

ASi E/A-Module

ASi Spezifikation 3

Single Adresse (bis zu 31 Single Adressen) oder
AB Adresse (bis zu 62 AB Adressen)

Gehäuse mit Außenbefestigungslaschen



(Abbildung ähnlich)



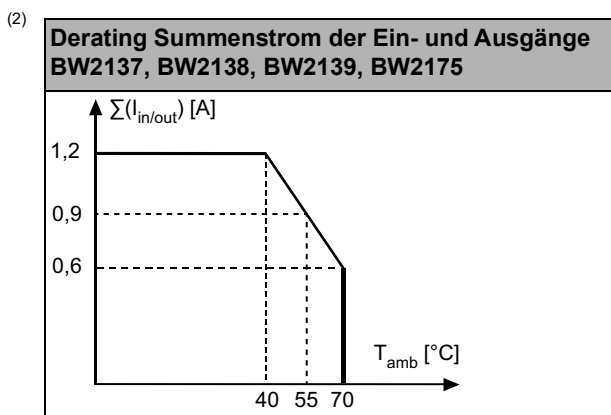
| Abbildung | Typ | Gehäuse | Eingänge digital | Ausgänge digital | Eingangsspannung (Sensorvers.) ⁽¹⁾ | Ausgangsspannung (Aktuatorvers.) ⁽²⁾ | ASi Anschluss ⁽³⁾ | ASi Adresse ⁽⁴⁾ | Artikel Nr. |
|-----------|-------------------------|----------------|------------------|------------------|---|---|------------------------------|----------------------------|---------------|
| | E/A Module | Aufputzgehäuse | 4 | 3 x elektronisch | aus AUX | aus AUX | Federzugklemmen | 1 AB Adresse | BW2139 |
| | E/A Module | Aufputzgehäuse | 4 | 4 x elektronisch | aus AUX | aus AUX | Federzugklemmen | 1 AB Adresse | BW2137 |
| | E/A Module | Aufputzgehäuse | 4 | 4 x elektronisch | aus AUX | aus AUX | Federzugklemmen | 1 Single Adresse | BW2175 |
| | Heizung/Klima (Ventile) | Aufputzgehäuse | – | 4 x elektronisch | – | aus AUX | Federzugklemmen | 1 Single Adresse | BW2138 |

- Eingangsspannung (Sensorversorgung):** Die Versorgung der Eingänge erfolgt entweder aus ASi oder aus AUX (24 V Hilfsenergie). Bei Versorgung aus ASi ist keine Verbindung zu Erde oder einem Fremdpotential erlaubt.
- Ausgangsspannung (Aktuatorversorgung):** Die Versorgung der Ausgänge erfolgt entweder aus ASi oder aus AUX (24 V Hilfsenergie). Bei Versorgung aus ASi ist keine Verbindung zu Erde oder einem Fremdpotential erlaubt.
- ASi Anschluss:** Die Anbindung an ASi und an AUX (24 V Hilfsenergie) erfolgt über das gelbe bzw. schwarze ASi Profilkabel mit Durchdringungstechnik oder über einen M12-Stecker (in IP20 über Klemmen).
- ASi Adresse:** 1 AB Adresse (max. 62 AB Adressen/ASi Kreis), 2 AB Adressen (max. 31 Module mit 2 AB Adressen), Single Adressen (max. 31 Single Adressen/ASi Kreis), gemischter Betrieb erlaubt. Bei Modulen mit 2 ASi Teilnehmern ist der 2. ASi Teilnehmer abgeschaltet, solange der 1. ASi Teilnehmer auf Adresse "0" adressiert ist. Auf Kundenwunsch liefern wir die ASi Teilnehmer auch mit speziellen ASi Adressenprofilen.

| Artikel Nr. | BW2139 | BW2137 | BW2175 | BW2138 |
|--|----------------------------|--------------------------|----------------------------|----------------------------|
| Allgemeine Daten | | | | |
| Gerätetyp | Ein- / Ausgang | | | Ausgang |
| Anschluss | | | | |
| ASi / AUX Anschluss | Federzugklemmen | | | |
| Peripherieanschluss | Federzugklemmen | | | |
| Länge der Anschlusskabel | E/A: 15 m ⁽¹⁾ | | | |
| ASi | | | | |
| Profil | S-7.A.E ID1=7 (default) | S-7.A.7 ID1=7 (fixed) | S-7.F.E ID1=F (default) | S-8.F.E ID1=F (default) |
| Adresse | 1 AB Adresse | | 1 Single Adresse | |
| Erforderliches Master Profil | ≥M3 | ≥M4 | ≥M0 | |
| Ab ASi Spezifikation | 2.1 | 3 | 2 | |
| Bemessungsbetriebsspannung | 30 V (18 ... 31.6 V) | | | |
| Max. Stromverbrauch | 70 mA | | | |
| Max. Stromverbrauch ohne Sensor-/ Aktuatorversorgung | ≤ 20 mA | | | |
| AUX | | | | |
| Spannung | 24 V (20 ... 30 V) | | | |
| Max. Stromverbrauch | 1,2 A | | | |

| Artikel Nr. | BW2139 | BW2137 | BW2175 | BW2138 |
|--|---|--|--------|--------|
| Eingang | | | | |
| Anzahl | 4 | | | – |
| Versorgungsspannung | aus AUX | | | |
| Versorgung angeschlossener Sensoren | bis +40 °C | Σ (Eingänge+Ausgänge) 1,2 A ⁽²⁾ | | – |
| | bei +55 °C | Σ (Eingänge+Ausgänge) 0,9 A ⁽²⁾ | | – |
| | bei +70 °C | Σ (Eingänge+Ausgänge) 0,6 A ⁽²⁾ | | – |
| Schaltswelle | U<5 V (low) U>15 V (high) | | | – |
| Ausgang | | | | |
| Anzahl | 3 x elektronisch | 4 x elektronisch | | |
| Versorgungsspannung | aus AUX | | | |
| Max. Ausgangsstrom | bis +40 °C | 0,5 A pro Ausgang Σ (Eingänge+Ausgänge) 1,2 A ⁽²⁾ | | |
| | bei +55 °C | 0,5 A pro Ausgang Σ (Eingänge+Ausgänge) 0,9 A ⁽²⁾ | | |
| | bei +70 °C | 0,5 A pro Ausgang Σ (Eingänge+Ausgänge) 0,6 A ⁽²⁾ | | |
| Anzeige | | | | |
| LED ASI (grün) | an: ASi Spannung an, blinkend: ASi Spannung an, aber Peripheriefehler ⁽³⁾ oder Adresse 0 aus: keine ASi Spannung | | | |
| LED FLT/FAULT (rot) | an: ASi Adresse 0 oder ASi Teilnehmer offline blinkend: Peripheriefehler ⁽³⁾ aus: ASi Teilnehmer online | | | |
| LED AUX (grün) | an: 24 V _{DC} AUX aus: keine 24 V _{DC} AUX | | | |
| Umwelt | | | | |
| Angewandte Normen | EN 61000-6-2 EN 61000-6-4 EN 60529 | | | |
| Betriebshöhe üNN | 2000 m | | | |
| Umgebungstemperatur | -25 °C ... +70 °C ⁽²⁾ | | | |
| Lagertemperatur | -25 °C ... +85 °C | | | |
| Gehäuse | Kunststoff, Schraubmontage | | | |
| Schutzart | IP54 | | | |
| Zulässige Schock- und Schwingbeanspruchung | ≤15 g, T≤11 ms 10 ... 55 Hz, 0,5 mm Amplitude | | | |
| Isolationsspannung | ≥500 V | | | |
| Gewicht | 155 g | | | |
| Maße (B / H / T in mm) | 93 / 93 / 55 | | | |

(1) Schleifenwiderstand ≤150 Ω



(3) siehe Tabelle „Peripheriefehler-Meldung“

| Artikel Nr. | Peripheriefehler-Meldung | |
|-------------|--------------------------|--------------------|
| | Ausgangskurzschluss | AUX Spannung fehlt |
| BW2137 | • | • |
| BW2138 | • | • |
| BW2139 | • | • |
| BW2175 | • | • |

| Programmierung | Bitbelegung | | | |
|---|---------------------|---|---|-------------------------------|
| | D3 | D2 | D1 | D0 |
| | Eingang | | | |
| BW2137 / BW2139 / BW2175 | I4 | I3 | I2 | I1 |
| | Ausgang | | | |
| BW2137 / BW2138 / BW2175 | O4 | O3 | O2 | O1 |
| BW2139 | – | O3 | O2 | O1 |
| | Parameterbit | | | |
| | P3 | P2 | P1 | P0 |
| BW2137 / BW2138 / BW2139 / BW2175 | nicht verwendet | 0= Ein / 1=Aus (Synchroner E/A Modus) | 0= Ein / 1= Aus (Dateneingangsfiler 128 µs) | 0= Aus / 1= Ein (Watchdog) |
| Programmierhinweise | | | | |
| voreingestellt Adresse 0, änderbar über Busmaster-Programmiergeräte | | | | |

| Bezeichnung | Bedeutung |
|------------------------|--|
| Ix | digitaler Eingang x |
| Ox | digitaler Ausgang x |
| 24V _{ext.out} | Sensorversorgung |
| 0V _{ext.out} | Bezugspotential für Ausgänge |
| 24V _{ext.in} | Eingang Versorgungsspannung, erzeugt aus externer Spannung, Pluspol |
| 0V _{ext.in} | Eingang Versorgungsspannung, erzeugt aus externer Spannung, Minuspol |
| ASi +, ASi - | Anschluss an ASi Bus |

| Anschlussbelegung | | | |
|-------------------|----|------------------------|----------------------------------|
| BW2137, BW2175 | | | |
| | | Terminal A | Terminal B |
| 1 | 3 | 1 | 13 |
| 2 | 4 | 2 | 14 |
| 5 | 6 | 3 | 15 |
| 7 | 8 | 4 | 16 |
| 9 | 10 | 5 | 17 |
| 11 | 12 | 6 | 18 |
| | | 7 | 19 |
| | | 8 | 20 |
| | | 9 | 21 |
| | | 10 | 22 |
| | | 11 | 23 |
| | | 12 | 24 |
| | | Adressierbuchse | |
| | | ADDR | Anschluss für ASi Adressiergerät |

| Anschlussbelegung | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------|---|-------------------------|----|------------|---|----|-------------------------|----|------------------------|---|----|----|---|---|-------------------------|----|-----------------------|----|--|----|-----------------------|----|------------------------|----|-------|----|----|----|-------|----|------------------------|----|--------------|---|----|----|-------|---|------------------------|----|-------------------------|----|----|----|----|----|------------------------|----|-------------------------|----|------|----|----|
| BW2139 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td><td>9</td><td>11</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> <tr><td colspan="6">[Terminal A]</td></tr> </table> | | 1 | 3 | 5 | 7 | 9 | 11 | 2 | 4 | 6 | 8 | 10 | 12 | [Terminal A] | | | | | | <table border="1"> <tr><td>13</td><td>15</td><td>17</td><td>19</td><td>21</td><td>23</td></tr> <tr><td>14</td><td>16</td><td>18</td><td>20</td><td>22</td><td>24</td></tr> <tr><td colspan="6">[Terminal B]</td></tr> </table> | | 13 | 15 | 17 | 19 | 21 | 23 | 14 | 16 | 18 | 20 | 22 | 24 | [Terminal B] | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 5 | 7 | 9 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 4 | 6 | 8 | 10 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [Terminal A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 15 | 17 | 19 | 21 | 23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 16 | 18 | 20 | 22 | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [Terminal B] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal A | | Terminal B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th colspan="2">Terminal A</th> <th colspan="2">Terminal B</th> </tr> </thead> <tbody> <tr><td>1</td><td>24 V_{ext out}</td><td>13</td><td>24 V_{ext in}</td></tr> <tr><td>2</td><td>I1</td><td>14</td><td>24 V_{ext in}</td></tr> <tr><td>3</td><td>24 V_{ext out}</td><td>15</td><td>0 V_{ext in}</td></tr> <tr><td>4</td><td>I2</td><td>16</td><td>0 V_{ext in}</td></tr> <tr><td>5</td><td>0 V_{ext out}</td><td>17</td><td>ASi +</td></tr> <tr><td>6</td><td>O1</td><td>18</td><td>ASi +</td></tr> <tr><td>7</td><td>0 V_{ext out}</td><td>19</td><td>ASi -</td></tr> <tr><td>8</td><td>O2</td><td>20</td><td>ASi -</td></tr> <tr><td>9</td><td>0 V_{ext out}</td><td>21</td><td>24 V_{ext out}</td></tr> <tr><td>10</td><td>O3</td><td>22</td><td>I3</td></tr> <tr><td>11</td><td>0 V_{ext out}</td><td>23</td><td>24 V_{ext out}</td></tr> <tr><td>12</td><td>n.c.</td><td>24</td><td>I4</td></tr> </tbody> </table> | Terminal A | | Terminal B | | 1 | 24 V _{ext out} | 13 | 24 V _{ext in} | 2 | I1 | 14 | 24 V _{ext in} | 3 | 24 V _{ext out} | 15 | 0 V _{ext in} | 4 | I2 | 16 | 0 V _{ext in} | 5 | 0 V _{ext out} | 17 | ASi + | 6 | O1 | 18 | ASi + | 7 | 0 V _{ext out} | 19 | ASi - | 8 | O2 | 20 | ASi - | 9 | 0 V _{ext out} | 21 | 24 V _{ext out} | 10 | O3 | 22 | I3 | 11 | 0 V _{ext out} | 23 | 24 V _{ext out} | 12 | n.c. | 24 | I4 |
| Terminal A | | Terminal B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 24 V _{ext out} | 13 | 24 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | I1 | 14 | 24 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 24 V _{ext out} | 15 | 0 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | I2 | 16 | 0 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 0 V _{ext out} | 17 | ASi + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | O1 | 18 | ASi + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 0 V _{ext out} | 19 | ASi - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | O2 | 20 | ASi - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 0 V _{ext out} | 21 | 24 V _{ext out} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | O3 | 22 | I3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 0 V _{ext out} | 23 | 24 V _{ext out} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | n.c. | 24 | I4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adressierbuchse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADDR Anschluss für ASi Adressiergerät | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BW2138 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> <tr><td colspan="4">[Terminal A]</td></tr> </table> | | 1 | 3 | 5 | 7 | 2 | 4 | 6 | 8 | [Terminal A] | | | | <table border="1"> <tr><td>9</td><td>11</td><td>13</td><td>15</td></tr> <tr><td>10</td><td>12</td><td>14</td><td>16</td></tr> <tr><td colspan="4">[Terminal B]</td></tr> </table> | | 9 | 11 | 13 | 15 | 10 | 12 | 14 | 16 | [Terminal B] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 5 | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 4 | 6 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [Terminal A] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 11 | 13 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 12 | 14 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| [Terminal B] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Terminal A | | Terminal B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th colspan="2">Terminal A</th> <th colspan="2">Terminal B</th> </tr> </thead> <tbody> <tr><td>1</td><td>0 V_{ext out}</td><td>9</td><td>24 V_{ext in}</td></tr> <tr><td>2</td><td>O1</td><td>10</td><td>24 V_{ext in}</td></tr> <tr><td>3</td><td>0 V_{ext out}</td><td>11</td><td>0 V_{ext in}</td></tr> <tr><td>4</td><td>O2</td><td>12</td><td>0 V_{ext in}</td></tr> <tr><td>5</td><td>0 V_{ext out}</td><td>13</td><td>ASi +</td></tr> <tr><td>6</td><td>O3</td><td>14</td><td>ASi +</td></tr> <tr><td>7</td><td>0 V_{ext out}</td><td>15</td><td>ASi -</td></tr> <tr><td>8</td><td>O4</td><td>16</td><td>ASi -</td></tr> </tbody> </table> | Terminal A | | Terminal B | | 1 | 0 V _{ext out} | 9 | 24 V _{ext in} | 2 | O1 | 10 | 24 V _{ext in} | 3 | 0 V _{ext out} | 11 | 0 V _{ext in} | 4 | O2 | 12 | 0 V _{ext in} | 5 | 0 V _{ext out} | 13 | ASi + | 6 | O3 | 14 | ASi + | 7 | 0 V _{ext out} | 15 | ASi - | 8 | O4 | 16 | ASi - | | | | | | | | | | | | | | | | |
| Terminal A | | Terminal B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 0 V _{ext out} | 9 | 24 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | O1 | 10 | 24 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 0 V _{ext out} | 11 | 0 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | O2 | 12 | 0 V _{ext in} | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 0 V _{ext out} | 13 | ASi + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | O3 | 14 | ASi + | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 0 V _{ext out} | 15 | ASi - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | O4 | 16 | ASi - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Zubehör:

- ASi-5/ASi-3 Handadressiergerät (Art. Nr. BW4708)