NUINTEK
Challenge & Passion

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Challenge & Passion



|주|뉴인텍

Contents

03 Introduction
04 CEO Greeting
05 History
06 SH Power Dry Capacitor
09 SH Power Wet Capacitor
12 High Voltage Power Capacitor
18 Serise Reactor & Discharge Coil

Introduction

NUINTEK is a company who pursues human's convenience through the parts industry. It is our thought that to make richness for people through that to make richness for people through technical development, the parts industry should be developed.
NUINTEK is, manufacturing the core parts with basic materials technologies that is a source of the parts industry, thinking only about parts, a sticked company.
To cover the parts for home appliances, advanced communications and the parts which can adopt to the environment, NUINTEK will be a company who pursues human's convenience with an endless technical development.

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Zip Code : 31423
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CEO Greeting



NUINTEK has been concentrating on film capacitor business for half century.
We are currently expanding our business areas from metallized capacitor film and capacitors for appliance applications which closely relate to human life, to advanced technology applications for both renewable energy and eco-friendly automobile which are the main focuses of the business of the company.
With strong support of the customers, we have been able to achieve the world best quality level and become one of the largest metallized film manufacturers in the world. AS a CEO of the company, it is my top priority to lead NUINTEK to further grow for the century to com, into a company that our customers take pride in.

CEO Chang Ki Soo



History

2000.01 Established a Joint Venture Company ("Nuintek VRK") in Thailand
2000.03 Change Company's Registered Name to "NUINTEK Co., Ltd."
2004.01 Incorporated the China Facility to the Registered Company, "KUKKWANG Suzhou Electric Co., Ltd."
2005.01 Started Developing Capacitors for Eco-Friendly Automobiles
2006.06 Acquired ISO 14001:2004 Environmental Management Certification from KSA
2008.02 Selected as an Exclusive Collaborating Partner for Hyundai-Kia Motors' Eco-friendly Automobiles
2010.11 Selected as an Exclusive Parts Supplier for Hyundai-Kia Motors' Hybrid Vehicle Models
2011.12 Selected as an Exclusive Parts Supplier for Kia Motors' Electric Vehicle "RAY"
2012.03 Acquired KS Certification for High-Voltage Power Factor Correction Capacitors
2012.04 Selected as an Exclusive Parts Supplier for Hyundai Motors' Fuel Cell Electric Vehicle "Tucson ix" and Hybrid Model of Bus
2013.01 Won the "Green Car Award of the Venture Companies" from Korea Automotive Technology Institute (KATECH)
2013.01 Selected as an Exclusive Parts Supplier for Hyundai Motors' PSEV Electric Vehicle
2013.05 Received the Korean Prime Minister's Citation of Industrial Contribution (CEO)
2013.05 Selected as an Exclusive Parts Supplier for Hyundai Motors' LF Hybrid Vehicle
2015.01 Established a Joint Venture Company ("NUINTEK DONGGUAN CO.,LTD") in China



SH Power Dry Capacitors

■ SH Power Dry Capacitors Feature.

◈ It is very excellent product to have a polypropylene film with dielectric and soft resin with insulator. And They have very excellent ability that low loss, coalescence reduction, prevention of oil leak, prevention of disasters.
◈ It has return to self- healing ability when metalized part occurred to scatter and have to assure product of long life. If It has a trouble in dielectric.
◈ It makes good use of field that require prevention of fire and explosion without oil.
◈ It use to have polyurethane soft resin with dielectric to help natural part.

■ Capacity Range

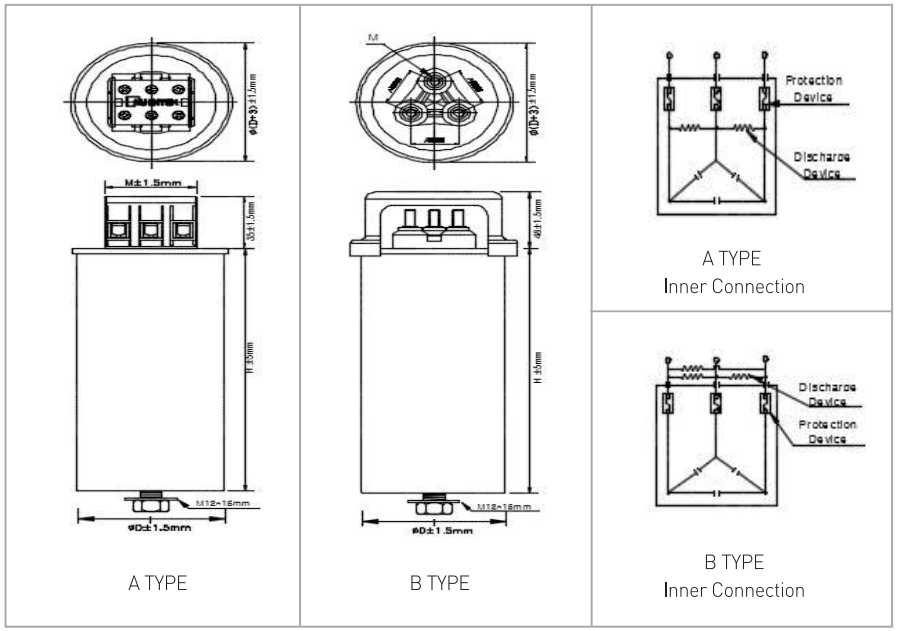
Phase	3
Rated current range.	1 ~ 30kvar
	30 ~ 600uF
Rated voltage range	220 ~ 660V
Frequency	50Hz / 60Hz

■ Standard and Performance

Location	· Indoor
Ambient temperature	· -25˚C ~ +45˚C(Average Less then 35˚C a day.
Max. Permissible Overcurrent	· Rated normal current is below 130%
Withstand voltage	· Between terminals : Rated voltage × 2.15(10sec)
	· Terminals to case: 3000VAC(2sec)
Safety Device	· Inner pressure Security devices
Discharge Device	· For this product that discharge performance to below 75V within 3 minute
Impregnant	· Polyurethane Soft Resin (Non PCB'S)
Reference Standard	· KS C 4801, KS C IEC 60831, IEC 60831
Max. Permissible Voltage	· Rated voltage x 110% (Less then 8hours during 24hours)
	· Rated voltage x 110% (Less then 30minute during 24hours)
	· Rated voltage x 110% (Less then 3times during 5minutes for 1month
	· Rated voltage x 110% (Less then 1times during 1minutes for 1month

SH Power Dry Capacitors

■ Drawing



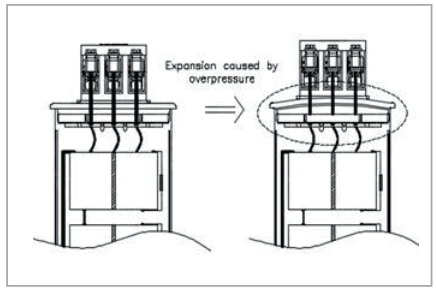
A TYPE

B TYPE

A TYPE
Inner Connection

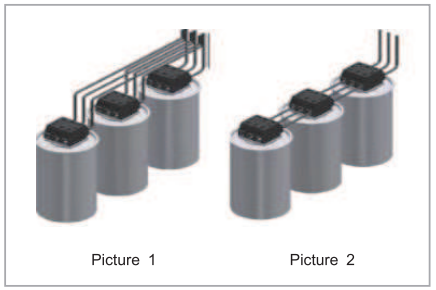
B TYPE
Inner Connection

■ Inner type of security device



It makes a safety to shut out power supply,
When have high internal pressure for end of life

■ Parallel connection method



Picture 1 Picture 2

Parallel capacitor exceed 50A same as picture 1, below 50A same as picture 2.

ex) 440V 3P 60Hz 120kvar 3 of parallel b connection.
: Rated current 26.2A x 3 parallel = 78.6A
: connect with picture

SH Power Dry Capacitors

■ SH Power Dry Capacitors

Rated Voltage [Vac]	Rated capacity		Part No	Rated Current [A]	Dimension [mm]				TYPE
	kvar	㎌			D	H	A	M	
400	5	100	KNE-4039965S	7.2	76	165	-	45	A
	10	199	KNE-4031996S	14.4	76	225	-	45	A
	15	299	KNE-4032996S	21.7	86	255	-	45	A
	20	398	KNE-4033986S	28.9	116	215	-/35	60/8	A/B
	25	497	KNE-4034976S	36.1	116	245	-/35	60/8	A/B
	30	597	KNE-4035976S	43.3	116	275	-/35	60/8	A/B

■ SPECS & SIZE : 415V 50Hz

Rated Voltage [Vac]	Rated capacity		Part No	Rated Current [A]	Dimension [mm]				TYPE
	kvar	㎌			D	H	A	M	
415	5	92	KNE-4139205S	7.0	76	165	-	45	A
	10	185	KNE-4131856S	13.9	76	225	-	45	A
	15	277	KNE-4132776S	20.9	86	225	-	45	A
	20	370	KNE-4133706S	26.8	86	295	-/30	45/6	A/B
	25	462	KNE-4134626S	34.8	116	215	-/35	60/8	A/B
	30	554	KNE-4135546S	41.7	116	245	-/35	60/8	A/B

■ SPECS & SIZE : 440V 50

Rated Voltage [Vac]	Rated capacity		Part No	Rated Current [A]	Dimension [mm]				TYPE
	kvar	㎌			D	H	A	M	
440	5	82	KNE-4438205S	6.6	76	165	-	45	A
	10	164	KNE-4431646S	12.4	76	195	-	45	A
	15	247	KNE-4432476S	19.7	86	225	-	45	A
	20	329	KNE-4433296S	26.2	86	265	-/30	45/6	A/B
	25	411	KNE-4434116S	32.8	116	215	-/35	60/8	A/B
	30	493	KNE-4434936S	39.4	116	245	-/35	60/8	A/B

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SH Power Wet Capacitors

■ SH Power Wet Capacitors Feature.

- ◈ It is very excellent product to have a polypropylene film with dielectric and soft resin with insulator. And They have very excellent ability that low loss, coalescence reduction, prevention of oil leak, prevention of disasters.
- ◈ It has return to self- healing ability when metalized part occurred to scatter and have to assure product of long life. If It has a trouble in dielectric.
- ◈ It makes good use of field that require prevention of fire and explosion without oil.
- ◈ It use to have polyurethane soft resin with dielectric to help natural part.

■ Capacity Range

Phase	3
Rated current range.	1 ~ 100kvar
	10 ~ 2000uF
Rated voltage range	220 ~ 1000V
Frequency	50Hz / 60Hz

■ Standard and Performance

Location	· Indoor
Ambient Temperature	· -25 ˚C ~ +45 ˚C(Average Less then 35 ˚C a day.
Max. Permissible Over current	· 130% of rated current
Withstand voltage	· Between terminals : Rated voltage × 2.15(10sec)
	· Terminals to case: 3000VAC(2sec)
Safety Device	· Pressure built security devices
Discharge Device	· Voltage decreases to Less then 75v in 3minutes when disconnected from power
Impregnant	· Po Oil (Non PCB'S)
Reference Standard	· KS C 4801, KS C IEC 60831, IEC 60831
Max. Permissible Overvoltage	· Rated voltage x 110% (Less then 8hours during 24hours)
	· Rated voltage x 110% (Less then 30minute during 24hours)
	· Rated voltage x 110% (Less then 3times during 5minutes for 1month
	· Rated voltage x 110% (Less then 1times during 1minutes for 1month

SH Power Wet Capacitors

■ Drawing

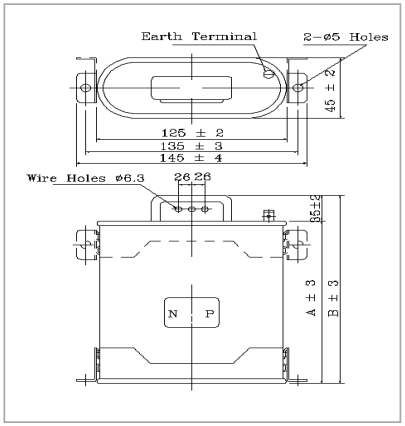


FIG-1

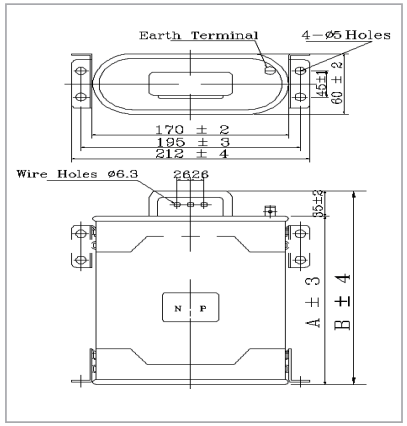


FIG-2

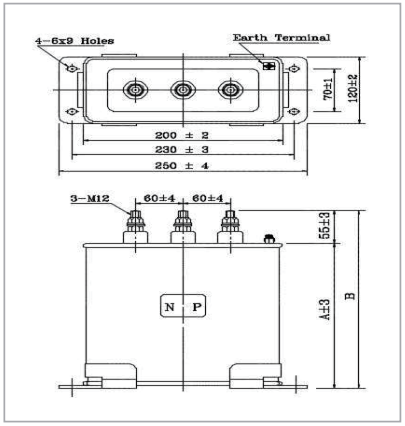


FIG-3

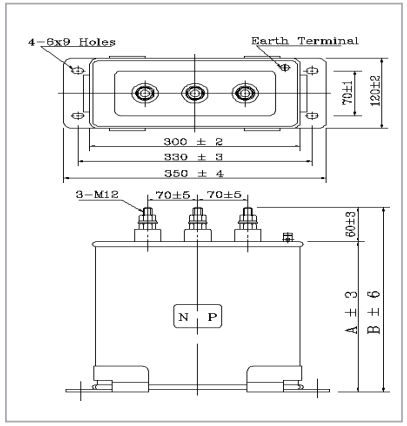
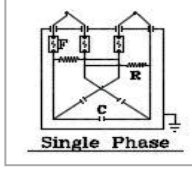
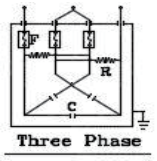
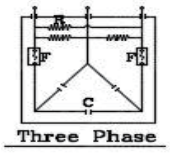


FIG-4

Fig-1, 2 Inner Connection - 1Φ	Fig-1, 2 Inner Connection - 3Φ	Fig-3, 4 Inner Connection
		
Single Phase	Three Phase	Three Phase

SH Power Wet Capacitors

■ SPECS & SIZE : 415V 50Hz

Rated Voltage [Vac]	Rated capacity		Part No	Rated Current [A]	Dimension [mm]		FIG
	kvar	㎌			A	B	
415	5	92	ENU-4125KS	7.0	130	165	1
	10	185	ENU-41210KS	13.9	150	185	2
	15	277	ENU-41215KS	20.9	200	235	2
	20	370	ENU-41220KS	27.8	250	285	2
	25	462	ANU-41225KS	34.8	190	245	3
	30	554	ANU-41230KS	41.7	220	275	3
	35	647	ANU-41235KS	48.7	230	285	3
	40	739	ANU-41240KS	55.7	240	295	3
	45	832	ANU-41245KS	62.6	280	335	3
	50	924	ANU-41250KS	69.6	290	345	3
	75	1386	ANU-41275KS	104.3	300	360	4
	100	1848	ANU-412100KS	139.1	350	410	4

■ SPECS & SIZE : 440V 50Hz

Rated Voltage [Vac]	Rated capacity		Part No	Rated Current [A]	Dimension [mm]		FIG
	kvar	㎌			A	B	
440	5	82	ENU-4425KS	6.6	130	165	1
	10	164	ENU-44210KS	13.1	200	235	2
	15	246	ENU-44215KS	19.7	250	285	2
	20	329	ENU-44220KS	26.2	180	235	3
	25	411	ANU-44225KS	32.8	190	245	3
	30	493	ANU-44230KS	39.4	230	285	3
	35	575	ANU-44235KS	45.9	240	295	3
	40	658	ANU-44240KS	52.5	280	335	3
	45	740	ANU-44245KS	59.1	290	345	3
	50	822	ANU-44250KS	65.6	300	355	3
	75	1233	ANU-44275KS	98.4	340	400	4
	100	1644	ANU-442100KS	131.2	390	450	4

Notice) The above information subject to change, so please contact us before purchasing.

High Voltage Power Capacitors

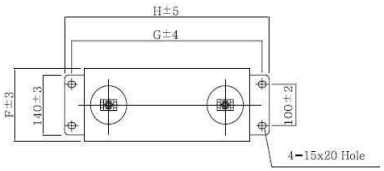
■ Specification

Location	· Indoor or outdoor
Ambient temperature	· -20℃ ~ +40℃ (24hours average Less than 35℃ , Less than 25℃ a year)
Max. Permissible Over current	· 130% of rated current
Withstand voltage (Between Terminals)	· Rated voltage x 2, 1minutes
Withstand voltage (Terminals to Case)	· (Insulating level 3 A) 16kv, 1minutes
	· (Insulating level 6 A) 22kv, 1minutes
	· (Insulating level 10A) 28kv, 1minutes
	· (Insulating level 20A) 50kv, 1minutes
Discharge Device	· Device Voltage decreases to Less then 50V in 5minutes when disconnected from power source.
Temperature rise	· Less than 30deg (at rated voltage, 35℃)
Reference Standard	· KS C 4802, KS C IEC 60871, IEC 60871
Max. Permissible Overvoltage	· Rated voltage x 110%(Less than 12hours during 24hours)
	· Rated voltage x 115% (Less than 30min during 24hours
	· Rated voltage x 120%(Less than 2times during 5minutes for 1month)
	· Rated voltage x 130%(Less than 2times during 1minutes for 1month)
Color	· Munsell No. 5Y 7/1

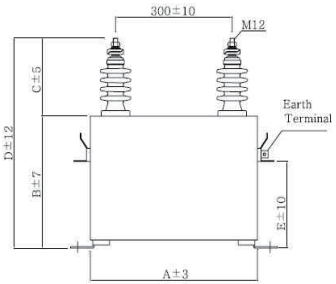


High Voltage Power Capacitors

■ High voltage power capacitors (1-phase)









Drawing



■ SPECS & SIZE : 3.3KV, 1.9KV, 1-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
3.3	1.9	50	26.3	APJ-P3319250D	430	230	185	415	100	115	495	530	28
		100	52.6	APJ-P33192100D	430	340	185	525	210	115	495	530	33
		150	79.0	APJ-P33192150D	430	370	185	555	240	145	495	530	39
		200	105.3	APJ-P33192200D	430	470	185	655	340	145	495	530	46
		250	131.6	APJ-P33192250D	430	560	185	745	380	145	495	530	51
		300	157.9	APJ-P33192300D	430	640	185	825	460	145	495	530	57
		400	210.5	APJ-P33192400D	430	820	185	1005	600	145	495	530	68

Notice) The above information subject to change, so please contact us before purchasing.

High Voltage Power Capacitors

■ SPECS & SIZE : 6.6KV, 3.8KV, 1-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
6.6	3.8	50	13.2	APJ-P6638250D	430	230	185	415	100	115	495	530	28
		100	26.3	APJ-P66382100D	430	350	185	535	220	115	495	530	34
		150	39.5	APJ-P66382150D	430	380	185	565	250	145	495	530	40
		200	52.6	APJ-P66382200D	430	470	185	655	340	145	495	530	46
		250	65.8	APJ-P66382250D	430	560	185	745	380	145	495	530	51
		300	79.0	APJ-P66382300D	430	650	185	835	470	145	495	530	57
		400	105.3	APJ-P66382400D	430	820	185	1005	600	145	495	530	68

■ SPECS & SIZE : 22.9KV, 6.6KV, 1-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
22.9	6.6	50	7.6	APJ-P2266250D	430	210	305	515	90	145	495	530	29
		100	15.2	APJ-P22662100D	430	310	305	615	180	145	495	530	36
		150	22.7	APJ-P22662150D	430	400	305	705	270	145	495	530	41
		200	30.3	APJ-P22662200D	430	490	305	795	360	145	495	530	47
		250	37.9	APJ-P22662250D	430	590	305	895	410	145	495	530	54
		300	45.5	APJ-P22662300D	430	680	305	985	470	145	495	530	60
		400	60.6	APJ-P22662400D	430	820	305	1125	600	145	495	530	72

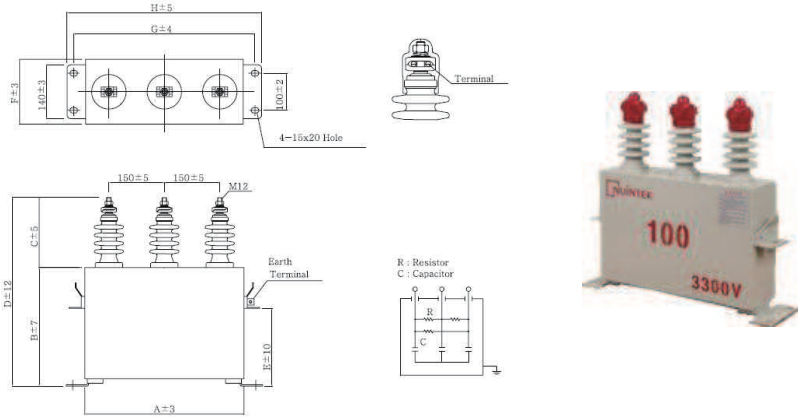
Notice) The above information subject to change, so please contact us before purchasing.

High Voltage Power Capacitors

■ SPECS & SIZE : 22.9KV, 13.2KV, 1-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
22.9	13.2	50	3.8	APJ-P2213250D	430	210	305	515	90	145	495	530	29
		100	7.6	APJ-P22132100D	430	310	305	615	180	145	495	530	36
		150	11.4	APJ-P22132150D	430	400	305	705	270	145	495	530	41
		200	15.2	APJ-P22132200D	430	490	305	795	360	145	495	530	47
		250	18.9	APJ-P22132250D	430	590	305	895	410	145	495	530	54
		300	22.7	APJ-P22132300D	430	680	305	985	470	145	495	530	60
		400	30.3	APJ-P22132400D	430	880	305	1185	660	145	495	530	73

■ High voltage power capacitors (3-phase)



Drawing

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High Voltage Power Capacitors

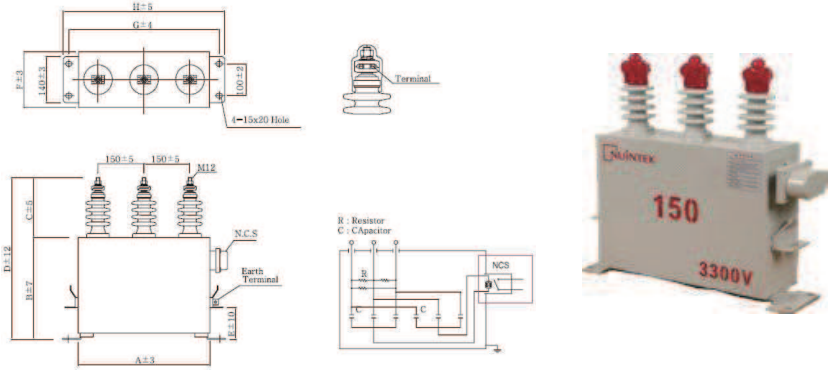
■ SPECS & SIZE : 3.3KV, 3.3KV, 3-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
3.3	3.3	50	8.8	APJ-P3333250S	430	220	185	405	90	115	495	530	21
		75	13.1	APJ-P3333275S	430	280	185	465	150	115	495	530	24
		100	17.5	APJ-P33332100S	430	280	185	465	150	145	495	530	29

■ SPECS & SIZE : 6.6KV, 6.6KV, 3-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
6.6	6.6	50	4.4	APJ-P6666250S	430	220	185	405	90	115	495	530	21
		75	6.6	APJ-P6666275S	430	280	185	465	150	115	495	530	24
		100	8.8	APJ-P66662100S	430	280	185	465	150	145	495	530	29

■ High voltage power capacitors (3-phase) - with NCS (Natural Current Sensor)



Drawing

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High Voltage Power Capacitors

■ SPECS & SIZE : 3.3KV, 3.3KV, 3-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
3.3	3.3	150	26.2	APJ-P33332150S	430	400	185	585	180	145	495	530	40
		200	35.0	APJ-P33332200S	430	480	185	665	260	145	495	530	47
		250	43.7	APJ-P33332250S	430	580	185	765	360	145	495	530	55
		300	52.5	APJ-P33332300S	430	680	185	865	460	145	495	530	63
		400	70.0	APJ-P33332400S	430	700	185	885	480	145	495	530	74
		500	87.5	APJ-P33332500S	430	830	185	1015	610	145	495	530	86

■ SPECS & SIZE : 6.6KV, 6.6KV, 3-Phase, 50Hz

Line Voltage [KV]	Rated Voltage [KV]	Rated capacity [kvar]	Rated Current [A]	Part No.	Dimension [mm]								Weight [kg]
					A	B	C	D	E	F	G	H	
6.6	6.6	150	13.1	APJ-P66662150S	430	420	185	605	200	145	495	530	41
		200	17.5	APJ-P66662200S	430	480	185	665	260	145	495	530	47
		250	21.9	APJ-P66662250S	430	580	185	765	360	145	495	530	55
		300	26.2	APJ-P66662300S	430	680	185	865	460	145	495	530	63
		400	35.0	APJ-P66662400S	430	700	185	885	480	145	495	530	74
		500	43.7	APJ-P66662500S	430	830	185	1015	610	145	495	530	86

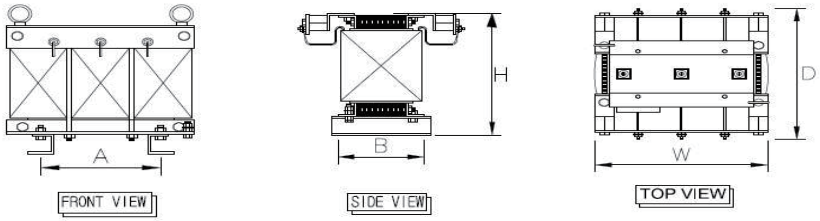
Notice) The above information subject to change, so please contact us before purchasing.

Serise Reactor & Discharge Coil

Specification

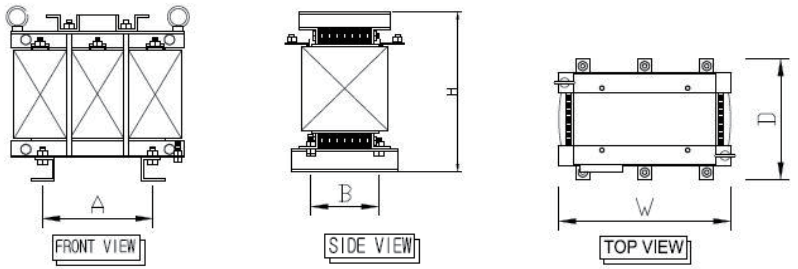
Location	· Indoor
Ambient temperature	· -20℃ ~ +40℃
Max. Permissible Overcurrent	· 120% of rated current(harmonic including)
Max. Permissible Overvoltage	· 110% of rated voltage
Temperature rise	· 130℃(H)
Reference Standard	· KS C 4806

High voltage



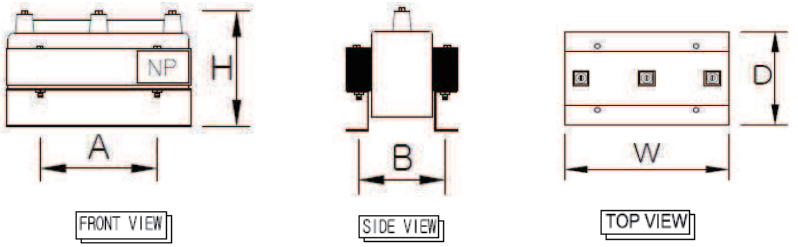
Line Voltage [KV]	Rated capacity [kva]	Part No.	Dimension [mm]					Weight [kg]
			W	D	H	A	B	
3.3/ 6.6	30	NSR-H1.8	360	440	370	250	260	45
	40	NSR-H2.4	360	450	370	250	270	49
	50	NSR-H3.0	360	460	370	250	280	53
	75	NSR-H4.5	420	170	400	290	290	68
	100	NSR-H6.0	450	490	420	310	310	87
	150	NSR-H9.0	480	500	440	330	310	105
	200	NSR-H12	510	520	490	350	330	135
	250	NSR-H15	510	530	490	350	340	145
	300	NSR-H18	510	540	490	350	350	154
	400	NSR-H24	600	540	520	410	360	198
	500	NSR-H30	600	560	520	410	380	220
	600	NSR-H36	640	560	560	440	380	275
	750	NSR-H45	640	570	560	440	390	289
	1000	NSR-H60	640	600	750	440	390	448

Low voltage



Line Voltage [KV]	Rated capacity [kva]	Part No.	Dimension [mm]					Weight [kg]
			W	D	H	A	B	
220- 440	10	NSR-L0.6	250	250	280	170	220	26
	15	NSR-L0.9	250	260	280	170	220	29
	20	NSR-L1.2	280	260	280	190	230	32
	25	NSR-L1.5	280	270	280	190	240	34
	30	NSR-L1.8	280	270	280	190	240	36
	40	NSR-L2.4	280	300	280	190	250	40
	50	NSR-L3.0	310	270	350	210	250	52
	60	NSR-L3.6	310	280	350	210	250	27
	75	NSR-L4.5	310	300	350	210	260	61
	100	NSR-L6.0	340	310	370	240	260	75
	150	NSR-L9.0	370	310	390	250	290	95
	200	NSR-L12.0	370	330	390	250	290	107

Dischage Coil



Rated capacity [kva]	Part No.	Dimension [mm]					Weight [kg]
		W	D	H	A	B	
220-440v	NSR-LDC	210	160	160	170	130	11
3.3/6.6kv	NSR-HDC	340	220	180	260	150	29

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