

SOHO  
INVERTER  
SERIES

# ***HIGH SPEED INVERTER***



## **SOHO HS**

**High Speed Inverter Series**



**SEOHO ELECTRIC CO.,LTD**

431-836, 9, Gwiin-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea

TEL : 82-31-463-6711~5 FAX : 82-31-468-3311

Web site : [www.seoho.com](http://www.seoho.com)



# Features

## SOHO HS (High Speed Inverter)

### SOHO HS?

High-speed motors are applied to many different fields such as turbo blower, extruder, generators and etc.

SOHO HS is a high-speed application inverter which is possible to control high speed induction motors and synchronous motors with permanent magnet.

### HIGH-SPEED MOTOR CONTROL

SOHO HS is able to control high speed motors by V/F control or sensorless vector control using high-switching.

Motor's speed control range is max. 120,000rpm(0~2000Hz).

## Effective Control

- Maximized performance and energy efficiency
- Reduced harmonics of motor current
- Increased efficiency by high-performance technologies
- Easy operation and installation

## Interface

- Connecting to various devices via Profibus, Modbus, RS485, CAN
- Using Seoho Drive Manager(MMI) - monitoring & fault trace

## Improved Trouble Shooting

Saving the conditions(trace data)of current, voltage, frequency, torque And etc. for 1sec before the inverter trip occurs.

## Water & Air Cooling System

### Effective Cooling System

- Using water cooling system for efficient cooling
- Increased the safety and reliability.

## Specification

Main Connection	Input Voltage V <sub>in</sub>		3 Phase 380V <sub>ac</sub> ~ 480V <sub>ac</sub>		
	Input Frequency		50Hz~60Hz (±10%)		
	Connection to the Main		Don't turn on and off the inverter more than 1 times within 1 min.		
	Efficiency		97%		
Rated Output	Output Voltage		0 ~ 95% of V <sub>in</sub>		
	Continuous Output current		I <sub>CT</sub> : ambient temperature max. +40°C Overload1.35×I <sub>CT</sub> (1min./10min.)		
	Output Frequency/speed		Sensorless Vector: 0.0~2000.0[Hz] / 0~120000[rpm]		
	Frequency/speed resolution		Sensorless Vector : 1[rpm]		
Control	Control Method		V/F Control (High speed induction motors) S/L Control(High speed synchronous motors)		
	Switching Frequency		1.0~10.0[kHz]	400V	5.5kW~500kW
	Frequency reference	Modbus 485	Resolution 16bit 1[rpm]/ 0.1[Hz]		
		Keypad	Resolution 10[rpm]		
	Field weakening point		Auto setting		
	Acceleration Time		Sensorless Vector speed control - 0.00~3000.00[sec]		
Deceleration Time		Sensorless Vector speed control - 0.00~3000.00[sec]			
Environmental Limits	Ambient Operating Temperature		-10°C ~ +40°C		
	Relative Humidity		0 to 95%RH, no condensation allowed		
Protection	Over voltage, Over current, Over load, Under voltage, Over speed, External fault signal detection, Gate drive signal detection, Keypad fault detection,				
Control I/O Specification	Digital input		Negative Logic		
	Aux. supply Voltage		+24V ±20%, Max. 100mA		
	Analog Output		0 (or 4) ~ 20mA, R <sub>L</sub> <500Ω, resolution 10bit		
	Digital Output		Multi-output : 24Vdc, 50mA		
	Relay output	DO1	Multi-output : AC 250V/1A or DC 30V/1A		
DO2		Multi-output : AC 250V/1A or DC 30V/1A			

## Selection Table

SOHO Inverter Type	Rated Output Power and Rated Current		Inverter Allowed Temperature	Size/IP	Dimension W×H×D [mm]	Weight [Kg]
	P[kW]	I <sub>CT</sub> [A]				
SOHO 5.5 NV4N	5.5	12	95[°C]	K3A / IP00	195x368x183	7
SOHO 7.5 NV4N	7.5	16	95[°C]	K3A / IP00	195x368x183	7
SOHO 11 NV4N	11	23.5	95[°C]	K3A / IP00	195x368x183	7
SOHO 15 NV4N	15	31	95[°C]	K3B / IP00	195x368x279	13
SOHO 18.5 NV4N	18.5	38	95[°C]	K3C / IP00	195x460x300	18
SOHO 22 NV4N	22	45	95[°C]	K3C / IP00	195x460x300	18
SOHO 30 NV4N	30	61	95[°C]	K6 / IP00	253x640x300	32
SOHO 37 NV4N	37	72	95[°C]	K6 / IP00	253x640x300	32
SOHO 45 NV4N	45	88	95[°C]	K6 / IP00	253x640x300	32
SOHO 55 NV4N	55	107	95[°C]	K6H / IP00	253x640x300	32
SOHO 75 NV4N	75	146	95[°C]	K7C / IP00	252x830x390	55
SOHO 90 NV4N	90	174	95[°C]	K7C / IP00	252x830x390	55
SOHO 110 NV4N	110	212	95[°C]	M8B/ IP00	496x860x435	91
SOHO 132 NV4N	132	252				
SOHO 160 NV4N	160	305		M8W/ IP00	496x860x405	100
SOHO 200 NV4N	200	382				
SOHO 250 NV4N SOHO 315 NV4N	250 315	478 596	105[°C]	K9B/ IP00	554x1050x443	150
SOHO 250 NV4N SOHO 315 NV4N	250 315	478 596		K9W/ IP00	554x964x402	129
SOHO 400 NV4N SOHO 500 NV4N	400 500	759 929	105[°C]	K10D/ IP00	704x1449x498	250
				K10W/ IP00	866x972x403	190

I<sub>CT</sub> = rated input and output current (constant torque load)



SEOHO ELECTRIC CO.,LTD

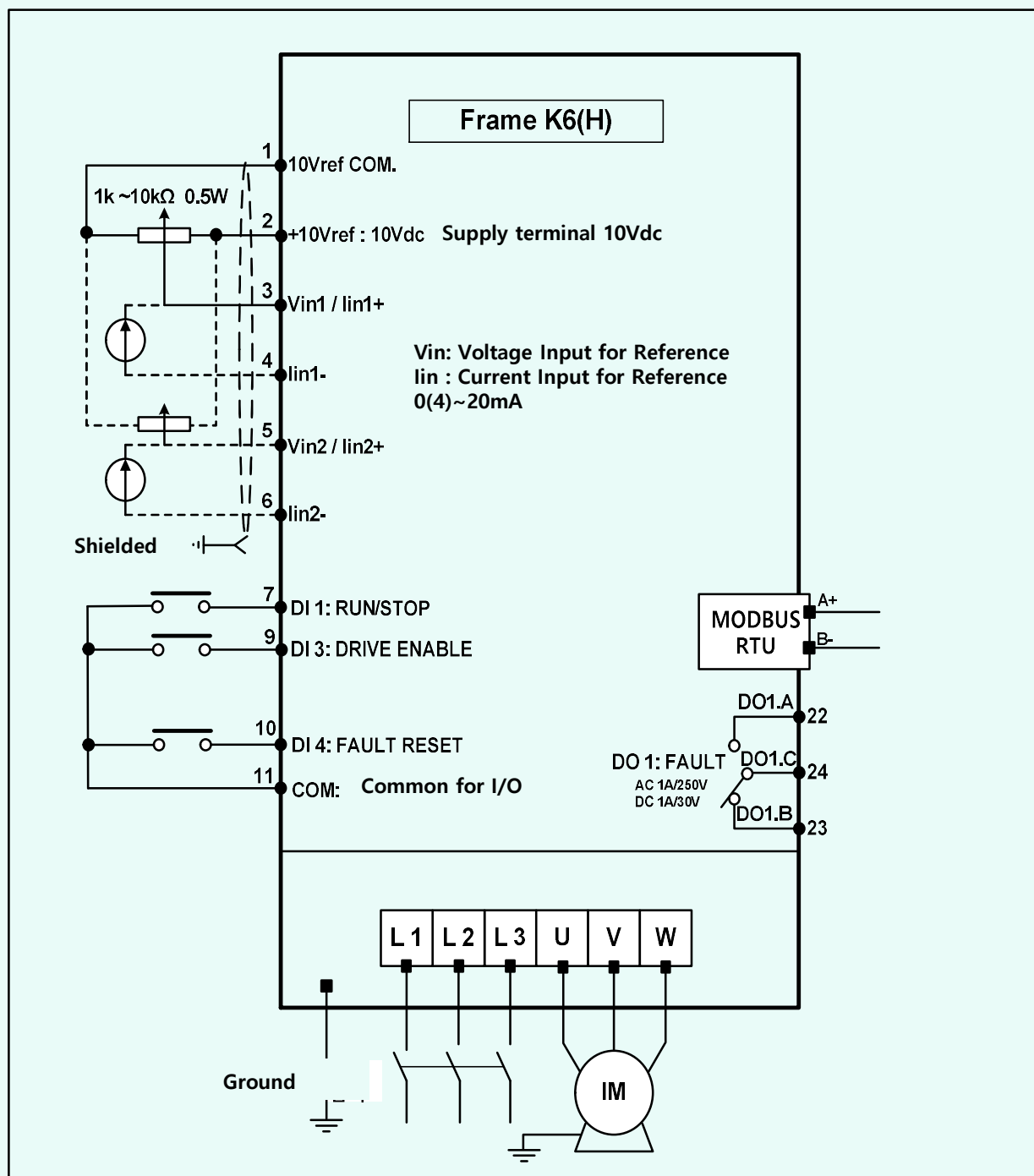
431-836, 9, Gwiin-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea

TEL : 82-31-463-6711~5 FAX : 82-31-468-3311

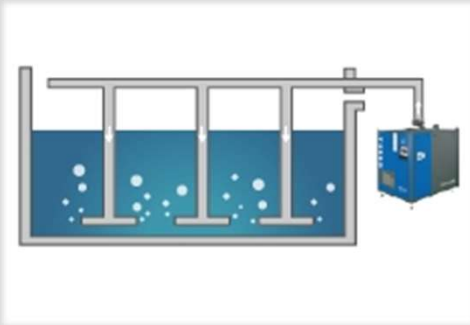
Web site : www.seoho.com

CAT. NO. 1403-2

## Wiring



## Application



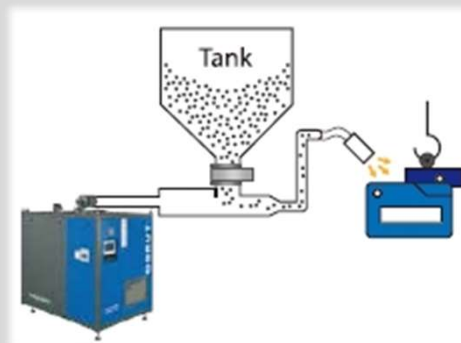
### Water treatment facilities

Sewage, filthy water and wastewater treat facilities  
Waste water oxygen dissolution  
(inorganic substance propagation)

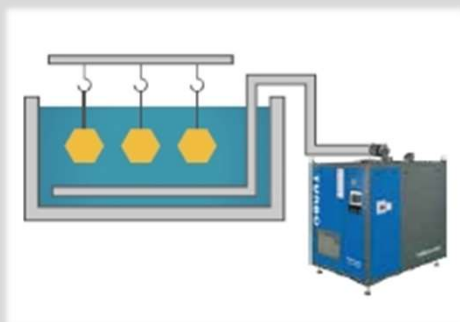


### Mechanical Conveying System(MCS)

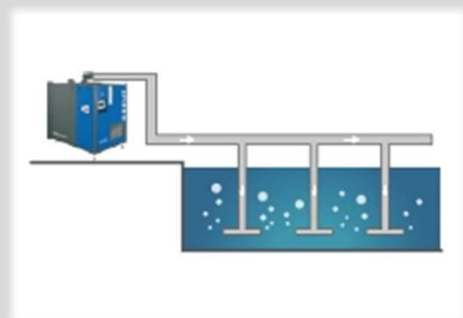
Mechanical conveying of cement material & chemical material  
Other industries



### Sand Blasting



### Plating Bath



### Oxygen Supply