## ADS series / High Voltage Shunt Capacitor

### **TYPICAL APPLICATIONS**

Mainly used for power system to provide the reactive power, increase transmission the line loss and improve the quality of electric energy.

#### **■OPERATING ENVIRONMENT**

- 1. Altitude in service not exceeding 2000m\*
- 2. Ambient temperature is between the range of -40 $\sim$ +45 $^{\circ}$ C \*
- 3. Relative humidity of environment is not higher than 85 %( in  $20\pm5^{\circ}$ C)
- 4. Pollution class IV(Leakage distance is larger than 3.1cm/kV)
- 5. There is no fierce vibrating, noxious gas, the steam, and conductive and explosive dust particle in the installation sites.
- 6. Installation site is well-ventilated if indoor.
- \*Proposal should be proposed before ordering when surpassing this value.

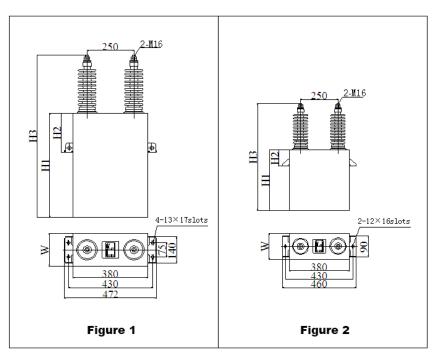
### **■ GENERAL TECHNICAL CHARACTERISTICS**

- 1. Capacity deviation -3~+5%.
- 2. For AC rated voltage the loss angle tangent value of capacitors is no more than 0.03% at 20  $^\circ$ C.
- 3. Capacitors permit voltage up to 1.05Un for a long time in the power frequency stable state. Under the condition of 1.1Un power frequency stable state, capacitors should not be used for more than 8 hours every 24 hours.
- 4. It is permitted capacitors run on the effective value 1.3In stable state, created by overvoltage and the higher harmonic, for a long time. For capacitors with the largest positive deviation capacity, the allowable overcurrent should not exceed 1.43In on the effective value.
- 5.This product complies with the standard of GB/T11024.1-2010 and IEC60871-1:2005 Shunt Capacitors for AC Power System having a rated voltage above 1000V---part 1:General and DL/T840-2003 Technical Specification of High Voltage Shunt Capacitor.

### ■STRUCTURE AND CHARACTERISTICS OF THE PRODUCTS

- 1. The capacitor is mainly composed of a case, high strength of the crimping bushing and a core.
- 2. The case, made of good quality stainless steel molding, is made by argon arc welding to ensure that the product has a good tightness and high explosion stability. Can run well in low temperature environment.
- 4. Elements are made up of high-quality polypropylene film and ultra-thin aluminum foil. Folding and convex aluminum foil structure improves the plate edge effect. So the partial discharge characteristics of capacitors are improved.
- 5. The product is equipped with glass glaze film discharge resistor which is very reliable and can reduce the voltage from the initial peak voltage of  $\sqrt{2}$  Un to below 75V in 10 minutes after the power is cut off.
- 6. The shunt capacitor with built-in fuse which is arranged between the elements can ensure the intact elements operate normally when isolating the faulty elements effectively at the same time. Then products can be with higher reliability.
- 7. The elements of products are rolled in the ultra-clean state. Cluster pumping single note drip impregnating technology is used for impregnation process which makes the products have the characteristics of low loss, low magnitude of partial discharge and long service life.

### **OUTLINE DRAWING**





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### ■HOW TO ORDER:

K2S A M 2.5 413 3 Series Code: Rated voltage: Rated Output: No. of Phase: Internal Impermanent Code: Main Medium Code: Code K2S: ADS Series Kilovolt(kV) A: Benzyl toluene M: all film medium Kilovar (kvar) 1: one-phase F: PXE F: Film paper 3: three-

composite medium phase

### **■ELECTRICAL SPECIFICATION**

Unit: mm

Table 1: Internally fused for high voltage shunt capacitor

	Rated	Rated	Rated	Weight	H1	H2	Н3	w	No. of
Model	voltage	Output	Capacitance	(kg)	(mm)	(mm)	(mm)	(mm)	dimensional
	(kV)	(kvar)	(μ <b>F</b> )	5/	(,	(,	()	()	drawing
K2SAM1.05-100-1	1.05	100	288.7	34	375	110	685	140	Fig. 2
K2SAM1.05-200-1	1.05	200	577.4	54	535	110	845	170	Fig.1
K2SAM2.1-100-1	2.1	100	72.2	28	310	110	620	140	Fig.2
K2SAM2.1-200-1	2.1	200	144.4	44	425	110	735	170	Fig.1
K2SAM3.15-100-1	3.15	100	32.1	28	310	110	620	140	Fig.2
K2SAM3.15-200-1	3.15	200	64.2	44	425	110	735	170	Fig.1
K2SAM3.15-300-1	3.15	300	96.2	59	590	235	900	170	Fig.1
K2SAM3.15-334-1	3.15	334	107.1	69	645	265	955	170	Fig.1
K2SAM6.6/√3-100-1	6.6/√3	100	21.9	28	310	110	620	140	Fig.2
K2SAM6.6/√3-200-1	6.6/√3	200	43.9	42	410	110	720	170	Fig.1
K2SAM6.6/√3-334-1	6.6/√3	334	73.3	62	630	265	940	170	Fig.1
K2SAM6.6/√3-400-1	6.6/√3	400	87.7	72	735	300	1045	170	Fig.1
K2SAM6.6/√3-500-1	6.6/√3	500	109.7	80	820	350	1130	190	Fig.1
K2SAM7.2/√3-100-1	7.2/√3	100	18.4	28	310	110	620	140	Fig.2
K2SAM7.2/√3-200-1	7.2/√3	200	36.8	42	410	110	720	170	Fig.1
K2SAM7.2/√3-334-1	7.2/√3	334	61.5	62	630	265	940	170	Fig.1
K2SAM7.2/√3-400-1	7.2/√3	400	73.7	72	735	300	1045	170	Fig.1
K2SAM7.2/√3-500-1	7.2/√3	500	92.1	80	820	350	1130	190	Fig.1
K2SAM11/√3-200-1	11/√3	200	15.8	43	410	110	720	170	Fig.1
K2SAM11/√3-300-1	11/√3	300	23.7	57	565	235	875	170	Fig.1
K2SAM11/√3-334-1	11/√3	334	26.4	61	615	265	925	170	Fig.1
K2SAM11/√3-400-1	11/√3	400	31.6	71	720	300	1030	170	Fig.1
K2SAM11/√3-500-1	11/√3	500	39.5	87	805	350	1115	190	Fig.1
K2SAM11/√3-600-1	11/√3	600	47.4	101	945	400	1255	190	Fig.1
K2SAM12/√3-200-1	12/√3	200	13.26	43	410	110	720	170	Fig.1
K2SAM12/√3-300-1	12/√3	300	19.9	58	580	235	890	170	Fig.1
K2SAM12/√3-334-1	12/√3	334	22.2	63	630	265	940	170	Fig.1
K2SAM12/√3-400-1	12/√3	400	26.5	72	735	300	1045	170	Fig.1
K2SAM12/√3-500-1	12/√3	500	33.2	89	825	350	1135	190	Fig.1
K2SAM12/√3-600-1	12/√3	600	39.8	104	970	400	1280	190	Fig.1
K2SAM11/2-334-1	11/2	334	35.2	64	640	265	950	170	Fig.1
K2SAM11/2-417-1	11/2	417	43.9	79	720	300	1030	190	Fig.1
K2SAM11/2-500-1	11/2	500	52.6	91	840	350	1150	190	Fig.1
K2SAM12/2-334-1	12/2	334	29.5	64	640	265	950	170	Fig.1
K2SAM12/2-417-1	12/2	417	36.9	79	720	300	1030	190	Fig.1
K2SAM12/2-500-1	12/2	500	44.2	91	840	350	1150	190	Fig.1
K2SAM11-417-1	11	417	11.0	79	720	300	1030	190	Fig.1
K2SAM11-500-1	11	500	13.2	91	840	350	1150	190	Fig.1
K2SAM11-600-1	11	600	15.8	106	990	400	1300	190	Fig.1
K2SAM12-417-1	12	417	9.2	79	720	300	1030	190	Fig.1
K2SAM12-500-1	12	500	11.1	91	840	350	1150	190	Fig.1
K2SAM12-600-1	12	600	13.3	106	990	400	1300	190	Fig.1
K2SAM3.46-167-1	3.46	167	44.403	39	505	110	735	140	Fig.2

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Table 2: Externally fused for high voltage shunt capacitor

Model	Rated voltage (kV)	Rated Output (kvar)	Rated Capacitance (µF)	Weight (kg)	H1 (mm)	H2 (mm)	H3 (mm)	W (mm)	No. of dimensional drawing
K2SAM11/√3-100-1	11/√3	100	7.9	28	310	110	620	140	Fig.2
K2SAM11/√3-200-1	11/√3	200	15.8	44	425	110	735	170	Fig.1
K2SAM11/√3-300-1	11/√3	300	23.7	59	590	235	900	170	Fig.1
K2SAM12/√3-100-1	12/√3	100	6.6	28	310	110	620	140	Fig.2
K2SAM12/√3-200-1	12/√3	200	13.3	44	425	110	735	170	Fig.1
K2SAM12/√3-300-1	12/√3	300	19.9	59	590	235	900	170	Fig.1
K2SAM11-100-1	11	100	2.6	28	310	110	620	140	Fig.2
K2SAM11-200-1	11	200	5.3	44	425	110	735	170	Fig.1
K2SAM11-300-1	11	300	7.9	59	590	235	900	170	Fig.1
K2SAM12-100-1	12	100	2.2	28	310	110	620	140	Fig.2
K2SAM12-200-1	12	200	4.4	44	425	110	735	170	Fig.1
K2SAM12-300-1	12	300	6.6	59	590	235	900	170	Fig.1

### Appendix:

- 1. Internally fused for high voltage shunt capacitor of B series, see table 1.
- 2. Externally fused for high voltage shunt capacitor of B series, see table 2.
- 3. Dimensions of high voltage shunt capacitor of B series, see table 1 and table 2.

### Note:

- 1. Because of the improvement of technology and development of structure, the size in the table above may be inconsistent with the actual one. Please subject to the size of the actual products.
- 2. If there are special requirements on the type specification or size, we can consult for customization which is based on customer needs.