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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 stucked 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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History

- 1968. 01 Established "KUKKWANG Electric Factory" in Seoul.
- 1977. 07 Incorporate the Registered Company as "KUKKWANG Electric Co., Ltd."
- 1979. 04 Started Manufacturing Low-Voltage Power Factor Correction Capacitors.
- 1981. 10 Started Manufacturing Metallized Film for Capacitors.
- 1990. 02 Started Manufacturing Metallized film for AC Capacitors .
- 1995. 01 Acquired ISO:9002 Certifications for Metallized Film, AC Capacitors.
- 1996. 10 Incorporated the China Facility to the Registered Company, "KUKKWANG Suzhou Electric Co.,Ltd."
- 1997. 02 Listed in KOSDAQ Stock Exchange Market.
- 2000. 01 Established a Joint Venture Company ("Nuitek VRK") in Thailand
- 2000. 03 Change Company's Registered Name to "NUINTEK Co., Ltd."
- 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.
- 2013. 01 Won the "Green Car Award of the Venture Companies" from Korea Automotive Technology Institute (KATECH)
- 2015. 01 Established Company ("NUINTEK DONGGUAN CO.,LTD") in China
- 2015. 12 Acquired SQ Certifications for Metallized Film(SPV232), Assembly of electricity(EA65)
- 2016. 12 Acquired "CE" Certification.
- 2017. 03 Established "NUINTEK EUROPE SRL" in Romania.

SH Power Dry Capacitors

SH Power Dry Capacitors Feature.

- ◆ Using the polypropylene film which has excellent electronic properties as dielectric and using soft resin for insulator.
- ◆ Specialized in preventing for Heat losing, Leaking, Damage.
- ◆ Self-healing function under failure by the heat and electronic impact for durability of product.
- ◆ Exclusion of using the impregnated liquid to apply any production process where is required such safety working environment.
- ◆ Installing the circuit breaker inside of product against any internal failure of product.

Capacity Range

Phase	3
Rated capacity range	1 ~ 50kVAR
	30 ~ 924uF
Rated voltage range	220 ~ 800V
Frequency	50Hz / 60Hz

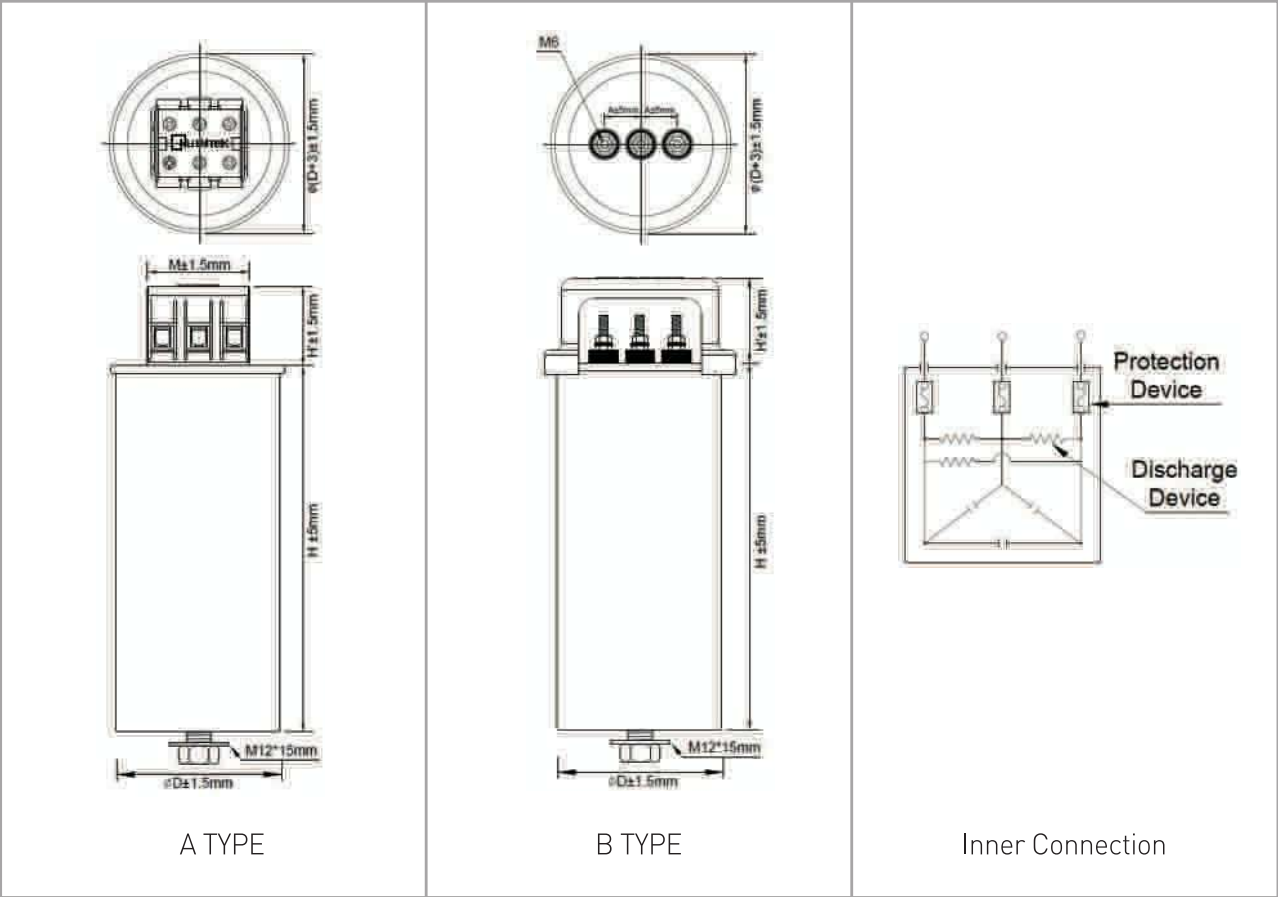
Standard and Performance

Location	· Indoor
Ambient temperature	· -25°C ~ +55°C(Average Less then 45°C a day).
Max. Permissible Overcurrent	· 150% of rated current
Withstand voltage	· Between terminals : Rated voltage × 2.15(10sec)
	· Terminals to case: 3000Vac(10sec) or 3600Vac(2sec)
Safety Device	· Inner pressure Security devices
Discharge Device	· Device Voltage decreases to Less than 75V in 1 minute when disconnected from power source (for 50kVAr capacitor is below 75V for 3 minute)
Impregnant	· Polyurethane Soft Resin (Non PCB'S)
Dielectric losses	· < 0.2 W/kVAR , Total < 0.45 W/kVAR
Reference Standard	· IEC 60831
Max. Permissible Voltage	· Rated voltage x 110% (8hours in every 24hours)
	· Rated voltage x 115% (30minute in every 24hours)
	· Rated voltage x 120% (5minute)
	· Rated voltage x 130% (1minute)

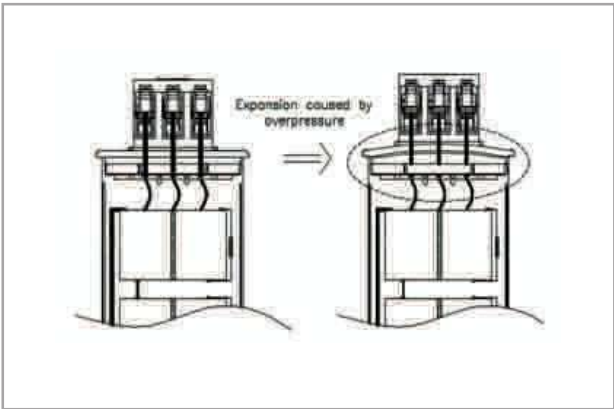


SH Power Dry Capacitors

Drawing

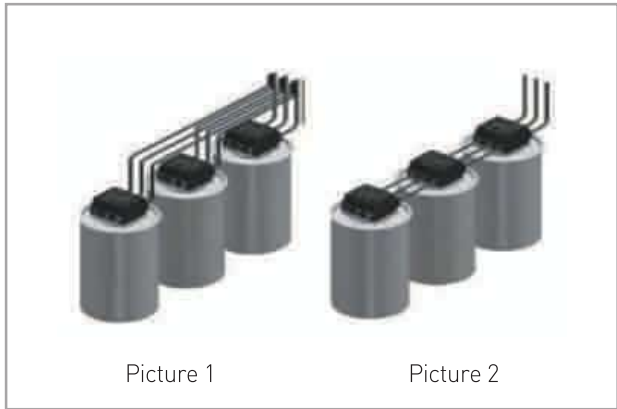


Inner type of security device



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

Parallel connection method



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

SPECS & SIZE : 250V/220V, 50Hz

Rated capacity			Part No	Rated Current [A]		Dimension [mm]				TYPE
kVAR		μF		220V	250V	D	H	A	M	
220V	250V									
1.94	2.5	3x42.5	KNE-2521286S	5.1	5.8	76	135	-	45	A
3.87	5	3x84.9	KNE-2522556S	10.2	11.5	76	195	-	45	A
5.8	7.5	3x127.4	KNE-2523826S	15.3	17.3	86	195	-	45	A
7.8	10	3x170	KNE-2525106S	20.4	23.1	86	265	-	45	A
9.7	12.5	3x212	KNE-2526366S	25.4	28.8	86	295	-	45	A
11.6	15	3x255	KNE-2527656S	30.5	34.7	116	215	-/23	62/-	A/B

SPECS & SIZE : 440V/415V, 50Hz

Rated capacity			Part No	Rated Current [A]		Dimension [mm]				TYPE
kVAR		μF				D	H	A	M	
440V	415V			440V	415V					
5	4.5	3x27.5	KNE-4438205S	6.6	6.2	76	165	-	45	A
10	8.9	3x54.8	KNE-4431646S	13.1	12.4	76	195	-	45	A
11.2	10	3x61.4	KNE-4131846S	14.7	13.9	76	225	-	45	A
12.5	11.1	3x68.5	KNE-4432066S	16.4	15.4	86	195	-	45	A
14	12.5	3x76.7	KNE-4132306S	18.4	17.4	86	225	-	45	A
15	13.3	3x82.2	KNE-4432476S	19.7	18.5	86	225	-	45	A
16.9	15	3x92.6	KNE-4132786S	22.2	20.9	86	225	-	45	A
20	17.8	3x109.6	KNE-4433296S	26.2	24.8	86	265	-	45	A
23	20	3x123.3	KNE-4133706S	29.5	27.8	86	295	-	45	A
25	22.2	3x137	KNE-4434116S	32.8	30.9	116	215	-/23	62/-	A/B
28.1	25	3x154	KNE-4134626S	36.9	34.8	116	215	-/23	62/-	A/B
30	26.7	3x164.5	KNE-4434936S	39.4	37.1	116	245	-/23	62/-	A/B
33.8	30	3x185	KNE-4135556S	44.3	41.8	116	245	-/23	62/-	A/B
40	35.5	3x219	KNE-4436586S	52.4	49.5	116	275	-/23	62/-	A/B
45	40	3x246.5	KNE-4137406S	59	55.7	136	275	-/23	62/-	A/B
50	44.5	3x274	KNE-4438226S	65.6	61.9	136	275	-/23	62/-	A/B
56.2	50	3x308	KNE-4139246S	73.7	69.6	136	275	-/23	62/-	A/B

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

SH Power Dry Capacitors

■ SPECS & SIZE : 525V/480V, 50Hz

Rated capacity			Part No	Rated Current [A]		Dimension [mm]				TYPE
kVAR		μF				D	H	A	M	
525V	480V			525V	480V					
10	8.33	3x38.5	KNE-4821166S	11	10	76	195	-	45	A
12.5	10.4	3x48.1	KNE-4821446S	13.7	12.6	76	225	-	45	A
15	12.5	3x57.7	KNE-4821736S	16.5	15	86	225	-	45	A
18	15	3x69.1	KNE-4822076S	19.7	18	86	225	-	45	A
20	16.7	3x77	KNE-4822316S	22	20.1	86	265	-	45	A
25	20.9	3x96.2	KNE-4822896S	27.1	25.1	116	215	-/23	62/-	A/B
30	25	3x115.1	KNE-4823456S	32.9	30.1	116	215	-/23	62/-	A/B

Construction of references Principle					
KNE-	48	2	345	6	S
LOW VOLTAGE DRY CAPACITOR	41 : 415V 44 : 440V 48 : 480V	1 : 60Hz 2 : 50Hz 3 : 50/60Hz	Total capacity [μF]	5 : 10 ⁻⁵ 6 : 10 ⁻⁶ 7 : 10 ⁻⁷	D : 1 Phase S : 3 Phase

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SH Power Wet Capacitors

■ SH Power Wet Capacitors Feature

- ◆ Using the polypropylene film which has excellent electronic properties as dielectric and using soft resin for insulator.
- ◆ Specialized in preventing for Heat losing, Leaking, Damage.
- ◆ Self-healing function under failure by the heat and electronic impact for durability of product.
- ◆ Exclusion of using the impregnated liquid to apply any production process where is required such safety working environment.
- ◆ Installing the circuit breaker inside of product against any internal failure of product.
- ◆ Environment-friendly electronic product by using NON-PCB'S.

■ Capacity Range

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

■ Standard and Performance

Location	· Indoor
Ambient Temperature	· -25°C ~ +55°C(Average Less then 45°C a day).
Over current	· 150% of rated current
Withstand voltage	· Between terminals : Rated voltage × 2.15(10sec)
	· Terminals to case: 3000Vac(10sec) or 3600Vac(2sec)
Safety Device	· Pressure built security devices
Discharge Device	· Device Voltage decreases to Less than 50V in 1minutes when disconnected from power source.
Impregnant	· Po Oil (Non PCB'S)
Dielectric losses	· < 0.2 W/kVAR , Total < 0.45 W/kVAR
Reference Standard	· IEC 60831
Max. Permissible Voltage	· Rated voltage x 110% (8hours in every 24hours)
	· Rated voltage x 115% (30minutes in every 24hours)
	· Rated voltage x 120% (5minutes)
	· Rated voltage x 130% (1minute)



SH Power Wet Capacitors

Drawing

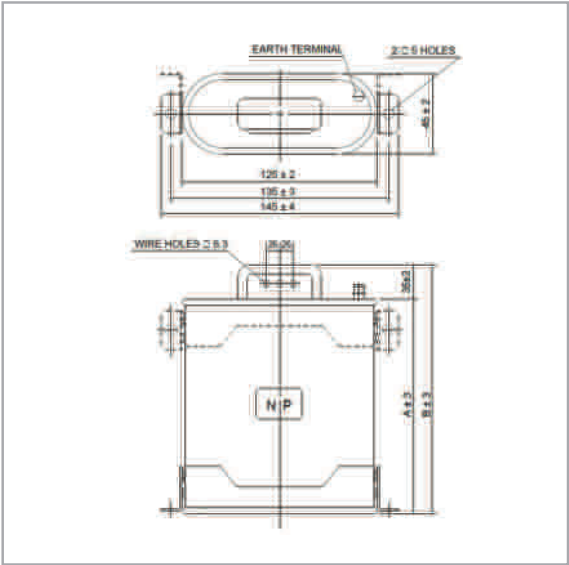


FIG-1

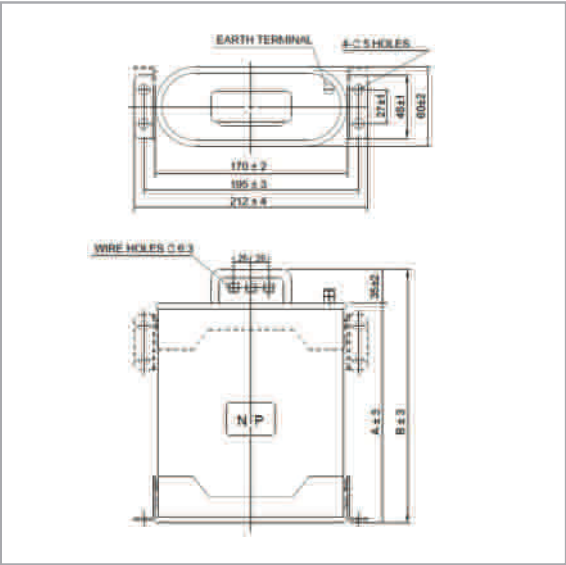


FIG-2

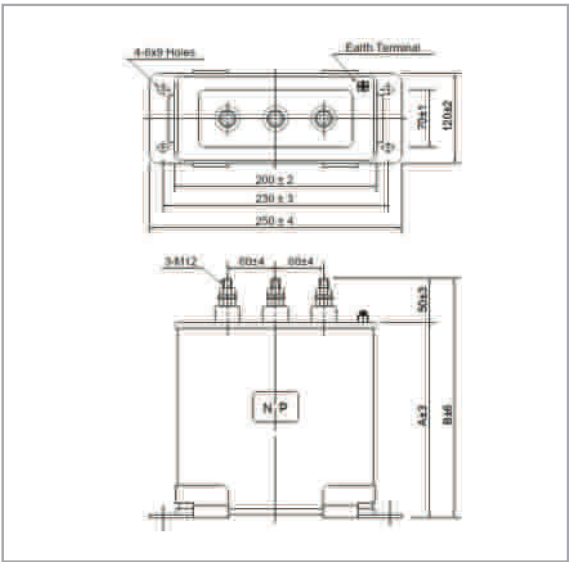


FIG-3

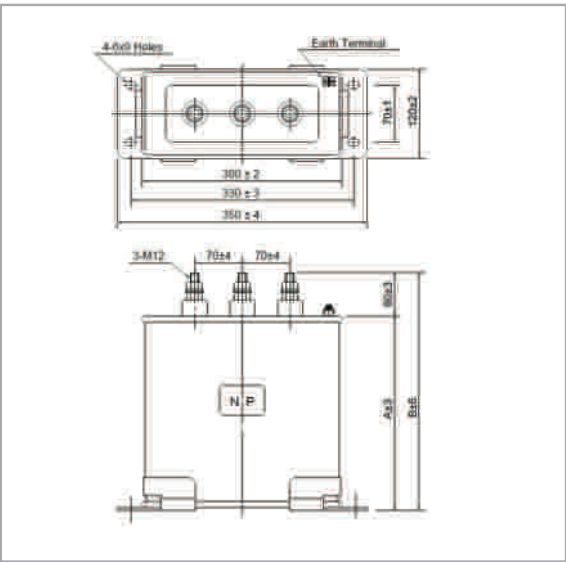


FIG-4

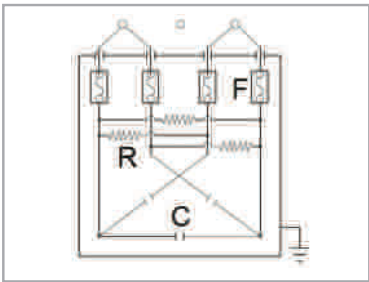


Fig-1, 2
Inner Connection - 1 Ø

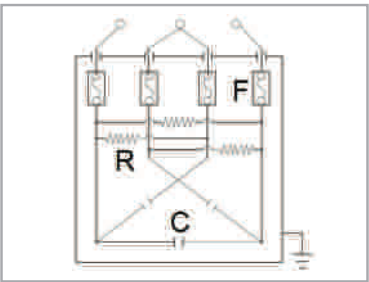


Fig-1, 2
Inner Connection - 3 Ø

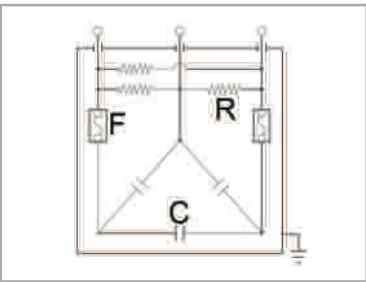


Fig-3, 4
Inner Connection

SH Power Wet Capacitors

SPECS & SIZE : 220V 50Hz

Rated Voltage	Rated capacity	Part No	Current [A]	Dimension [mm]		FIG
	kVAR			A	B	
220V	5	ENU-2225KS	13.1	152	187	1
	10	ANU-22210KS	26.2	170	220	3
	15	ANU-22215KS	39.4	190	240	3
	20	ANU-22220KS	52.5	240	290	3
	25	ANU-22225KS	65.6	280	330	3
	30	ANU-22230KS	78.7	250	310	4
	35	ANU-22235KS	91.9	260	320	4
	40	ANU-22240KS	105.0	300	360	4
	45	ANU-22245KS	118.1	320	380	4
	50	ANU-22250KS	131.2	340	400	4

SPECS & SIZE : 400V 50Hz

Rated Voltage	Rated capacity	Part No	Current [A]	Dimension [mm]		FIG
	kVAR			A	B	
400V	5	ENU-4025KS	7.2	132	167	1
	10	ENU-40210KS	14.4	152	187	2
	15	ENU-40215KS	21.7	202	237	2
	20	ANU-40220KS	28.9	180	230	3
	25	ANU-40225KS	36.1	190	240	3
	30	ANU-40230KS	43.3	230	280	3
	35	ANU-40235KS	50.5	240	290	3
	40	ANU-40240KS	57.7	280	330	3
	45	ANU-40245KS	65.0	290	340	3
	50	ANU-40250KS	72.2	300	350	3
	75	ANU-40275KS	108.3	320	380	4
	100	ANU-402100KS	144.3	380	440	4

SPECS & SIZE : 415V 50Hz

Rated Voltage	Rated capacity	Part No	Current [A]	Dimension [mm]		FIG
	kVAR			A	B	
415V	5	ENU-4125KS	7.0	132	167	1
	10	ENU-41210KS	13.9	152	187	2
	15	ENU-41215KS	20.9	202	237	2
	20	ENU-41220KS	27.8	252	287	2
	25	ANU-41225KS	34.8	180	230	3
	30	ANU-41230KS	41.7	220	270	3
	35	ANU-41235KS	48.7	230	280	3
	40	ANU-41240KS	55.7	240	290	3
	45	ANU-41245KS	62.6	280	330	3
	50	ANU-41250KS	69.6	290	340	3
	75	ANU-41275KS	104.3	300	360	4
	100	ANU-412100KS	139.1	350	410	4

SPECS & SIZE : 440V 50Hz

Rated Voltage	Rated capacity	Part No	Current [A]	Dimension [mm]		FIG
	kVAR			A	B	
440V	5	ENU-4425KS	6.6	132	167	1
	10	ENU-44210KS	13.1	202	237	2
	15	ENU-44215KS	19.7	252	287	2
	20	ENU-44220KS	26.2	180	230	3
	25	ANU-44225KS	32.8	190	240	3
	30	ANU-44230KS	39.4	230	280	3
	35	ANU-44235KS	45.9	240	290	3
	40	ANU-44240KS	52.5	280	330	3
	45	ANU-44245KS	59.1	290	340	3
	50	ANU-44250KS	65.6	300	350	3
	75	ANU-44275KS	98.4	340	400	4
	100	ANU-442100KS	131.2	390	450	4

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

High Voltage Power Capacitors

High Voltage Power Capacitors Feature

- ◆ It is very excellent product to have a polypropylene film with dielectric insulator. And They have very excellent ability that low loss, coalescence reduction, prevention of oil leak, prevention of disasters.
- ◆ The use of high quality materials ensure reliability and longevity.

Specification

Location	· Indoor or outdoor
Ambient temperature	· -20℃ ~ +55℃ (24hours average Less than 45℃ , Less than 35℃ a year)
Max. Permissible Over current	· 150% of rated current
Withstand voltage (Between Terminals)	· Un(VAC) x 2.15 10sec or Un(VDC) x 4 10sec
Dielectric losses	· < 0.2W/kVAR or Less with Internal fuse
	· < 0.15W/kVAR or Less without Internal fuse
Oil leakage	· No oil leakage when heat is applied to all parts of capacitor until temperature reaches 70℃
Discharge Device	· Device Voltage decreases to Less than 50V in 5minutes when disconnected from power source.
Temperature rise	· Less than 30deg (at rated voltage, 35℃)
Reference Standard	· IEC 60871
Max. Permissible Overvoltage	· Rated voltage x 110% (12hours in every 24hours)
	· Rated voltage x 115% (30min in every 24hours)
	· Rated voltage x 120% (5minutes)
	· Rated voltage x 130% (1minute)
Color	· Munsell No. 5Y 7/1

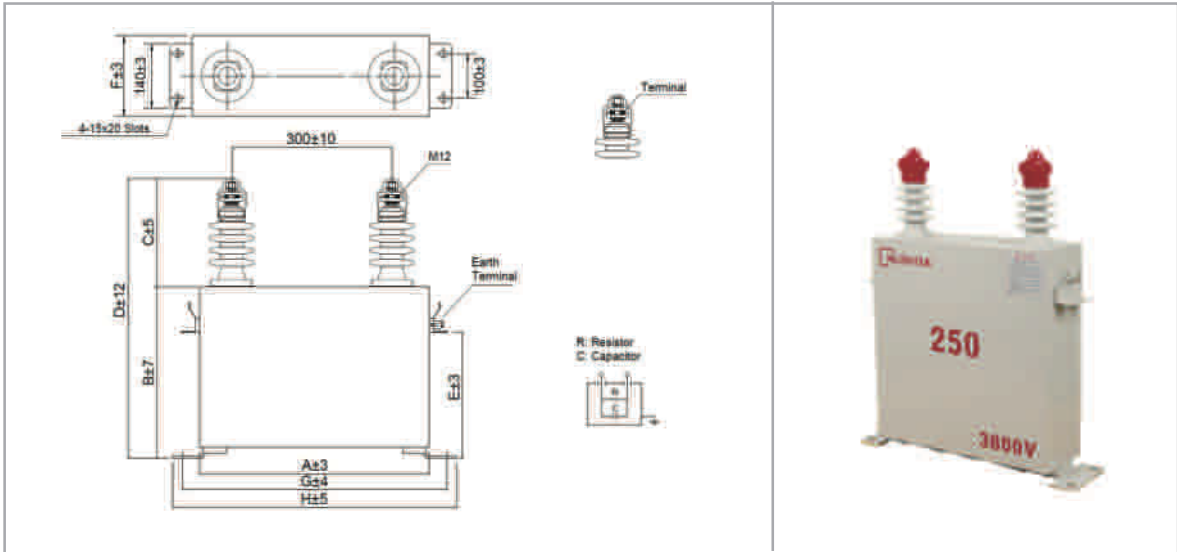
Construction of references Principle

APJ-P	22	12	2	100	D
HIGH VOLTAGE CAPACITOR	Line Voltage [kV]	Rated Voltage [kV]	1 : 60Hz 2 : 50Hz 3 : 50/60Hz	Capacitor capacity [kVAR]	D : 1 Phase S : 3 Phase



High Voltage Power Capacitors

High voltage power capacitors (1-phase)



Drawing

SPECS & SIZE : 1-Phase

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 7.2kV
			A	B	C	D	E	F	G	H		
7.2 6.6 6.0	4.16 3.8 3.46	50	430	220	185	405	90	115	495	530	20	20/60
		100	430	270	185	455	140	145	495	530	27	
		150	430	340	185	525	210	145	495	530	33	
		200	430	420	185	605	290	145	495	530	39	
		250	430	500	185	685	320	145	495	530	46	
		300	430	560	185	745	380	145	495	530	50	
		400	430	610	185	795	430	175	495	530	62	
		500	430	730	185	915	510	175	495	530	74	

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 12kV
			A	B	C	D	E	F	G	H		
12 11	6.93 6.35	100	430	270	185	455	140	145	495	530	28	28/75
		200	430	410	185	595	280	145	495	530	39	
		300	430	550	185	735	370	145	495	530	50	
		400	430	610	185	795	430	175	495	530	62	
		500	430	710	185	895	510	175	495	530	72	
		600	430	820	185	1005	600	175	495	530	82	
		700	430	940	185	1125	720	175	495	530	93	
		800	430	1060	185	1245	840	175	495	530	104	
		900	430	1180	185	1365	960	175	495	530	114	
		1000	430	1290	185	1475	1070	175	495	530	126	

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High Voltage Power Capacitors

■ SPECS & SIZE : 1-Phase

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 17.5kV
			A	B	C	D	E	F	G	H		
15 13.8	8.66 7.97	100	430	260	265	525	130	145	495	530	27	38/95
		200	430	400	265	665	270	145	495	530	38	
		300	430	540	265	805	360	145	495	530	49	
		400	430	580	265	845	400	175	495	530	60	
		500	430	690	265	955	490	175	495	530	70	
		600	430	810	265	1075	590	175	495	530	81	
		700	430	920	265	1185	700	175	495	530	91	
		800	430	1030	265	1295	810	175	495	530	102	
		900	430	1140	265	1405	920	175	495	530	112	
		1000	430	1250	265	1515	1030	175	495	530	122	

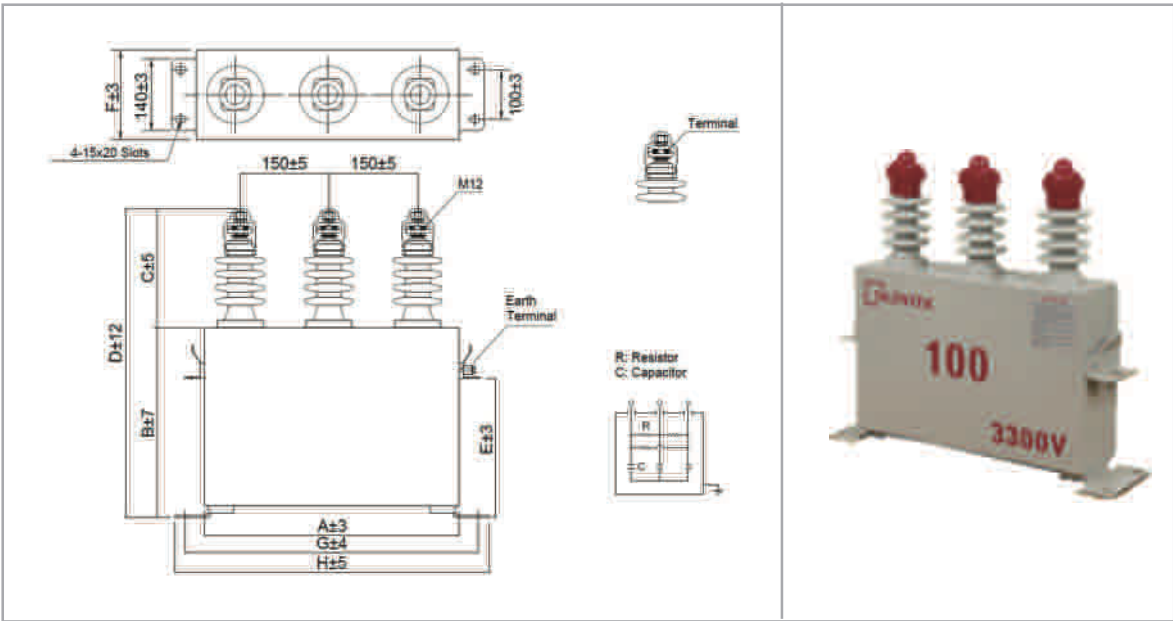
Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 24kV
			A	B	C	D	E	F	G	H		
23	13.2	100	430	270	305	575	140	145	495	530	27	50/125
		200	430	400	305	705	270	145	495	530	38	
		300	430	530	305	835	350	145	495	530	48	
		400	430	570	305	875	400	175	495	530	59	
		500	430	670	305	975	470	175	495	530	69	
		600	430	770	305	1075	570	175	495	530	78	
		700	430	880	305	1185	660	175	495	530	88	
		800	430	1000	305	1305	780	175	495	530	99	
		900	430	1100	305	1405	880	175	495	530	113	
		1000	430	1200	305	1505	980	175	495	530	118	

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 36kV
			A	B	C	D	E	F	G	H		
33 30	19.05/9.53 17.32/8.66	100	430	280	305	585	150	145	495	530	28	50/150
		200	430	410	305	715	280	145	495	530	39	
		300	430	560	305	865	380	145	495	530	50	
		400	430	600	305	905	420	175	495	530	62	
		500	430	710	305	1015	510	175	495	530	73	
		600	430	810	305	1115	590	175	495	530	82	
		700	430	930	305	1235	710	175	495	530	93	
		800	430	1060	305	1365	840	175	495	530	106	
		900	430	1160	305	1465	940	175	495	530	115	
		1000	430	1280	305	1585	1060	175	495	530	127	

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High Voltage Power Capacitors

■ High voltage power capacitors (3-phase)



Drawing

■ SPECS & SIZE : 3-Phase

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 7.2kV
			A	B	C	D	E	F	G	H		
7.2 6.6 6.0	7.2 6.6 6.0	50	430	220	185	305	90	115	495	530	20	20/60
		100	430	270	185	455	140	145	495	530	27	
		150	430	350	185	535	220	145	495	530	34	
		200	430	430	185	615	300	145	495	530	40	
		250	430	500	185	685	320	145	495	530	46	
		300	430	580	185	765	400	145	495	530	52	
		400	430	600	185	785	420	175	495	530	62	
		500	430	740	185	925	520	175	495	530	75	

Line Voltage [kV]	Rated Voltage [kV]	Rated capacity [kVAR]	Dimension [mm]								Weight [kg]	Insulation Level 12kV
			A	B	C	D	E	F	G	H		
11	11	100	430	270	185	455	140	145	495	530	27	28/75
		200	430	420	185	605	290	145	495	530	39	
		300	430	560	185	745	380	145	495	530	50	
		400	430	600	185	785	420	175	495	530	62	
		500	430	720	185	905	500	175	495	530	73	

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

Series Reactor & Discharge Coil



Series Reactor & Discharge Coil Feature

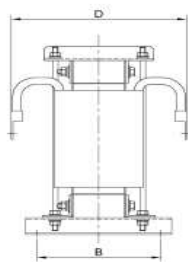
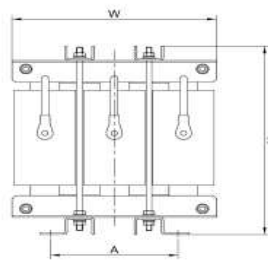
- Series reactor reduces the problems occurring when the capacitor installed.
- Advantages during installation.
 - To Decrease the distortion of the voltage and current wave forms.
 - To suppress harmonic that flows into the capacitor.
 - It reduces inrush current during switching capacitors.

Series Reactor of Specification

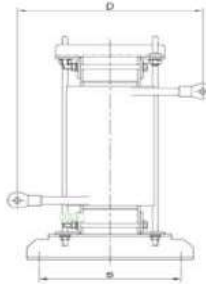
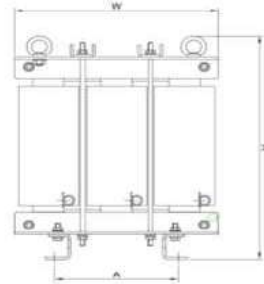
Location	· Indoor
Ambient temperature	· -20℃ ~ +40℃
Max. Permissible Overcurrent	· 150% of rated current(harmonic including)
Max. Permissible Overvoltage	· 110% of rated voltage
Tuning order	· 3.8 when 7%, 2.7 when 14%
Temperature rise	· 130℃(Class H)
Coil Material	· Aluminum (Copper on request)
Reference Standard	· IEC 60076-6

Low voltage : 7%

Low voltage 30~60KVA



Low voltage 75~200KVA



Line Voltage [V]	Capacitor capacity [kVAR]	Dimension [mm]					Weight [kg]
		W	D	H	A	B	
440	30	280	220	291	175	150	28
	40	280	220	325	175	150	30
	50	280	230	325	175	170	34
	60	330	252	372	195	180	47
	75	330	280	451	200	210	56
	100	330	300	451	200	230	65
	150	420	330	464	240	250	85
	200	420	340	515	240	250	100

Construction of references Principle

NSR -	L	7	44	2	050	A	D
Nuintek Series Reactor	L : low voltage H : high voltage	7 : 7% 14 : 14%	41 : 415V 44 : 440V 66 : 6600V 72 : 7200V	1 : 60Hz 2 : 50Hz	Capacitor capacity [kVAR]	A : Aluminum C : Copper	D : DRY O : Oil

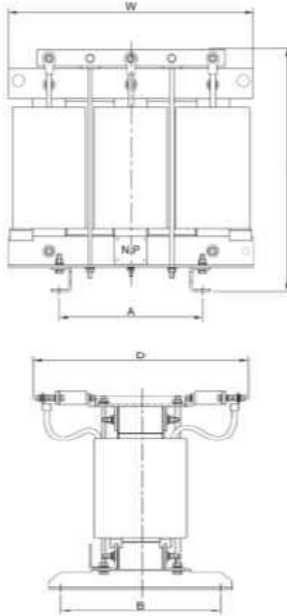
Notice) The above information subject to change, so please contact us before purchasing.

Series Reactor & Discharge Coil



High voltage : 7%

Line Voltage [kV]	Rated capacity [kva]	Dimension [mm]					Weight [kg]
		W	D	H	A	B	
6.6	50	430	476	550	250	250	75
	75	430	486	550	250	250	85
	100	600	456	510	350	350	110
	150	600	456	570	350	350	120
	200	600	456	600	350	350	130
	250	600	471	600	350	350	150
	300	600	481	600	350	350	160
	400	600	516	642	350	350	200
	500	600	506	710	350	350	220
	600	600	516	750	350	350	240
	750	600	546	750	350	350	290
	1000	680	566	790	400	400	410



Discharge Coil of Specification

Location	· Indoor
Max. Permissible Overvoltage	· 110% of rated voltage
Discharge capacity	· Device Voltage decreases to Less then 50V in 5seconds when disconnected from power source.
Reference Standard	· KS C 4804

Rated voltage range[V]	Part No.	Dimension [mm]					Weight [kg]
		W	D	H	A	B	
220-1000V	NSR-LDC	210	160	160	170	130	11
3.3-7.2kV	NSR-HDC	340	220	180	260	150	29



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

CERTIFICATION

CERTIFICATE

TÜVRheinland

of Conformity

Low Voltage Directive 2014/35/EU

Registration No.:

AN 50366076 0001

Report No.:

50059132 001

Holder:

NUINTEK Co., Ltd.
243, Eumbongmyeon-ro, Eumbong-myeon,
Asan, Chungcheongnam-do 31423
Rep. of Korea

Product:

Capacitor

Identification:

Type Designation : APD-series, BMD-series
x = 25 - 25, 27 - 45, 41 - 44 or 45 - 48
y = 1, 2 or 3
z = 1 - 140
Serial No. : n.a. (prototype)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

TagSun Park

Date

21.12.2016

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

CERTIFICATE

TÜVRheinland

of Conformity

Low Voltage Directive 2014/35/EU

Registration No.:

AK 50366525 0001

Report No.:

50059133 001

Holder:

NUINTEK Co., Ltd.
243, Eumbongmyeon-ro, Eumbong-myeon,
Asan, Chungcheongnam-do 31423
Rep. of Korea

Product:

Capacitor

Identification:

Type Designation : APD-series
x = 25 - 25, 27 - 45, 41 - 44 or 45 - 48
y = 1, 2 or 3
z = 1 - 140
Serial No. : n.a. (prototype)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

TagSun Park

Date

21.12.2016

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

CERTIFICATE

TÜVRheinland

of Conformity

Low Voltage Directive 2014/35/EU

Registration No.:

AN 50393370 0001

Report No.:

13014620 004

Holder:

NUINTEK Co., Ltd.
243, Eumbongmyeon-ro, Eumbong-myeon,
Asan, Chungcheongnam-do 31423
Rep. of Korea

Product:

Capacitor

Identification:

Type Designation : BMD-series
x = 25 - 25, 27 - 45, 41 - 44 or 45 - 48
y = 1, 2 or 3
z = 1 - 140
Serial No. : n.a. (prototype)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the License Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

TagSun Park

Date

16.11.2017

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE

KQA

Q-Assurance

IAF

Certificate of Approval

Accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management Systems

KQA approves that the Quality Management System of the following company is conformant with the certification audit criteria.

Certificate No. : KQA-Q051936
Company : NUINTEK CO., LTD.
Address : 243, Eumbongmyeon-ro, Eumbong-myeon, Asan-si, Chungcheongnam-do, Republic of Korea

The standards for this certificate of conformity are as follows.

Management Systems Standards :
ISO 9001:2015 / KR-Q ISO 9001:2015
Scope of Registration :
Design/development and manufacture of
Electric Capacitor and Metallized film

Original Approval : 13 June 2005
Validity : 16 April 2018 - 16 April 2021
Date of Issue : 16 April 2018
(Renewal of certificate and Standard reviewed)

Lee Jong In

Song Jong Cheol

Lead Auditor

CEO

Korea Quality Assurance

KQA Address : 2F, Hwanggi Bldg, 42 Hwanggi-ro, Seongju-si, Gyeongsang-do, 74704, Republic of Korea

MEMO

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