BARTEC

ESP junction & terminal boxes

Ex e GRP junction & terminal boxes for zone 1/21



- Robust
- Available in 20+ different sizes for flexible configurations
- Functional
- Engineered to order

Glass-fibre reinforced polyeste junction and terminal boxes have been of great advantage in many industrial plants. They offer safe protection even when they are exposed to extreme en-vironmental conditions, aggressive chemical media or high mechanical stress. The narrow sides within the enclosure hold threaded bushings for the fixing of terminal rails or mounting panels. The enclosure is mounted by means of insulated screws outside of the lid sealing gasket. Black version of high-quality explosion-proofed enclosures are used in hazardous areas by inflammable dust (Zone 21 and 22). The fundamental prerequisites of the “protection through enclosure“ protection class are fulfilled with the heating up calculation as per the accompanying sheet and a separate IP protection test. Main components as rail-mounted terminals provide secure wire connections, complemented by terminal markers for organization, cable glands for entry and strain relief and mounting panels for structured installation. Type labels and tag labels further contribute to easy identification and maintenance.

Explosion Protection

Marking ATEX / UKEX	II 2G Ex eb ia ib IIA, IIB or IIC T6, T5, T4 or T3 Gb II 2D Ex tb ia ib IIIA, IIIB or IIIC, T80 °C, T95 °C or T130°C Db Dust protection for black version enclosures only.
Certification	IBExU 12 ATEX 1099X
Marking IECEx	Ex eb ia ib IIA, IIB, or IIC T6, T5, T4, or T3 Gb Ex tb ia ib IIIA, IIIB, or IIIC, T80 °C, T95 °C, or T130 °C Db
Certification	IECEx IBE 12.0031X
Other certification	CCC: 2020322304001711 INMETRO: UL-BR 11.0118 PESO: A/P/HQ/UP/104/5577 (P470774) ECASEx: 23-06-75816/E23-05-076028/NB000

For further information and certificates, see **www.bartec.com**

Technical data

Ambient temperature	Dependent on installed components. Please pay attention to the information on the marking plate. -55 °C to max. +80 °C (-67 °F to max. +176 °F)
Material	glass-fibre reinforced polyester, EN 60079-0, halogen-free black version, surface resistance < 10^9 Ω grey version, surface resistance > 10^{12} Ω
Colour	black: RAL 9005 grey: RAL 7000/RAL 7001
Lid screws	stainless steel, captive cross-head (+ -) (other models on request)
Standard seals	Silicone (dark grey color) -55 °C to +100 °C optional: EPDM (black color) -35 °C to +95 °C
Mechanical resistance	impact energy 7 Nm (EN/IEC 60079-0)
Degree of protection	IP 66 EN/IEC 60529
Voltage	max. 1000 V*
Nominal current	max. 690 A*
Maximal cross-section	max. 400 mm²*

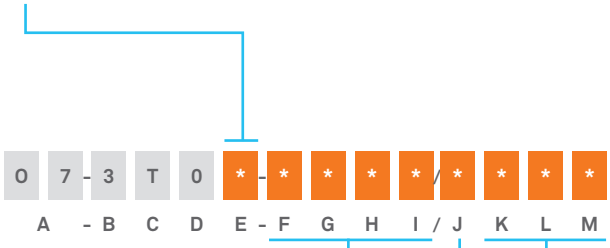
* The rated values are maximum values. The respective built-in components cause the actual electrical values. The manufacturer specified the final rated values, within the limits of the maximum values, and depending on the supply conditions, mode of operation, equipment protection level and so on. The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

Configuration data for control stations

Enclosure type / material

E	Type	Enclosure type	Ex protection	Material	Max. operating temperature
3	Empty enclosure	ESP, 07-5185	Ex e	Polyester black	Silicone -55 °C to +100 °C
5		ESP, 07-5185	Ex i		
6		ESP, 07-5184	Ex e	Polyester grey	EPDM -35 °C to +90 °C
7		ESP, 07-5184	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		

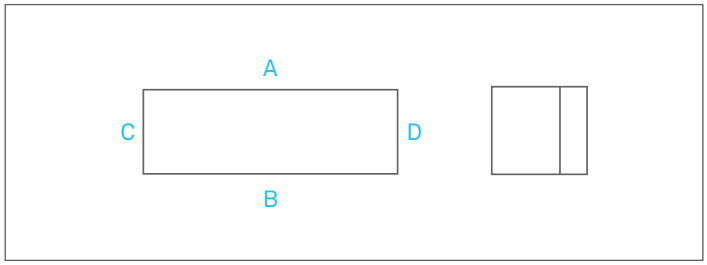
External dimensions, earth bars, mounting panels

Polyester enclosure Article no.	External dimensions in mm			Earth bars				Mounting panel
	Width	Height	Depth	Type	Order no.	Type	Order no.	Order no.
07-3T0*-0805/****	80	75	55	MK 2	05-0012-0006	-	-	05-2105-0002
07-3T0*-1105/****	110	75	55	MK 2	05-0012-0006	-	-	05-2105-0003
07-3T0*-1605/****	160	75	55	MK 2	05-0012-0006	-	-	05-2105-0004
07-3T0*-1905/****	190	75	55	MK 2	05-0012-0006	-	-	05-2105-0005
07-3T0*-1209/****	122	120	90	QS 3	05-0012-0091	LS 4	05-0012-0100	05-0105-0100
07-3T0*-1212/****	122	120	120	QS 3	05-0012-0091	LS 4	05-0012-0100	05-0105-0100
07-3T0*-2209/****	220	120	90	QS 3	05-0012-0091	LS 9	05-0012-0101	05-0105-0101
07-3T0*-1609/****	160	160	90	QS 5	05-0012-0092	LS 5	05-0012-0010	05-0105-0103
07-3T0*-1612/****	160	160	120	QS 5	05-0012-0092	LS 5	05-0012-0010	05-0105-0103
07-3T0*-2609/****	260	160	90	QS 5	05-0012-0092	LS 11	05-0012-0102	05-0105-0104
07-3T0*-3609/****	360	160	90	QS 5	05-0012-0092	LS 16	05-0012-0103	05-0105-0105
07-3T0*-2512/****	255	250	120	QS 9	05-0012-0096	LS 11	05-0012-0105	05-0105-0113
07-3T0*-2516/****	255	250	160	QS 9	05-0012-0096	LS 11	05-0012-0105	05-0105-0113
07-3T0*-4012/****	400	250	120	QS 9	05-0012-0096	LS 18	05-0012-0016	05-0105-0114
07-3T0*-4016/****	400	250	160	QS 9	05-0012-0096	LS 18	05-0012-0016	05-0105-0114
07-3T0*-4112/****	400	405	120	QS 15	05-0012-0097	LS 18	05-0012-0016	05-0105-0117
07-3T0*-4116/****	400	405	165	QS 15	05-0012-0097	LS 18	05-0012-0016	05-0105-0117
07-3T0*-6012/****	600	250	120	QS 9	05-0012-0096	LS 28	05-0012-0106	05-0105-0199

Rail-mounted terminal components/maximum number

Polyester distribution boxes Article no.	Mini-terminal 07-9702-....		AKZ4 03-7112-0006		WDU 2.5 03-7111-0012		WDU 2.5 bl 03-7111-0012		WDU 4 03-7112-0015	
	Mounting rail	Terminals per rail	Mounting rail	Terminals per rail	Mounting rail	Terminals per rail	Mounting rail	Terminals per rail	Mounting rail	Terminals per rail
07-3T0*-0805/****	1	6	1	8	–	–	–	–	–	–
07-3T0*-1105/****	1	8	1	13	–	–	–	–	–	–
07-3T0*-1605/****	1	12	1	21	–	–	–	–	–	–
07-3T0*-1905/****	1	16	1	26	–	–	–	–	–	–
07-3T0*-2305/****	1	19	1	32	–	–	–	–	–	–
07-3T0*-1209/****	2	8	1	14	1	16	1	16	1	14
07-3T0*-1212/****	2	8	1	14	1	16	1	16	1	14
07-3T0*-2209/****	2	17	1	30	1	35	1	35	1	30
07-3T0*-1609/****	–	–	2	18	1	24	1	23	1	20
07-3T0*-1612/****	–	–	2	18	1	24	1	23	1	20
07-3T0*-2609/****	–	–	2	34	1	43	1	42	1	34
07-3T0*-3609/****	–	–	–	–	1	60	1	62	1	50
07-3T0*-2512/****	–	–	–	–	2	43	3	42	2	35
07-3T0*-2516/****	–	–	–	–	2	43	3	42	2	35
07-3T0*-4012/****	–	–	–	–	2	67	3	70	2	56
07-3T0*-4016/****	–	–	–	–	2	67	3	70	2	56
07-3T0*-4112/****	–	–	–	–	3	67	5	70	3	56
07-3T0*-4116/****	–	–	–	–	3	67	5	70	3	56
07-3T0*-6012/****	–	–	–	–	2	108	2	110	1	91

Orientation



The table on this page applies to the following polyester distribution boxes:

Ex e distribution box	black	07-3T03-..../....
Ex e distribution box	grey	07-3T06-..../....
Ex i distribution box	black	07-3T05-..../....
Ex i distribution box	grey	07-3T07-..../....

Cable glands/maximum number

Article no.	Side	M12 x 1.5	M16 x 1.5	M20 x 1.5	M20 x 1.5 extended	M25 x 1.5	M25 x 1.5 extended	M32 x 1.5	M40 x 1.5	M50 x 1.5	M63 x 1.5
07-3T0*-0805/****	A/B	4	2	2	2	1	1	–	–	–	–
	C/D	1	1	–	–	–	–	–	–	–	–
07-3T0*-1105/****	A/B	6	4	3	3	2	2	–	–	–	–
	C/D	1	1	–	–	–	–	–	–	–	–
07-3T0*-1605/****	A/B	12	6	5	4	4	3	–	–	–	–
	C/D	1	1	-	-	-	-	–	–	–	–
07-3T0*-1905/****	A/B	15	8	6	5	5	4	–	–	–	–
	C/D	1	1	–	–	–	–	–	–	–	–
07-3T0*-1209/****	A/B	13	9	5	5	4	3	2	1	1	–
	C/D	4	4	2	2	2	1	1	1	–	–
07-3T0*-1212/****	A/B	13	9	5	5	4	3	2	1	1	–
	C/D	4	4	2	2	2	1	1	1	–	–
07-3T0*-2209/****	A/B	28	18	12	11	10	5	3	3	2	–
	C/D	4	4	2	2	2	1	1	1	–	–
07-3T0*-1609/****	A/B	18	14	8	8	6	4	2	2	1	–
	C/D	8	8	5	4	4	2	2	1	–	–
07-3T0*-1612/****	A/B	18	14	8	8	6	4	2	1	1	–
	C/D	8	8	5	4	4	2	2	1	–	–
07-3T0*-2609/****	A/B	33	26	17	14	12	7	4	3	3	–
	C/D	8	8	5	4	4	2	2	1	–	–
07-3T0*-3609/****	A/B	48	38	24	20	18	10	6	5	4	–
	C/D	8	8	5	4	4	2	2	1	–	–
07-3T0*-2013/****	A/B	24	16	10	9	7	4	3	2	2	–
	C/D	12	12	10	8	8	4	3	2	2	2
07-3T0*-2512/****	A/B	53	34	23	20	18	9	7	4	3	2
	C/D	12	12	10	8	8	4	3	2	2	2
07-3T0*-2516/****	A/B	53	34	23	20	18	9	7	4	3	2
	C/D	12	12	10	8	8	4	3	2	2	2
07-3T0*-4012/****	A/B	88	58	38	35	30	17	13	6	5	4
	C/D	12	12	10	8	8	4	3	2	2	2
07-3T0*-4016/****	A/B	88	58	38	35	30	17	13	6	5	4
	C/D	12	12	10	8	8	4	3	2	2	2
07-3T0*-4112/****	A/B	88	58	38	35	30	17	13	6	5	4
	C/D	26	20	16	14	10	6	4	2	4	3
07-3T0*-4116/****	A/B	135	89	58	53	46	26	20	9	7	4
	C/D	42	38	34	30	24	8	5	3	6	4
07-3T0*-6012/****	A/B	130	84	56	52	46	24	18	10	6	4
	C/D	12	12	10	8	8	4	3	2	2	2