



Voltage Dip / Power Blackout Compensator





UNISAFE

MEGASAFE





Problem of Voltage Disturbance

Power Blackout

Voltage Dip

Production Line Loss

Huge
Loss

Product / Material Loss

Opportunity Loss

Cost for maintenance / repair of production line

Cost of Damaged product / material which has to be scrapped

Loss due to the stoppage of the production line

To mitigate such huge loss, Nissin would like to propose you to introduce

Voltage Dip / Power Blackout Compensator



Nissin's Voltage Dip / Power Blackout Compensator



UNISAFE

Problem Voltage Dip

Application
Low Capacity Load

For Low Voltage

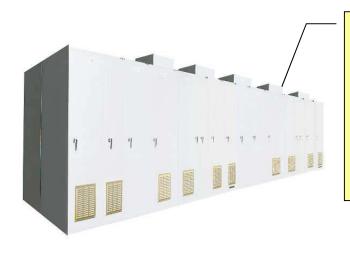


MEGASAFE

Problem Voltage Dip

Application
High Capacity Load

For Medium Voltage



POWERSAFE

Problem
Voltage Dip
Power Blackout

Application
High Capacity Load

For Medium Voltage



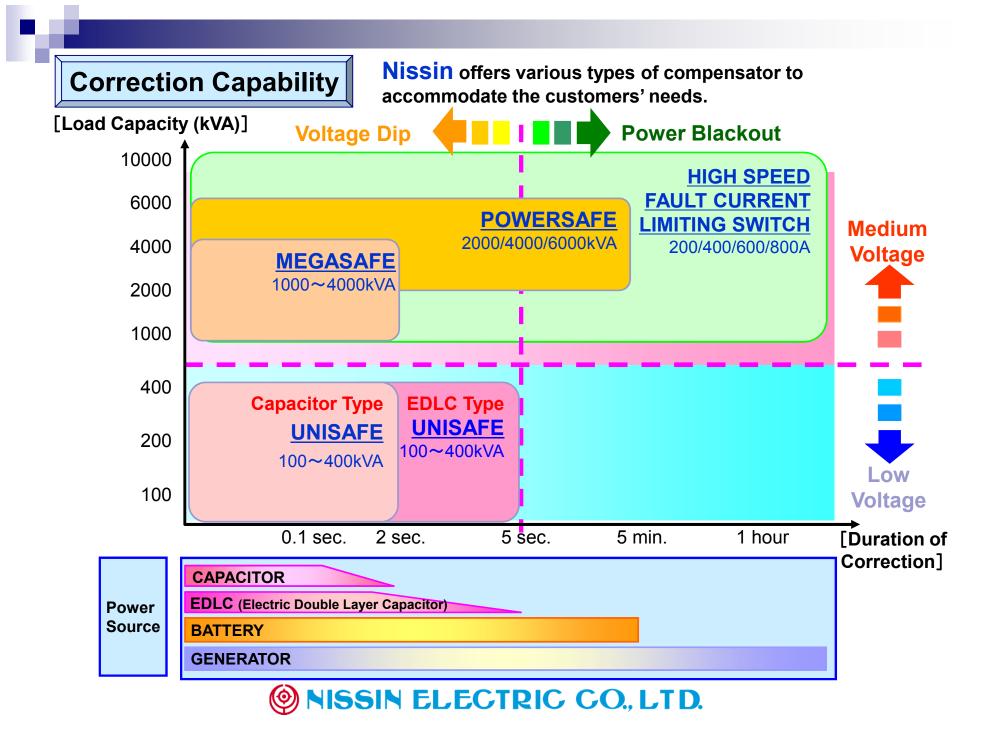
HIGH SPEED FAULT CURRENT LIMITING

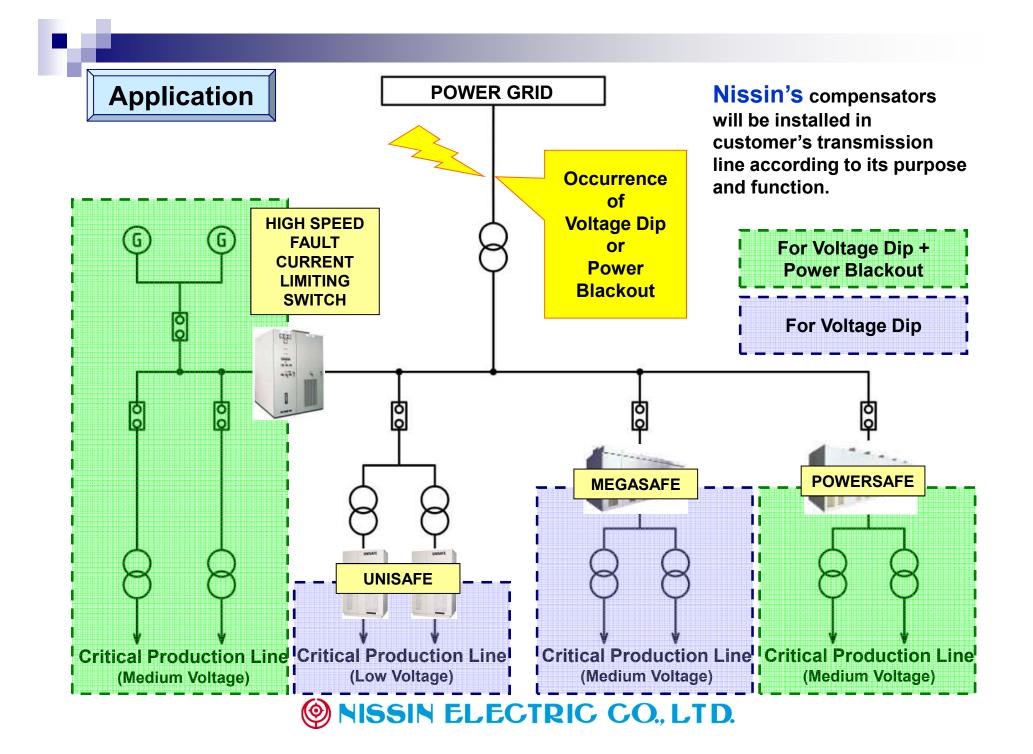
SWITCH

Problem
Voltage Dip
Power Blackout

Application
High Capacity Load
Generators

For Medium Voltage







Nissin UNISAFE & MEGASAFE

To countermeasure the problem of Voltage Dip, we recommend...





UNISAFE

MEGASAFE



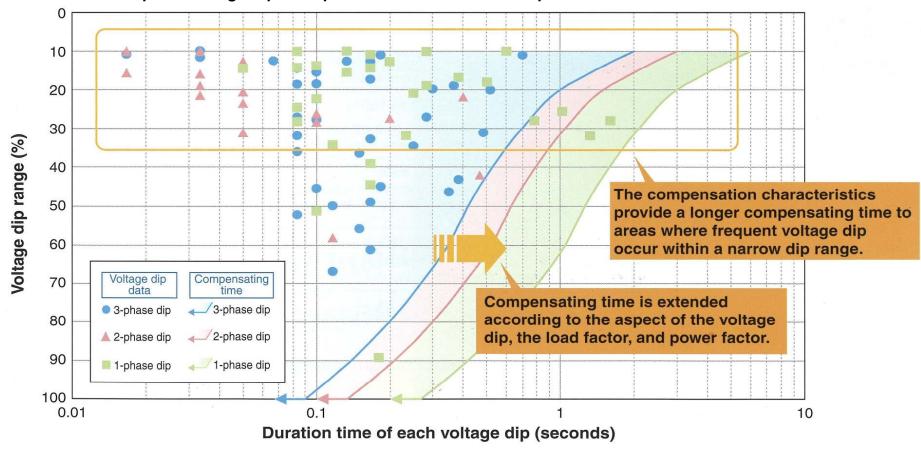
Features of Unisafe/Megasafe Compact Compared with power generation systems, smaller installation area is required **Power Storage** = Capacitors **High Efficiency** More than 98% (Unisafe) More than 99% (Megasafe) **Compensation of** insufficient voltages **Less Maintenance** Unlike batteries or generators, no periodical maintenance is needed **Commercial Power Supply during normal Eco-Friendly** operation Battery is not used = No lead



Compensation Characteristic of MEGASAFE

The compensation characteristics of Nissin MEGASAFE is just suitable for the actual voltage dip.

Example of Voltage Dip on Japanese Actual Site and Compensation Performance

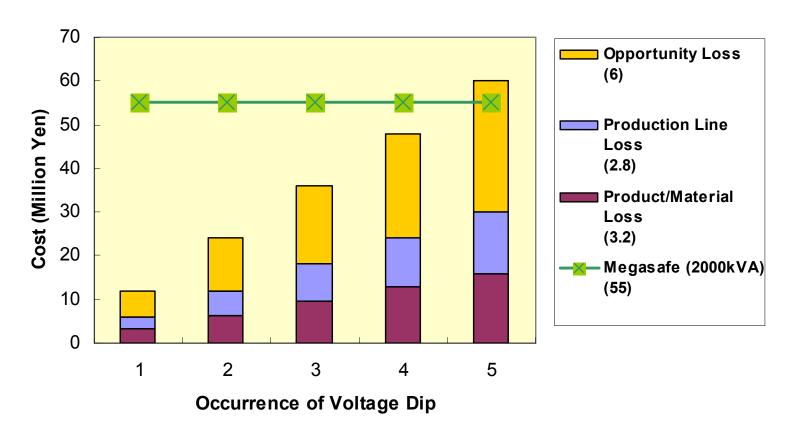






Case Study: Cost-Benefit Analysis

Cost-Benefit Analysis



For the above case, the investment for the Megasafe (2000kVA) will be recovered after 5 times of the occurrence of Voltage Dip.





Case Study: Your Case

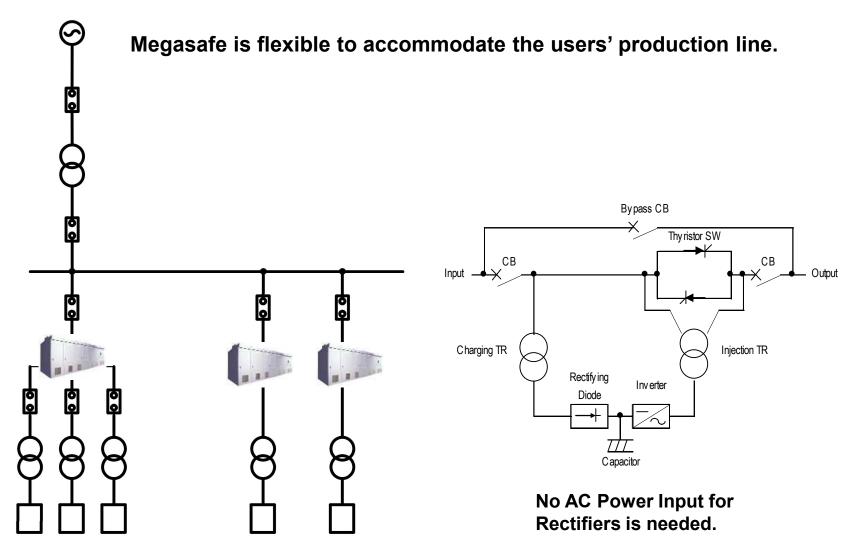
Voltage	kV
Capacity of Production Line to be Protected	kVA
Occurrence of Voltage Dip	Times/Year
Product/Material Loss	
Production Line Loss	
Opportunity Loss	

For your case, the investment for the offered voltage dip compensator will be recovered within year(s).





Application of Megasafe



- 1. For multiple production line
- 2. For single production line



Specification

Product	Purpose	Power Storage	Rated Capacity (Rated Current)	Rated Voltage				Duratio	on of Cor (Sec.)	rection	Insta	Dimensions (mm)						
				Low Voltage			Medium Voltage		1.0-5.0	10-60	_							Weight (kg)
				200V	400V	3.3kV	6.6kV	Lev	s on the el of ge Dip	10-60	Indoor	Outdoor	W		D		Н	
Unisafe	Insufficient Voltage Serial Compensation		100kVA	•	•			•			•	0	1250	×	750	×	1950	1200
			200kVA	•	•			•			•	0	1250	×	750	×	1950	1200
		Capacitor	300kVA		•			•			•	0	2190	×	750	×	1950	2100
				0				•			•	0	3000	×	750	×	1950	2700
			400kVA		•			•			•	0	2190	×	750	×	1950	2100
				0				•			•	0	3000	×	750	×	1950	2700
		e Layer Capacitor (EDLC)	100kVA	0	0				•		•	0	1750	×	750	×	1950	1500
			200kVA	•	•				•		•	0	1750	×	750	×	1950	1500
			300kVA		0				•		•	0	3190	×	750	×	1950	2700
				0					•		•	0	4000	×	750	×	1950	3300
		Double I			•				•		•	0	3190	×	750	×	1950	2700
		Electric	400kVA	0					•		•	0	4000	×	750	×	1950	3300
Megasafe		Capacitor	1,000kVA			0	•	•			•	•	6000	×	2500	×	2350	12000
			2,000kVA			0	•	•			•	•	6700	×	2500	×	2350	13500
			3,000kVA			0	•	•			•	•	10400	×	2500	×	2350	22300
			4,000kVA			0	•	•			•	•	11100	×	2500	×	2350	23800

Standard

O Optional



Specification

Product		Power Storage	Rated Capacity (Rated Current)	Rated Voltage				Duratio	on of Cor (Sec.)	rection	Insta	Dimensions (mm)						
	Purpose			Low Voltage		Med Volt	lium tage	0.1-2.0	1.0-5.0									Weight (kg)
				200V	400V	3.3kV	6.6kV	Lev	s on the el of ge Dip	10–60	Indoor	Outdoor	w		D		Н	
	tion	Compensation Battery	2,000kVA			0	•			•	•		11400	×	2500	×	2650	43500
Paralel Full	rallel F Voltage npensat		4,000kVA			0	•			•	•		22100	×	2500	×	2650	84700
	Pa		6,000kVA			0	•			•	•		31400	×	2500	×	2650	123900
	tion		(200A)			0	•				•	•	2300	×	2500	×	2550	3800
High Speed Fault	Connection	rator	(400A)			0	•	Der	ends on	the	•	•	3800	×	2200	×	2650	5600
Current Limiting Switch	Generator (Generator	(600A)			0	•	(Generato	r	•	•	4000	×	2200	×	2650	6500
	Gene		(800A)			0	•				•	•	5800	×	3200	×	2350	11300

Standard

O Optional





Thank You For Your Kind Attention

