

FOCUSING ON POWER QUALITY.
PROFESSION, CONCENTRATION.

DIRECT SIKES

Power Transformers / Harmonic Filter / Sine Wave Filter / EMC Filter/
Reactor / Regenerative Brake / Braking Chopper / Power Braking Resistor/
Load test for generator, electric vehicle driver, motor controller, charging
station etc.

Dynamic Braking Unit

Whole product portfolios of power quality can be offered.



We are developing and producing in China for the world.



GUANGDONG SIKES Electric Co.,Ltd.

SIKES
18 YEARS OF
SUCCESS

Braking Unit/Brake chopper

Descriptions

Sikes ordinary type LN/GN series braking units have been specially designed to make use of modern IGBT power transistors to switch the braking resistor when the brake voltage-threshold is reached during the power braking process of frequency inverters, UPS, etc.

The connection to the inverter is very simple. Two cables to the DC link are required. An external control voltage is not required.

Functions



Functions	LN Series	GN Series
Voltage range	200-400V	200-1100V
Continuous braking times	0,5-50s	0,5-120s
Easy mounting, also for retrofitting into existing plants	√	√
Wear-resistant and maintenance-free	√	√
Continuous braking times	√	√
Connection of external brake contactor possible	√	√
DC braking with on-way rectification	×	√
Controlled by microcontroller with a keyboard	-	√
Suitable for all asynchronous motors	×	√
Temperature monitoring of heat sink	×	√
Potential-free signalling and control outputs	×	√

Technical Standards: EN 60146-1-1, EN 61800-2, EN 50178

Environmental conditions

Operating temperature	Ambient : -25°C to +45°C
Relative humidity	5% to 85%
Other demands	The cooling fan must have little dust and be non corrosive.

Applications

■ Cranes, hoists, chain hoists



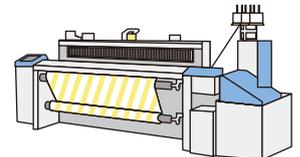
■ Elevator



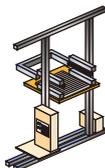
■ Vertical lifts



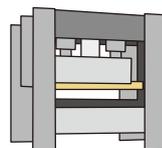
■ Textile machinery



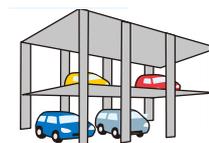
■ Stacking Crane in Automatic Warehouse



■ Metal machinery- punching machine



■ Stereoscopic Parking Lot



■ Industrial manipulator



■ Chemical equipment- Centrifugal machine



■ Food processing machinery-Mixers



Features

Main Characteristics	LN Series 220V	LN Series 400V	GN Series
Inverter Power Rating (Pr)	7.5Kw to 90Kw	7.5Kw to 132Kw	37Kw to 450Kw
Maximum braking current(I)	50A to 200A	40A to 200A	75A to 450A
Repetitive braking power(Pm)	Based on Pr and ED/duty(%)	Based on Pr and ED/duty(%)	Based on Pr and ED/duty(%)
Feasible minimum resistance value(R)	See“Technical table”	See“Technical table”	See “Technical table”
Cycle time (up to 600s on request)	120s standard	120s standard	120s standard
ED / Cycle duty (higher than 40% on request)	up to 20%	Up to 20%	up to 40%
Mains system voltage(U) @50/60Hz	220/240V±10%	380/415V±10%	380/415V±10% 480/500V±10% 660/690V±10%
Default chopper voltage (Adjustable)	DC320V±5V	DC660V±5V	DC660V±5V / DC830V±5V / DC1150V±5V
Dielectric voltage	3,000VAC@1min	3,000VAC@1min	3,000VAC@1min
Insulation resistance	>20MΩ / body	>20MΩ / body	>20MΩ / body

Design features	LN Series 220V	LN Series 400V	GN Series
Enclosure material	Painted steel	Painted steel	Painted steel
Degree of protection	IP00/ IP20(EN 60529)	IP00/ IP20(EN 60529)	IP00/ IP20(EN 60529)
Terminal connections	wires, terminals, copper bars	wires, terminals, copper bars	wires, terminals, copper bars
Ventilation	Natural	Natural	Fan cooling internal
Mounting	On the wall or inside panel	On the wall or inside panel	On the wall or inside panel
Installation	Indoor standards	Indoor standards	Indoor standards

Mechanical data

All dimensions in mm; 1 inch = 25,4 mm

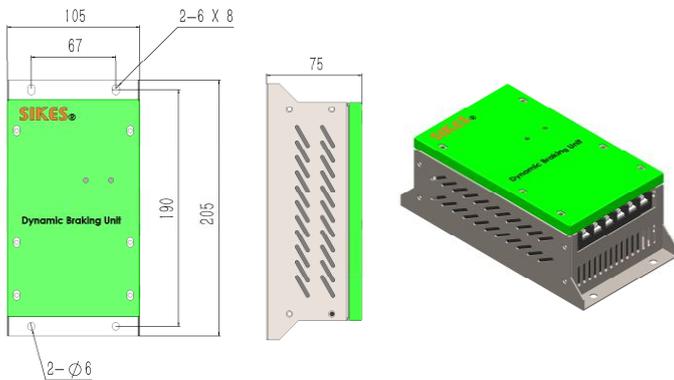


Fig. 1

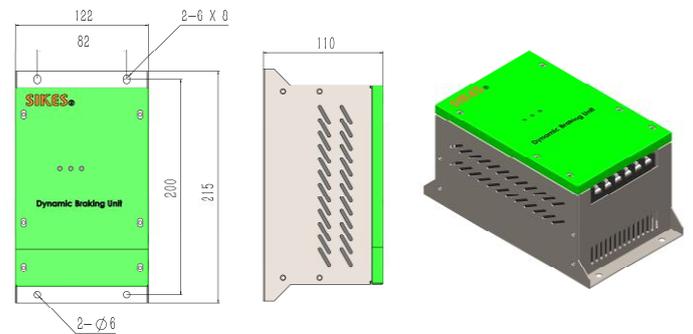


Fig. 2

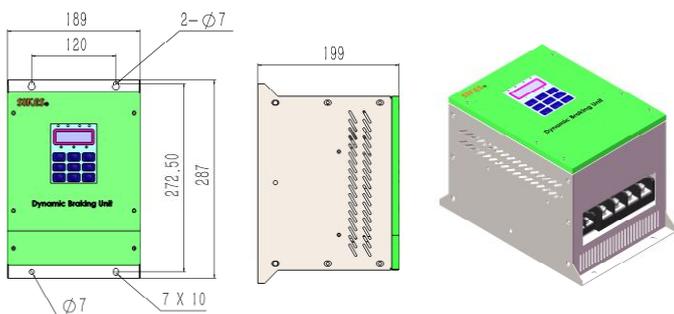


Fig. 3

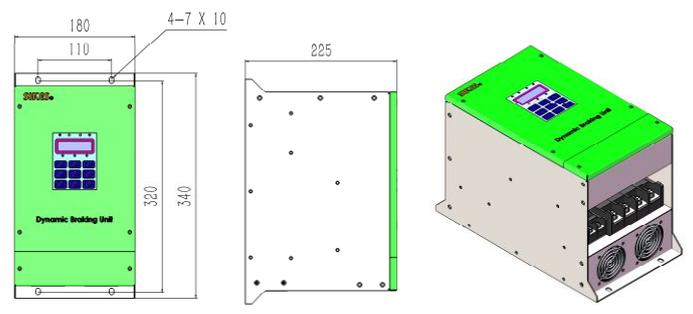


Fig. 4

Mechanical data

All dimensions in mm; 1 inch = 25,4 mm

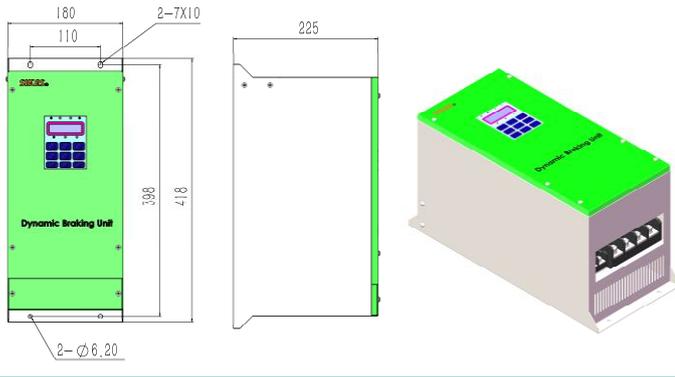


Fig. 5

Technical Data

型号 Type	容量 Inverter power	电压等级 Voltage Grade	峰值电流 Peak current	最小电阻值 Min Resistance Value (Ω)	斩波电压 预设值 Default chopper voltage	制动力矩 Braking torque	图号 Dimension Pic.	端子 Terminal	配线 Cable (mm ²)	重量 Weight (kg)
SKS-LN-2022	7.5-22kw	220V	50A	8	DC320V±5V (300-380V Adjustable)	100%	Fig.1	M4	6-8	1.5
SKS-LN-2037	30-37kw		75A	5.5		100%	Fig.2	M4	6-8	2.5
SKS-LN-2045	45kw		100A	4		100%	Fig.3	M5	10-16	5.2
SKS-LN-2075	55-75kw		150A	3		100%	Fig.4	M8	10-16	8.5
SKS-LN-2090	90kw		200A	2		100%		M8	25-35	8.5
SKS-LN-4022	7.5-22kw	400V	40A	20	DC660V±5V (600-760V Adjustable)	120%	Fig.1	M4	4-6	1.5
SKS-LN-4030	30kw		50A	17		120%		M4	6-8	1.5
SKS-LN-4055	45-55kw		75A	12		120%	Fig.2	M4	6-8	2.5
SKS-LN-4075	75kw		100A	7.5		120%		M4	10-16	2.5
SKS-LN-4110	90-110kw		150A	6		120%	Fig.3	M5	10-16	5.2
SKS-LN-4132	132kw	200A	3.8	120%	M8	25-35		5.2		
SKS-GN-4110	55-110kw	400V	150A	5	DC660V±5V (600-760V Adjustable)	150%	Fig.4	M8	10-16	8.5
SKS-GN-4200	132-200kw		200A	4		150%			25-35	8.5
SKS-GN-4280	220-280kw		300A	2.5		150%			25-35	8.5
SKS-GN-4400	315-400kw		400A	1.6		150%			50-70	8.5
SKS-GN-5037	7.5-37kw	500V	75A	12.5	DC830V±5V (760-900V Adjustable)	150%	Fig.5	M10	6-8	11
SKS-GN-5110	45-110kw		150A	6.5		150%			10-16	11
SKS-GN-5200	132-200kw		200A	5		150%			10-16	11
SKS-GN-5280	220-280kw		300A	3.5		150%			25-35	11
SKS-GN-5450	315-450kw		450A	2.5		150%			50-70	11
SKS-GN-6037	11-37kw	660V	100A	12	DC1080V±5V (990-1155V Adjustable)	150%	Fig.5	M10	6-8	11
SKS-GN-6110	55-110kw		150A	8.5		150%			10-16	11
SKS-GN-6200	132-200kw		200A	6.5		150%			10-16	11
SKS-GN-6280	220-280kw		300A	4.5		150%			25-35	11
SKS-GN-6400	315-400kw		400A	3.2		150%			50-70	11
SKS-GN-6450	420-450kw		450A	2.8		150%			50-70	11

NOTE:

- Other optional nominal power or ED(% duty cycle), on demand.
- Other mains system voltage, on demand.
- Other higher IP class or enclosure design, on demand.
- For more technical details, please contact our sales representatives.

Model Rules:

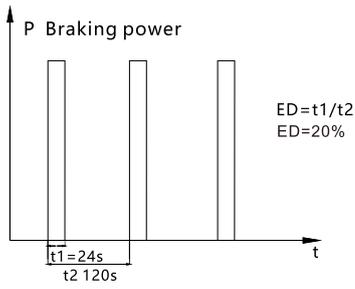
SKS - □ □ - □ □ □ □

- Power (022 for 22KW, ... 450 for 450KW)
- Voltage grade(4 for 400V, 5 for 500V, 6 for 660V)
- Series name
- Brand name

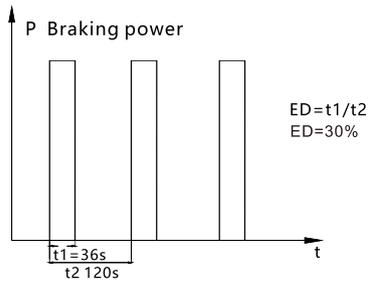
- **Warning:** Units must never be mounted with the terminal area or base uppermost.

Efficiency of duty (ED)

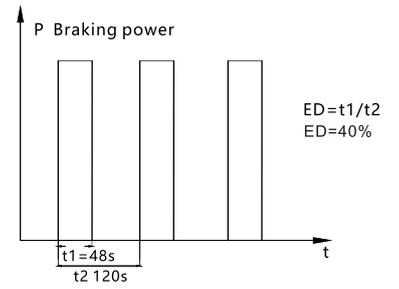
Circle time=120S



Picture A



Picture B



Picture C