# Field junction box

# Model: B500 series

Spec. sheet no. BD05-01

#### Service intended

The Field junction box range of enclosures delivers an outstanding performance in the severest conditions and meet the needs of the increasingly stringent requirements of hazardous area applications that can be found in particular in the process and energy industries. Therefore, B500 Series is explosion proof type product which is designed to be used in a critical danger zone by acquiring IECEx and ATEX certificate.





#### Certificates

#### **ATEX**

- II 2G Ex d ia/ib IIC T6 Gb
- II 2G Ex e IIC T6 Gb
- II 2D Ex tb IIIC T85 °C Db

#### **IECEx**

- Ex d ia/ib IIC T6 Gb
- Ex e IIC T6 Gb
- Ex tb IIIC T85 °C Db



# Standard features

#### Ambient temperature

-40 ~ +70 °C

#### Material

Cast aluminium alloy

# Degree of protection

EN 60529 / IEC 529 IP67/IP68

#### Electrical data

Max. voltage: 250 V Max. current: 20 A

RTD

- Operating current : 1 mA, Max 5 mA

Thermocouple

- Resistance : 0.4 ~ 40 ohm/m

- Voltage: 0 ~ 80 mV

Direct current: Max DC 36 V 20 mA

# Field junction box size (mm)

250(W) x 200(L) x 209(H) 350(W) x 300(L) x 210(H)



#### 1. Base model

B500 Field junction box

# 2. Explosion proof type

- 0 ATEX II 2G Ex d IIC T6 Gb
- 1 ATEX II 2D Ex tb IIIC T85 °C Db
- 2 ATEX II 2G Ex ia IIC T6 Gb
- 3 ATEX II 2G Ex ib IIC T6 Gb
- 4 ATEX II 2G Ex e IIC T6 Gb
- 5 IECEx Ex d IIC T6 Gb
- 6 IECEx Ex tb IIIC T85 °C Db
- 7 IECEx Ex ia IIC T6 Gb
- 8 IECEx Ex ib IIC T6 Gb
- 9 IECEx Ex e IIC T6 Gb

## 3. Field junction box size (mm)

- 1 250(W) x 200(L) x 209(H)
- 2 350(W) x 300(L) x 210(H)

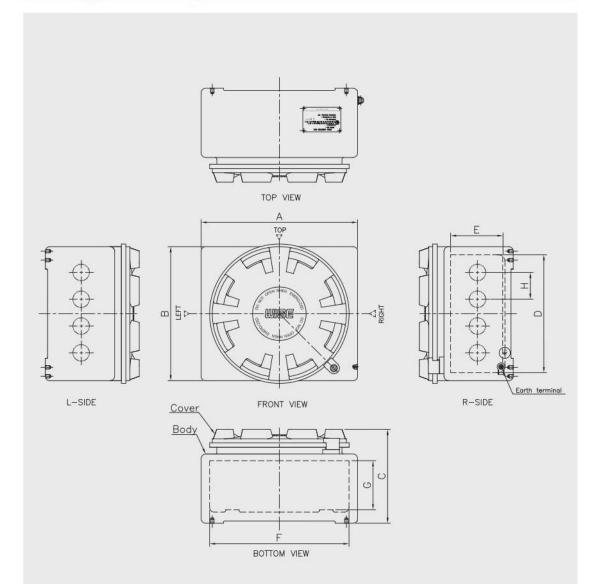
## 4. Material

1 Cast aluminium alloy

#### 5. Cable entries

XX Refer to cable entry table

# B500: Type of mounting



Code	A	В	С	Cable entry area at faces		Cable entry table			
				Left & Right Side(D x E)	Top & Bottom Side(F x G)	Thread	Max. number of holes		Thread spacing(H)
							L-Side	R-Side	(maintained over)
B500X111X	250	200	209	166 x 113	216 x 113	PF(G) 1/2"	6	6	50
B500X112X						PF(G) 3/4"	6	6	60
B500X113X						PF(G) 1"	2	2	80
B500X114X						PF(G) 1 1/4"	2	2	80
B500X115X						PF(G) 1 1/2"	2	2	80
B500X211X	350	300	210		312 x 110	PF(G) 1/2"	10	10	50
B500X212X				264 x 110		PF(G) 3/4"	8	8	60
B500X213X						PF(G) 1"	3	3	80
B500X214X						PF(G) 1 1/4"	3	3	80
B500X215X						PF(G) 1 1/2"	3	3	80

\*Thread hole spacing 50mm maintained over (except for 1 point)



# **Explosion proof type space heater**

Model: H100 series

Spec. sheet no. HD01-01

# Service intended

Space heater is filled and compressed with Ni/Cr heat element, ceramics, and Mgo element. This product has the fixed terminal pin at both sides, therefore, maximization on the heat conduction of insulation products and the heat conductivity are possible.

Basically, space heater uses tube, and it can be used in various type of conditions. Furthermore, heat element's outer frame is made of thin steel, so it can be easily modified to provide an easier installation, and its mechanical strength provides a strong performance against the temperature fluctuations.

This product is also designed to protect the heat element from oxidization by providing closed ends, and it can prolong its life-cycle.











#### Usage

Used to prevent freezing of electric motor and to maintain the temperature of specific space or area

# Safety and environment

This product is not designed to use the controller to control temperature. Instead, the temperature can be controlled by changing voltage (V) and wattage (W) on the space heater. Therefore, it is critical to check the voltage and the wattage indicated on the product before installation. This product is made of environment-friendly and harmless materials to human body. Please dismantle the product before discarding.

## Heating element

Ni-Cr (Standard) Fe-Cr Kantal

#### **Tube material**

304SS

#### Standard

Explosive atmospheres. Equipment. General requirements

■ EN 60079-0:2009

Electrical apparatus for explosive gas atmospheres. Increased safety "e"

■ EN 60079-7:2007

## Ambient temperature

Tamb = -40 ~ 70 °C

#### Certificates

KCS Ex e II ATEX II 2G Ex e II Gb IECEx Ex e IIC Gb



# Main order

# **Ordering information**

#### 1. Base model

H100 Explosion proof - Space heater

## 2. Explosion proof

- A ATEX Ex e II Gb
- I IECEx e IIC Gb
- K KCS Ex e II
- N Non-explosion

#### 3. Tube material

- 4 304SS
- 6 316SS
- X Other

#### 4. Tube outer diameter (mm)

- RA 6 (Round type)
- RB 8 (Round type)
- RC 10 (Round type)
- RD 12 (Round type)
- RE 16 (Round type)
- RF 18 (Round type)
- RG 20 (Round type)
- OA 21 x 7 (Oval type)
- OB Other (Oval type)

## 5. Tube length (mm)

- 1 Less than 600 (Minimum length is 200 mm)
- 2 Less than 601 ~ 800
- 3 Less than 801 ~ 1,000
- 4 Less than 1,001 ~ 1,200
- 5 Less than 1,201 ~ 1,600
- 6 Less than 1,601 ~ 2,200
- 7 Special length (mm) (Maximum length is up to 3,000 mm)

# 6. Standard surface temperature (°C)

- T1 450
- T2 300
- T3 200
- T4 135
- T5 100
- T6 85

## 7. Ambient temperature (°C)

- 01 0
- 02 10
- 03 20
- 04 30
- 05 40
- 06 50
- **07** 60
- 08 70
- 00 70
- **09** -10
- 10 -20
- **11** -30
- 12 -40

# 8. Heating element

- 1 Ni-Cr
- 2 F-Cr
- 3 Kanthal

# 9. Installation design (Refer to standard product drawing)

- A Straight (Type A)
- B Straight (Type B)
- C Oval type (Type C)
- D Oval type (Type D)



# H100 : Standard product drawing

