

Data sheet

## Solenoid coils for electric expansion and solenoid valves with UL approval

Type BJ, BX, BT and BU



BJ and BX are a series of coils with UL approval. The coils are designed to be used with Danfoss electric expansion and solenoid valves.

BT and BU are dual-voltage versions with UL approval, designed to be used with Danfoss solenoid valves.

### Features

- High reliability and long lifetime
- Easy mounting and dismounting
- UL approved coil range
- Covering standard voltage and frequency
- Two electrical connection versions

### Approval

 us Listed

**Data sheet | Solenoid coils, Type BJ, BX, BT and BU**
**Technical data**

*Design*  
In accordance with UL 429

*Power supply*  
Alternating current (AC)

*Permissible voltage variation*  
Alternating current (AC):  
50 Hz and 60 Hz: -15% to +10%  
50/60 Hz: ± 10%

*Insulation of coil wire*  
Class H according to IEC 85

*Connection*  
Junction box or Conduit boss

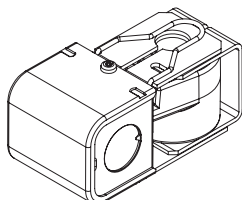
*Enclosure, IEC 60529*  
Junction box NEMA 2 ~ IP 12-32  
Conduit boss NEMA 4 ~ IP 54

*Ambient temperature*  
-40 – 122 °F (-40 – 50 °C)

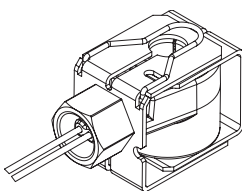
*Humidity*  
0 – 97% non-condensation condition

**Ordering**

BJ and BX Coils



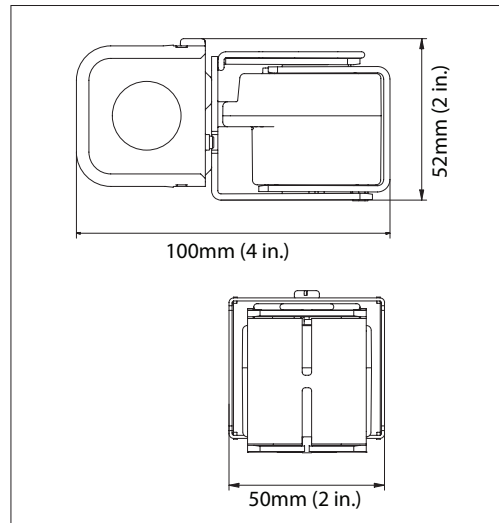
| Valve type   | Coil type   | Wire length |      | Voltage [V AC]   | Frequency [Hz] | Power consumption [W] | Code no.        |
|--|-------------|-------------|------|------------------|----------------|-----------------------|-----------------|
|  |             | [in.]       | [cm] |                  |                |                       |                 |
| Junction box NEMA 2  |             |             |      |                  |                |                       |                 |
| AKV / EVR<br>EVRH / EVRA<br>EVRAT / EVRS<br>EVRST / EVM<br>EV220B 6-50<br>EV210B<br>EV215B<br>EV225B<br>EV250B | BJ024CS     | 7           | 18   | 24               | 50 / 60        | 14                    | <b>018F4100</b> |
|  | BJ120CS     | 7           | 18   | 110<br>120       | 50 / 60<br>60  | 16<br>15              | <b>018F4110</b> |
|  | BJ240CS     | 7           | 18   | 208 – 240<br>230 | 60<br>50       | 14<br>17              | <b>018F4120</b> |
| AKVH / EVRH  | BJ120BS     | 7           | 18   | 120              | 60             | 16                    | <b>018F4130</b> |
|  | BJ208BS     | 7           | 18   | 208              | 60             | 16                    | <b>018F4132</b> |
|  | BJ240BS     | 7           | 18   | 240              | 60             | 16                    | <b>018F4134</b> |
| Conduit boss NEMA 4  |             |             |      |                  |                |                       |                 |
| AKV / EVR<br>EVRH / EVRA<br>EVRAT / EVRS<br>EVRST / EVM<br>EV220B 6-50<br>EV210B<br>EV215B<br>EV225B<br>EV250B | BX024CS     | 18          | 46   | 24               | 50 / 60        | 14                    | <b>018F4102</b> |
|  | BX024CS     | 71          | 180  | 24               | 50 / 60        | 14                    | <b>018F4103</b> |
|  | BX024CS     | 98          | 250  | 24               | 50 / 60        | 14                    | <b>018F4104</b> |
|  | BX120CS     | 18          | 46   | 110<br>120       | 50 / 60<br>60  | 16<br>15              | <b>018F4112</b> |
|  | BX120CS     | 36          | 91   |                  |                |                       | <b>018F4113</b> |
|  | BX120CS     | 71          | 180  |                  |                |                       | <b>018F4114</b> |
|  | BX120CS     | 98          | 250  | 208 – 240<br>230 | 60<br>50       | 14<br>17              | <b>018F4115</b> |
|  | BX240CS     | 18          | 46   |                  |                |                       | <b>018F4122</b> |
|  | BX240CS     | 98          | 250  | <b>018F4123</b>  |                |                       |                 |
|  | AKVH / EVRH | BX120BS     | 98   | 250              | 120            | 60                    | 16              |
| BX208BS  |             | 98          | 250  | 208              | 60             | 16                    | <b>018F4133</b> |
| BX240BS  |             | 98          | 250  | 240              | 60             | 16                    | <b>018F4135</b> |


**Ordering**

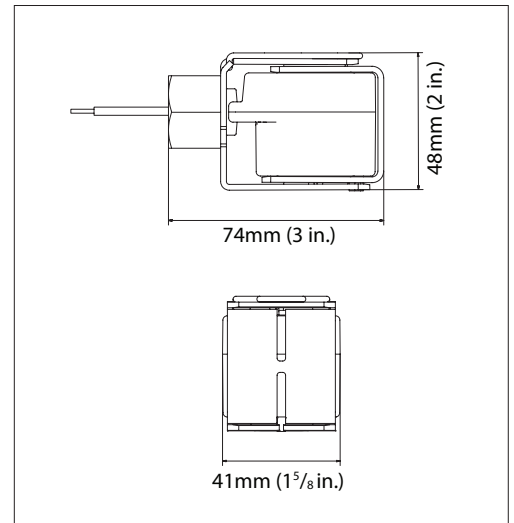
BT and BU Coils

| Valve type          | Coil type | Wire length |      | Voltage [V AC] | Frequency [Hz] | Power consumption [W] | Code no.        |
|---------------------|-----------|-------------|------|----------------|----------------|-----------------------|-----------------|
|                     |           | [in.]       | [mm] |                |                |                       |                 |
| Junction box NEMA 2 |           |             |      |                |                |                       |                 |
| EVR                 | BT240C    | 7           | 18   | 110            | 50             | 12                    | <b>018F4180</b> |
|                     | BT240C    | 7           | 18   | 110 – 120      | 60             | 12                    |                 |
|                     | BT240C    | 7           | 18   | 230            | 50             | 12                    |                 |
|                     | BT240C    | 7           | 18   | 208 – 240      | 60             | 12                    |                 |
| Conduit boss NEMA 4 |           |             |      |                |                |                       |                 |
| EVR                 | BU240C    | 7           | 18   | 110            | 50             | 12                    | <b>018F4181</b> |
|                     | BU240C    | 7           | 18   | 110 – 120      | 60             | 12                    |                 |
|                     | BU240C    | 7           | 18   | 230            | 50             | 12                    |                 |
|                     | BU240C    | 7           | 18   | 208 – 240      | 60             | 12                    |                 |

**Dimensions and weight**



**Junction box**  
Weight 0.860 lbs / 0.39 kg



**Conduit boss**  
Weight 0.717 lbs / 0.33 kg