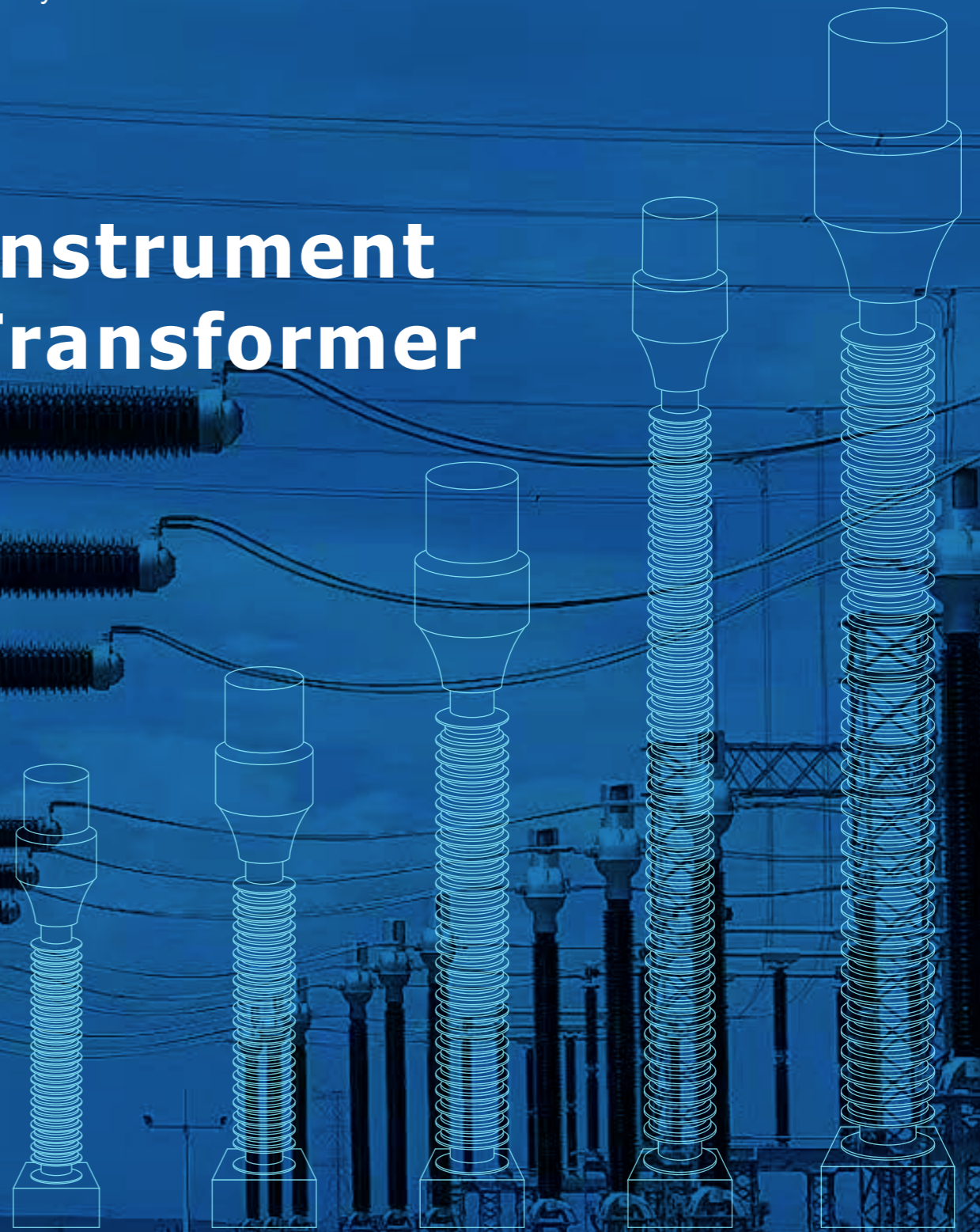


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# Instrument Transformer



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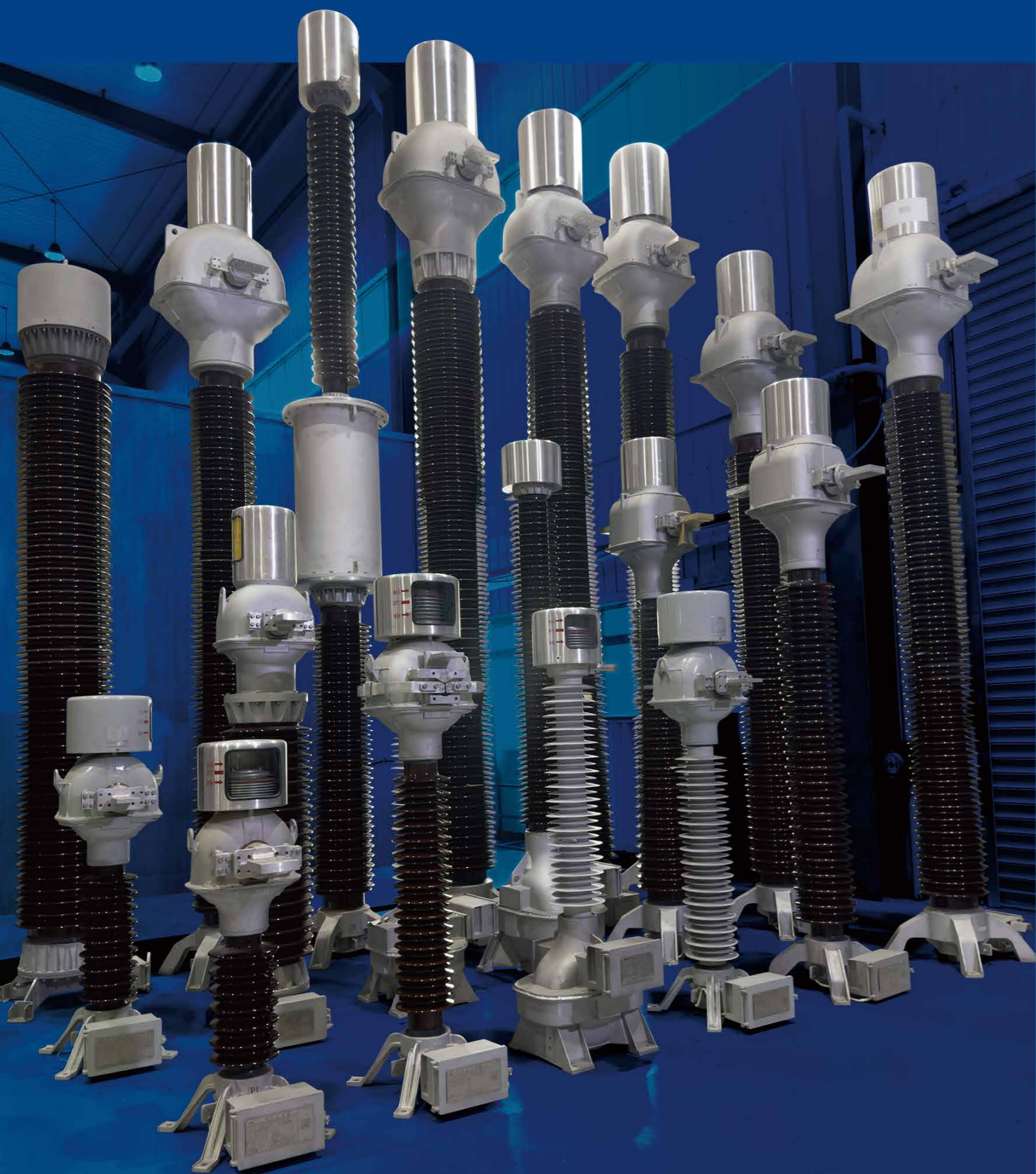
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Sieyuan Electric Co., Ltd.

Jiangsu Sieyuan Hertz Instrument Transformer Co.,Ltd.

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Smarter Power Better Life



## Instrument Transformer

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# LVB

## Oil immersed current transformer



27.5kV-500kV Oil immersed inverted current transformer

### Product introduction:

LVB series current transformers are of oil impregnated paper insulation and inverted structure to meet the IEC/IEEE standard. The series connected transformer in the line has the functions of electric energy measurement, metering, relay protection and transient protection.

### Product features:

- The primary winding is of through type conductive rod structure, with good dynamic and thermal stability. The maximum thermal stability current is 63kA/3s (when the primary winding is in series).
- The primary winding passes through the center of the secondary winding without the influence of magnetic flux leakage, and the measurement accuracy reaches 0.2S and 0.1.
- The secondary winding is poured into the aluminum shield housing with organic materials, and the measuring and protection lines at the secondary side will not be subject to electrical attack due to insulation breakdown.
- The optimized capacitor screen bushing is wound by a high-performance computer controlled full-automatic wrapping machine with a whole sheet of imported wide width cable paper. The process dispersion is small, and the insulation performance is excellent. The partial discharge test is conducted under the power frequency test voltage.
- The fully automatic vacuum drying treatment system imported from Germany LEYBOLD is adopted. After the overall assembly of the product, the new process of variable pressure vacuum drying treatment and oil injection is carried out. The fully imported insulating materials ensure that the overall dielectric loss factor tand of the product is less than 0.3%.
- The head insulation of the product is wrapped with an automatic binding machine, and the insulation wrapping of the product is uniform, tight and consistent.
- The secondary outlet box is cast with aluminum alloy as a whole, with a dust-proof, waterproof and breathable sealing structure.
- The connection between product parts adopts argon arc welding, and the whole assembly is filled with high-pressure nitrogen for leak detection, which fundamentally solves the problem of oil leakage of oil immersed products.
- The shell, base and junction box are all made of aluminum alloy. The expander and nameplate are made of stainless steel. All exposed parts will never rust.
- The product is maintenance free.

### Technical parameter

Type	Highest voltage (kV)	Rated frequency (Hz)	Power-frequency voltage(kV)	Lightning impulse voltage(BIL)(kV)	Rated primary current(A)	Class
LVB-31.5	31.5	50/60	95	200	IEC: Min current: 0.5A; Max current: 8000A; IEEE: MR5000/MR4000/MR3000/ MR2000/MR1200/MR600	IEC: 0.2/0.5/0.2S/0.5S/5P/ 10P/TPS/TPX/TPY IEEE: 0.3/0.6/1.2/C200/C40 0/C800
LVB-40.5	40.5	50/60	95	200		
LVB-72.5	72.5	50/60	160	350		
LVB-110	123	50/60	230	550		
LVB-126	126	50/60	230	550		
LVB-145	145	50/60	275	650		
LVB-170	170	50/60	325	750		
LVB-245	252	50/60	460	1050		
LVB-300	300	50/60	460	1050		
LVB-363	363	50/60	510	1175		
LVB-420	420	50/60	630	1425		
LVB-550	550	50/60	740	1675		

### Technical parameter

Type	Thermal current (kA)	Dynamic current (kA)	Oil weight (kg)	Total weight (kg)	Dimensions		
					A(mm)	T(mm)	H(mm)
LVB-31.5	31.5kA/3S	80	34	140	300	984±25	1464±30
LVB-40.5	40kA/3S	100	78	315	475	1075±15	1615±25
LVB-72.5			80	350	475	1290±25	1815±25
LVB-110	50kA/3S	125	80	400	475	1790±15	2310±25
LVB-126			80	400	475	1790±15	2310±25
LVB-145			80	400	475	2198±15	2730±25
LVB-170			100	500	475	2198±15	2730±25
LVB-245	63kA/3S	160	180	800	550	2955±15	3650±25
LVB-300			222	935	550	3585±25	4285±30
LVB-363			330	1200	600	4535±25	5100±20
LVB-420			440	1400	600	4750±25	5650±30
LVB-550			550	2600	650	5920±15	7015±20

Remark: Approximate dimensions and weights for special requirements, please consult us.

# LVQB

## SF6 gas insulated current transformer



27.5kV-500kV Oil immersed inverted current transformer

### Product introduction:

LVQB series current transformers are SF6 gas insulated, inverted structure to meet the IEC/IEEE standard. The series connected transformer in the line has the functions of electric energy measurement, metering, relay protection and transient protection.

### Product features:

- The primary winding is of through type conductive rod structure with good dynamic and thermal stability.
- The maximum thermal stability current is 63kA/3s (when the primary winding is in series).
- The primary winding passes through the center of the secondary winding without the influence of magnetic flux leakage, and the measurement accuracy reaches 0.1 and 0.2s.
- The upper shell is of aluminum alloy welding structure, and the top is equipped with a metal explosion-proof disc. If the internal high-energy discharge occurs, when the gas pressure exceeds 1.0MPa, the explosion-proof disc will break, so as to achieve the purpose of pressure release, improve product safety, and there is no danger of explosion.
- The secondary winding is poured into the aluminum shield housing with organic materials, and the measuring and protection lines at the secondary side will not be subject to electrical attack due to insulation breakdown.
- The optimized electrode shielding structure improves the internal and external electric field distribution of the product, and the insulation performance is excellent. The local discharge test is conducted under the power frequency test voltage.
- The cast aluminum footing is directly cast on the external insulating bushing, and the bottom plate bolt is fixed with the footing from the bottom up to avoid water ingress and ponding from the base fastener. The secondary outlet box is cast with stainless steel or aluminum alloy. The dust-proof, waterproof and breathable sealing structure meets the requirements of IP55.
- The secondary terminals for users to connect are Phoenix special terminal blocks, which are more convenient and fast to plug, pull and connect.
- The sealing ring is made of ethylene propylene diene monomer (EPDM) and imported fluorosilicone rubber. It is suitable for areas with high and low temperature changes and harsh ambient temperatures. The annual air leakage rate is less than 0.5%.
- The product performance remains unchanged after rigorous transportation vibration test.
- The shell, base and junction box are all made of aluminum alloy. The nameplate is made of stainless steel. All exposed parts will never rust. The base is equipped with a density meter, which can display the gas pressure inside the transformer (the displayed value is automatically converted to the internal gas pressure at 20 °C) and density. When the internal pressure of the transformer drops to the alarm pressure, it will provide a signal and require gas supplement.

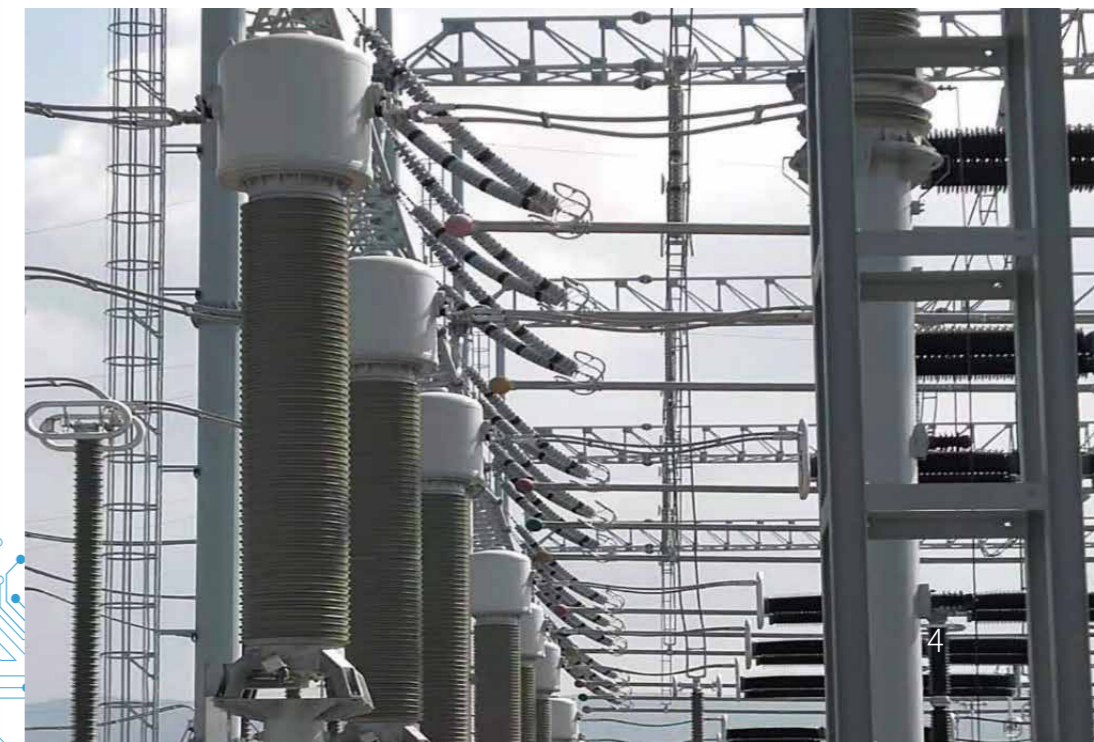
### Technical parameter

Type	Highest voltage (kV)	Rated frequency (Hz)	Power-frequency voltage(kV)	Lightning impulse voltage(BIL)(kV)	Rated primary current(A)	Class
LVQB-40.5	40.5	50/60	95	200	IEC: Min current: 0.5A; Max current: 8000A; IEEE: MR5000/MR4000/MR3000/ MR2000/MR1200/MR600	IEC: 0.2/0.5/0.2S/0.5S/5P/ 10P/TPS/TPX/TPY IEEE: 0.3/0.6/1.2/C200/C40 0/C800
LVQB-72.5	72.5	50/60	160	350		
LVQB-126	126	50/60	230	550		
LVQB-170	170	50/60	325	750		
LVQB-245	252	50/60	460	1050		
LVQB-300	300	50/60	460	1050		
LVQB-363	363	50/60	510	1175		
LVQB-550	550	50/60	740	1675		

### Technical parameter

Type	Thermal current (kA)	Dynamic current (kA)	Gas pressure (absolute)Mpa	Total weight (kg)	Dimensions		
					A(mm)	T(mm)	H(mm)
LVQB-40.5	31.5kA/3S	80	0.4	300	475	1403±5	1886.5±10
LVQB-72.5	40kA/3S	100	0.5	400	475	1403±5	1886.5±10
LVQB-126			0.5	490	475	1700±5	2350±10
LVQB-170	63kA/3S	160	0.5	1000	550	3360±5	3690±10
LVQB-245			0.5	1200	550	3360±5	3690±10
LVQB-300			0.5	1600	660/600	4405±5	5300±10
LVQB-363			0.5	1800	660/600	4405±5	5300±10
LVQB-550			0.55	3000	900	5525±10	6350±10

Remark: Approximate dimensions and weights for special requirements, please consult us.



# LB

## Oil immersed hair pin current transformer



Oil immersed hair pin current transformer

### Product introduction:

LB series current transformers are oil impregnated paper insulated, vertical structure to meet the IEC/IEEE standard. The series connected transformer in the line has the functions of electric energy measurement, metering, relay protection and transient protection.

### Product features:

- LB series current transformers are of oil immersed fully sealed insulation structure. The primary winding is U type. The body is fixed at the bottom of the box. The main insulation is capacitive oil paper insulation, which is wrapped around the primary winding with high-voltage cable paper. Several capacitance screens are set between them. The inner screen is connected to the high potential, and the outer screen can be grounded.
- The upper part of the oil tank is equipped with a porcelain bushing. The primary outlet terminal is on the top of the porcelain bushing. The series and parallel connection are external exchange devices, that is, they can be exchanged outside the porcelain bushing.
- The stainless steel expander is used as the oil compensation device to ensure the oil quality. The oil level indication of the product is indicated by the eye-catching displacement indication of the upper window of the expander.
- The product can be equipped with 4-6 secondary windings. The secondary measurement windings made of microcrystalline alloys with high magnetic conductivity can ensure the measurement accuracy to reach class 0.2 or 0.2S × The secondary winding of 600A and above current transformer measurement level has taps to achieve two current ratios.
- The secondary terminal box is cast with aluminum alloy as a whole, with a dust-proof, waterproof and breathable sealing structure
- The connection between product parts adopts argon arc welding, and the whole assembly is filled with high-pressure nitrogen for leak detection, which fundamentally solves the problem of oil leakage of oil immersed products.
- The shell, base and junction box are all made of aluminum alloy. The expander and nameplate are made of stainless steel. All exposed parts will never rust.
- The product is maintenance free.

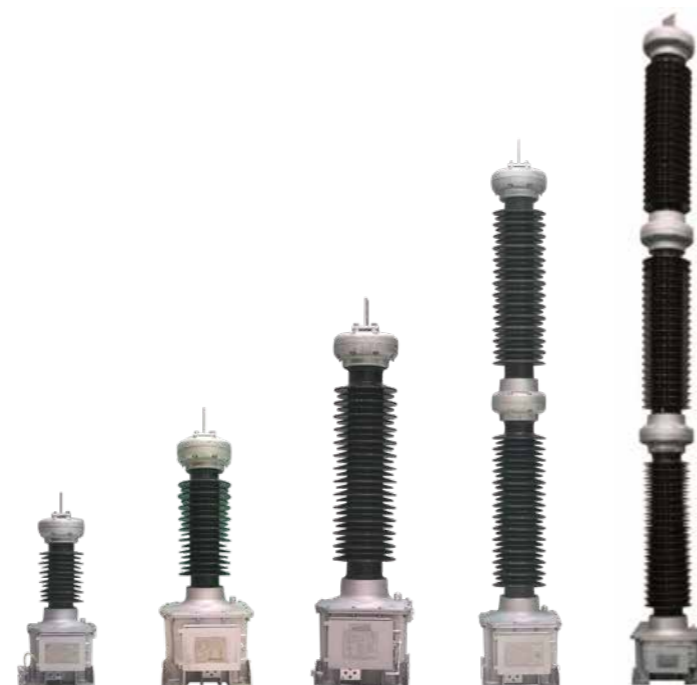
Technical parameter						
Type	Highest voltage (kV)	Rated frequency (Hz)	Power-frequency voltage(kV)	Lightning impulse voltage(BIL)(kV)	Rated primary current(A)	Class
LAB6-31.5	31.5	50/60	95	200	IEC: Min current: 0.5A; Max current: 8000A;	IEC: 0.2/0.5/0.2S/0.5S/5P/ 10P
LB6-40.5	40.5	50/60	95	200		
LB6-72.5	72.5	50/60	160	350	IEEE: MR2000/MR1200/MR600	IEEE: 0.3/0.6/1.2/C200/C40 0/C800
LB6-110	126	50/60	230	550		
LB6-145	145	50/60	275	650		
LB6-170	170	50/60	325	750		
LB6-245	252	50/60	460	1050		

Technical parameter							
Type	Thermal current (kA)	Dynamic current (kA)	Oil weight (kg)	Total weight (kg)	Dimensions		
					A(mm)	T(mm)	H(mm)
LAB6-31.5	25kA/3S	63	70	245	258	1320±30	1700±30
LB6-40.5			70	245	258	1320±30	1700±30
LB6-72.5	40kA/3S	100	70	340	475	1600±15	2060±20
LB6-126	50kA/3S	125	100	500	475	2000±15	2460±20
LB6-145			120	520	475	2200±15	2687±20
LB6-170			150	650	475	2200±15	2687±20
LB6-245			320	950	500	3300±20	3800±20

Remark: Approximate dimensions and weights for special requirements, please consult us.



## Capacitor voltage transformer



Capacitor voltage transformer

### Product introduction:

Capacitor voltage transformer is mainly used in power frequency power system to meet the IEC/IEEE standard, outdoor rated voltage 40.5-1100kV, frequency 50/60Hz neutral point effective grounding system/neutral point non effective grounding system to provide voltage signals for electrical measuring instruments and protection and control devices, and also as coupling capacitor for power carrier communication system.

### Product features:

- It has excellent performance in suppressing ferromagnetic resonance. With a speed saturation damping device, it has fast transient response and can reliably damp ferromagnetic resonance. It can meet the test requirements of 320 times of ferromagnetic resonance under 0-1.5Un, and can effectively suppress ferromagnetic resonance within 10 cycles. The peak value of the secondary voltage of the product drops to 5% of the peak value of the secondary voltage before the short circuit within 0.02s.
- Capacitor voltage transformer has medium voltage switch function, which is convenient for on-site operation and maintenance.
- Porcelain bushing and flange are used for integral casting to reduce bolt connection, improve sealing performance and reduce the risk of oil leakage.
- It is easy to install and maintain. Phoenix Contact terminals are used to facilitate user wiring.
- The oil tank is of cast aluminum structure, which is free of rust after long-term use.

### Technical parameter

Type	Highest voltage (kV)	Capacitance (pF)	Rated frequency (Hz)	Power-frequency voltage(kV)	Lightning impulse voltage(BIL)(kV)	Rated burden(VA)
TYD 40.5	40.5	10000-20000	50/60	95	200	IEC: 10/30/50/75/100/120/ 150/200/300 IEEE: 0.15Y/0.15MWXYZ/0.3MWXYZ/ 0.6MWXYZ/0.6ZZ/1.2ZZ
TYD 72.5	72.5	10000-20000	50/60	160	350	
TYD 126	126	10000-20000	50/60	230	550	
TYD 145	145	10000-20000	50/60	275	650	
TYD 170	170	4000-10000	50/60	325	750	
TYD 245	252	5000-10000	50/60	460	1050	
TYD 300	300	5000-10000	50/60	460	1050	
TYD 363	363	5000-10000	50/60	510	1175	
TYD 420	420	5000-10000	50/60	630	1425	
TYD 550	550	5000-10000	50/60	740	1675	
TYD 765	765	5000-10000	50/60	975	2100	
TYD 1100	1100	5000-10000	50/60	1200	2400	

### Technical parameter

Type	Rated voltage factor	Total weight (kg)	Limit output (VA)	Dimensions		
				A(mm)	T(mm)	H(mm)
TYD 40.5	1.2 times/Continuous, 1.9 times/30s	315	1000	400	1394±20	1424±20
TYD 72.5		390	1000	400	1693±20	1669±20
TYD 126	1.2 times/Continuous, 1.5 times/30s	400	1000	400	2015±20	2045±20
TYD 145		430	1000	400	2414±20	2444±20
TYD 170		650	1000	400	2714±20	2744±20
TYD 245		760	1000	400	3350±20	3380±20
TYD 300		760	1000	400	4049±20	4079±20
TYD 363		900	1000	400	4936±20	4966±20
TYD 420		1200	1000	400	5643±20	5673±20
TYD 550		1200	1000	400	6333±20	6363±20
TYD 765		4000	1000	670	10755±20	10785±20
TYD 1100		6620	1000	670	13832±20	13862±20

Remark: Approximate dimensions and weights for special requirements, please consult us.

# JDCF

## Oil immersed inductive voltage transformer



Inductive voltage transformer

### Product introduction:

JDCF series oil immersed electromagnetic voltage transformer is a voltage transformer with transformer oil and insulating paper as the insulating medium. It protects measuring instruments and relays in the power system, and makes the secondary side equipment miniaturized and standardized. It is an indispensable power equipment in the substation.

### Product features:

- It has the characteristics of fast transient response.
- Meet the requirements of IEC 61869-3, CFE NRF-026, IEEE57.13 and other technical standards.
- For single-stage electromagnetic voltage transformer, the upper part is the expander part, the middle part is the porcelain bushing part, the bottom part is the oil tank, and the internal part is the body part. The transformer body contains winding and capacitor voltage equalizing screen, which are bound together.
- The product has small size, light weight, large load and stable dielectric loss.

### Technical parameter

Type	Highest voltage (kV)	Rated frequency (Hz)	Power-frequency voltage(kV)	Lightning impulse voltage(BIL)(kV)	Rated burden(VA)
JDT-27.5	31.5	50/60	70	200	IEC: 10/30/50/75/100/120/ 150/200/300 IEEE: 0.15Y/0.15MWXYZ/0.3MWXYZ/ 0.6MWXYZ/0.6ZZ/1.2ZZ
JDCF-40.5	40.5	50/60	95	200	
JDCF-72.5	72.5	50/60	160	350	
JDCF-126	126	50/60	230	550	
JDCF-145	145	50/60	275	650	
JDCF-170	170	50/60	325	750	
JDCF-245	245	50/60	460	1050	
JDCF-300	300	50/60	460	1050	
JDCF-420	420	50/60	630	1425	
JDCF-550	550	50/60	740	1550	

### Technical parameter

Type	Rated voltage factor	Total weight (kg)	Limit output (VA)	Dimensions		
				A(mm)	T(mm)	H(mm)
JDT-27.5	1.2 times/Continuous, 1.9 times/30s	180	1000	320/360	1010±10	1260±10
JDCF-40.5		152	1000	450	1014±20	1290±20
JDCF-72.5	1.2 times/Continuous, 1.5 times/30s	240	1000	450	1225±30	1510±30
JDCF-126		344	1000	450	1900±30	2180±30
JDCF-145		350	1000	450	1900±30	2180±30
JDCF-170		370	1000	450	2300±50	2580±50
JDCF-245		655	1000	600	3180±50	3540±50
JDCF-300		700	1000	600	3180±50	3540±50
JDCF-420		1600	1000	600	5795±50	6350±50
JDCF-550		1600	1000	600	6395±50	7000±50

Remark: Approximate dimensions and weights for special requirements, please consult us.

# Station Service Voltage Transformer



Gas insulated Power PT: SGPVT



Oil immersed Power PT: SOPVT

## Product introduction:

- Substation power supply: provide power supply for lighting and secondary relay protection equipment in substation switching station;
- Island power supply: electrification in remote areas;
- Mobile transformer: power supply during construction;

## Product features:

- Low investment, easy installation, low operation and maintenance costs;
- Environment protection, and meet the IEC/IEEE standard in power system;
- No need for distribution network construction, simple and cheap system, short construction period and fast power supply;
- Single phase line to ground design is adopted, and the high-voltage end can be simply connected to the high-voltage overhead line to provide load.
- With the direct connection with the transmission line, the reliability of POWER PT is very high, and it does not depend on the distribution line that is more easily interrupted.

Type	SOPVT & SGPVT									
Voltage level	kV	72.5	126	145	170	245	252	300	363	550
Power-frequency voltage	kV	160	230	275	325	460	460	460	510	680
Lightning impulse voltage	kV	325	550	650	750	1050	1050	1050	1175	1550
Switching impulse voltage	kV	--	--	--	--	--	--	850	950	1175
Output power	kVA	10, 25, 50, 100, 125, 150, 200, 250								
Rated output voltage	V	220/380, 120/240								
Rated voltage factor		1.5(30s)								
Rated frequency	Hz	50/60								
Creepage distance	mm/kV	25-31 (Other requirements can be customized)								
Product operation environment	°C	-50 ~ +50								
Insulation class		E								
Measurement accuracy class		0.2/0.5/1.0/3.0 (Customized options)								
Protection accuracy class		3P/6P (Customized options)								
Applicable standards		IEC 61869, IEC 60076, IEEE C57.12 (Liquid insulation), IEEE 693, IEEE C57.13								

Remark: Approximate dimensions and weights for special requirements, please consult us.





## Combined instrument transformer



Combined instrument transformer

### Product introduction:

The combined instrument transformer is used to separate the protection and measurement devices from the high voltage, and convert the current and voltage to be measured on the high voltage line into the power equipment with a certain accuracy of current and voltage signals suitable for the protection and measurement devices.

### Product features:

- Small volume: the volume is basically the same as the current transformer of the same grade;
- Good anti ferromagnetic resonance performance: the voltage part adopts a new open T-type iron core to avoid ferromagnetic resonance;
- Excellent lightning impulse resistance and system over-voltage performance: the voltage primary coil is divided into multiple sections, which are connected in parallel with the capacitance screen inside the main insulation to increase the longitudinal capacitance of the primary winding and improve the product's ability to withstand lightning impulse over-voltage and system over-voltage;
- Low product temperature rise: the primary winding of the product is thin and high compared with the traditional structure, the total heat dissipation area is large, the product temperature rise is low, and the product performance is reliable;
- The product occupies a small area, reducing the investment in substations;

Type	JLD										
Voltage level	kV	40.5	72.5	126	145	170	252	300	420	550	
Power-frequency voltage	kV	95	160	230	275	325	460	460	630	750	
Lightning impulse voltage	kV	200	325	550	650	750	1050	1050	1425	1675	
Switching impulse voltage	kV	--	--	--	--	--	--	850	1050	1300	
Rated primary current	A	0.5-4000A									
Rated output voltage	V	100/√3, 110/√3, 115/√3, Optional									
Rated voltage level and Burden	VA	0.2, 50/50VA(Ultimate burden)									
Rated voltage factor		1.9 times(8h) /1.5 times(Continuous) /1.2 times(Continuous), Optional									
Rated frequency	Hz	50/60									
Creepage distance	mm/kV	25-31 (Other requirements can be customized)									
Product operation environment	C	-50~+40									
Insulation class		E									
Applicable standards		IEC 61869, IEEE 693, IEEE C57.13									

Remark: Approximate dimensions and weights for special requirements, please consult us.



GC For Live&Dead Tank Circuit Breaker

### Porcelain Bushing & Composite Bushing

Rated voltage up to 280kV, meet the IEC/IEEE standard in power system.

Capacitor value is usually from 150 pF to maximum 30 nF, Special specifications by the client requirement to custom .

Temperature scope -55℃ to 75℃

Vibration and Mechanical shock up to 40G

Cantilever withstand strength up to 25kNm

Stable quality, Life up to 30 years

## Grading Capacitor for AIS System

Siyuan Registration	Arcing Distance [mm]	Rated Voltage Maximum [kV]	Power Frequency Withstand Voltage Maximum [kV]	Lighting Impulse Voltage Maximum [kV]	Different Flange Diameters [mm] Maximum Capacitance[pF]					Different Flange Diameters [mm] Maximum mass [kg]				
					160	200	210	230	255	160	200	210	230	255
SJA-192	2130	192	550	1105	--	--	--	2500	--	--	--	--	155	--
SJA-125	1200-1280	125	265	630	4500	12500	5000	6400	12000	25	40	75	90	120
SJA-145	1400-1480	145	316	750	3800	10500	4000	5100	9500	28	44	78	107	125
SJA-160	1472-1520	160	350	800	3300	9500	--	--	--	32	47	--	--	--
SJA-170	1600-1680	170	375	860	3200	9000	3200	4000	7400	37	50	110	135	155
SJA-180	1750-1830	180	435	950	3000	8500	3100	5000	7500	35	55	100	130	152
SJA-210	1952-2048	210	520	1050	2300	7900	--	--	--	48	60	--	--	--
SJA-250	2192-2240	250	560	1200	2500	6200	--	--	--	42	65	--	--	--
SJA-300	2000-2672	300	600	1300	2500	7000	2500	4000	6100	50	80	125	150	172
												137	196	205
												190	220	--
												208	296	--

Remark: Approximate dimensions and weights for special requirements, please consult us.

# Inductive Voltage Transformer for GIS



## Main Technical Parameters

Type	Highest voltage (kV)	Rated voltage (kV)	Rated accuracy class and Rated output(VA)	Insulation level (kV)	Weight (kg)
JDQXFH-66	72.5	66/√3	IEC: 0.2/0.5/3P/3P according to customer design 10/30/50/75/100/120/ 150/200/300 IEEE: 0.15Y/0.15MWXYZ/0.3MWXYZ/0.6M WXYZ/0.6ZZZ/1.2ZZ	160/350/-	150
JSQXFH-66	72.5	66/√3		160/350/-	500
JDQXFH-69	72.5	69/√3		160/350/-	150
JSQXFH-69	72.5	69/√3		160/350/-	500
JDQXFH-110	126	110/√3		230/550/-	160
JSQXFH-110	126	110/√3		230/550/-	550
JDQXFH-145	145	132/√3 or 138/√3		275/650/-	160
JSQXFH-145	145	132/√3 or 138/√3		275/650/-	550
JDQXFH-154	170	154/√3		325/750/-	170
JSQXFH-154	170	154/√3		325/750/-	560
JDQXFH-220	245	220/√3	460/1050/-	350	
JSQXFH-220	245	220/√3	460/1050/-	800	
JDQXFH-230	245	220/√3	460/1050/-	350	
JSQXFH-230	245	220/√3	460/1050/-	350	
JDQXFH-275	300	275/√3	460/1050/850	600	
JDQXFH-363	363	330/√3	510/1175/950	700	
JDQXFH-400	420	400/√3	630/1425/1050	700	
JDQXFH-500	550	500/√3	740/1675/1300	800	
JDQXFH-765	800	765/√3	975/2100/1550	1500	
JDQXFH-1000	1100	1000/√3	1100/2400/1800	2600	

Remark: The parameters in the table are typical engineering parameters, which can be customized according to different customer requirements.

### Product introduction:

The inductive voltage transformer is used for GIS, it is widely applied to the nominal system voltage is 66-1000kV, and 50/60Hz frequency in power system, for the secondary measurement apparatus, protection and control device provide voltage signal. The product has three-phase and single phase two kinds of structure, in order to facilitate the GIS customer substation site handover test, our company developed the isolated structure of the GIS VT product. When power frequency withstand voltage through the disconnecter directly to the VT and GIS isolation, and enhance the efficiency of acceptance test on site.

### Product features:

- Gas optional: SF6 , Mixed gas or Clean air
- Epoxy pouring insulator(Spacer): Provided by GIS manufacturer or purchase from customer-specified suppliers.
- Gas charging valve: Provided by GIS manufacturer or purchase from customer-specified suppliers.
- Partial discharge sensor: According to customer demand selective installation.
- Operating box: The box of three phase products placed at the bottom and single phase products places at the side, can be achieved both manually and electrically operation ways.
- Open and close indication: Using the fish eye type indication, consistent with the GIS.

# Resin & Oil

## Impregnated Paper Bushing



### RIP Product introduction:

#### Excellent electrical performance

Impregnated paper, high insulation and heat resistance grade, to avoid long-term operation aging of insulating materials,

Single advanced winding and curing process, the partial discharge of the product is less than 3pc.

5m winding machine is used for winding. Effectively improve the electric field distribution of external insulation under bad working conditions.

#### Excellent mechanical properties

Double sealing structure, excellent water proof and leak proof performance.

High mechanical strength and meets the seismic requirements of Grade 8.

Adopt high-strength materials to deal with metal fatigue under long-term operation.

Stable and reliable

No oil, no explosion and fire after bushing failure, high safety and reliability

#### Excellent insulation performance, No maintenance required

It can be used in harsh environment

High altitude areas.

Dirty area.

Configuration selection

Advanced on-line monitoring device to control the operation state of products.

## RIP GIS bushing

Standard	IEC 60137								
Technical parameter	Highest voltage for equipment (kV)	72.5	126	145	170	252	363	420	550
	Power frequency withstand voltage (kV)	140	230	275	355	460	625	750	870
	Lightning impulse full wave withstand voltage (kV)	325	550	650	750	1050	1175	1550	1800
	Operating impulse withstand voltage (kV)	-	-	-	-	850	950	1175	1300
	Rated current (A)	2000-3150				3150-4000			
	Ambient temperature (C)	Minimum temperature:-45 C , maximum temperature:45 C							
Strength under shock (g)	0.5/0.25								

## RIP Oil-SF6 bushing

Standard	IEC 60137								
Technical parameter	Highest voltage for equipment (kV)	72.5	126	145	252	363	550	800	
	Power frequency withstand voltage (kV)	155	255	305	505	625	870	1075	
	Lightning impulse full wave withstand voltage (kV)	325	550	650	1050	1175	1800	2400	
	Operating impulse withstand voltage (kV)	-	-	-	850	950	1300	1550	
	Rated current (A)	630-3150	630-3150	630-3150	630-3150	630-4000	630-4000	630-4000	
	Ambient temperature (C)	Minimum temperature:-45 C , maximum temperature:45 C							
Strength under shock (g)	0.5/0.25								

## RIP AC transformer bushing

Standard	IEC 60137									
Technical parameter	Highest voltage for equipment (kV)	72.5	126	145	170	252	363	550	800	
	Power frequency withstand voltage (kV)	155	255	305	355	505	625	870	1075	
	Lightning impulse full wave withstand voltage (kV)	325	550	650	750	1050	1175	1800	2400	
	Operating impulse withstand voltage (kV)	-	-	-	-	850	950	1300	1550	
	Rated current (A) (Threading type)	630-1250	630-1250	630-1250	630-1250	630-1250	-	-	-	
	Rated current (A) (Current carrying type)	1600-3150	1600-3150	1600-3150	1600-3150	1600-3150	630-3150	630-4000	2500	
	Ambient temperature (C)	Minimum temperature:-45 C , maximum temperature:45 C								
	Strength under shock (g)	0.5/0.25								

## OIP AC transformer bushing

Standard	IEC 60137									
Technical parameter	Highest voltage for equipment (kV)	72.5	126	145	170	252	363	420	550	
	Power frequency withstand voltage (kV)	155	255	305	355	505	625	750	870	
	Lightning impulse full wave withstand voltage (kV)	325	550	650	750	1050	1175	1550	1800	
	Operating impulse withstand voltage (kV)	-	-	-	-	850	950	1175	1300	
	Rated current (A) (Threading type)	630-1250	630-1250	630-1250	630-1250	630-1250	630-1250	630-1250	630-1250	
	Rated current (A) (Current carrying type)	1600-3150	1600-3150	1600-3150	1600-3150	1600-3150	1600-3150	1600-3150	1600-4000	
	Ambient temperature (C)	Minimum temperature:-45 C , maximum temperature:45 C								
	Strength under shock (g)	0.5/0.25								

Remark: The parameters in the table are typical engineering parameters, which can be customized according to different customer requirements.