

## <SEOHO\_SLUP User Manual>



Regenerative Converter for energy saving

### **SOHO SLUP**

7.5 ~ 800kW / 400V

SOHO SLUP Series returns the regenerative energy consumed by the braking resistor to AC power and uses it for other electrical equipment. (120° excitation)

#### **#. Features**

##### **Regenerative Converter for various capacities: Possible for large capacity**

SOHO SLUP Series returns the regenerative energy consumed by the braking resistor to AC power and uses it for other electrical equipment. (120° excitation)

#### **Features**

- Powerful energy saving (saving regenerative power)
- No dynamic braking unit and no dynamic braking resistor are required.
- A low price and easy installation.
- Applicable for various loads such as crane and lift.
- Low-carbon, eco-friendly energy-saving product

## #. Application

### Crane / Lift



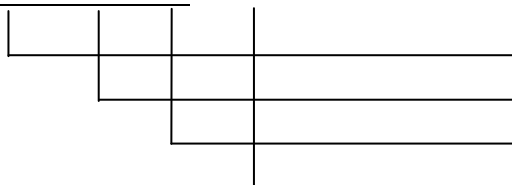
### Centrifuge separator / elevator



## #. Power rating

### SOHO SLUP type

SOHO110SLUP4



**SOHO** : SEOHO

Rated power : kW

Model :SLUP (Regenerative Unit)

Voltage Class**4** : 380Vac ~ 460Vac

## Power rating

### SLUP Power rating

Id=rated input DC current, In=rated output ACcurrent(60 seconds per 240 seconds),

Ic = continuous output AC current

mainvoltage 380V - 480V, 50/60Hz SLU-P series							
SOHO SLUP type	Rated power and rated input•output current				size	dimension W×H×D (mm)	weight (kg)
	P[kW]	Id[Aavg]	In[Arms]	Ic[Arms]			
SOHO 7.5 SLUP 4N	7.5	15	14	11.2	KE2SP	Require to headquarter	-
SOHO 11 SLUP 4N	11	22	20	16			
SOHO 15 SLUP 4N	15	29	27	21.6			
SOHO 18.5 SLUP 4N	18.5	37	34	27.2	KE3SP	Require to headquarter.	-
SOHO 22 SLUP 4N	22	43	40	32			
SOHO 30 SLUP 4N	30	58	54	43.2	KE4SP	Require to headquarter	-
SOHO 37 SLUP 4N	37	72	67	53.6	K4SP	285×490×260	25
SOHO 45 SLUP 4N	45	87	81	64.8			
SOHO 55 SLUP 4N	55	106	99	79.2			
SOHO 75 SLUP 4N	75	144	135	108	K6SP	252×640×330	32
SOHO 90 SLUP 4N	90	172	161	128.8			
SOHO 110 SLUP 4N	110	210	197	157.6			
SOHO 132 SLUP 4N	132	251	236	188.8			
SOHO 160 SLUP 4N	160	304	286	228.8	K7SP	262×780×370	41
SOHO 200 SLU 4N	200	381	358	286.4			
SOHO 250 SLUP 4N	250	475	447	357.6	K8SP	462×750×380	-
SOHO 315 SLUP 4N	315	600	564	451.2			
SOHO 355 SLUP 4N	355	675	635	507	K9SP	Require to headquarter	-
SOHO 400 SLUP 4N	400	760	715	570	K10SP	554×1052×403.5	-
SOHO 500 SLUP 4N	500	950	894	713			
SOHO 710 SLUP 4N	710	1350	1270	1013	K11SP	Require to headquarter	-
SOHO 800 SLUP 4N	800	1520	1430	1141			

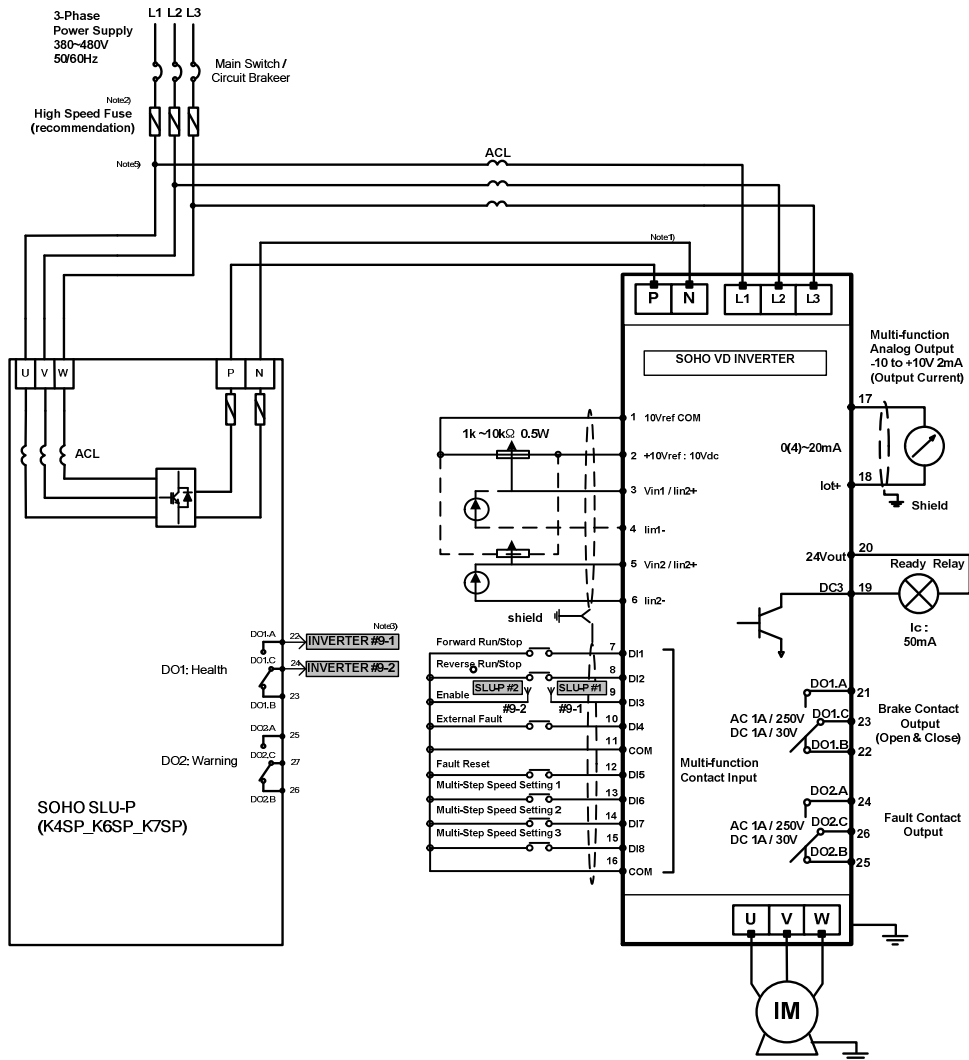
## #. Specification

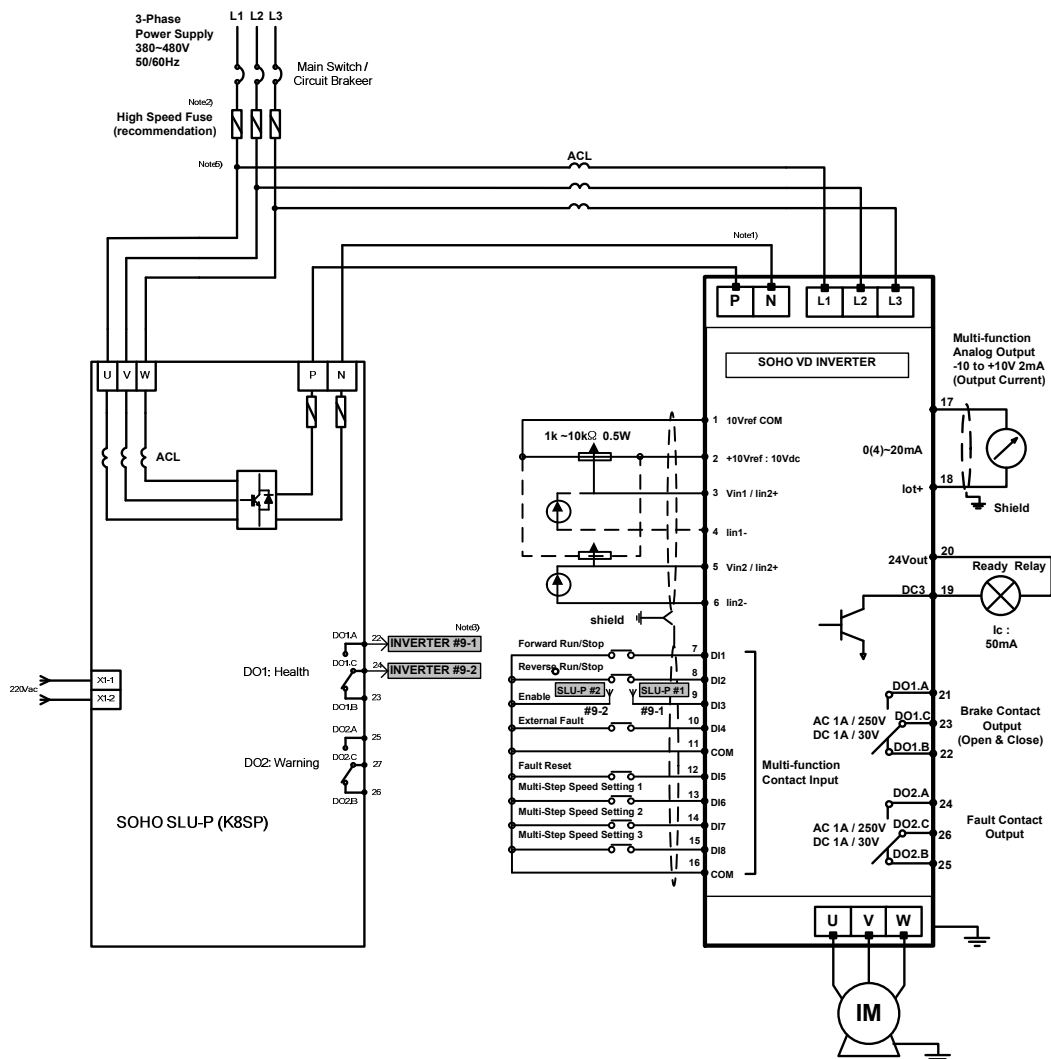
Main connection	output (AC source)	( U, V, W ) 3-phase 380V <sub>ac</sub> ~480V <sub>ac</sub> , 50/60Hz (±3Hz)
		Allowable voltage fluctuation ±10%
		Allowable imbalance rate of voltage between phases≤2%
	input (DC source)	AC line voltage X 1.414
Rated output	Regenerative torque	150% 30s, 100% 60s, 50% continuous
	Rated %ED	25%ED
Terminal characteristic	Control method	120°excitation
	Input signal	5.5kW~132kW: Run/ Enable/ Ex. Fault/ Fault Reset 160kW~355kW: Fault Reset
	Healthy relay output 1(DO1)	AC 250V, 1A or DC 30V, 1A / N.O/N.C output
Protection function	instantaneous overcurrent	Stops at approximately 200% of the current on power side by software
	Short circuit protection	Short circuit status is detected by hardware
	Overvoltage(DC)	Stops at approximately 800 VDC
	overload	Stops over 100% 100seconds, 150% 30seconds
	Current limitation	Stops at 150% of rated current operating condition
	overheat	Protected by thermistor at overheat condition(85°C)
	AC Line open phase	If the AC power line is connected to protect the disabled - SLUP regenerative operation is maintained when only one phase of u, v, w is lost during regenerative operation. In case of phase failure of two or more of u, v, w detect occurs immediately.
Environmental condition	Installation area	indoor(no corrosion, flammable gas and dust)
	Ambient Temperature	-10°C ~ +40°C (operating temperature), -20°C ~ +65°C (storage temperature)
	Humidity	< 90%, (no condensation)
	vibration	Up to 9.8 m/s <sup>2</sup> (1G) under 15Hz, up to 1.96 m/s <sup>2</sup> (0.2G) at 15 to 60Hz

**\*caution:1. SOHO SLUP cannot be used single-phase power supply.**

**2. SOHO SLUP capacity is used to select the motor with the same capacity.**

## #. Wiring diagram





Note 1)

The length of cable must be less than 7m which connect the terminal P-N of SLU-P with the terminal P-N of the Pay attention to the polarity, connect the line between SLU-P and inverter.

Note 2)

Install fuses, between outputs of SLU-P(L1,L2,L3) and power line (Refer to the chapter 4. to choose the proper fuse and wire.)

Note 3)

The Healthy signal of SLU-P can be connected to the VD Inverter as Enable Signal. but the signal line connection is optional

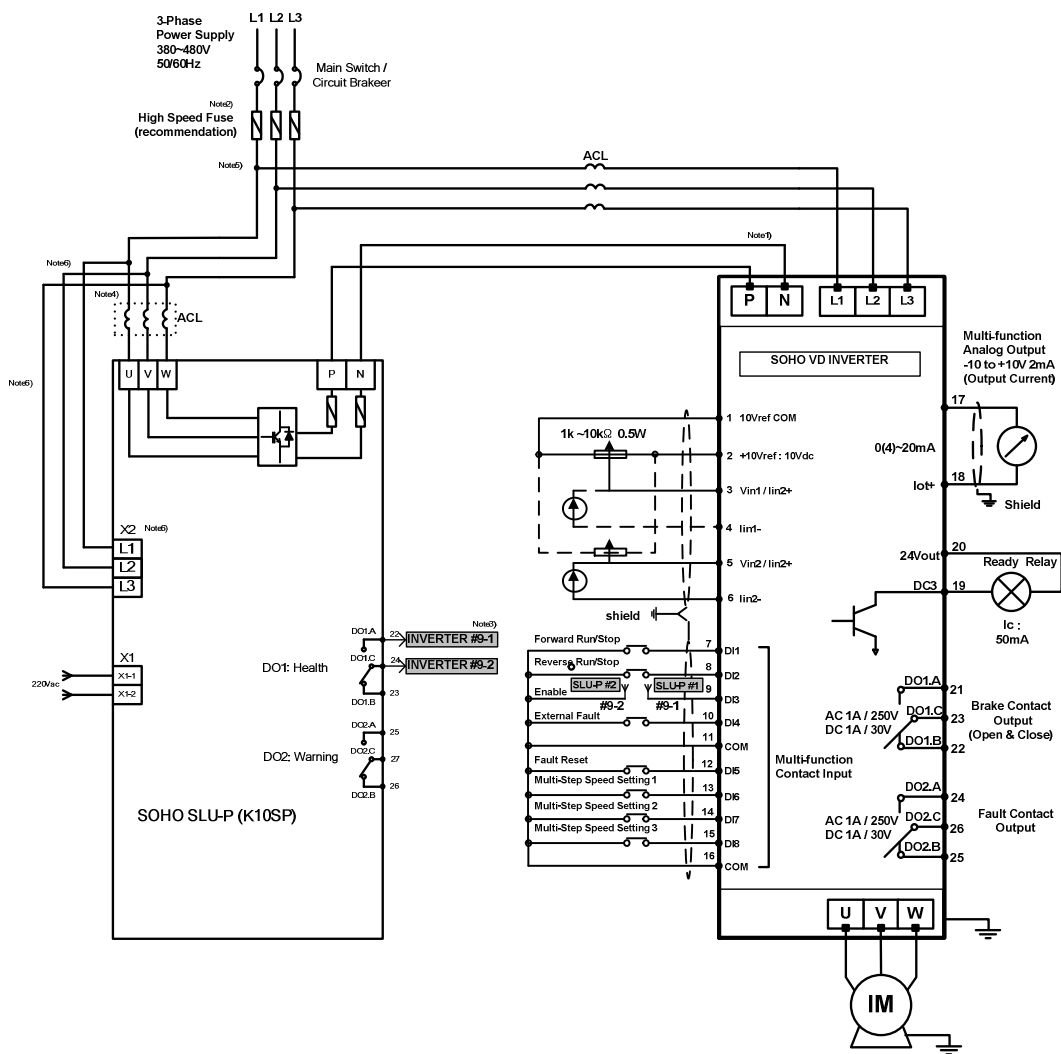
Note 5)

Do NOT install any component for the power-factor improvement, between input power and line reactor.

Note 6)

The power line(L1,L2,L3) and the output(U1,U2,U3) of SLU-P must be correspond to each other.

**SOHO SLU-P(K8SP) typical wiring diagram**



Note 1)  
The length of cable must be less than 7m which connect the terminal P-N of SLU-P with the terminal P-N of the Pay attention to the polarity, connect the line between SLU-P and inverter.

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The Healthy signal of SLU-P can be connected to the VD Inverter as Enable Signal.  
but the signal line connection is optional

Note 4)  
For 355SLU-P or more, be sure to install Reactor externally.

Note 5)  
Do NOT install any component for the power-factor improvement, between input power and line reactor.

Note 6)  
The power line(L1,L2,L3) and the output(U1,U2,U3) of SLU-P must be correspond to each other.

*SOHO SLU-P(K10SP) typical wiring diagram*