BPEG

北 京 电 力 设 备 总 厂

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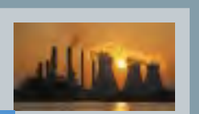
节 能 型 封 闭 式

XZF型线路阻波器

ENERGY SAVED CLOSED LINE TRAP TYPE XZF



全 员 参 与

持 续 改 进

质 量 第 一

用 户 至 上

BPEG

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简介 Brief Introduce

北京电力设备总厂(BPEG)是我国最大和最早的阻波器生产厂家，从二十世纪六十年代至今，产品遍布全国各地，并出口东南亚、西亚及中北美地区等，并于1986年引进加拿大Trech Electric公司先进技术，使BPEG阻波器生产、技术与质量达到了世界一流水平。BPEG阻波器成功运行于国内外各电压等级的电力系统，并以高可靠性、长寿命和低损耗等显著特点为电力载波通信和高频保护提供保证。

BPEG一直致力于新产品的研制开发，以满足用户的需要。产品除满足中国国家标准外，还可以按IEC国际标准、美国ANSI标准或其它国家标准设计制造各种规格的阻波器。

BPEG生产的XZF封闭型系列阻波器较XZK开放式阻波器具有十分明显的节能效果和更强的抗短路能力。XZF-B1型阻波器绝缘耐热等级为B级，在XZF-B1型基础上开发的XZF-B5型阻波器采用了F级绝缘，具有更小的体积、更轻的重量。型号为XZF-3150-1.0/63-B5的新型阻波器已于2001年10月通过荷兰KEMA试验站的动热稳定试验，取得合格证书。

BPEG生产的所有XZF封闭型系列阻波器均安装了新一代B1A调谐装置，能够承受各种操作过电压的冲击，更好地保障了高频保护系统的安全运行。

BPEG始终坚持以用户为中心，以市场为导向。对产品实行终身保修，为用户提供优质产品和快捷、热情、周到的服务是BPEG真诚的承诺。

Beijing Power Equipment Group (BPEG) is the largest and earliest manufacturer producing line trap in China.Since 1960,its products have been widely put into use all over the country and exported to the areas in Southeast and West Asia as well as the Central and North America. In 1986,BPEG introduced the advanced technique of TRENCH ELECTRIC in Canada,which made its production,technology and quality of the line trap the top-ranking in the world.BPEG's line traps have been put into operation successfully in the power systems of all kind of voltage levels in China and many other countries. Having the remarkable characteristic of highly reliable,longer life time and low loss,BPEG's line traps provide guarantee for PLC system and HF protection.

BPEG has been devoting itself to the research and development of new products to meet the demand of the customers. Our products comply with the national standard of China,and besides,we can design and manufacture the products according to the IEC standard,ANSI standard or the standards of other countries.

The line trap of XZF closed type has the better characteristic to resist short circuit and is more energy saving compared with those line traps of XZK open type. The line trap of XZF-B1 type conforms to the thermal insulation of class B. The XZF-B5 type,which was developed on the basis of XZF-B1,has the thermal insulation of class F and also a reduction of its size and weight. Furthermore, BPEG's new type of line trap XZF-3150-1.0/63-B5 has passed short-time current test in KEMA High-Power Laboratory of Netherlands in October,2001 and the certificate was obtained.

At present,each of the line traps manufactured by BPEG is equipped with the latest generation of tuning device of type B1A so that the product will endure all kinds of switching over-voltage impulse and therefore ensure the operation of the carrier current protection system more safety and reliability.

BPEG believe that our customer is always the focus of our attention and our strategy must be market-led. It is BPEG's sincere commitment to provide our customers the high quality products with lifetime maintenance guarantee and fast,enthusiastic and comprehensive service.

北京

加拿大传奇电器公司向中华人民共和国转让线路阻波器技术协议

Transferred Technique Agreement on Line Trap From Trench Electric in Canada

自1970年以来，传奇电器公司一直在向中华人民共和国提供空芯电抗器。随着近期中国电力事业的大规模发展，对空芯电抗器的需求也在不断增加。传奇电器公司是中国最大的空芯电抗器提供厂家。

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合同签订前，北京电力设备集团曾经考察参观过包括传奇电器公司在内的世界主要电抗器生产厂家，最终选择与传奇电器公司合作是因为传奇电器公司不仅有最先进的技术，而且还有精通汉语的工程师，有助于双方的交流。

合同于1986年初开始执行，到1987年11月结束，共历时两年时间，为此合作项目共成立了两支队伍，分别由传奇电器公司的P.DIAMANTI，北京电力设备集团的邓升渠带领。

传奇电器公司小组首先着手进行技术文件的翻译工作，之后又建造了两台线路阻波器原型，并通过了所有的型式及例行试验，同时制造设备也在北京电力设备集团小组到达加拿大进行为期一个月的设计、制造和试验培训前建成。

培训期间，双方进一步加强了相互间的了解和合作。由于传奇电器公司在培训的大多数关键环节都配置了精通汉语的工作人员，消除了语言上的障碍，使得培训能够在愉快、友好的气氛中顺利进行。培训结束时双方都达到了各自的目标，并建立了相互间的友谊。与中国小组的合作是令人愉快的。

接下来传奇电器公司小组前往北京电力设备集团下设的工厂进行了为期两周的设计、制造和试验培训检验。这次访问的重点是检查前期培训的效果和帮助中国方面安装从传奇电器公司买进的机器设备。整个计划进展顺利，按期完成，设备也顺利投入生产。北京电力设备集团尽了最大努力，热情、友好地接待来宾，使他们感到宾至如归，对此传奇电器公司方面十分感激。

经过六个月的准备，北京电力设备集团生产出了两台与传奇电器相同的空芯电抗器，以供传奇电器公司小组检验。传奇电器公司小组又一次来到中国参加产品试验和检查，试验包括了热运行及其他例行试验。试验结果达到了设计要求的指标，电抗器原型通过了检验。

检验结束后举行了由水力电力部及中国技术进口公司领导出席的证书签字仪式和庆祝合作项目顺利完成的酒会。

图1　北京良乡电力设备总厂王作宾(右)，朱六义先生和传奇电器公司总经理佩尔先生(中)互相祝贺协议的签定。

香港捷成洋行介绍加拿大传奇公司与北京电力设备总厂技术转让经过。

An article introducing technique transfer from Trench Electric in Canada to BPEG, reported by Jebsen & Co Ltd Hongkong.

图 5 座式阻波器安装结构外形图
Outline and mounting drawing

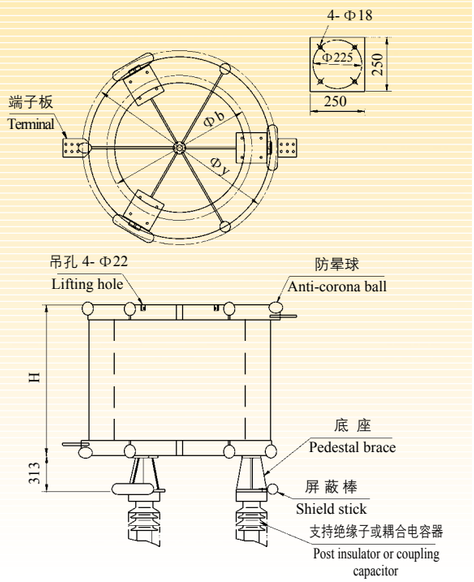


图 6 座式阻波器安装结构外形图
Outline and mounting drawing

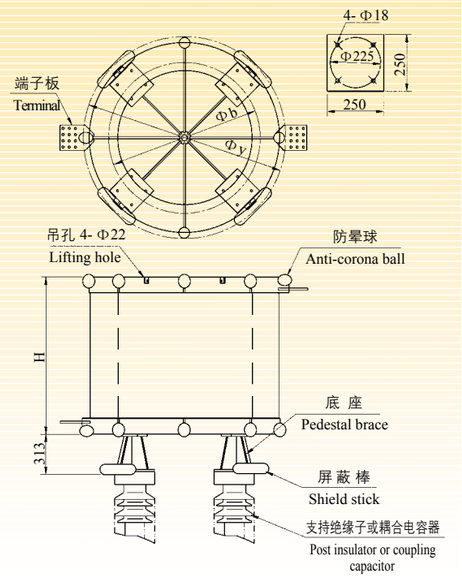


图 7 端子板图 (630-800A)
Terminal, 630-800A

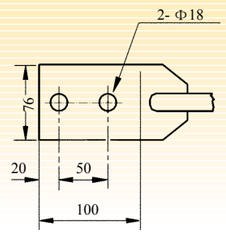


图 8 端子板图 (1000-1600A)
Terminal, 1000-1600A

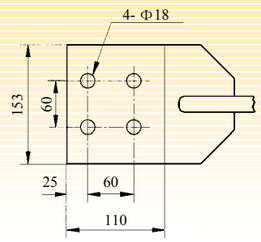


图 9 端子板图 (2000-2500A)
Terminal, 2000-2500A

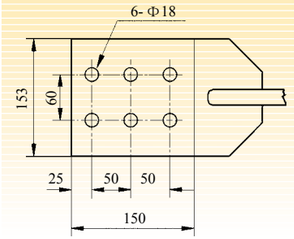


图 10 端子板图 (3150A)
Terminal, 3150A

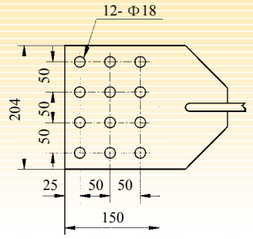
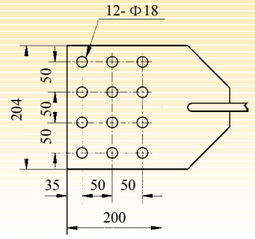


图 11 端子板图 (4000A)
Terminal, 4000A



京 电 力 设 备 总 厂

用 途

阻波器是串联在高压输电线上的重要设备，它为电力线传送高频保护和载波通信的信号构成通道；阻止高频信号向不需要的方向传送，抑制变电站对载波系统的分流影响，同时正常地输送工频电流。

执行标准

BPEG 阻波器执行国家标准 GB/T7330-1998、国际电工委员会标准 IEC60353:1989 及其 A1 号修改单。对于特殊地区及特殊要求，亦可执行美国国家标准 ANSI C93.3:1995 标准。

结 构

阻波器一般由主线圈、调谐装置和保护装置组成。

主线圈

XZF 型主线圈由多股压方绝缘铝绞线绕制，环氧树脂、玻璃纤维全包封多层结构。两端星型架由高强度铝合金挤压型材制作，采用玻璃钢绑扎带与线圈构成整体。封闭型结构具有较高机械强度、耐腐蚀和低损耗特点。主线圈用以承载工频电流，包括短路电流。

调谐装置

新型B1A调谐装置，主要由电容器、电感器、电阻器和辅助保护装置构成。调谐装置与主线圈构成谐振回路，对高频信号起阻塞作用。电容器采用特制的高压聚苯乙烯电容器，绝缘性能满足IEC60353:1989标准及其A1修改单的要求。特别研制的辅助保护装置对电感器和电阻器构成有效保护，能够消除开关操作和雷电引起的高频振荡型过电压或高陡度冲击过电压。

Usage

The line trap is an important equipment in series with high-voltage transmission line, and forms a channel transmitting carrier-frequency signal of PLC communication and tele-protection. It prevents carrier-frequency signal from transmitting toward unnecessary direction,restrains the tapping effect of the substation to the PLC system and transmits power frequency current at the same time.

Standards

BPEG's line trap carrys out Standards GB/T7330-1998 and IEC60353:1989 and its amendment No.A1 as well. Regarding especial areas and requirements, BPEG could execute American Standards ANSI C93.3:1995 and any other standards.

Structure

The line trap is composed of main coil, tuning device and protective device.

Main Coil

Main coil of the XZF line trap is wound by rectangular rolled stranded insulating aluminum conductors, and cylindrical envelopment for each parallel winding layer is made up of epoxy resin and fiberglass. Spiders on the both sides are made in rectangular aluminum alloy of high mechanical strength, it will be integrated entirely together with main coil by means of epoxy-resin fiberglass ties. Closed structure is of higher mechanical strength, anticorrosive and lower loss as well as other advantages. The main coil is used for loading power frequency current including short-circuit current.

Tuning Device

Modern tuning device of type B1A consists of capacitors, inductors, resistors and auxiliary protective device. Tuning device and main coil form resonant circuit and take blocking effect. Capacitors are made of special and high voltage polystyrene capacitor so as to ensure insulation properties to satisfy with Standards IEC60353:1989 and new requirements from Amendment A1 to IEC 60353(1989-10). Especially developed auxiliary protective device can protect inductors and resistors efficiently and get rid of high-frequency oscillation over-voltage induced by switching operation, HF steep lightning impulse and high gradient etc.

图 1 阻波器外形图(挂式安装)
Outline for line trap(suspension mounting)

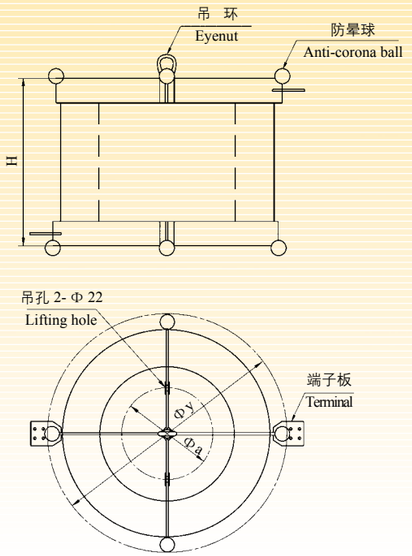


图 2 阻波器外形图(挂式安装)
Outline for line trap(suspension mounting)

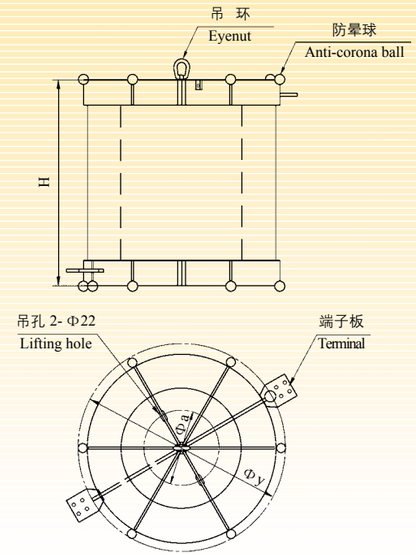


图 3 阻波器外形图(挂式安装)
Outline for line trap(suspension mounting)

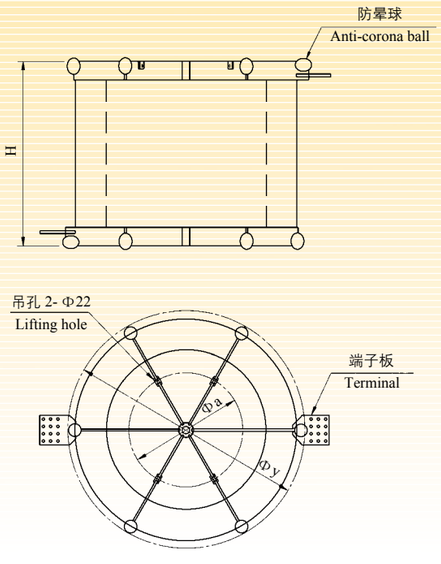
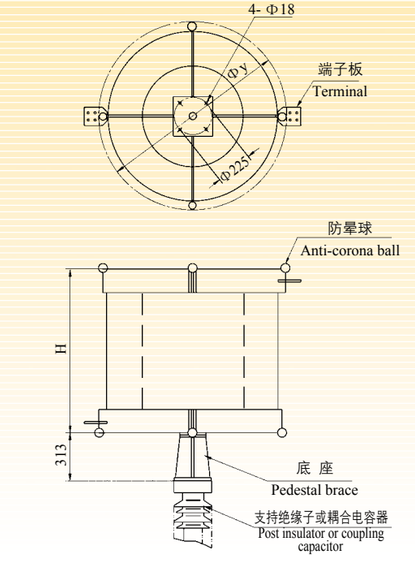


图 4 座式阻波器安装结构外形图
Outline and mounting drawing



1997年荣获ISO9001质量体系认证证书2000年通过复审
Certificat e of ISO9001 Quality System acquired in 1997 and reviewed in 2000

XZF-B1型线路阻波器于1990年和1997年在荷兰柯马试验站通过1250A/50kA至3150A/63kA系列动热稳定试验，取得合格证书。XZF-3150-1.0/63-B5型线路阻波器于2001年在荷兰柯马试验站通过动热稳定试验，取得合格证书。

Line trap of type XZF-B1 successfully passed through short-time current serial tests from 1250A/50kA to 3150A/63kA in KEMA High-Power Laboratory of Netherlands and accepted certificates in 1990 and 1997. Line trap of type XZF-3150-1.0/63-B5 successfully passed through short-time current test in KEMA High-Power Laboratory of Netherlands and accepted certificates in 2001.

XZF-3150-1.0/63-B1型线路阻波器于1997年11月在中国水利水电科学研究院工程抗震研究中心通过抗震试验。

XZF-3150-1.0/63-B1 type Line trap passed resist quake test at engineering resist quake research center of China Institute of Water Resource and Hydro Power Research in November,1997.

保护装置

采用特别为阻波器研制的氧化锌避雷器。保护装置用于限制阻波器的雷电行波(冲击)过电压和操作过电压，保护主线圈和调谐装置。

Protective Device

The line trap adopts metal-oxide arrester developed specially. It is used for limiting the over-voltage of lightning impulse and switching operation in order to protect main coil and tuning device.

运行条件

- 运行地点： 户外
- 海拔高度： 不大于1000m
- 环境温度： -40~45℃
- 额定频率： 50Hz或60Hz
- 污秽等级： III级
- 特殊条件： 凡超过以上范围的特殊条件，如高海拔、重污秽、高地震烈度、热带及台风地区等，均可提出与BPEG协商。

Operating Conditions

- Operating site: outdoors
- Altitude: no higher than 1000 m
- Ambient temperature: - 40 ~ 45 ℃
- Rated frequency: 50 Hz or 60 Hz
- Pollution Class: III
- Especial condition: If exceeding above conditions, such as higher altitude, serious pollution, high earthquake intensity, tropical and typhoon area etc., purchaser may consult with BPEG.

安装方式

挂　式：分为单挂点、双挂点或四挂点安装，详见规格表。

座　式：分为单支点、三支点或四支点安装，详见规格表。

其它安装方式请与BPEG协商。安装及现场检验见《XZF型阻波器安装使用说明书》。

Mounting type

Suspension type: Apply to suspension points of single point, double points or four points, detals as catalog

Pedestal type: Apply to support points as single point, three points or four points, details as Catalog.

Note: You can consult with BPEG for other mounting types.Please read《Instruction Manual of Type XZF Line Trap》for installing and inspecting at the site.

阻塞性能 Blocking characteristic

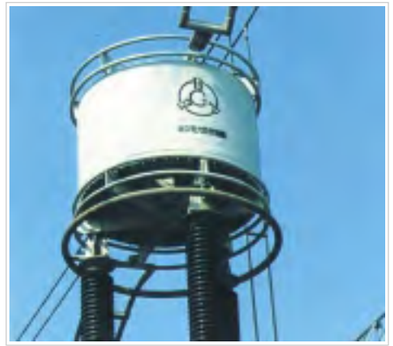
电　感 Inductance of Main Coil	阻塞频带宽度 Bandwidth for blocking frequency(kHz)						单频最低频率 (kHz)Min frequency for single frequency	
Ln (mH)	段 号 Band No.							
	1	2	3	4	5	6	BW6(kHz)	BW4(kHz)
0.1	340 - 500	300 - 400	265 - 340	245 - 300	230 - 275	210 - 245	133	109
0.2	260 - 500	220 - 360	186 - 280	164 - 228	150 - 195	135 - 170	95	79
0.3	208 - 500	164 - 300	142 - 228	124 - 184	116 - 164	104 - 140	78	65
0.5	160 - 500	120 - 268	96 - 168	80 - 124	72 - 106		62	51
1.0	84 - 500	70 - 208	58 - 126	48 - 84	42 - 64	40 - 60	45	40
1.5	64 - 500	40 - 84					32	30
2.0	48 - 500							

宽频阻塞电阻 R ⩾ 570 Ω，单频阻塞电阻⩾ 800 Ω

Blocking Resistance for Wide-band tuning Not Less Than 570 ohms, blocking Resistance for Single Frequency Not Less Than 800 ohms.

阻波器损耗对照表 (75℃) Power loss

连续电流(A) CONT. Current	电感(mH) Inductance	损耗 Power loss(KW)		
		Type XZF - B1型	Type XZF - B5型	Type XZK 型
630	1.0	4.3	5.2	8.4
800	1.0	5.4	6.6	12.0
1000	1.0	7.7	10.1	14.6
1000	2.0	11.8	14.8	19.2
1250	0.2	3.5	4.5	7.8
1250	0.3	4.6	5.8	9.7
1250	0.5	6.2	7.7	16.7
1250	1.0	9.4	12.8	20.6
1250	2.0	13.6	18.6	33.7
1600	0.2	4.7	5.5	9.2
1600	1.0	13.0	15.8	30.2
2500	1.0	22.0	26.4	41.9
3150	1.0	30.4	36.6	



说 明

1．图号中，susp. 意指悬挂式结构所对应的图示，而 ped. 意指座式结构。

2．Ltn －额定电感

In －额定连续工作电流

Ikn/T －额定短时电流有效值／时限

Ikp －短时电流不对称峰值即动稳定电流

Loss － 75℃时工频损耗。

H －阻波器本体高度

Φy －包括防电晕装置的阻波器本体外径

Φa －挂式阻波器吊孔距离

Φb －座式阻波器底座法兰盘中心直径

3．额定连续工作电流 800A 以下（包括 800A）的阻波器，主要用于电压在 110（或 132）kV 及以下的系统，因而一般不配图中所示的电晕球。

4．对于重量大于 3000kg 的阻波器，一般不采用悬挂安装方式。

Note

1. susp—suspension type,ped—pedestal type
2. Ltn — Rated inductance
   In — Rated continuous current
   Ikn/T — Rated short-time current,r.m.s/ Duration
   Ikp — Asymmetric peak of Ikn
   Loss — 75 ℃ power loss
   H — Height of Line Trap
   Φy — Outer diameter including corona-proof device of line trap
   Φa — Central distance between lifting holes of line trap
   Φb — Central diameter of pedestal brace flange
3. Line traps with rated continuous current not larger than 800A, are used mainly in system of 110(or 132) kV or below, corona balls are not provided normally.
4. When weight of the line trap is more than 3000kg we do not use suspension mounting in general.

型号含义举例：
Examples for type meaning

XZF — 1250 — 1.0／50 — B1(B5)

- XZF：线路阻波器 Line Trap；封闭式 Closed type
- 1250：1250A 连续电流 Continuous current
- 1.0：1.0mH 额定电感 Rated inductance
- 50：50kA 短时电流 Short-time current
- B1(B5)：设计序号 Design serial；厂家代号 Manufacturer code

XZF-B5 型 (F 级绝缘阻波器) 规格表 Catalog for Line Traps with thermal insulation class F

序号 No.	型号 Type	工厂代号 Manufacture code	In	Ikn	Ikp	T	Ltn	Loss	图号 Drawing. No.		H	Φy	Φa	Φb	质量 W
			(A)	(kA)	(kA)	s	mH	(kW)	Susp.	Ped.	(mm)	(mm)	(mm)	(mm)	(kg)
57	XZF - 3150 - 0.1/63 - B5	BTZ81A01	3150	63	161	3	0.1	8.8	1	5	906	1120	500	700	340
58	0.2	BTZ82A01					0.2	12.9	2	5	966	1330	660	900	520
59	0.3	BTZ83A01					0.3	16.1	2	5	1046	1490	700	1100	680
60	0.5	BTZ84A01					0.5	23.8	2	5	1106	1760	1240	1350	900
61	1.0	BTZ85A01					1.0	36.6	3	5	1306	2010	1100	1700	1300
62	1.5	BTZ86A01					1.5	44.9	3	5	1566	2120	1170	1700	1870
63	2.0	BTZ87A01					2.0	50.2	3	5	1686	2330	1420	1900	2300
64	XZF - 4000 - 0.1/80 - B5	BTZ91A01	4000	80	204	3	0.1	12.2	2	5	1068	1330	540	900	500
65	0.2	BTZ92A01					0.2	17.4	2	5	1198	1530	720	1100	740
66	0.3	BTZ93A01					0.3	23.4	2	5	1258	1790	920	1400	920
67	0.5	BTZ94A01					0.5	31.1	3	5	1288	1840	840	1500	1220
68	1.0	BTZ95A01					1.0	49.0	3	5	1498	2150	1140	1700	1870
69	1.5	BTZ96A01					1.5	59.2	3	6	1868	2130	1090	1700	2670
70	2.0	BTZ97A01					2.0	69.6	3	6	1948	2340	——	1900	3320

许可证及获奖证书 Awarded Certificates

XZF-B1 型阻波器规格表 (系列 II) Catalog for Line Traps Series II

序号 No.	型号 Type	工厂代号 Manufacture code	In	Ikn	Ikp	T	Ltn	Loss	图号 Drawing.No.		H	Φy	Φa	Φb	质量 W
			(A)	(kA)	(kA)	s	mH	(kW)	Susp.	Ped.	(mm)	(mm)	(mm)	(mm)	(kg)
1	XZF - 630 - 0.1/20 - B1	BTZ1101	630	20	51	1	0.1	1.1	1	4	654	570	——	——	67
2	0.2	BTZ1201					0.2	1.5	1	4	734	630	——	——	106
3	0.5	BTZ1401					0.5	3.0	1	4	884	780	——	——	160
4	1.0	BTZ1501					1.0	4.3	1	4	904	760	250	——	240
5	XZF - 800 - 0.1/25 - B1	BTZ2101	800	25	63.8	1	0.1	1.3	1	4	734	580	——	——	86
6	0.2	BTZ2201					0.2	2.0	1	4	724	690	——	——	122
7	0.3	BTZ2301					0.3	2.9	1	4	854	740	——	——	165
8	0.5	BTZ2401					0.5	3.3	1	4	704	780	280	——	210
9	1.0	BTZ2501					1.0	5.4	1	5	904	940	280	600	310
10	XZF - 1000 - 0.1/31.5 - B1	BTZ3101	1000	31.5	80.3	1	0.1	1.8	1	4	654	800	——	——	110
11	0.2	BTZ3201					0.2	2.7	1	4	804	850	——	——	165
12	0.3	BTZ3301					0.3	3.3	1	4	864	950	450	——	215
13	0.5	BTZ3401					0.5	4.9	1	4	944	1100	500	——	275
14	1.0	BTZ3501					1.0	7.7	2	5	1224	1150	890	800	450
15	1.5	BTZ3601					1.5	9.8	2	5	1234	1350	700	1000	570
16	2.0	BTZ3701					2.0	11.8	2	5	1274	1550	870	1200	686
17	XZF - 1250 - 0.1/50 - B1	BTZ4101	1250	50	127.5	1	0.1	2.4	1	4	784	850	300	——	147
18	0.2	BTZ4201					0.2	3.5	1	4	774	920	300	——	210
19	0.3	BTZ4301					0.3	4.6	1	4	824	1020	450	——	260
20	0.5	BTZ4401					0.5	6.2	1	5	984	1120	500	800	355
21	1.0	BTZ4501					1.0	9.4	2	5	1284	1230	500	900	620
22	1.5	BTZ4601					1.5	11.5	2	5	1294	1480	720	1100	798
23	2.0	BTZ4701					2.0	13.6	2	5	1314	1640	870	1300	990
24	XZF - 1600 - 0.1/50 - B1	BTZ5101	1600	50	127.5	1	0.1	3.3	1	4	834	910	300	——	190
25	0.2	BTZ5201					0.2	4.7	1	4	804	1040	350	——	275
26	0.3	BTZ5301					0.3	6.2	1	5	894	1090	450	700	345
27	0.5	BTZ5401					0.5	8.4	2	5	1054	1140	470	800	500
28	1.0	BTZ5501					1.0	13.0	2	5	1194	1410	600	1000	750
29	1.5	BTZ5601					1.5	16.5	2	5	1274	1560	720	1200	955
30	2.0	BTZ5701					2.0	19.0	2	5	1314	1760	910	1400	1155
31	XZF - 2000 - 0.1/50 - B1	BTZ6101	2000	50	127.5	2	0.1	4.1	1	4	926	920	300	——	260
32	0.2	BTZ6201					0.2	6.5	1	5	996	1130	450	800	380
33	0.3	BTZ6301					0.3	8.0	2	5	926	1220	450	900	500
34	0.5	BTZ6401					0.5	10.9	2	5	1016	1320	500	1000	650
35	1.0	BTZ6501					1.0	17.0	2/3	5	1306	1490	990	1100	1000
36	1.5	BTZ6601					1.5	21.5	2/3	5	1346	1700	1190	1400	1265
37	2.0	BTZ6701					2.0	26.3	3	5	1426	1850	1340	1500	1510
38	XZF - 2500 - 0.1/50 - B1	BTZ7101	2500	50	127.5	3	0.1	5.3	1	5	886	1070	300	700	335
39	0.2	BTZ7201					0.2	8.3	2	5	1016	1230	470	900	490
40	0.3	BTZ7301					0.3	10.7	2	5	1096	1330	550	1000	610
41	0.5	BTZ7401					0.5	14.6	2	5	1006	1470	550	1100	792
42	1.0	BTZ7501					1.0	22.0	2/3	5	1296	1660	1040	1300	1280
43	1.5	BTZ7601					1.5	28.1	3	5	1366	1910	1290	1500	1630
44	2.0	BTZ7701					2.0	33.1	3	5	1416	2080	1390	1700	2000
45	XZF - 3150 - 0.1/63 - B1	BTZ8101	3150	63	161	3	0.1	7.6	2	5	966	1270	540	900	435
46	0.2	BTZ8201					0.2	11.4	2	5	1006	1440	580	1100	625
47	0.3	BTZ8301					0.3	14.1	2	5	1006	1750	920	1400	830
48	0.5	BTZ8401					0.5	20.7	2	5	1276	1930	1050	1500	1100
49	1.0	BTZ8501					1.0	30.4	3	5	1296	2140	1100	1800	1630
50	1.5	BTZ8601					1.5	40.7	3	5	1486	2300	1690	1900	2200
51	2.0	BTZ8701					2.0	43.6	3	6	1626	2430	1890	1900	2850
52	XZF - 4000 - 0.1/80 - B1	BTZ9101	4000	80	204	3	0.1	10.8	2	5	1088	1340	540	1100	574
53	0.2	BTZ9201					0.2	15.2	2	5	1128	1650	770	1200	790
54	0.3	BTZ9301					0.3	19.4	2	5	1128	1780	850	1400	1070
55	0.5	BTZ9401					0.5	26.6	3	5	1188	2140	1180	1700	1495
56	1.0	BTZ9501					1.0	41.1	3	6	1488	2290	1180	1900	2320
57	1.5	BTZ9601					1.5	53.2	——	6	1708	2360	——	2000	3100
58	2.0	BTZ9701					2.0	60.5	——	6	1888	2570	——	2100	3950

XZF-B1型阻波器规格表 (系列 III) Catalog for Line Traps series III

序号 No.	型号 Type	工厂代号 Manufacture code	In	Ikn	Ikp	T	Ltn	Loss	图号 Drawing. No.		H	Φy	Φa	Φb	质量 W
			(A)	(kA)	(kA)	s	mH	(kW)	Susp.	Ped.	(mm)	(mm)	(mm)	(mm)	(kg)
1	XZF - 630 - 0.1/25 - B1	BTZ31101					0.1	1.1	1	4	654	570	——	——	67
2	0.2	BTZ31201					0.2	1.5	1	4	734	630	——	——	106
3	0.3	BTZ31301					0.3	2.2	1	4	824	680	——	——	125
4	0.5	BTZ31401	630	25	63.8	1	0.5	3.0	1	4	884	780	——	——	160
5	1.0	BTZ31501					1.0	4.3	1	4	904	760	250	——	240
6	1.5	BTZ31601					1.5	5.4	1	5	934	910	450	700	312
7	2.0	BTZ31701					2.0	6.3	1	5	984	970	470	800	365
8	XZF - 800 - 0.1/31.5 - B1	BTZ32101					0.1	1.3	1	4	734	580	——	——	86
9	0.2	BTZ32201					0.2	2.0	1	4	724	690	——	——	122
10	0.3	BTZ32301					0.3	3.0	1	4	854	740	——	——	165
11	0.5	BTZ32401	800	31.5	80.3	1	0.5	3.3	1	4	704	780	280	——	210
12	1.0	BTZ32501					1.0	5.4	1	5	904	940	280	600	310
13	1.5	BTZ32601					1.5	7.1	1	5	944	1090	450	700	400
14	2.0	BTZ32701					2.0	8.1	1	5	964	1200	500	900	500
10	XZF - 1000 - 0.1/40 - B1	BTZ33101					0.1	1.8	1	4	654	800	——	——	110
11	0.2	BTZ33201					0.2	2.7	1	4	804	850	——	——	165
12	0.3	BTZ33301					0.3	3.3	1	4	864	950	450	——	215
13	0.5	BTZ33401	1000	40	102	1	0.5	4.9	1	4	944	1100	500	——	275
14	1.0	BTZ33501					1.0	7.7	2	5	1224	1150	890	800	450
15	1.5	BTZ33601					1.5	9.8	2	5	1234	1350	700	1000	570
16	2.0	BTZ33701					2.0	11.8	2	5	1274	1550	870	1200	686
17	XZF - 1250 - 0.1/50 - B1	BTZ34101					0.1	2.4	1	4	784	850	300	——	147
18	0.2	BTZ34201					0.2	3.5	1	4	774	920	300	——	210
19	0.3	BTZ34301					0.3	4.6	1	4	824	1020	450	——	260
20	0.5	BTZ34401	1250	50	127.5	1	0.5	6.2	1	5	984	1120	500	800	355
21	1.0	BTZ34501					1.0	9.4	2	5	1284	1230	500	900	620
22	1.5	BTZ34601					1.5	11.5	2	5	1294	1480	720	1100	798
23	2.0	BTZ34701					2.0	13.6	2	5	1314	1640	870	1300	990
24	XZF - 1600 - 0.1/63 - B1	BTZ35101					0.1	3.3	1	4	834	910	300	——	190
25	0.2	BTZ35201					0.2	4.7	1	4	804	1040	350	——	275
26	0.3	BTZ35301					0.3	6.2	1	5	894	1090	450	700	345
27	0.5	BTZ35401	1600	63	161	1	0.5	8.4	1	5	1054	1140	470	800	500
28	1.0	BTZ35501					1.0	12.8	2	5	1204	1460	680	1100	830
29	1.5	BTZ35601					1.5	15.9	2	5	1294	1670	820	1300	1150
31	XZF - 2000 - 0.1/63 - B1	BTZ36101					0.1	4.1	1	4	926	920	300	——	260
32	0.2	BTZ36201					0.2	6.5	1	5	996	1130	450	800	380
33	0.3	BTZ36301					0.3	8.0	2	5	926	1220	450	900	500
34	0.5	BTZ36401	2000	63	161	2	0.5	10.9	2	5	1016	1320	500	1000	650
35	1.0	BTZ36501					1.0	17.0	2/3	5	1306	1490	990	1100	1000
36	1.5	BTZ36601					1.5	21.5	2/3	5	1346	1700	1190	1400	1265
38	XZF - 2500 - 0.1/63 - B1	BTZ37101					0.1	5.3	1	5	886	1070	300	700	335
39	0.2	BTZ37201					0.2	8.3	2	5	1016	1230	470	900	490
40	0.3	BTZ37301					0.3	10.7	2	5	1096	1330	550	1000	610
41	0.5	BTZ37401	2500	63	161	3	0.5	14.6	2	5	1016	1470	550	1100	795
42	1.0	BTZ37501					1.0	22.0	2/3	5	1296	1660	1040	1300	1280
43	1.5	BTZ37601					1.5	28.1	3	5	1366	1910	1290	1500	1630
45	XZF - 3150 - 0.1/80 - B1	BTZ38101					0.1	7.6	2	5	966	1270	540	900	440
46	0.2	BTZ38201					0.2	11.4	2	5	1006	1440	580	1100	625
47	0.3	BTZ38301	3150	80	204	3	0.3	14.1	2	5	1006	1750	550	1000	830
48	0.5	BTZ38401					0.5	20.7	2	5	1276	1930	1050	1500	1075
49	1.0	BTZ38501					1.0	30.4	3	5	1296	2140	1100	1800	1640
52	XZF - 4000 - 0.1/100 - B1	BTZ39101					0.1	10.8	2	5	1088	1340	540	1100	574
53	0.2	BTZ39201					0.2	15.2	2	5	1128	1650	770	1200	840
54	0.3	BTZ39301	4000	100	255	3	0.3	19.4	2	5	1128	1780	850	1400	1075
55	0.5	BTZ39401					0.5	26.6	3	5	1188	2140	1180	1700	1505
56	1.0	BTZ39501					1.0	41.1	3	6	1488	2290	1180	1900	2350

XZF-B5型 (F级绝缘阻波器) 规格表 Catalog for Line Traps with thermal insulation class F

序号 No.	型号 Type	工厂代号 Manufacture code	In	Ikn	Ikp	T	Ltn	Loss	图号 Drawing. No.		H	Φy	Φa	Φb	质量 W
			(A)	(kA)	(kA)	s	mH	(kW)	Susp.	Ped.	(mm)	(mm)	(mm)	(mm)	(kg)
1	XZF - 630 - 0.1/20 - B5	BTZ11A01					0.1	1.3	1	4	604	570	——	——	55
2	0.2	BTZ12A01					0.2	2.2	1	4	794	570	——	——	75
3	0.3	BTZ13A01					0.3	3.0	1	4	974	570	——	——	100
4	0.5	BTZ14A01	630	20	51	1	0.5	3.3	1	4	754	640	——	——	127
5	1.0	BTZ15A01					1.0	5.2	1	4	824	750	380	——	190
6	1.5	BTZ16A01					1.5	7.0	1	4	1054	820	380	——	250
7	2.0	BTZ17A01					2.0	7.8	1	5	1134	870	420	700	310
8	XZF - 800 - 0.1/25 - B5	BTZ21A01					0.1	1.6	1	4	664	575	——	——	70
9	0.2	BTZ22A01					0.2	2.7	1	4	824	625	——	——	100
10	0.3	BTZ23A01					0.3	3.6	1	4	884	725	——	——	130
11	0.5	BTZ24A01	800	25	63.8	1	0.5	5.1	1	4	1074	790	420	——	175
12	1.0	BTZ25A01					1.0	6.6	1	4	894	920	330	——	250
13	1.5	BTZ26A01					1.5	8.5	1	5	974	1020	420	700	330
14	2.0	BTZ27A01					2.0	10.4	1	5	1054	1110	470	800	390
15	XZF - 1000 - 0.1/31.5 - B5	BTZ31A01					0.1	2.3	1	4	604	890	——	——	85
16	0.2	BTZ32A01					0.2	3.2	1	4	794	890	——	——	130
17	0.3	BTZ33A01					0.3	4.3	1	4	934	940	470	——	170
18	0.5	BTZ34A01	1000	31.5	80.3	1	0.5	6.6	1	4	1054	1050	530	——	215
19	1.0	BTZ35A01					1.0	10.1	1	5	1184	1120	550	800	330
20	1.5	BTZ36A01					1.5	12.2	1	5	1244	1330	810	1000	450
21	2.0	BTZ37A01					2.0	14.8	2	5	1334	1430	860	1100	550
22	XZF - 1250 - 0.1/40 - B5	BTZ41A01					0.1	3.0	1	4	834	790	——	——	110
23	0.2	BTZ42A01					0.2	4.5	1	4	814	850	330	——	160
24	0.3	BTZ43A01					0.3	5.8	1	4	754	1010	420	——	205
25	0.5	BTZ44A01	1250	40	102	1	0.5	7.7	1	4	884	1060	470	——	265
26	1.0	BTZ45A01					1.0	12.8	2	5	1224	1200	600	900	440
27	1.5	BTZ46A01					1.5	15.0	2	5	1294	1400	810	1000	600
28	2.0	BTZ47A01					2.0	18.6	2	5	1334	1550	880	1200	720
29	XZF - 1600 - 0.1/50 - B5	BTZ51A01					0.1	3.8	1	4	844	850	410	——	150
30	0.2	BTZ52A01					0.2	5.5	1	4	794	970	460	——	220
31	0.3	BTZ53A01					0.3	7.5	1	4	974	970	460	——	280
32	0.5	BTZ54A01	1600	50	127.5	1	0.5	10.4	1	5	1014	1080	510	750	400
33	1.0	BTZ55A01					1.0	15.8	2	5	1214	1280	600	950	590
34	1.5	BTZ56A01					1.5	18.9	2	5	1294	1480	690	1100	810
35	2.0	BTZ57A01					2.0	22.4	2	5	1344	1650	870	1300	1020
36	XZF - 2000 - 0.1/50 - B5	BTZ61A01					0.1	4.9	1	4	926	910	460	——	210
37	0.2	BTZ62A01					0.2	7.8	1	5	1116	1060	560	700	310
38	0.3	BTZ63A01					0.3	9.7	1	5	916	1140	560	800	360
39	0.5	BTZ64A01	2000	50	127.5	2	0.5	13.2	2	5	1206	1150	400	800	550
40	1.0	BTZ65A01					1.0	20.4	2	5	1326	1440	1090	1100	800
41	1.5	BTZ66A01					1.5	26.1	2	5	1436	1560	1140	1200	1060
42	2.0	BTZ67A01					2.0	29.4	3	5	1556	1670	1240	1300	1315
43	XZF - 2500 - 0.1/50 - B5	BTZ71A01					0.1	6.3	1	4	966	960	400	——	270
44	0.2	BTZ72A01					0.2	9.8	2	5	1046	1110	500	700	400
45	0.3	BTZ73A01					0.3	12.2	2	5	1096	1310	600	900	520
46	0.5	BTZ74A01	2500	50	127.5	3	0.5	17.5	2	5	1186	1560	780	1150	710
47	1.0	BTZ75A01					1.0	26.4	2	5	1276	1570	1060	1100	1000
48	1.5	BTZ76A01					1.5	32.0	3	5	1426	1780	1240	1400	1400
49	2.0	BTZ77A01					2.0	38.7	3	5	1596	1880	1340	1500	1710
50	XZF - 2500 - 0.1/63 - B5	BTZ71B01					0.1	6.0	1	4	816	1260	530	——	320
51	0.2	BTZ72B01					0.2	8.6	2	5	836	1260	510	900	450
52	0.3	BTZ73B01					0.3	11.1	2	5	926	1310	540	900	550
53	0.5	BTZ74B01	2500	63	161	3	0.5	15.3	2	5	1006	1460	610	1100	730
54	1.0	BTZ75B01					1.0	24.8	2	5	1306	1630	1100	1200	1140
55	1.5	BTZ76B01					1.5	31.5	3	5	1556	1650	1040	1300	1540
56	2.0	BTZ77B01					2.0	36.7	3	6	1626	1860	1240	1500	1950