

# ESI Junction & terminal boxes

Ex e Stainless Steel Junction box for Zone 1/21



**BARTEC junction and terminal boxes are designed and approved for Zone 1 and Zone 21. They are particularly suitable for applications under extreme environmental conditions, and they provide reliable protection under heavy loads.**

The housings are made of 1.4301 (V2 A) or 1.4404 stainless steel (V4 A). The series includes empty housings and distribution boxes with door or cover. From a housing height of 120 mm, the housings can be supplied with or without flange plates. In addition to 25 standard sizes, approved customer-specific design variants are also available.

- Zones 1/21
- Extremely robust
- Fully bolted or hinged

Explosion protection

|                                 |                                                                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| ATEX/UKEX<br>Ex protection type | Ex II 2G Ex eb ia ib IIA, IIB or IIC T6, T5, T4 or T3 Gb<br>Ex II 2G Ex tb ia ib IIIA, IIIB oder IIIC, T80°C, T95°C or T130°C Db |
| ATEX/UKEX<br>certificate number | IBExU 12 ATEX 1099X                                                                                                              |
| IECEX<br>Ex protection type     | Ex eb ia ib IIA, IIB, or IIC T6, T5, T4, or T3 Gb<br>Ex tb ia ib IIIA, IIIB, or IIIC, T80 °C, T95 °C, or T130 °C Db              |
| IECEX certificate number        | IECEX IBE 12.0031X                                                                                                               |
| Temperature Classes             | T6, T5, T4, T3<br>T80 °C, T95 °C, T130 °C                                                                                        |
| Ambient temperature             | -40 °C to +80 °C                                                                                                                 |
| Other certification             | CCC: 2020322304001711<br>INMETRO: UL-BR 11.0118<br>PESO: A/P/HQ/UP/104/5577 (P470774)<br>ECASEx: 23-06-75816/E23-05-076028/NB000 |

Other approvals and certificates, see [bartec.com](https://www.bartec.com)

Electrical data

|                          |                                        |
|--------------------------|----------------------------------------|
| Rated insulation voltage | max. 1000 V *                          |
| Nominal current          | max. 690 A *                           |
| Maximal cross-section    | max. 400 mm² *                         |
| Maximum current          | please refer to operating instructions |

\* The rated values are maximum values. The respective built-in components cause the actual electrical values. The manufacturer specified the final rated values, within the limits of the maximum values, and depending on the supply conditions, mode of operation, equipment protection level and so on.

The circuits must be interconnected in accordance with the requirements of the current standard IEC 60079-14. For intrinsically safe circuits, the requirements of IEC 60079-25 also apply.

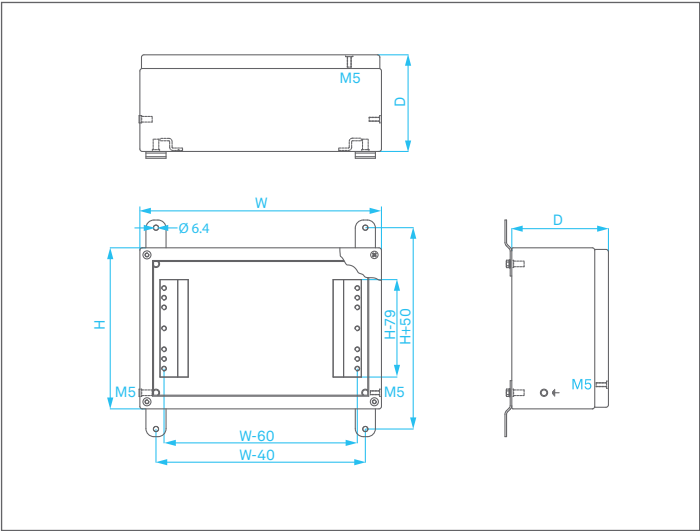
Technical data

|                      |                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------|
| Degree of protection | max. IP 66 EN/IEC 60529                                                                                      |
| Enclosure material   | 1.4404, AISI 316 L high quality stainless steel<br>optional<br>1.4301, AISI 304 high quality stainless steel |
| Mechanical strength  | Impact energy 7 Nm                                                                                           |
| Surface              | Standard: brushed, Optional: painted or electro polished                                                     |
| Standard seals       | Standard: Silicone (-40 °C to +80 °C)<br>Optional: EPDM (-20 °C to +80 °C)                                   |
| Version              | with or without gland plates                                                                                 |

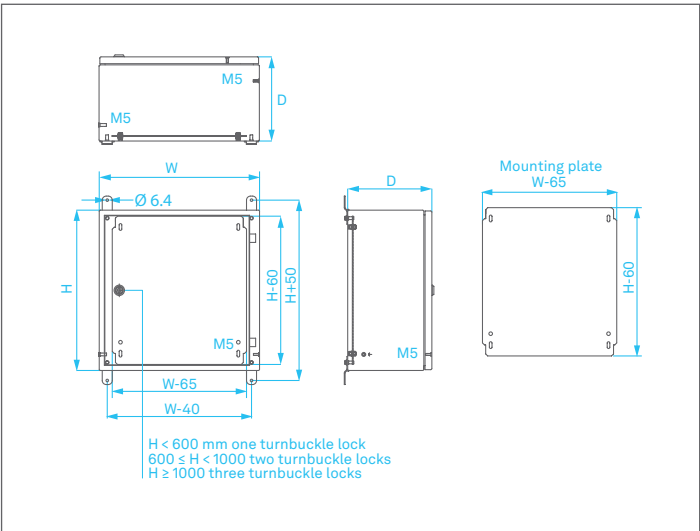
Scope of delivery

The scope of delivery includes wall attachment straps, internal and external PE connection, as well as a mounting plate for the empty housings/distribution cabinets.

Enclosure with cover dimensions



Enclosure with hinged door dimensions

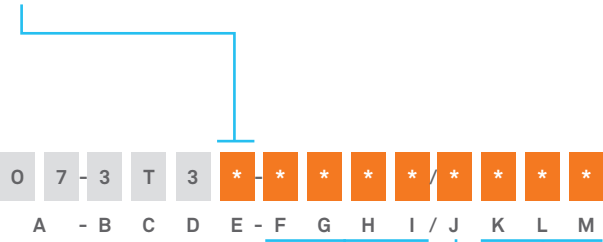


Configuration data for control stations

Enclosure type / material

| E | Type                                        | Enclosure type | Ex protection | Material                    | Max. operating temperature     |
|---|---------------------------------------------|----------------|---------------|-----------------------------|--------------------------------|
| 0 | Empty enclosure with flange and cover       | ESI, 07-56A1   | Ex e          | Stainless steel 304 - V2 A  | Silicone:<br>-40 °C to +100 °C |
| 1 |                                             | ESI, 07-56A1   | Ex i          |                             |                                |
| 2 | Empty enclosure with flange and cover       | ESI, 07-56B1   | Ex e          | Stainless steel 316L - V4 A | EPDM:<br>-20 °C to +100 °C     |
| 3 |                                             | ESI, 07-56B1   | Ex i          |                             |                                |
| 4 | Empty enclosure with flange and hinged doo  | ESI, 07-56C1   | Ex e          | Stainless steel 304 - V2 A  | RAKU PUR:<br>-40 °C to +80 °C  |
| 5 |                                             | ESI, 07-56C1   | Ex i          |                             |                                |
| 6 | Empty enclosure with flange and hinged door | ESI, 07-56D1   | Ex e          | Stainless steel 316L - V4 A |                                |
| 7 |                                             | ESI, 07-56D1   | Ex i          |                             |                                |

\*\* more Enclosures available on request



| Character | Character for:                    | Variant:     | Description                             |
|-----------|-----------------------------------|--------------|-----------------------------------------|
| FGHI      | Enclosure size code               |              | Size code defined during engineerin     |
| J         | Country identification            | A, B, C, ... | Production location identification code |
| KLM       | Sequence number starting with 001 |              |                                         |

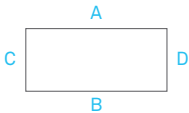
The table on this page applies to the junction and terminal boxes.

Stainless steel junction and terminal boxes rail-mounted terminal components/maximum number

| High-quality stainless steel<br>junction boxes without flanges<br>Article no. | External dimensions<br>in mm (W x H x D) | AKZ4<br>03-7112-0008 |               | WDU 2.5<br>03-7111-0012 |               | WDU 4<br>03-7112-0015 |               |
|-------------------------------------------------------------------------------|------------------------------------------|----------------------|---------------|-------------------------|---------------|-----------------------|---------------|
|                                                                               |                                          | Mounting rail        | Mounting rail | Mounting rail           | Mounting rail | Mounting rail         | Mounting rail |
| Version with cover                                                            |                                          |                      |               |                         |               |                       |               |
| 07-3T3*-1006/****                                                             | 100 x 100 x 60                           | 1                    | 7             | -                       | -             | -                     | -             |
| 07-3T3*-1508/****                                                             | 150 x 150 x 80                           | 2                    | 13            | 1                       | 16            | 1                     | 13            |
| 07-3T3*-4008/****                                                             | 400 x 150 x 80                           | 2                    | 54            | 1                       | 65            | 1                     | 54            |
| 07-3T3*-2008/****                                                             | 200 x 200 x 80                           | 2                    | 21            | 1                       | 25            | 1                     | 21            |
| 07-3T3*-3108/****                                                             | 300 x 200 x 80                           | 2                    | 37            | 1                       | 45            | 1                     | 38            |
| 07-3T3*-1510/****                                                             | 150 x 150 x 100                          | 2                    | 13            | 1                       | 16            | 1                     | 13            |
| 07-3T3*-2012/****                                                             | 200 x 200 x 120                          | -                    | -             | 1                       | 25            | 1                     | 21            |
| 07-3T3*-3112/****                                                             | 300 x 200 x 120                          | -                    | -             | 1                       | 45            | 1                     | 38            |
| 07-3T3*-4013/****                                                             | 400 x 200 x 120                          | -                    | -             | 1                       | 65            | 1                     | 54            |
| 07-3T3*-6112/****                                                             | 600 x 200 x 120                          | -                    | -             | 1                       | 104           | 1                     | 87            |
| 07-3T3*-3012/****                                                             | 300 x 300 x 120                          | -                    | -             | 2                       | 45            | 2                     | 38            |
| 07-3T3*-3016/****                                                             | 300 x 300 x 160                          | -                    | -             | 2                       | 45            | 2                     | 38            |
| 07-3T3*-3816/****                                                             | 380 x 380 x 160                          | -                    | -             | 3                       | 61            | 3                     | 51            |
| 07-3T3*-4015/****                                                             | 400 x 200 x 160                          | -                    | -             | 1                       | 65            | 1                     | 54            |
| 07-3T3*-4216/****                                                             | 400 x 400 x 160                          | -                    | -             | 4                       | 65            | 4                     | 54            |
| 07-3T3*-5016/****                                                             | 500 x 400 x 160                          | -                    | -             | 4                       | 84            | 4                     | 70            |
| Version with hinged door                                                      |                                          |                      |               |                         |               |                       |               |
| 07-3T3*-2015/****                                                             | 200 x 300 x 155                          | -                    | -             | 2                       | 21            | 2                     | 18            |
| 07-3T3*-3815/****                                                             | 380 x 300 x 155                          | -                    | -             | 2                       | 60            | 2                     | 50            |
| 07-3T3*-3021/****                                                             | 300 x 380 x 210                          | -                    | -             | 3                       | 45            | 3                     | 37            |
| 07-3T3*-4021/****                                                             | 400 x 400 x 210                          | -                    | -             | 3                       | 64            | 3                     | 54            |
| 07-3T3*-4121/****                                                             | 400 x 600 x 210                          | -                    | -             | 5                       | 64            | 5                     | 54            |
| 07-3T3*-6021/****                                                             | 600 x 600 x 210                          | -                    | -             | 5                       | 103           | 5                     | 86            |
| 07-3T3*-6121/****                                                             | 600 x 760 x 210                          | -                    | -             | 6                       | 103           | 6                     | 86            |
| 07-3T3*-6033/****                                                             | 600 x 800 x 300                          | -                    | -             | 7                       | 103           | 7                     | 86            |
| 07-3T3*-8030/****                                                             | 800 x 800 x 300                          | -                    | -             | 7                       | 142           | 7                     | 118           |
| 07-3T3*-8130/****                                                             | 800 x 1000 x 300                         | -                    | -             | 9                       | 142           | 9                     | 118           |

REMARK:  
Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.

The table on this page applies to the junction and terminal boxes.



Stainless steel junction boxes without flanges Rail-mounted terminal components/maximum number

| Article no.              | External dimensions<br>in mm (L x W x H) | Side       | M12 x 1.5  | M16 x 1.5  | M20 x 1.5  | M25 x 1.5 | M32 x 1.5 | M40 x 1.5 | M50 x 1.5 | M63 x 1.5 |
|--------------------------|------------------------------------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|
| Version with cover       |                                          |            |            |            |            |           |           |           |           |           |
| 07-3T3*-1006/****        | 100 x 100 x 60                           | A/B<br>C/D | 3<br>3     | 2<br>2     | 1<br>1     | 1<br>-    | -<br>-    | -<br>-    | -<br>-    | -<br>-    |
| 07-3T3*-1508/****        | 150 x 150 x 80                           | A/B<br>C/D | 14<br>16   | 5<br>7     | 4<br>5     | 2<br>2    | 1<br>2    | -<br>-    | -<br>-    | -<br>-    |
| 07-3T3*-4008/****        | 400 x 150 x 80                           | A/B<br>C/D | 45<br>14   | 24<br>7    | 18<br>6    | 7<br>2    | 6<br>2    | -<br>-    | -<br>-    | -<br>-    |
| 07-3T3*-2008/****        | 200 x 200 x 80                           | A/B<br>C/D | 20<br>23   | 10<br>11   | 6<br>8     | 3<br>3    | 2<br>2    | -<br>-    | -<br>-    | -<br>-    |
| 07-3T3*-3108/****        | 300 x 200 x 80                           | A/B<br>C/D | 31<br>22   | 17<br>11   | 12<br>7    | 6<br>4    | 4<br>2    | -<br>-    | -<br>-    | -<br>-    |
| 07-3T3*-1510/****        | 150 x 150 x 100                          | A/B<br>C/D | 18<br>21   | 11<br>12   | 7<br>7     | 3<br>3    | 2<br>2    | 1<br>1    | 1<br>1    | 1<br>1    |
| 07-3T3*-2012/****        | 200 x 200 x 120                          | A/B<br>C/D | 37<br>30   | 20<br>20   | 15<br>13   | 7<br>7    | 4<br>4    | 2<br>2    | 2<br>2    | 2<br>2    |
| 07-3T3*-3112/****        | 300 x 200 x 120                          | A/B<br>C/D | 59<br>35   | 32<br>19   | 21<br>13   | 11<br>7   | 7<br>5    | 4<br>2    | 3<br>2    | 3<br>2    |
| 07-3T3*-4013/****        | 400 x 200 x 120                          | A/B<br>C/D | 64<br>35   | 34<br>20   | 28<br>13   | 15<br>7   | 9<br>4    | 6<br>2    | 5<br>2    | 4<br>2    |
| 07-3T3*-6112/****        | 600 x 200 x 120                          | A/B<br>C/D | 82<br>30   | 78<br>20   | 47<br>13   | 23<br>7   | 15<br>5   | 9<br>2    | 7<br>2    | 6<br>2    |
| 07-3T3*-3012/****        | 300 x 300 x 120                          | A/B<br>C/D | 60<br>50   | 35<br>29   | 22<br>21   | 11<br>11  | 7<br>7    | 4<br>4    | 3<br>3    | 3<br>3    |
| 07-3T3*-3016/****        | 300 x 300 x 160                          | A/B<br>C/D | 75<br>68   | 46<br>47   | 30<br>31   | 16<br>17  | 10<br>9   | 7<br>7    | 5<br>5    | 4<br>4    |
| 07-3T3*-3816/****        | 380 x 380 x 160                          | A/B<br>C/D | 96<br>93   | 60<br>59   | 40<br>39   | 21<br>23  | 11<br>12  | 9<br>9    | 6<br>6    | 5<br>5    |
| 07-3T3*-4015/****        | 400 x 200 x 160                          | A/B<br>C/D | 97<br>40   | 61<br>30   | 40<br>17   | 23<br>11  | 13<br>6   | 9<br>4    | 7<br>3    | 5<br>2    |
| 07-3T3*-4216/****        | 400 x 400 x 160                          | A/B<br>C/D | 105<br>104 | 61<br>63   | 41<br>43   | 21<br>21  | 13<br>12  | 9<br>9    | 7<br>7    | 5<br>5    |
| 07-3T3*-5016/****        | 500 x 400 x 160                          | A/B<br>C/D | 126<br>104 | 79<br>63   | 64<br>43   | 28<br>21  | 16<br>12  | 12<br>9   | 9<br>7    | 7<br>5    |
| Version with hinged door |                                          |            |            |            |            |           |           |           |           |           |
| 07-3T3*-2015/****        | 200 x 300 x 155                          | A/B<br>C/D | 48<br>74   | 28<br>46   | 18<br>32   | 10<br>17  | 6<br>9    | 4<br>7    | 3<br>4    | 2<br>3    |
| 07-3T3*-3815/****        | 380 x 300 x 155                          | A/B<br>C/D | 91<br>74   | 51<br>46   | 39<br>32   | 21<br>17  | 12<br>9   | 9<br>7    | 6<br>4    | 5<br>3    |
| 07-3T3*-3021/****        | 300 x 380 x 210                          | A/B<br>C/D | 104<br>107 | 60<br>69   | 40<br>50   | 23<br>23  | 17<br>15  | 8<br>9    | 6<br>8    | 6<br>7    |
| 07-3T3*-4021/****        | 400 x 400 x 210                          | A/B<br>C/D | 136<br>115 | 84<br>72   | 55<br>51   | 31<br>23  | 21<br>18  | 10<br>10  | 10<br>9   | 8<br>7    |
| 07-3T3*-4121/****        | 400 x 600 x 210                          | A/B<br>C/D | 144<br>183 | 84<br>116  | 55<br>65   | 31<br>35  | 21<br>29  | 10<br>15  | 10<br>14  | 8<br>12   |
| 07-3T3*-6021/****        | 600 x 600 x 210                          | A/B<br>C/D | 208<br>194 | 120<br>120 | 85<br>70   | 42<br>35  | 30<br>29  | 16<br>15  | 14<br>14  | 13<br>11  |
| 07-3T3*-6121/****        | 600 x 760 x 210                          | A/B<br>C/D | 170<br>228 | 120<br>148 | 80<br>100  | 51<br>47  | 30<br>37  | 16<br>19  | 14<br>17  | 12<br>16  |
| 07-3T3*-6033/****        | 600 x 800 x 300                          | A/B<br>C/D | 324<br>411 | 189<br>252 | 119<br>147 | 72<br>78  | 40<br>51  | 28<br>32  | 21<br>27  | 19<br>26  |
| 07-3T3*-8030/****        | 800 x 800 x 300                          | A/B<br>C/D | 452<br>403 | 234<br>231 | 147<br>159 | 94<br>83  | 52<br>51  | 30<br>32  | 29<br>29  | 27<br>26  |
| 07-3T3*-8130/****        | 800 x 1000 x 300                         | A/B<br>C/D | 452<br>554 | 234<br>300 | 147<br>194 | 94<br>102 | 52<br>67  | 30<br>42  | 29<br>35  | 27<br>32  |