





#### **Features**

- Build size allows up to 120 mm of thermal insulation
- On and Off-Pipe (Tankwall) mountable versions
- Including cold applied power and end termination kit (CAK)
- Fast installation and maintenance-free operation with spring type terminals

#### PBS Power Box Single entry junction box kit

Power Junction Box, designed to connect one BARTEC parallel heating cable to power or to form a splice or powered splice. One CAK cold applied connection and end termination kit is included in every PBS kit.

#### PBS-200-E for self-regulating heating cables

Pipe mountable power junction box kit integrating the functions of an insulation entry and power connection kit within an Ex e certified polyester enclosure. Insulation Entry Kits are not required as the mounting stand provides this feature.

# PBS-300-E for self-regulating heating cables PBS-310-E for power limiting heating cables

Off-pipe mountable single power junction box, compromising one CAK silicone cold applied connection and termination kit, a galvanized steel bracket and mounting plate and an Ex e certified polyester enclosure. IEK Insulation Entry Kits must be ordered separately. CAK-SRB must be ordered separately if used with HSB+ or HTSB cables.

### PBM Power Box Multiple entry junction box kit

Power Junction Box, designed to connect up to three BARTEC parallel heating cables to power, form a splice or a tee. Two CAK cold applied connection and termination kits are included in every PBM kit.

#### PBM-200-E for self-regulating heating cables

Pipe mountable single power junction box kit integrating the functions of an insulation entry and power connection kit within an Ex e certified poly-ester enclosure. Insulation Entry Kits are not required as the mounting stand provides this feature.

# PBM-300-E for self-regulating heating cables PBM-310-E for power limiting heating cables

Off-pipe mountable power junction box, made of three CAK silicone cold applied connection and termination kits for three heating cables, a galva-nized steel bracket and mounting plate and an Ex e certified polyester enclosure. This configuration is designed to connect up to three BARTEC parallel heating cables to power, form a splice or a tee.

IEK Insulation Entry Kits must be ordered separately. CAK-SRB must be ordered separately if used with HSB+ or HTSB cables.

PBS and PBM kits are also available with M32 cable glands and 10mm<sup>2</sup> Ex e spring type terminals for larger supply conductor sizes. See type selection table on next page.

#### **Explosion protection** Junction Box

Marking	<ul><li>⟨ᡚ     2G Ex e     C T6 Gb</li><li>⟨ᡚ     2D Ex tb     C T80°C Db</li></ul>
Certification	IBEXU 12 ATEX 1099 IECEX IBE 12.0031

#### **Heating System**

Marking	PSB	<ul><li>⟨ □   2G Ex e   IC T5, T6 Gb</li><li>□ 2D Ex tb   IIC T80°C T95°C Db</li></ul>
	MSB	<a>⟨⟨⟨⟨⟩⟩     2G Ex e       C 150°C (T3), T4 Gb</a> ⟨⟨⟨⟩⟩     2D Ex tb         C T150°C, T130°C Db
	HSB	<ul> <li>⟨ □ ⟩   2G Ex e     C 200°C (T2),T3, T4 Gb</li> <li>⟨ □ ⟩   2D Ex tb       C T200°C, T195°C,T130°C Db</li> </ul>
	HSB+	<ul> <li></li></ul>
	HTSB	<ul> <li></li></ul>
Certification	PSB	KEMA 08 ATEX 0111 X IECEX KEM 09.0084X
	MSB/	KEMA 08 ATEX 0110 X
	HSB	IECEx KEM 09.0083X
	HSB+	CML 19 ATEX 3033
		IECEx CML 19.0008
	HTSB	SIRA 16 ATEX 3099
		IECEx SIR 16.0035
A		

## Other approvals and certificates, see www.bartec.de

#### **Technical data**

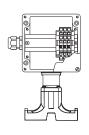
Protection class	IP 66
Min. ambient temperature	-55 °C
Max. ambient temperature	depends on the type of heating cable
Storage temperature	-55 °C to +65 °C
Max Pipe temperature	+240°C (PBS-200-E, PBM-200-E) +250°C (all other parts)
Material	
Enclosure	Polyester, glass fibre reinforced
Stand	PPS, glass fibre reinforced
Terminals	Ex e, Spring Type, 6 mm <sup>2</sup>
Max. current (breaker rating)	32 A

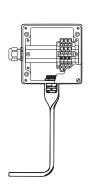
Notice Technical data subject to change without notice.

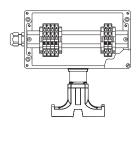
No claims for damage arising from alternations, errors or misprints shall be allowed.

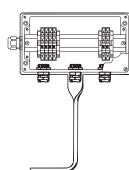


### **Ordering information**







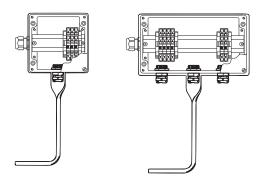


	PBS-200-E, -E10	PBS-300-E, -E10	PBM-200-E, -E10	PBM-300-E, -E10
Kit contents	1 junction box with terminals 1 stand assembly 1 cold applied set 1 green/yellow tube 2 cable grommet	1 junction box with terminals 1 plate and stand assembly 1 cold applied set 1 green/yellow tube 1 cable gland with grommet	1 junction box with terminals 1 stand assembly 3 cold applied sets 3 green/yellow tube 3 cable grommet	1 junction box with terminals 1 plate and stand assembly 3 cold applied sets 3 green/yellow tube 1 cable gland with grommet
Compatible cable series:	PSB, MSB, HSB, HSB+, HTSB	PSB, MSB, HSB, for HSB+, HTSB, please add one CAK-SRB to each kit	PSB, MSB, HSB, HSB+, HTSB	PSB, MSB, HSB, for HSB+, HTSB, please add three CAK-SRB to each kit
Box size	122 x 120 x 90 mm / 160 x 160 x 90 for –E10 220 x 220 x 90 mm		260 x 160 x 90 for –E10	
Power entry	1 x M25 1 blind plug M25 (M32 for -E10)	1 x M25 1 blind plug M25 (M32 for -E10)	1 x M25 1 blind plug M25 (M32 for -E10)	1 x M25 1 blind plug M25 (M32 for -E10)
Heating cable entry	2 x grommets	1 x M20 gland	3 x grommets	3 x M20 gland
Box support	Integrated PPS Mounting Stand	Mounting Plate & Bracket, galv. steel	Integrated PPS Mounting Stand	Mounting Plate & Bracket, galv. steel
Terminals	Triple Spring Type, Ex e, 1	phase, 1 neutral, 1 ground	Triple Spring Type, Ex e, 2	phase, 2 neutral, 2 ground
Max. conductor size	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)
Order Codes	27-54P2-4212/1210	27-54P2-4211/1210	27-54P2-4433/1210	27-54P2-4431/1210
-E10	27-54P2-4312/3B10	27-54P2-4311/3B10	27-54P2-4533/3B10	27-54P2-4531/3B10
Cold applied kits, explosi	on protected, with heating cable	grommets		
CAK-SRS, cold applied kit, f	for PBS-200-E and PBM-200-E for	self-regulating heating cables Page 1	SB, MSB, HSB, HSB+, HTSB	27-59CX-7C01/0001
CAK-SRG, cold applied kit, 1	for PBS-300-E and PBM-300-E for	self-regulating heating cables P	SB and MSB	27-59CX-73010001
OAK ODD	f DDC 000 E DDM 000 E f If		LUTOD	07 F00V D4040004

CAK-SRS, cold applied kit, for PBS-200-E and PBM-200-E for self-regulating heating cables PSB, MSB, HSB, HSB+, HTSB	27-59CX-7C01/0001
CAK-SRG, cold applied kit, for PBS-300-E and PBM-300-E for self-regulating heating cables PSB and MSB	27-59CX-73010001
CAK-SRB, cold applied kit, for PBS-300-E, PBM-300-E for self-regulating heating cables HSB+ and HTSB	27-59CX-B1010001
CAK-M25, splice modification kit, for PBS-200-E, PBM-200-E for self-regulating heating cables PSB, MSB, HSB, HSB+, HTSB	27-59CZ-9901/0000
CAK-E5, cold applied end seals (5pc per set, with RTV) for self-regulating heating cables PSB, MSB, HSB+, HTSB	27-59CZ-9000/0005
PBS-SPA, small pipe adaptor for pipe diameters smaller than DN25 for PBS-200-E, ELL-200-E, PBTW-200-E	05-1105-0071
PBM-SPA, small pipe adaptor for pipe diameters smaller than DN25 for PBM-200-E	05-1105-0072



## **Ordering information**



	PBS-310-E, -E10	PBM-310-E, -E10
Kit contents	1 junction box with terminals 1 stand assembly 1 cold applied boot and RTV 1 green/yellow tube 1 cable earth lug 1 cable gland with grommet	1 junction box with terminals 1 plate and stand assembly 3 cold applied boot and RTV 3 green/yellow tube 3 cable earth lugs 3 cable gland with grommet
Box size	122 x 120 x 90 mm (160 x 160 x 90 for –E10)	220 x 120 x 90 mm (260 x 160 x 90 for –E10)
Power entry	1 x M25 1 blind plug M25 (M32 for -E10)	1 x M25 1 blind plug M25 (M32 for -E10)
Heating cable entry	1 x M20 gland	3 x M20 gland
Box support	Mounting Plate & Bracket, galv. steel	Mounting Plate & Bracket, galv. steel
Terminals		
Max. conductor size	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)	6 mm <sup>2</sup> (10 mm <sup>2</sup> for -E10)
Order Codes	27-54P3-4211/1210	27-54P3-4431/1B10
-E10	27-54P3-4321/3B10	

Cold applied kits, explosion protected, with heating cable grommets		
CAK-PLG, cold applied kit, for PBS-310-E, PBM-310-E for power limiting heating cables BPL	27-59CX-E101/0001	
CAK-E5, cold applied end seals (5pc per set, with RTV) for power limiting heating cables BPL	27-59CZ-9000/0005	
CAK-E10, cold applied end seals (10pc per set, with RTV) for power limiting heating cables BPL	27-59CZ-9000/0010	