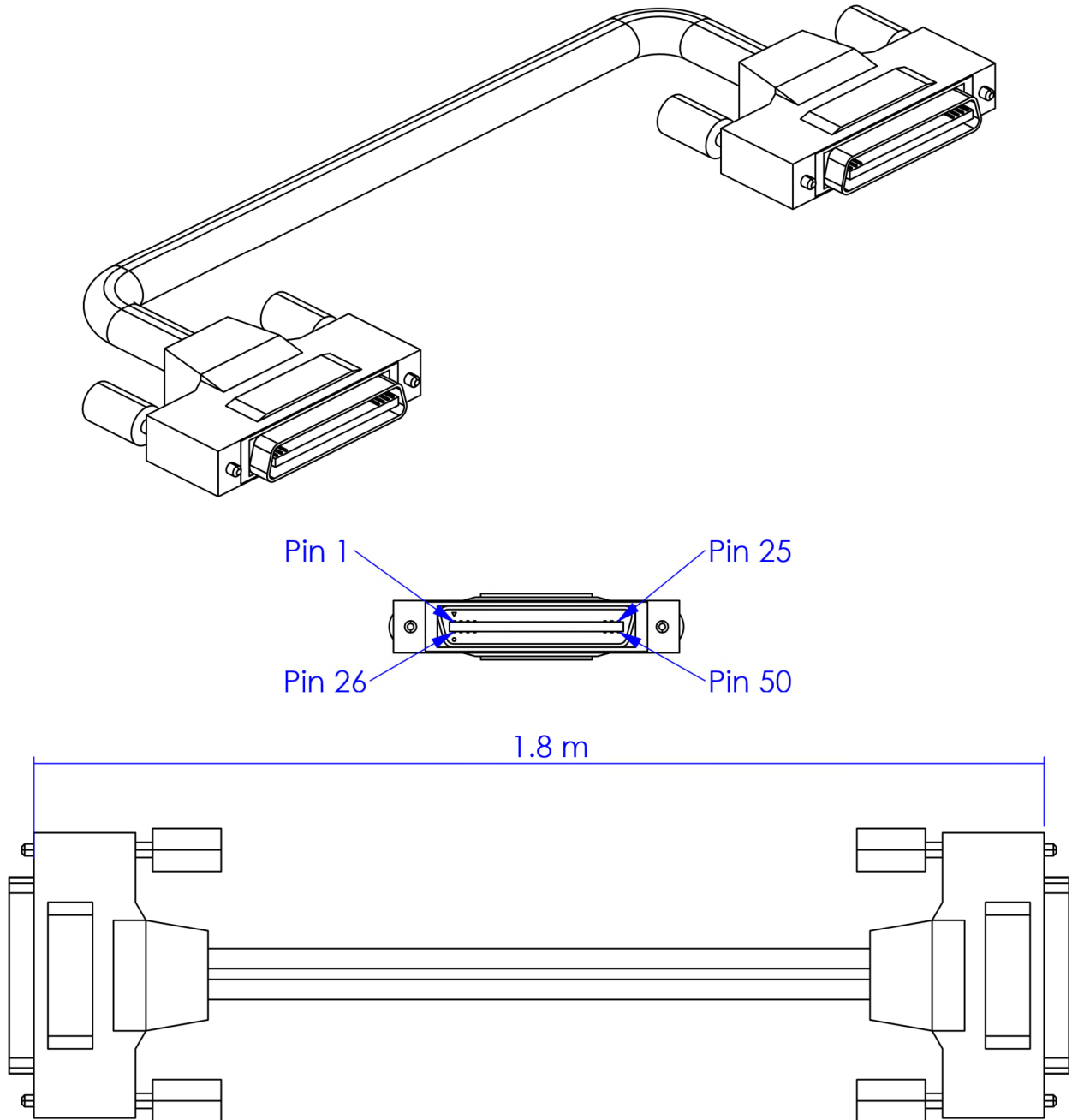


Figure 3-1 : TA116 Assembly Drawing



## 3.2 TA209 Terminal Block

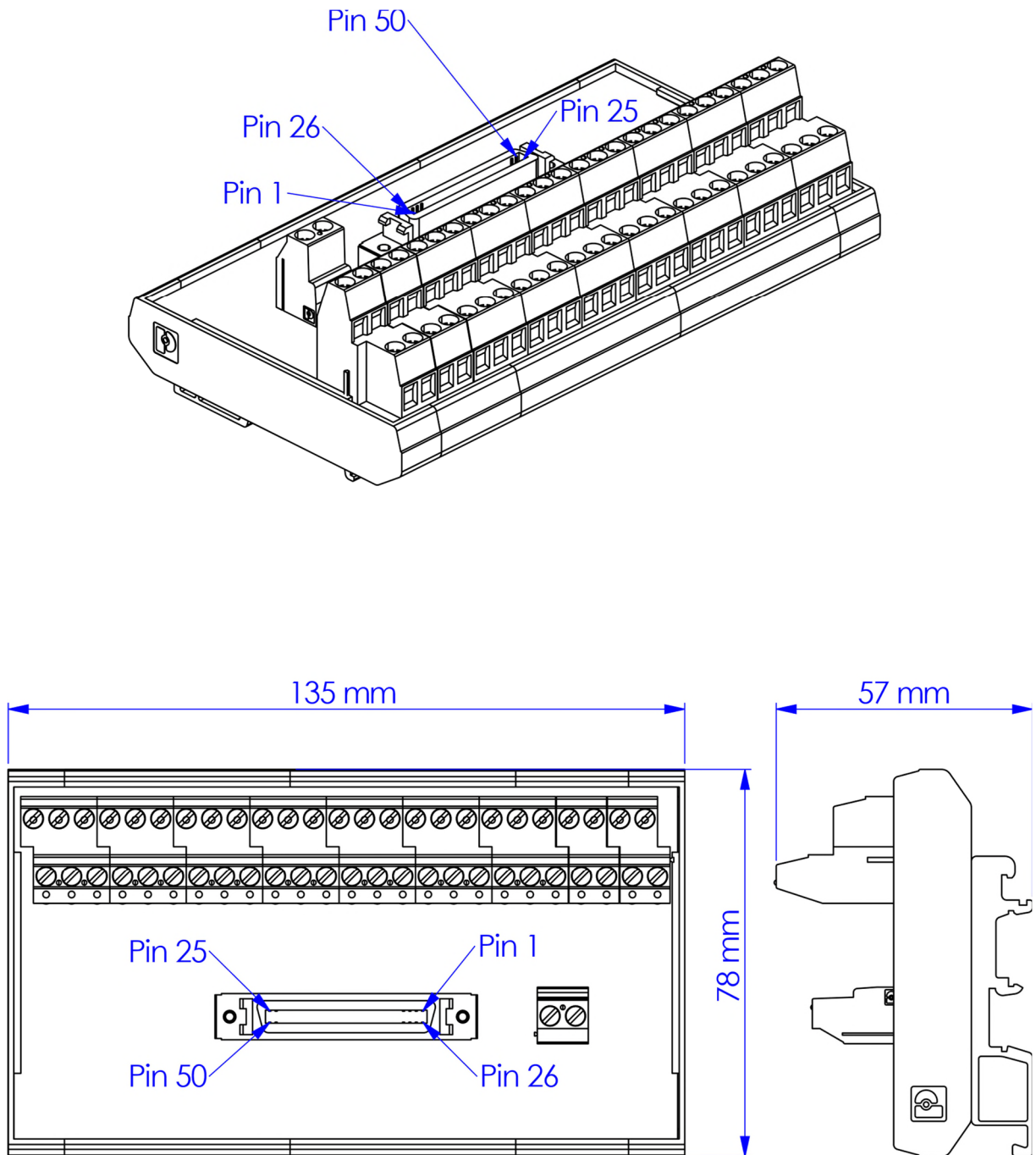


Figure 3-2 : TA209 Assembly Drawing