Derwent
Top 100
Global
Innovator
2020

High Performance Standard AC Drive iS7

0.75~75kW(1~100HP) 3-Phase 200~230V
0.75~375kW(1~600HP) 3-Phase 380~480V
IP54 0.75kW~22kW(1~30HP) 3-Phase 200~230V
IP54 0.75kW~22kW(1~30HP) 3-Phase 380~480V

RoHS

LS ELECTRIC

SEVA-tec GmbH - Lether Gewerbestraße 10 - 26197 Ahlhorn - www.seva-tec.de

User-Friendly Options

Diverse Communication Options, Expansion I/O Options, PLC Options, Encoder Options, IP54 Enclosure Options

Contents

Scan the QR code on your drive front and check the key use information

iS7 generates a more powerful performance through its superior V/F control, V/F PG, slip compensation, and sensorless vector control. The iS7 focuses on a user-friendly interface and environment-friendly features including a wide graphic LCD keypad, user & macro group support, electro-thermal functions for motor protection, and protection for input/output phase loss.

The iS7 sets the world standard for drives (VFDs) because of its features that meet all of your needs in AC drives. The iS7 offers powerful performance, flexibility through diverse options, and a more convenient and user-friendly interface. The iS7 offers more than you can imagine.

ISO14001, ISO9001

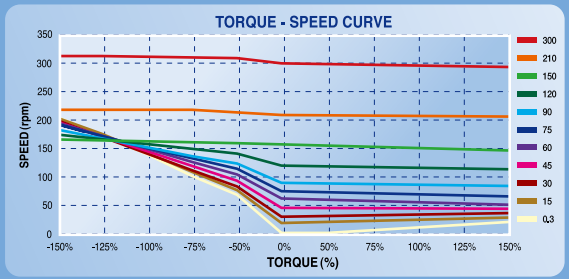
*i*S7 is Dependable Because it Has High Performance and Reliability.

Reliability

Powerful Electric Current Type Sensorless Vector Control

Our iS7 technology includes a competitive and strong low-speed torque control and a speed-precision-driven vector algorithm.

- Speed control range 100:1
- Extremely low torque control capability: 0.1Hz/150% real torque
- Max. torque control capability within the restoration range

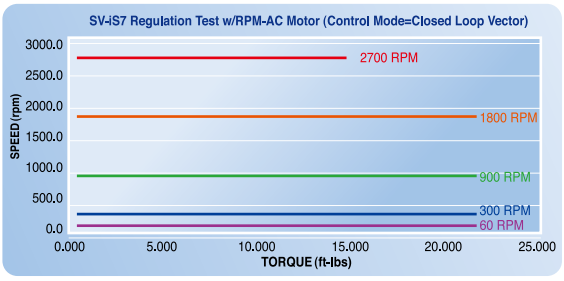


High Performance

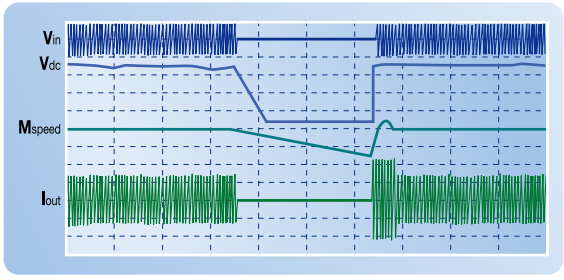
Sensored Vector Realizing Precise Speed/Torque Control

In the entire speed range including zero speed, powerful torque (more than 250%) performance is materialized through receiving Max. 200kHz frequency pulse via encoder-dedicated board.

- Speed control range 1000:1
- Instant Max. torque control capability 250%
- 50Hz speed control response



Ride-Through (LV Trip Delay) for Sudden Power Loss

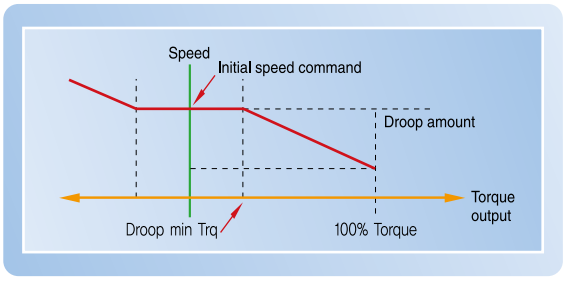


Powerful Performance

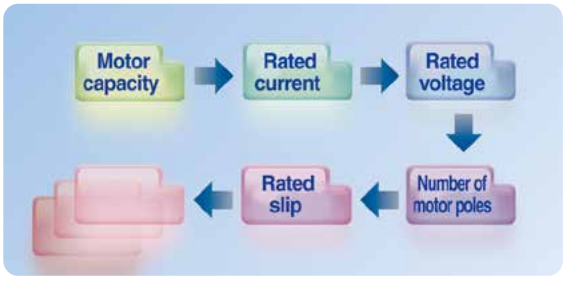
V/F Control, V/F PG, Slip Compensation, Sensorless Vector Control

Automatic Torque Balance Droop Control

Droop control algorithm adjusts changeable torque driven by speed. This algorithm is easily applicable to open loop linking driving and load sharing driving.

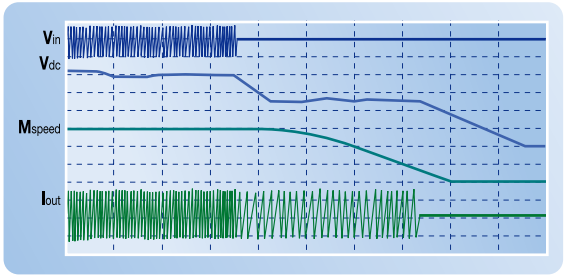


Easy Start Parameter Setting



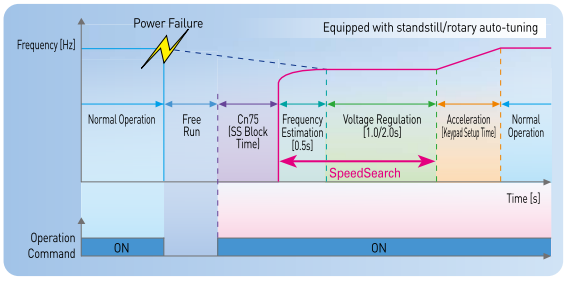
Power and Flux Braking for Maximum Deceleration

Kinetic Energy Buffering (KEB) for a Stable System Stop in Case of Power Loss or Failure



Flying Start Function

Drive capable of quick reliable smooth restarts into bi-directional rotating loads.



Safety Option

The Safety input function meets EN ISO 13849-1 PLd and EN 61508 SIL2 (EN60204-1, stop category 0).

This feature is standard and enables compliance with current safety standards.

iS7 is Flexible Because it is Easily Expandable.

Flexibility Expansion

* 1) Extension I/O-2 is only dedicated for WEB(Winder) customized models.
* 2) In order to use position control and synchronous options, customer have to purchase that customized product or to install customized main software.
* 3) Below 22kW : Default built-in basic I/O
  Above 30kW : Default built-in isolation I/O

* More information about the options, refer to the 23Page.

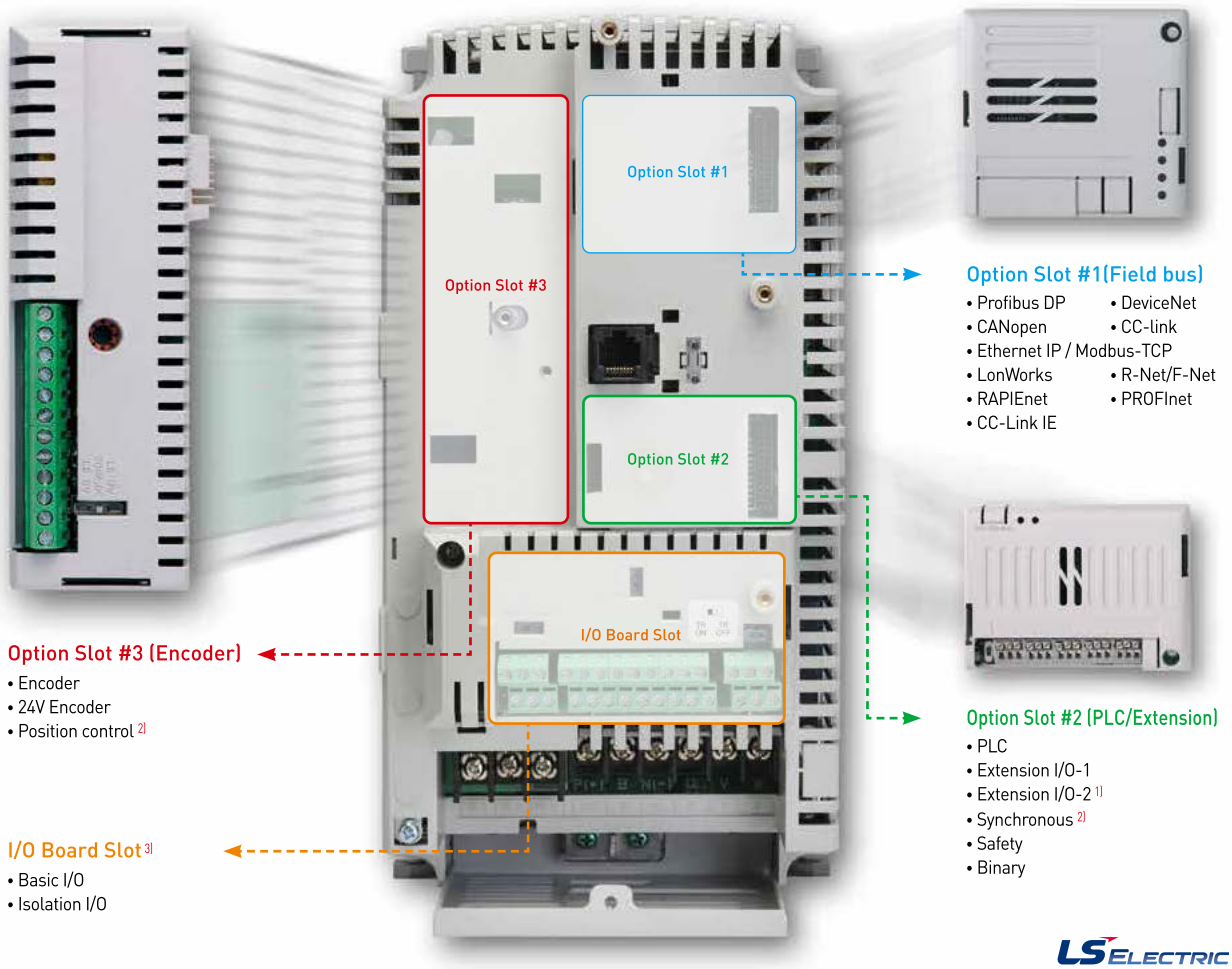
Conduit Kit Option

- Acquired UL open type & enclosed type1 certification
  - * UL open type is offered as default
  - * UL enclosed type1 needs conduit kit(option) installation
- 0.75~75kW (1~100HP)

- The heat sink can be mounted outside of the panel in case the space is limited.
- 0.75~75kW (1~100HP)

User-Friendly Options

Diverse Communication Options, Expansion I/O Options, PLC Options, Encoder Options, IP54 Enclosure Options



Option Slot #1(Field bus)

- Profibus DP
- DeviceNet
- CANopen
- CC-link
- Ethernet IP / Modbus-TCP
- LonWorks
- R-Net/F-Net
- RAPIEnet
- PROFInet
- CC-Link IE

Option Slot #3 (Encoder)

- Encoder
- 24V Encoder
- Position control [2]

Option Slot #2 (PLC/Extension)

- PLC
- Extension I/O-1
- Extension I/O-2 [1]
- Synchronous [2]
- Safety
- Binary

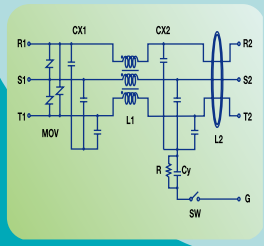
I/O Board Slot [3]

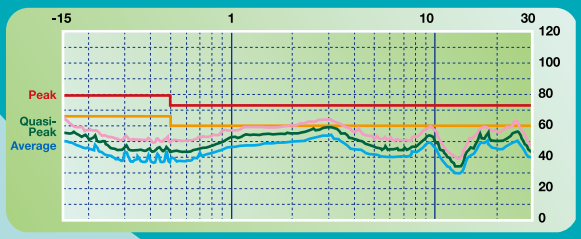
- Basic I/O
- Isolation I/O

iS7 is Convenient Because it Has a User Friendly Interface.

Convenience Environment

EMC Filter (In Conformity With EN61800-3) Built-in For Protection From Excessive Electronic Distortion

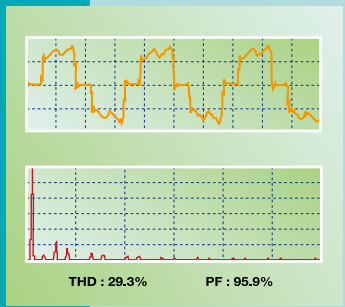




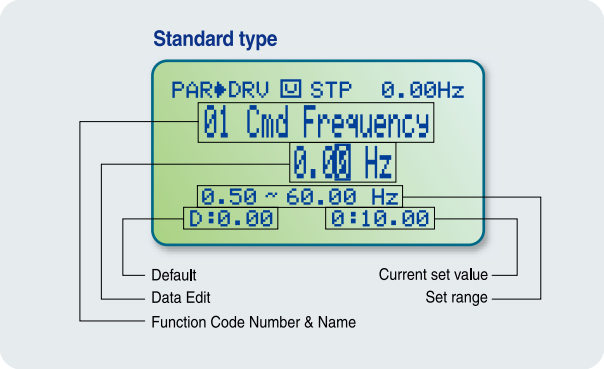
DC Reactor Built-in for Harmonic Reduction and Power Factor Improvement

Overloading Rate	110% (VT Rated Standard)
THD	18 ~ 37%
power factor	94 ~ 96%
IP Level	IP21
Insulation Class	155°C (300°F)

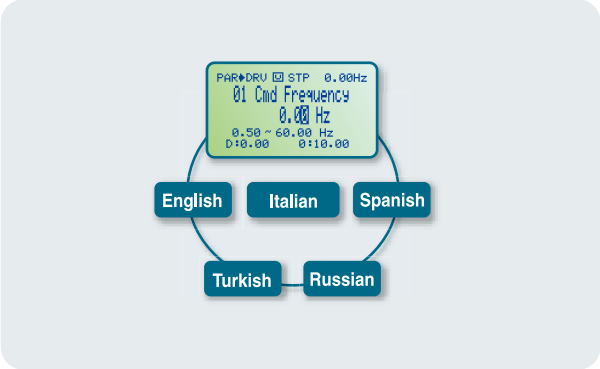
Input Current and THD Analysis



Widened Graphic LCD Keypad

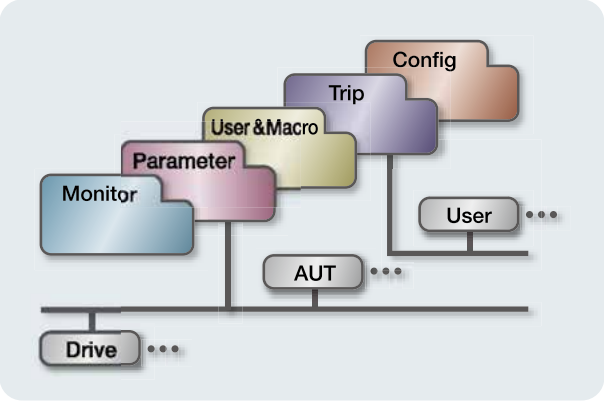


Multi-Language Support (5 Languages)

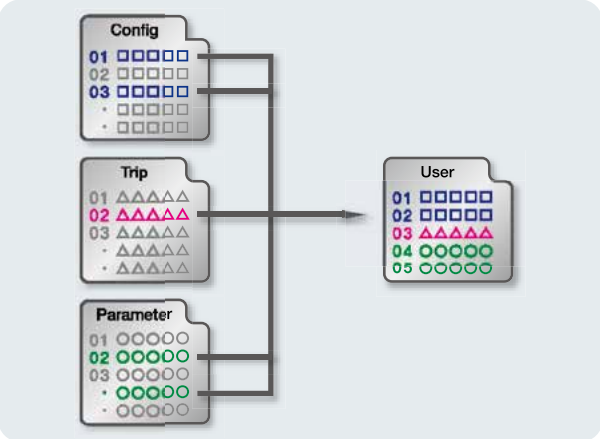


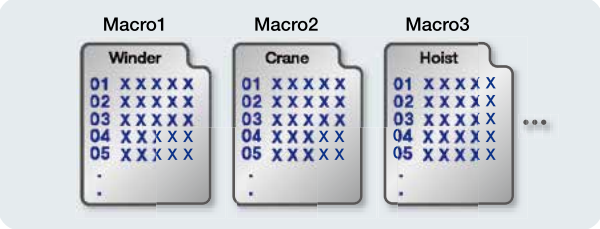
Convenience Through User-Friendly Interface

Efficient Architecture of 5-Mode 15-Parameter Groups

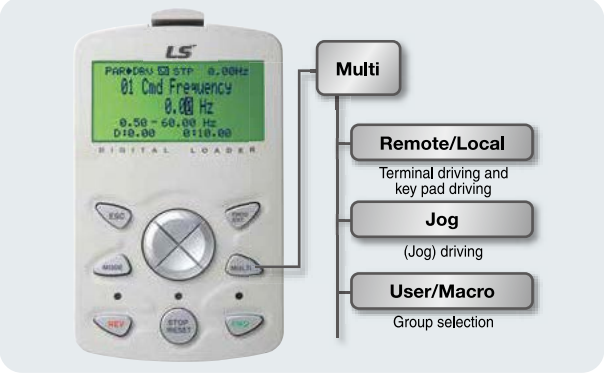


User & Macro Group Support





Multi-Function Key



Protective Functions Dedicated Motor Control

iS7 iS7 is Competitive Because it is Applicable to Various Industrial Fields.

Application

Variety

Warping / Beaming Machine
- Encoder feedback
- Tension control with built-in PID
- (Winding)
- Jog operation
- Anti-rollback

Laminating Machine
- Tension control with dancer feedback
- Diameter estimator winding
- Positive/negative taper
- Constant linear speed control

Wire Drawing Nachine
- Capstan operation with sensorless
- Tension control with dancer feedback
- Diameter estimator winding
- Skip function
- Constant linear speed control

Tire Line

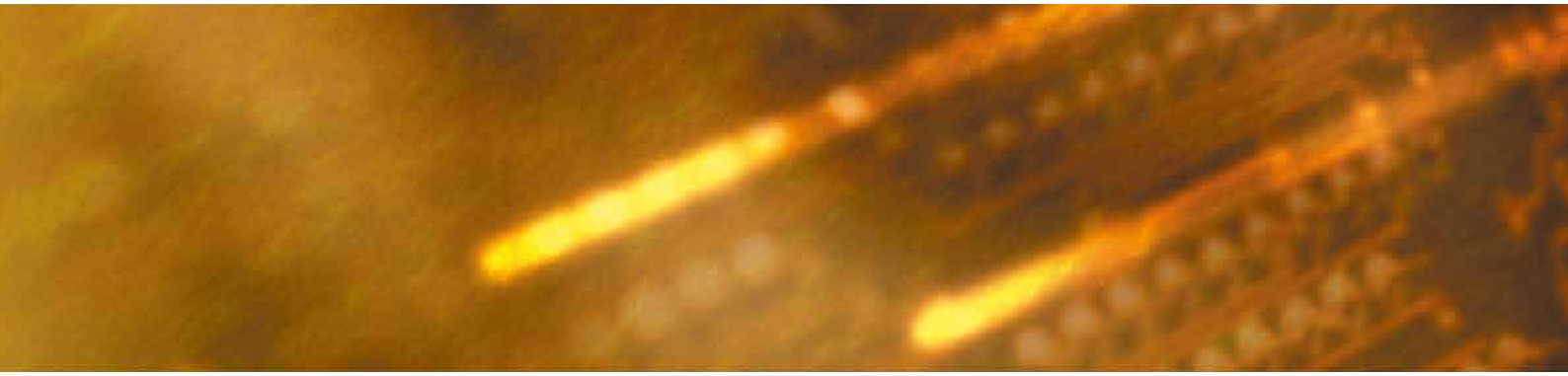
- Tag time reduction (Fast response time)
- Tension control with draw function
- Jog operation
- C3 conformal coating
- IP54 enclosure

Elevator

- Elevator optimized brake control
- Zero speed control (with encoder)
- Over speed check function
- Elevator master function (with PLC option)
- Ideal S curve (for comfortable driving)

Lift

- Joystick function
- Soft start & stop
- Over speed check function
- Stationary torque holding
- Dual motor control



Crane/Hoist

- Sensorless control
- Weight load brake control function
- Optimized load balancing
- Customized DB unit

Parking Facility

- Low speed torque control
- Powerful starting torque
- 2nd source for vertical and horizontal transverse sequential motor control

Automated Warehouse

- Smooth deceleration and precise target layer stops with powerful torque
- Real-time monitoring with driveview7

Press Nachine

- Peak current limit
- Inhibit regenerative operation

Washing Machine/Extractor

- Powerful laundry property with strong torque
- Effective deceleration with power braking & flux braking
- High speed operation with optimized algorithm

Air Compressor

- Optimized operation with enhanced PID algorithm
- Energy saving with sleep & wake up function
- Soft start/stop function

Model and Type

Motor Rating	200V Class		400V Class	
	VT(Normal Duty)	CT(Heavy Duty)	VT(Normal Duty)	CT(Heavy Duty)
0.75kW	SV0008 iS7-2NO(F)(D)	SV0008 iS7-2NO(F)(D)	SV0008 iS7-4NO(F)(D)	SV0008 iS7-4NO(F)(D)
1.5kW	SV0008 iS7-2NO(F)(D)	SV0015 iS7-2NO(F)(D)	SV0008 iS7-4NO(F)(D)	SV0015 iS7-4NO(F)(D)
2.2kW	SV0015 iS7-2NO(F)(D)	SV0022 iS7-2NO(F)(D)	SV0015 iS7-4NO(F)(D)	SV0022 iS7-4NO(F)(D)
3.7kW	SV0022 iS7-2NO(F)(D)	SV0037 iS7-2NO(F)(D)	SV0022 iS7-4NO(F)(D)	SV0037 iS7-4NO(F)(D)
5.5kW	SV0037 iS7-2NO(F)(D)	SV0055 iS7-2NO(F)(D)	SV0037 iS7-4NO(F)(D)	SV0055 iS7-4NO(F)(D)
7.5kW	SV0055 iS7-2NO(F)(D)	SV0075 iS7-2NO(F)(D)	SV0055 iS7-4NO(F)(D)	SV0075 iS7-4NO(F)(D)
11kW	SV0075 iS7-2NO(F)(D)	SV0110 iS7-2NO(F)(D)	SV0075 iS7-4NO(F)(D)	SV0110 iS7-4NO(F)(D)
15kW	SV0110 iS7-2NO(F)(D)	SV0150 iS7-2NO(F)(D)	SV0110 iS7-4NO(F)(D)	SV0150 iS7-4NO(F)(D)
18.5kW	SV0150 iS7-2NO(F)(D)	SV0185 iS7-2NO(F)(D)	SV0150 iS7-4NO(F)(D)	SV0185 iS7-4NO(F)(D)
22kW	SV0185 iS7-2NO(F)(D)	SV0220 iS7-2NO(F)(D)	SV0185 iS7-4NO(F)(D)	SV0220 iS7-4NO(F)(D)
30kW	SV0220 iS7-2NO(F)(D)	SV0300 iS7-2SO	SV0220 iS7-4NO(F)(D)	SV0300 iS7-4NO(D)
37kW	SV0300 iS7-2SO	SV0370 iS7-2SO	SV0300 iS7-4NO(D)	SV0370 iS7-4NO(D)
45kW	SV0370 iS7-2SO	SV0450 iS7-2SO	SV0370 iS7-4NO(D)	SV0450 iS7-4NO(D)
55kW	SV0450 iS7-2SO	SV0550 iS7-2SO	SV0450 iS7-4NO(D)	SV0550 iS7-4NO(D)
75kW	SV0550 iS7-2SO	SV0750 iS7-2SO	SV0550 iS7-4NO(D)	SV0750 iS7-4NO(D)
90kW	SV0750 iS7-2SO		SV0750 iS7-4NO(D)	SV0900 iS7-4SOD
110kW			SV0900 iS7-4SOD	SV1100 iS7-4SOD
132kW			SV1100 iS7-4SOD	SV1320 iS7-4SOD
160kW			SV1320 iS7-4SOD	SV1600 iS7-4SOD
185kW			SV1600 iS7-4SOD	SV1850 iS7-4SOD
220kW			SV1850 iS7-4SOD	SV2200 iS7-4SOD
280kW			SV2200 iS7-4SOD	SV2800 iS7-4SO
315kW			SV2800 iS7-4SO	SV3150 iS7-4SO
375kW			SV3150 iS7-4SO	SV3750 iS7-4SO
450kW			SV3750 iS7-4SO	

※ (F) : Built-in EMC(F) or Non-EMC(Blank) selectable
※ (D) : Built-in DCR(D) or Non-Reactor(Blank) selectable
※ Non DCR products are provided warranty service when used in CT(Constant torque) load rating only.
※ Please request LS sale person for UL type12(IP54) / Web customized product.

SV	0008	iS7	-	2	N	O	F	D	W
LS Drive Starvert Series	Capacity of Applied Motor	Series Name		Input Voltage	Keypad	UL	Filter	DC Reactor	Customized Product

Capacity of Applied Motor

0008	0.75 [kW]
0015	1.5 [kW]
0022	2.2 [kW]
0037	3.7 [kW]
0055	5.5 [kW]
0075	7.5 [kW]
0110	11 [kW]
0150	15 [kW]
0185	18.5 [kW]
0220	22 [kW]
0300	30 [kW]
0370	37 [kW]
0450	45 [kW]
0550	55 [kW]
0750	75 [kW]
0900	90[kW]
1100	110[kW]
1320	132[kW]
1600	160[kW]
1850	185kW
2200	220kW
2800	280kW
3150	315kW
3750	375kW

Input Voltage

2	3-Phase 200~230[V]
4	3-Phase 380~480[V]

Keypad

N	NON
S	GLCD (Graphic loader)

UL

O	Open
E	Enclosed UL type 1 [1]
P	Enclosed UL type 12 [2]

Filter

Blank	NON
F	EMC filter

DC Reactor

Blank	NON
D	DC reactor
R	DB resistor [3] (Inner mounted)

Customized Product

W	Winder
S	Synchronous
T	Safety [5]
V [4]	Marine

Customization
W: Web control,
S: Synchronization,
V: Vessel
E: High efficiency

*1) For 0.75~75KW enclosed type 1 can be satisfied if conduit option installed.
*2) Enclosed UL type 1,2 is available from 0.75 to 22kW.
*3) Built-in DB resistor option is available only for web version product from 0.75kW to 3.7kW.
DB resistor of IS7 porduct is the option of WEB product.
Applicable capacity is from 0.75 to 375 kW of IS7 porducts.
*4) More information about marine certification, refer to the 25 page.
*5) For 0.75~160kW, the safety option cannot be installed in the field. A type "T" safety iS7 must be specified and ordered from the factory.
For 185~375kW, a safety option can be purchased separately and field installed on the standard iS7.

Specification

Rated Input and Output: Input Voltage of 200V Class (0.75~22kW)

Type: SV□□□□iS7-2□				0008	0015	0022	0037	0055	0075	0110	0150	0185	0220
Motor Applied [1]		VT	[HP]	2	3	5	7.5	10	15	20	25	30	40
			[kW]	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30
		CT	[HP]	1	2	3	5	7.5	10	15	20	25	30
			[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
Rated Output	Rated Capacity [kVA] [2]			1.9	3.0	4.5	6.1	9.1	12.2	17.5	22.9	28.2	33.5
	Rated Current [A] [3]	CT		5	8	12	16	24	32	46	60	74	88
		VT		8	12	16	24	32	46	60	74	88	124
	Output Frequency [Hz]			0 ~ 400 [Hz] [4]									
	Output Voltage [V]			3-phase 200 ~ 230V [5] (Sensorless-1 : 0~300Hz, Sensorless-2, Vector : 0.1~120Hz)									
Rated Input	Available Voltage [V]			3-phase 200 ~ 230 VAC (-15% ~ +10%)									
	Frequency [Hz]			50 ~ 60 [Hz] (±5%)									
	Rated Current [A]	CT		4.3	6.9	11.2	14.9	22.1	28.6	44.3	55.9	70.8	85.3
		VT		6.8	10.6	14.9	21.3	28.6	41.2	54.7	69.7	82.9	116.1

2.1.2 Rated Input and Output: Input Voltage of 200V Class (30~75kw)

Type: SV□□□□iS7-2□				0300	0370	0450	0550	0750	-	-	-	-	-
Motor Applied [1]		VT	[HP]	50	60	75	100	125	-	-	-	-	-
			[kW]	37	45	55	75	90	-	-	-	-	-
		CT	[HP]	40	50	60	75	100	-	-	-	-	-
			[kW]	30	37	45	55	75	-	-	-	-	-
Rated Output	Rated Capacity [kVA] [2]			46	57	69	84	116	-	-	-	-	-
	Rated Current [A] [3]	CT		116	146	180	220	288	-	-	-	-	-
		VT		146	180	220	288	345	-	-	-	-	-
	Output Frequency [Hz]			0 ~ 400 [Hz] [4] (Sensorless -1: 0 ~ 300Hz, Sensorless -2, Vector. 0.1~120Hz)									
	Output Voltage [V]			3-phase 200 ~ 230V [5]									
Rated Input	Available Voltage [V]			3-phase 200 ~ 230 VAC (-15% ~ +10%)									
	Input Frequency			50 ~ 60 [Hz] (±5%)									
	Rated Current [A]	CT		121	154	191	233	305	-	-	-	-	-
		VT		152	190	231	302	362	-	-	-	-	-

Rated Input and Output: Input Voltage of 400V Class (0.75~22kW)

Type: SV□□□□iS7-4□				0008	0015	0022	0037	0055	0075	0110	0150	0185	0220
Motor Applied [1]		VT	[HP]	2	3	5	7.5	10	15	20	25	30	40
			[kW]	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30
		CT	[HP]	1	2	3	5	7.5	10	15	20	25	30
			[kW]	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22
Rated Output	Rated Capacity [kVA] [2]			1.9	3.0	4.5	6.1	9.1	12.2	18.3	22.9	29.7	34.3
	Rated Current [A] [3]	CT		2.5	4	6	8	12	16	24	30	39	45
		VT		4	6	8	12	16	24	30	39	45	61
	Output Frequency [Hz]			0 ~ 400 [Hz] [4]									
	Output Voltage [V]			3-phase 380 ~ 480V [5] (Sensorless-1 : 0~300Hz, Sensorless-2, Vector : 0.1~120Hz)									
Rated Input	Available Voltage [V]			3-phase 380 ~ 480 VAC (-15% ~ +10%)									
	Frequency [Hz]			50 ~ 60 [Hz] (±5%)									
	Rated Current [A]	CT		2.2	3.6	5.5	7.5	11.0	14.4	22.0	26.6	35.6	41.6
		VT		3.7	5.7	7.7	11.1	14.7	21.9	26.4	35.5	41.1	55.7

*1) Motor Applied indicates the maximum capacity applied to use of a standard 4 pole standard motor.
*2) Rated Capacity: the input capacity of a 200V class is based on 220V and that of a 400V class is based on 440V. The current rating is based on CT current.
*3) The output of rated current is limited according to the setting of the carrier frequency (CON-04).
*4) You can set the frequency at up to 300Hz by selecting 3, 4 Sensorless-1, Sensorless-2 as the control mode (DRV-09 Control Mode).
*5) The maximum output voltage does not go over the supplied power voltage. You can select the output voltage as you want below the supplied power voltage.

* Non DCR products are provided warranty service when used in CT (Heavy duty) load rating only.

Specifications

Rated Input and Output: Input Voltage of 400V Class (30~375kW)

Type: SV□□□□iS7-4□				0300	0370	0450	0550	0750	0900	1100	1320	1600	1850	2200	2850	3150	3750
Motor Applied [1]		VT	[HP]	50	60	75	100	125	150	200	250	300	350	400	500	600	700
			[kW]	37	45	55	75	90	110	132	160	185	220	280	315	375	450
		CT	[HP]	40	50	60	75	100	125	150	200	250	300	350	400	500	600
			[kW]	30	37	45	55	75	90	110	132	160	185	220	280	315	375
Rated Output	Rated Capacity [kVA] [2]			46	57	69	84	116	139	170	201	248	286	329	416	467	557
	Rated Current [A] [3]	CT		61	75	91	110	152	183	223	264	325	370	432	547	613	731
		VT		75	91	110	152	183	223	264	325	370	432	547	613	731	877
	Output Frequency [Hz]			0 ~ 400 [Hz] (Sensorless-1: 0 ~ 300Hz, Sensorless-2, Vector: 0 ~ 120Hz) [4]													
	Output Voltage [V]			3-phase 380 ~ 480V [5]													
Rated Input	Available Voltage [V]			3-phase 380 ~ 480 VAC (-15% ~ +10%)													
	Frequency [Hz]			50 ~ 60 [Hz] (±5%)													
	Rated Current [A]	CT		55.5	67.9	82.4	102.6	143.4	174.7	213.5	255.6	316.3	404	466	605	674	798
		VT		67.5	81.7	101.8	143.6	173.4	212.9	254.2	315.3	359,3	463	590	673	796	948

*1) Motor Applied indicates the maximum capacity applied of a standard 4 pole OTIS-LG motor.
*2) Rated Capacity: the input capacity of a 200V class is based on 220V and that of a 400V class is based on 440V. The current rating is based on CT current.
*3) The output of rated current is limited according to the setting of the carrier frequency (CON-04).
*4) In case of Sensorless-1, you can set the frequency at up to 300Hz by selecting 3, 4 as the control mode (DRV-09 Control Mode).
In case of Sensorless-2, you can set the frequency at up to 120Hz by selecting 3, 4 as the control mode (DRV-09 Control Mode).
*5) The maximum output voltage does not go up over the supplied power voltage. You can select the output voltage as you want below the supplied power voltage.

* Non DCR products are provided warranty service when used in CT (Heavy duty) load rating only.

Control

Control Method	V/F control, V/F PG, slip compensation, sensorless vector-1, sensorless vector-2, vector control
Frequency Setting Resolution	Digital command: 0.01Hz Analog command: 0.06Hz (maximum frequency: 60Hz)
Frequency Tolerance	Digital command operation: 0.01% of the maximum frequency Analog command operation: 0.1% of the maximum frequency
V/F Pattern	Linear, double reduction, user V/F
Overload Capacity	CT current rating: 150% for 1 minute, VT current rating: 110% for 1 minute
Torque Boost	Manual torque boost, automatic torque boost

Specifications

Control Method		Selectable among keypad/terminal block/communication operation	
Frequency Setting		Analog: 0 ~ 10[V], -10 ~ 10[V], 0 ~ 20[mA] Digital: keypad	
Operating Function		PID control, up-down operation, 3-wire operation, DC brake, frequency limit, frequency jump, second function, slip compensation, reverse rotation prevention, auto restart, drive by-pass, auto tune flying start, energy buffering, power braking, flux braking, leakage current reduction, MMC, easy start	
Input	Multi-Function Terminal (8 Points) P1 ~ P81 [1]	NPN(Sink)/PNP(Source) selectable	
		Function: forward operation; reverse operation; reset; external trip; emergency stop; jog operation; sequential frequency-high; medium and low; multi-level acceleration and deceleration-high; medium and low; D.C. control during stop; selection of a second motor; frequency increase; frequency decrease; 3-wire operation; change to general operation during PID operation; main body operation during option operation; analog command frequency fixation; acceleration and deceleration stop selectable	
Output	Multi-Function Open Collector Terminal	Drive fault output	Below DC 46V 100mA
	Multi-Function Relay Terminal		Below(N.O., N.C.) AC250V 1A, Below DC 30V 1A
	Analog Output	0 ~ 10 Vdc(below 20mA): selectable from frequency, current, voltage, direct current voltage	

*1) The Functions for Multi-function terminal available according to IN-65~72 parameter setting of IN Group.

Protective Functions

Trip	Over voltage, low voltage, over current, over current detection, drive overheat, motor thermal protection, phase loss protection, overload protection, communication error, frequency command loss, hardware failure, cooling fan failure, pre-PID failure, no motor trip, external brake trip. Safety function, etc.
Alarm	Stall prevention, overload, diminished load, encoder error, fan failure, keypad command loss, speed command loss.
Instantaneous Interruption [2]	Below CT class 15 msec(VT class 8 msec): operation continues(within rated input voltage, rated output) Over CT class 15 msec(VT class 8 msec): automatic restart

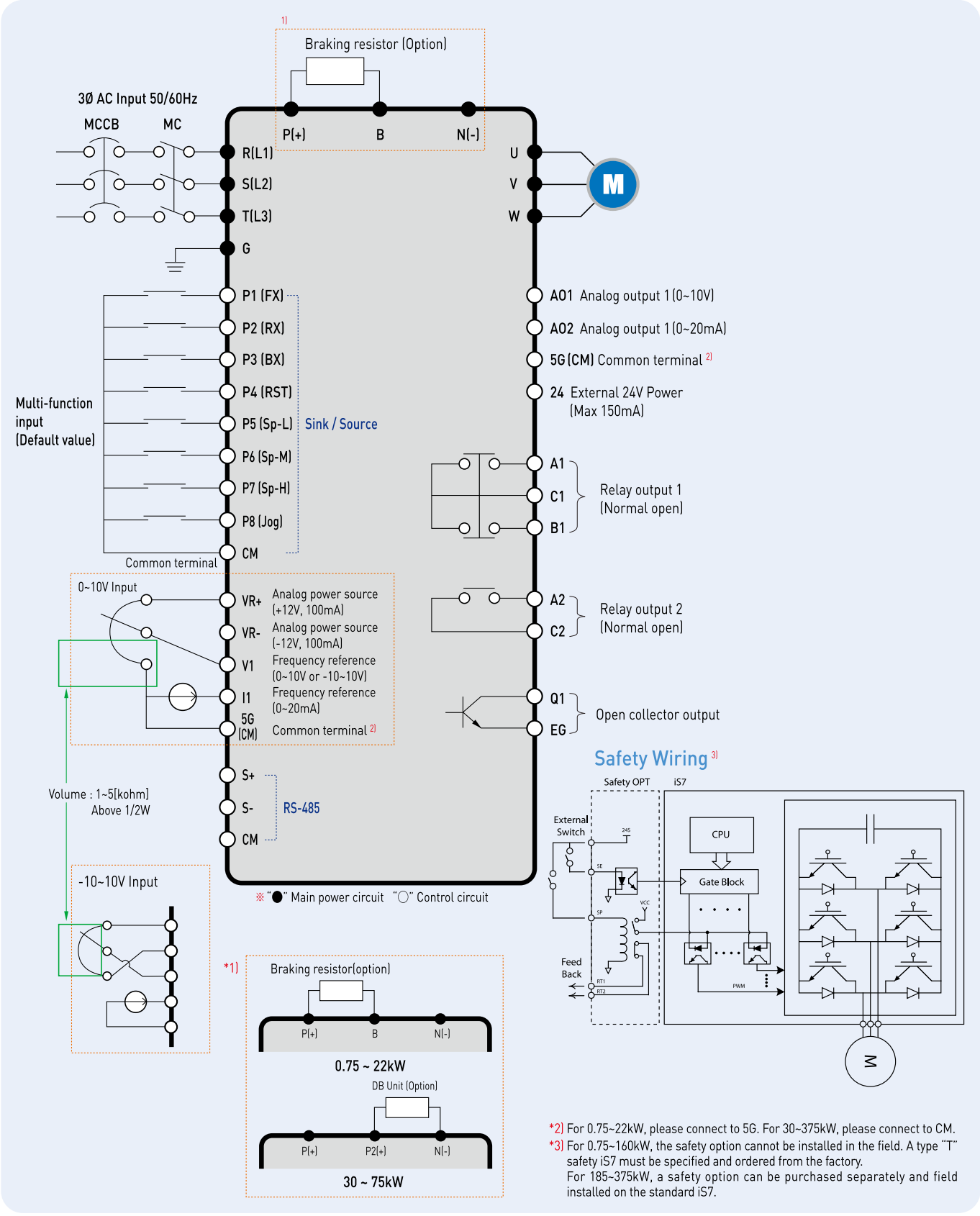
*2) Operation at the CT (Heavy Duty) current rating

Structure and Use Environment

Cooling Method	Forced air blast cooling: 0.75 ~ 15kW(200/400V class), 22kW(400V class) Inhalation cooling: 22 ~ 75kW(200V class), 30~375kW(400V class)
Protection Structure	0.75~22kW(200V), 0.75~75kW(400V): Open type IP 21(default), UL enclosed type 1(Option) [3] 30 ~ 75kW(200V), 90~375kW(400V): Open type IP 00 (default), UL enclosed type 1(Option) [3] 0.75~22kW-2/4 and etc: Enclosed IP54 type, UL enclosed type 12
Surrounding Temperature	CT(Heavy duty) load: -10 ~ 50°C,(14 ~ 122°F) without ice or frost VT(Normal duty) load: -10~ 40°C(14 ~ 104°F) without ice or frost (It is recommended that you use less than 80% load when you use VT load at 50°C(122°F)) IP54 product: -10~40°C(14~122°F) without ice or frost
Preservation Temperature	-20 ~ 65°C(-4 ~ 149°F)
Surrounding Humidity	Below 95% RH of relative humidity(with no dew formation)
Altitude, Vibration	Below 1,000m(From 1000 to 4000m, the rated input voltage and rated output current of the drive must be derated by 1% for every 100m.), below 5.9m/sec 2(19.36 ft/sec 2, 0.6G)
Surrounding Environment	Environment Level: 3C3(IEC60721-3-3) classifications (for SO2, H2S, CL, NO2) No corrosive gas, flammable gas, oil mist and dust etc., indoors
Conformal Coating	To meet the below IEC standard In the harsh operating environment and to enhance PCB Ass'y life cycle IEC 60721-3-3(3C2) / IEC 60068-2-43 / IEC 60068-2-60

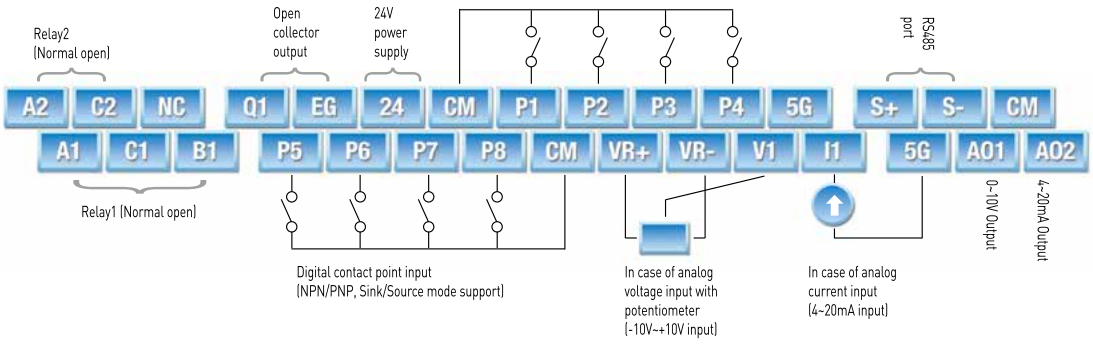
*3) UL Enclosed type 1 with conduit box installed. (30~75kW(200V) conduit box has been installed, is open type IP 20)

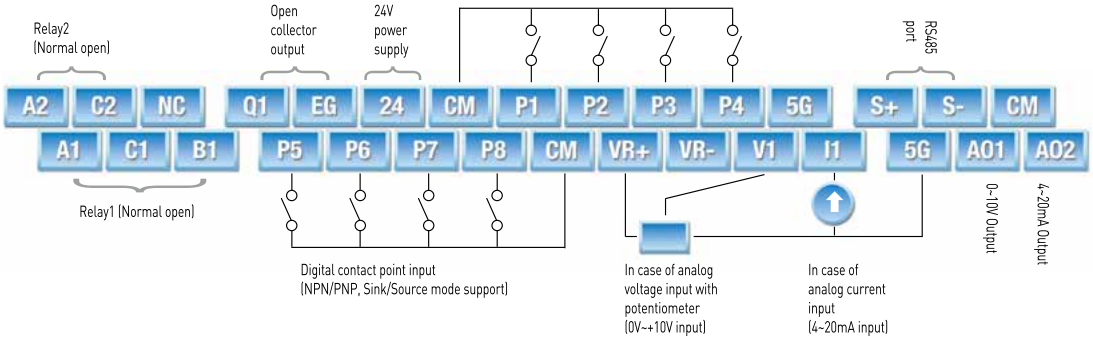
Wiring



*2) For 0.75~22kW, please connect to 5G. For 30~375kW, please connect to CM.
*3) For 0.75~160kW, the safety option cannot be installed in the field. A type "T" safety iS7 must be specified and ordered from the factory.
For 185~375kW, a safety option can be purchased separately and field installed on the standard iS7.

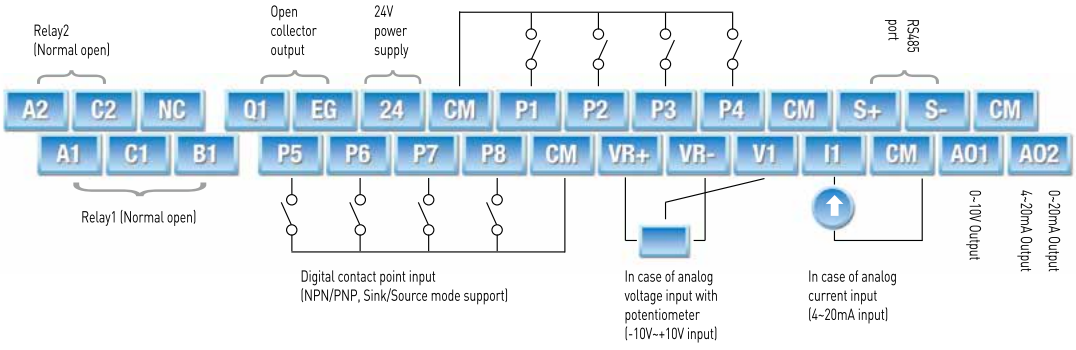
0.75~22kW (Basic I/O)

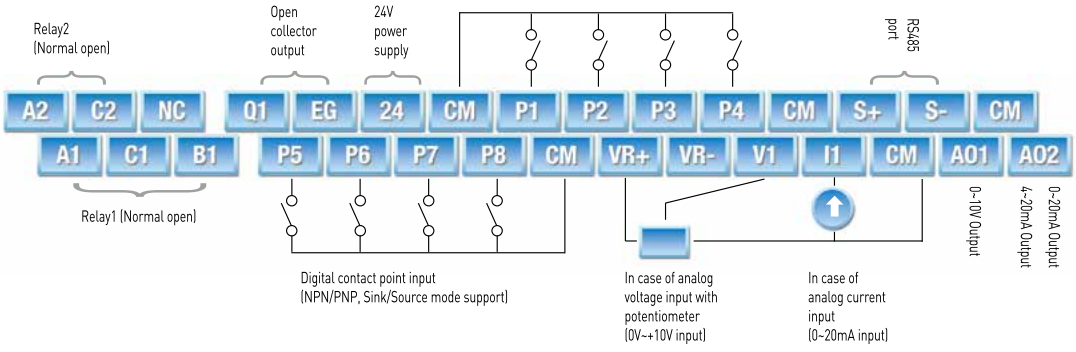




TR terminal located on the above the right side of terminal block is for the terminal resistor of RS485 communication(120Ω)
We recommend the potentiometer for 1/2W, 1kΩ.
* Description of TR terminal and variable resistence are same as those of insulated I/O.

30~375kW (Insulated I/O)





TR terminal located on the above the right side of terminal
block is for the terminal resistor of RS485 communication(120Ω)

AC Reactor Specifications / 200V 30~75kW

Capacity of Drive	Specifications of the AC Reactor			
	Heavy Duty		Normal Duty	
	mH	A	mH	A
0008iS7-2	2.13	5.7	1.20	10
0015iS7-2	1.20	10	0.88	14
0022iS7-2	0.88	14	0.56	20
0037iS7-2	0.56	20	0.39	30
0055iS7-2	0.39	30	0.28	40
0075iS7-2	0.28	40	0.20	59
0110iS7-2	0.20	59	0.15	75
0150iS7-2	0.15	75	0.12	96
0185iS7-2	0.12	96	0.10	112
0220iS7-2	0.10	112	0.07	160
0300iS7-2	0.07	160	0.05	200
0370iS7-2	0.05	200	0.044	240
0450iS7-2	0.044	240	0.038	280
0550iS7-2	0.038	280	0.026	360
0750iS7-2	0.026	360	0.02	500
0008iS7-4	8.63	2.8	4.81	4.8
0015iS7-4	4.81	4.8	3.23	7.5
0022iS7-4	3.23	7.5	2.34	10
0037iS7-4	2.34	10	1.22	15
0055iS7-4	1.22	15	1.14	20
0075iS7-4	1.14	20	0.81	30
0110iS7-4	0.81	30	0.61	38
0150iS7-4	0.61	38	0.45	50
0185iS7-4	0.45	50	0.39	58
0220iS7-4	0.39	58	0.287	80
0300iS7-4	0.287	80	0.232	98
0370iS7-4	0.232	98	0.195	118
0450iS7-4	0.195	118	0.157	142
0550iS7-4	0.157	142	0.122	196
0750iS7-4	0.122	196	0.096	237
0900iS7-4	0.096	237	0.081	289
1100iS7-4	0.081	289	0.069	341
1320iS7-4	0.069	341	0.057	420
1600iS7-4	0.057	420	0.042	558
1850iS7-4	0.042	558	0.042	558
2200iS7-4	0.042	558	0.029	799
2800iS7-4	0.029	799	0.029	799
3150iS7-4	0.029	799	0.024	952
3750iS7-4	0.024	952	0.024	952

DC Reactor Specifications

200V 30~75kW

Capacity of Drive	Specifications of the DC Reactor	
	mH	A
0300iS7-2	0.24	200
0370iS7-2	0.2	240
0450iS7-2	0.17	280
0550iS7-2	0.12	360
0750iS7-2	0.1	500

400V 280~375kW

Capacity of Drive	Specifications of the DC Reactor	
	mH	A
2800iS7-4	0.09	836
3150iS7-4	0.076	996
3750iS7-4	0.064	1195

400V/30–75kW (For Non-DCR products, remove the P1 and P2 shorting pins to install the DC reactor.)

Inverter capacity	DC reactor specifications	
	mH	A
0300iS7-4	0.98	75
0370iS7-4	0.87	90
0450iS7-4	0.55	110
0550iS7-4	0.47	150
0750iS7-4	0.48	180

Dynamic Braking Unit

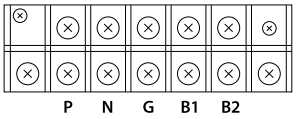
UL Form	Type	Voltage	Capacity of Applied Motor	Braking Unit	Braking Unit
UL Type	Type A	200V	30 ~ 37kW	SV370DBU-2U	Refer to the appearance of group 1
			45 ~ 55kW	SV550DBU-2U	
			75kW	SV370DBU-2U, 2Set	
		400V	30 ~ 37kW	SV370DBU-4U	
			45 ~ 55kW	SV550DBU-4U	
			75kW	SV750DBU-4U	
			90kW	SV550DBU-4U, 2Set	
			110 ~ 132kW	SV750DBU-4U, 2Set	
			160kW	SV750DBU-4U, 3Set	
Non UL Type	Type A	200V	30 ~ 37kW	SV037DBH-2	Refer to the appearance of group 2
		400V	30 ~ 37kW	SV037DBH-4	
			45 ~ 55kW, 75kW	SV075DBH-4	
				SV075DB-4	Refer to the appearance of group 3
			185 ~220kW	SV2200DB-4 [1]	Refer to the appearance of group 4
			280 ~ 375kW	SV2200DB-4, 2Set	
		200V	30 ~ 37kW	LSLV0370DBU-2LN	Group 5
				LSLV0370DBU-2HN	Group 6
			45 ~ 55kW, 75kW	LSLV0750DBU-2LN	Group 5
				LSLV0750DBU-2HN	Group 6
		400V	30 ~ 37kW	LSLV0370DBU-4LN	Group 5
				LSLV0370DBU-4HN	Group 6
			45 ~ 55kW, 75kW	LSLV0750DBU-4LN	Group 5
			90kW	LSLV0900DBU-4HN	Group 6
			110 ~ 132kW	LSLV1320DBU-4HN	
			160kW	LSLV1600DBU-4HN	
			185 ~ 220kW	LSLV2200DBU-4HN	
			280 ~ 375kW	LSLV2200DBU-4HN, 2Set	

*1) It is not necessary to option type dynamic braking unit for IS7 0.75~22kW(200V, 400V) because basically the dynamic braking unit is built in.
*2) You nust refer to dynamic braking unit manual for usage recommended dynamic braking unit in the table above due to changeable table.
*3) Resistance/watt/breaking torque/%ED of DB Resistor for type A DB Unit refer to the table of "6)DB Resistors". And in case of Type B&C refer to the manual of DB Unit.

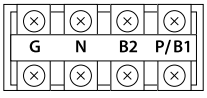
* Please refer to the manual for dimensions of DB unit.

Terminal Arrangement of Dynamic Braking Unit

Group 1



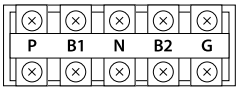
Group 2



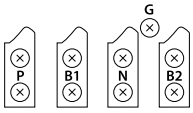
Terminal	Function
G	Ground terminal
B2	Terminal for connection with B2 of DBU
B1	Terminal for connection with B1 of DBU
N	Terminal for connection with N of drive
P	Terminal for connection with P1 of drive

*Note: READ DBU User manual certainly when selecting DB resistors.

Group 3

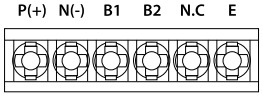


Group 4



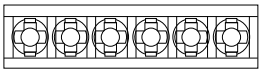
Terminal	Function
P	Terminal for connection with P of drive
B1	Terminal for connection with B1 of DBU
N	Terminal for connection with N of drive
B2	Terminal for connection with B2 of DBU
G	Ground terminal

Group 5

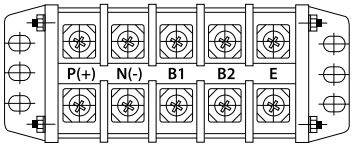


Group 6

A Frame
(37kW, 75kW-4)

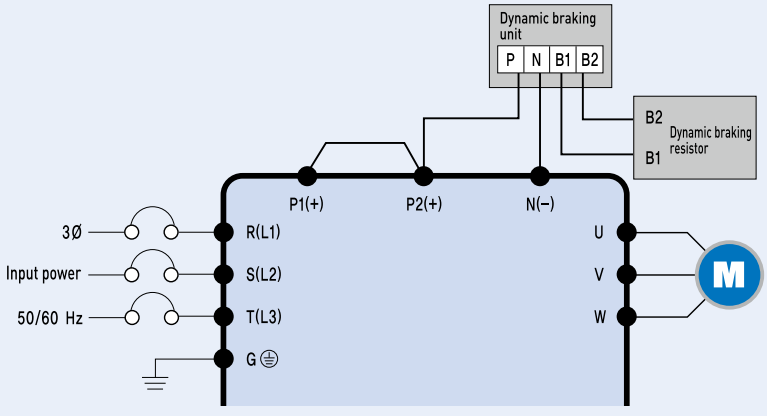


B Frame / C Frame
(75kW-2, 90~220kW)



Terminal	Function
P(+)	Terminal for connection with P of drive
N(-)	Terminal for connection with N of drive
B1	Terminal for connection with B1 of DBU
B2	Terminal for connection with B2 of DBU
N.C	Unused
E	Ground terminal

Dynamic Braking Unit (DBU) & DB Resistor Wiring Layout



DBU Terminals	Description
B1, B2	Wire correctly refering to diagram. DB Resistors connect with B1,B2 of DB Unit

Dynamic Braking Resistor (Option)

Resistance/watt/breaking torque/%ED of DB resistor for type A DB Unit refer to the table of "6) DB resistors".
And in case of type B&C refer to the manual of unit. Rating watt of DBU has to be doubled when %ED is doubled.

Voltage	Applied Drive Capacity [kW]	Resistance [ohm]	Watt [W]	Appearance	Reference	Wiring [mm^2]	Model
200V Class	0.75	150	150	-	150% Braking Torque, 5%ED	1.25	-
	1.5	60	300	-		1.25	-
	2.2	50	400	TYPE 1		2.5	MCRF400W50
	3.7	33	600	TYPE 2		2.5	MCRF600W33
	5.5	20	800	TYPE 3		2.5	MCRF800W20
	7.5	15	1200	TYPE 5		4	MCRF1200W15
	11	10	2400	TYPE 6		4	MCRF-ST2400W10
	15	8	2400	TYPE 6		10	MCRF-ST2400W8
	18.5	5	3600	TYPE 7		20	MCRF-ST3600W5
	22	5	3600	TYPE 7		20	MCRF-ST3600W5
	30	5	5000	-	100% Braking Torque, 10%ED	-	-
	37	4.5	7000	-		-	-
	45	3.5	10000	-		-	-
	55	3	15000	-		-	-
	75	2.5	20000	-		-	-
400V Class	0.75	600	150	-	150% Braking Torque, 5%ED	1.25	-
	1.5	300	300	-		2	-
	2.2	200	400	TYPE 1		2.5	MCRF400W200
	3.7	130	600	TYPE 2		2.5	MCRF600W130
	5.5	85	1000	TYPE 4		2.5	MCRF1000W85
	7.5	60	1200	TYPE 5		2.5	MCRF1200W60
	11	40	2000	TYPE 6		2.5	MCRF-ST2000W40
	15	30	2400	TYPE 6		4	MCRF-ST2400W30
	18.5	20	3600	TYPE 7		6	MCRF-ST3600W20
	22	20	3600	TYPE 7		6	MCRF-ST3600W20
	30	16.9	6,400	-	100% Braking Torque, 10%ED	-	-
	37	16.9	6,400	-		-	-
	45	11.4	9,600	-		-	-
	55	11.4	9,600	-		-	-
	75	8.4	12,800	-		-	-
	90	4.5	15,000	-		-	-
	110	3.5	17,000	-		-	-
	132	3,0	20,000	-		-	-
	160	2.5	25,000	-		-	-
	185	2	30,000	-		-	-
	220	2	30,000	-		-	-
	280	1.5	40,000	-		-	-
	315	1	60,000	-		-	-
	375	1	60,000	-		-	-

Please refer the following if you use option type dynamic braking unit to IS7.
1) If you use the DB Unit in parallel, the combined resistance value must the resistance value in the table above.
2) If the braking resistor type name is not listed in the table above, purchase separately a braking resistor reference to resistance and wattage in the table above.

* Please refer to the manual for dimensions of DB Resistor.

Specifications of Wiring Switch and Electronic Contactor

Drive Capacity	Wiring Switch				Short Circuit Switch		Electronic Contactor	
	METASOL		SUSOL					
	Model	Rated Current [A]	Model	Rated Current [A]	Model	Rated Current [A]	Model	Rated Current [A]
0008iS7-2	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	11
0015iS7-2	ABS33c	15	UTE100	15	EBS33c	15	MC-12b	12
0022iS7-2	ABS33c	30	UTE100	30	EBS33c	30	MC-18b	18
0037iS7-2	ABS33c	30	UTE100	30	EBS33c	30	MC-32a	32
0055iS7-2	ABS53c	50	UTE150	50	EBS53c	50	MC-40a	40
0075iS7-2	ABS63c	60	UTE150	60	EBS63c	60	MC-50a	55
0110iS7-2	ABS103c	100	UTE150	100	EBS103c	100	MC-65a	65
0150iS7-2	ABS103c	125	UTE150	125	EBS103c	125	MC-100a	105
0185iS7-2	ABS203c	150	UTE150	150	EBS203c	150	MC-130a	130
0220iS7-2	ABS203c	175	UTE250	175	EBS203c	175	MC-150a	150
0300iS7-2	ABS203c	225	UTE250	225	EBS203c	225	MC-150a	150
0370iS7-2	ABS403c	300	UTE400	300	EBS403c	300	MC-225a	225
0450iS7-2	ABS403c	350	UTE400	350	EBS403c	350	MC-330a	330
0550iS7-2	ABS603c	500	UTE600	500	EBS603c	500	MC-400a	400
0750iS7-2	ABS603c	630	UTE600	600	EBS603c	630	MC-630a	630
0008iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	15
0015iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-9b	15
0022iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-12b	15
0037iS7-4	ABS33c	15	UTE100	15	EBS33c	15	MC-18b	15
0055iS7-4	ABS33c	30	UTE100	30	EBS33c	30	MC-22b	30
0075iS7-4	ABS33c	30	UTE100	30	EBS33c	30	MC-32a	30
0110iS7-4	ABS53c	50	UTE150	50	EBS53c	50	MC-40a	50
0150iS7-4	ABS63c	60	UTE150	60	EBS63c	60	MC-50a	60
0185iS7-4	ABS103c	80	UTE150	80	EBS103c	80	MC-65a	80
0220iS7-4	ABS103c	100	UTE150	100	EBS103c	100	MC-65a	100
0300iS7-4	ABS103c	125	UTE150	125	EBS203c	125	MC-100a	125
0370iS7-4	ABS203c	150	UTE150	150	EBS203c	150	MC-130a	150
0450iS7-4	ABS203c	175	UTE250	175	EBS203c	175	MC-150a	175
0550iS7-4	ABS203c	225	UTE250	225	EBS203c	225	MC-185a	225
0750iS7-4	ABS403c	300	UTE400	300	EBS403c	300	MC-225a	300
0900iS7-4	ABS403c	400	UTE400	400	EBS403c	400	MC-330a	400
1100iS7-4	ABS603c	500	UTE600	500	EBS603c	500	MC-400a	500
1320iS7-4	ABS603c	630	UTE600	600	EBS603c	630	MC-400a	600
1600iS7-4	ABS603c	630	UTE600	600	EBS603c	630	MC-630a	600
1850iS7-4	ABS803c	800	UTE800	800	EBS803c	800	MC-630a	800
2200iS7-4	ABS803c	800	UTE800	800	EBS803c	800	MC-800a	800
2800iS7-4	ABS1003b	1000	UTE1200	1000	EBS1003c	1000	1000A	1000
3150iS7-4	ABS1203b	1200	UTE1200	1200	EBS1203c	1200	1200A	1200
3750iS7-4	1400A	1400	1400A	1400	1400A	1400	1400A	1400

Option Slot #1) Fieldbus Options

Profibus-DP

- Profibus dedicated connector
- Max. 12Mbps communication speed
- Max. 32 stations per segment
- Bus topology
- Enhanced on-line diagnosis

Devicenet

- Communication speed: 125kbps, 250kbps, 500kbps
- Free/Bus topology
- Max. 64 node connection points
- Max. 500m (1640 ft.) transmission distance (125kbps)

Can Open

- 1Mbps communication speed
- Bus Topology
- Max. 64 node connection points (include master)
- PDO, SDO, Sync, NMC communication support
- Support profile: PDO1 (CiA402 drive & motion control device profile), PDO3 (LS Profile)

CC-Link

- 10Mbps communication speed
- Connecting up to 42 AC drives
- Station type: Remote device station
- 1 connection point for 1 AC drive

2-Port Ethernet

- Modbus TCP, Ethernet IP protocol support (Rapienet available soon)
- Ring type topology support
- 100Mbps communication speed
- Half duplex, Full duplex support
- Auto negotiation support
- Maximun 100m[328ft.] transmission distance
- CSMA/CD communication access method

Lonworks

- 78kbps communication speed
- Free/bus topology
- Resistance built-in per topology
- Max. 2700m (8858 ft.) connection distance (bus topology)

R-Net/F-Net

- 1Mbps communication speed
- Manchester biphase-L frame synchronization
- Max. 64 node connection points
- Max. 750m transmission distance (segment each)

RAPIEnet

- RAPIEnet protocol support
- 100Mbps communication speed
- Full duplex support
- High speed link(8 WORD), P2P(2 WORD) support
- Max. 64 connection points
- Topology : Line/Ring topology

PROFInet

- PROFInet protocol support PROFInet IO CC-A
- 100Mbps communication speed
- Full duplex support
- PROFIdrive class 1
- Max. 64 connection points
- Topology : Line topology

CC-LINK IE Field

- CC-LINK IE field protocol support
- 1Gbps transmission speed
- Intelligent device station
- Max, number of stations: 120
- RX/Y 32bits, RWr/w 8words support
- Ring/Line/Star topology

Option Slot #2) PLC/Extension Options

PLC

- Master-K 120S platform
- Normal input 6 points (Sink/Source selectable), Max. input 14 points when expanded
- Normal output 4 points (N.O. Relay), Max. output 7 points when expanded
- RTC (Real time clock)
- KGL WIN operating system

I/O Expansion

- Insulated I/O 3 points each
- Ext-1 - Analog Input : voltage (-10V~10V) 1 point, current (0~20mV) 1 point analog output : voltage (-10V~10V) 1 point, current (0~20mV) 1 point digital Input 3 points / Digital output (Relay) 3 points
- Ext-2 - analog Input : 4points (voltage (-10V~10V) & current (0~20mV) selectable) analog output : voltage (-10V~10V) 2 point, current (0~20mV) 2 point digital output (TR) 2 points

Ext-2 is available for web customized version only

Safety

- 2-Channel STO function (STO : Safety torque off)
- Safety standard certified

* For 0.75~160kW, Safety option is provided as built-in form from manufacturer.

For 185~375kW, customer can purchase Safety option and install on product by himself.

Synchronization Option

- Closed loop control
- 100kHz Max. input frequency
- Position/Speed synchronization
- Synchronization hold (only slave)
- 15 slaves per master (3 serial - 5 parallel max)
- Open collector output : 26V/100mA (2 points)
- Synchronization option card is only available for synchronization version product.

Binary Input

- Operating frequency setting with digital input (NPN/PNP)
- Max. 16bit digital input (8bit / 12bit / 16bit)
- Frequency setting with bias-gain or BCD
- Frequency resolution (0.01Hz~10Hz)
- Digital input filter function Input signal read timing terminal

Option Slot #3) Encoder Options

Encoder

- Closed loop control
- Pulse train reference
- 5/12/15 V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection

24V Encoder

- Closed loop control
- Pulse train reference
- 24V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection

Position Control Option

- Closed loop control
- Pulse train reference
- 5/12/15V insulated power supply
- Line driver or open collector
- 200kHz Max. input frequency
- Signal loss detection
- External brake control
- Position control option card is only available for synchronization version product.

Marine Certification

Marine Certification

Marine classification is that the structure and equipment of the ship has been estimated from the test with the certain standards for certificate issued and given by classification society. SV-IS7 Series is certificated with product testing, process, production equipment and test equipment to install on the shipping.

DNV (Det Norske Veritas) Marine Certification Details

Certification Institute	DNV (Det norske vertas)
Certificate Number	TAE00001S1
Certified Model Types	SV-iS7 series (Range: 0.75kW~75kW, 200V Class / 0.75kW~375kW, 400V Class)
Compliance	Det norske veritas' rules for classification of ships, high speed & light craft det norske veritas' offshore standards

BV (Bureau Veritas) Marine Certification Details

Certification Institute	Bureau veritas (Marine&Off shore division)
Certificate Number	40183/AO BV
Certified Model Types	SV-iS7 Series (Range: 0.75kW~75kW, 200V class / 0.75kW~375kW, 400V Class)
Compliance	Bureau veritas rules for the classification of steel ships

ABS (American Bureau of Shopping) Marine Certification Details

Certification Institute	ABS (American bureau of shipping)
Certificate Number	14-BK1291913-PDA
Certified Model Types	SV-iS7 series (Range: 0.75kW~75kW, 200V Class / 0.75kW~90kW, 400V Class)
Compliance	Installation of the product on an ABS class vessel, MODU or facility

KR (Korean Resister)

Certification Institute	KR (Korean resister)
Certificate Number	PTD25585-AC003
Certified Model Types	SV-iS7 Series (Range: 0.75 kW–75 kW, 200V / 0.75 kW–375 kW, 400V)
Compliance	Korean resister's rules for classification of steel ships

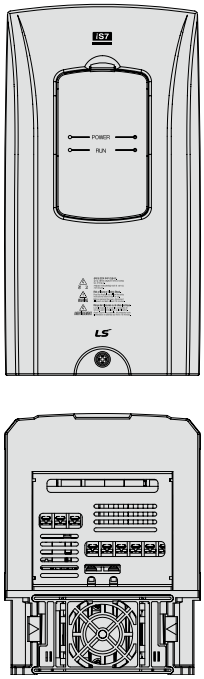
Marine Certification

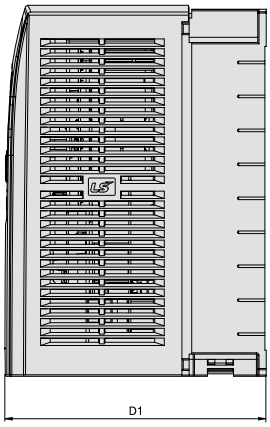
Marine Certification

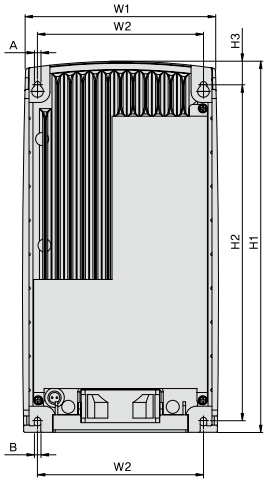
Voltage	Type	DNV	BV	ABS	KR
3-Phase 200V Class	SV0008iS7-2□□□□V	○	○	○	○
	SV0015iS7-2□□□□V	○	○	○	○
	SV0022iS7-2□□□□V	○	○	○	○
	SV0037iS7-2□□□□V	○	○	○	○
	SV0055iS7-2□□□□V	○	○	○	○
	SV0075iS7-2□□□□V	○	○	○	○
	SV0110iS7-2□□□□V	○	○	○	○
	SV0150iS7-2□□□□V	○	○	○	○
	SV0185iS7-2□□□□V	○	○	○	○
	SV0220iS7-2□□□□V	○	○	○	○
	SV0300iS7-2□□□□V	○	○	○	○
	SV0370iS7-2□□□□V	○	○	○	○
	SV0450iS7-2□□□□V	○	○	○	○
	SV0550iS7-2□□□□V	○	○	○	○
	SV0750iS7-2□□□□V	○	○	○	○
3-Phase 400V Class	SV0008iS7-2□□□□V	○	○	○	○
	SV0015iS7-2□□□□V	○	○	○	○
	SV0022iS7-2□□□□V	○	○	○	○
	SV0037iS7-2□□□□V	○	○	○	○
	SV0055iS7-2□□□□V	○	○	○	○
	SV0075iS7-2□□□□V	○	○	○	○
	SV0110iS7-2□□□□V	○	○	○	○
	SV0150iS7-2□□□□V	○	○	○	○
	SV0185iS7-2□□□□V	○	○	○	○
	SV0220iS7-2□□□□V	○	○	○	○
	SV0300iS7-2□□□□V	○	○	○	○
	SV0370iS7-2□□□□V	○	○	○	○
	SV0450iS7-2□□□□V	○	○	○	○
	SV0550iS7-2□□□□V	○	○	○	○
	SV0750iS7-2□□□□V	○	○	○	○
	SV0900iS7-2□□□□V	○	○	○	○
	SV1100iS7-2□□□□V	○	○	X	○
	SV1320iS7-2□□□□V	○	○	X	○
	SV1600iS7-2□□□□V	○	○	X	○
	SV1850iS7-2□□□□V	○	○	X	○
	SV2200iS7-2□□□□V	○	○	X	○
	SV2800iS7-2□□□□V	○	○	X	○
	SV3150iS7-2□□□□V	○	○	X	○
	SV3750iS7-2□□□□V	○	○	X	○

Dimensions (UL Enclosed Type1, IP21 Type)

SV0008 ~ 0037iS7 (200V/400V Class)



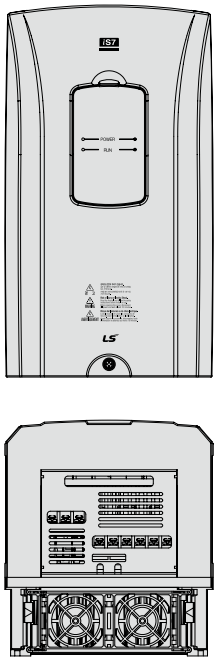


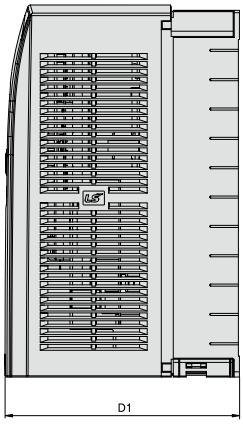


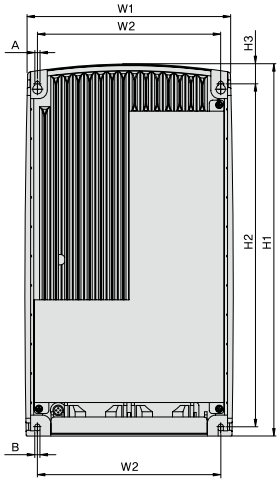
mm(inches)

Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0008~ 0037iS7-2/4	150 (5.90)	127 (5.00)	284 (11.18)	257 (10.11)	18 (0.70)	200 (7.87)	5 (0.19)	5 (0.19)

SV0055 ~ 0075iS7 (200V/400V Class)





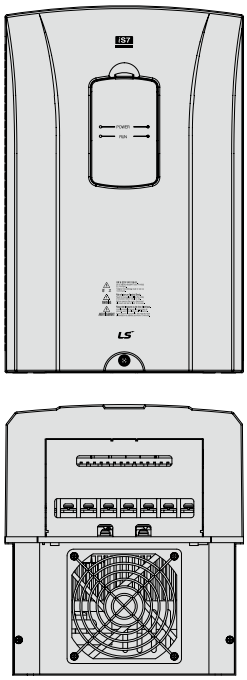


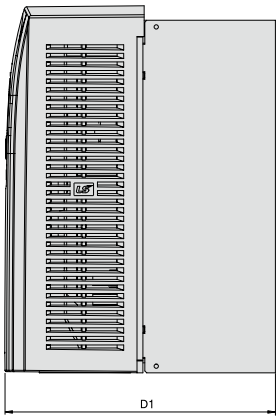
mm(inches)

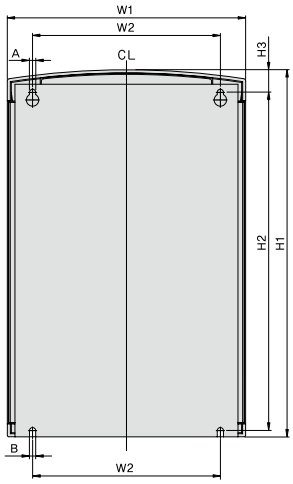
Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0055~ 0075iS7-2/4	200 (7.87)	176 (6.92)	355 (13.97)	327 (12.87)	19 (0.74)	225 (8.85)	5 (0.19)	5 (0.19)

Dimensions (UL Enclosed Type1, IP21 Type)

SV0110 ~ 0150iS7 (200V/400V Class)



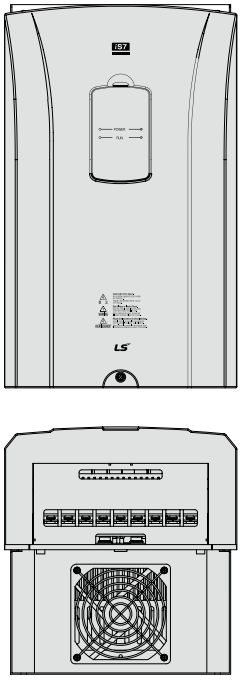


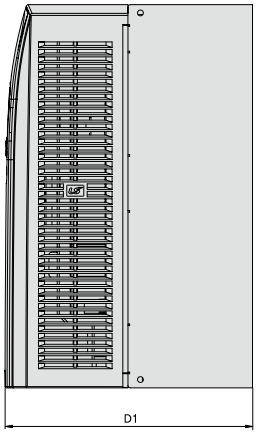


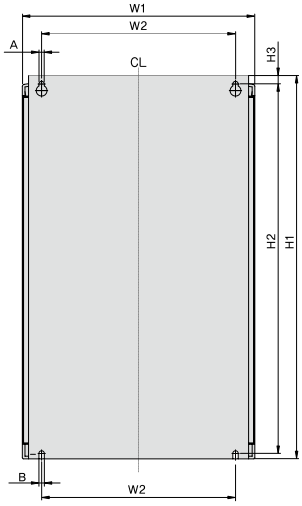
mm(inches)

Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0110~ 0150iS7-2/4	250 (9.84)	214.6 (8.44)	385 (15.15)	355 (13.97)	23.6 (0.92)	284.8 (11.21)	6.5 (0.25)	6.5 (0.25)

SV0185 ~ 0220iS7 (200V/400V Class)



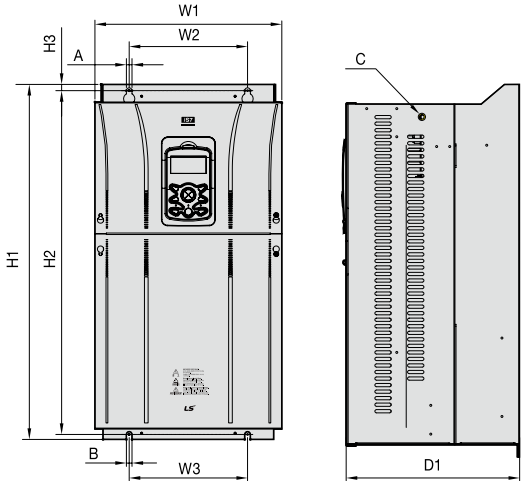




mm(inches)

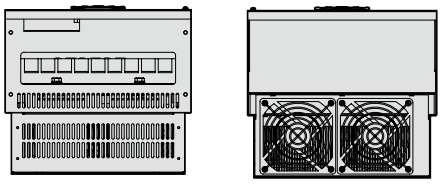
Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0185~ 0220iS7-2/4	280 (11.02)	243.5 (9.58)	461.6 (18.17)	445 (17.51)	10.1 (0.39)	299 (11.78)	6.5 (0.25)	6.5 (0.25)

SV0300iS7 (200V Class, IP00 Type)

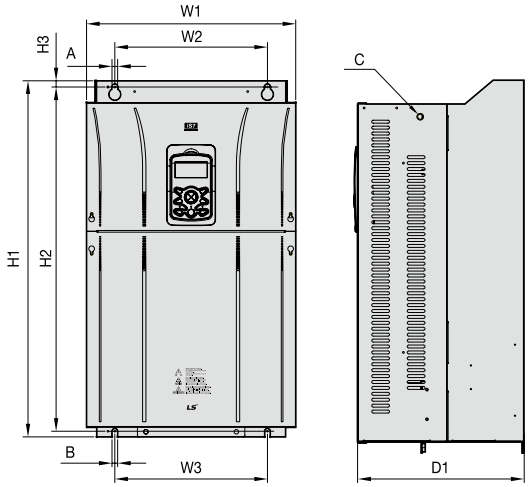


mm(inches)

Applied Drives	W1	W2/W3	H1	H2	H3	D1	A	B	C
SV0300iS7-2	300 (11.81)	190 (7.48)	570 (22.44)	552 (21.73)	10 (0.39)	265.2 (10.44)	9 (0.35)	10 (0.39)	M8

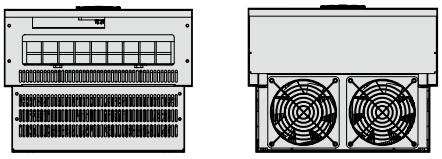


SV0370 ~ 0450iS7 (200V Class, IP00 Type)

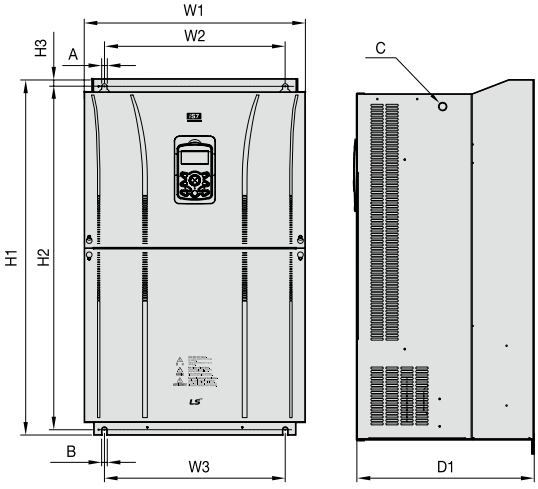


mm(inches)

Applied Drives	W1	W2/W3	H1	H2	H3	D1	A	B	C
SV0370~ 0450iS7-2	370 (14.56)	270 (10.63)	630 (24.8)	609 (23.97)	11 (0.43)	281.2 (11.07)	10 (0.39)	10 (0.39)	M10

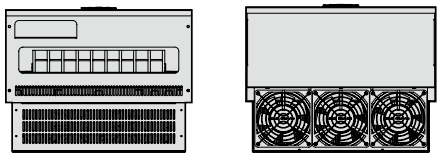


SV0550 ~ 0750iS7 (200V Class, IP00 Type)



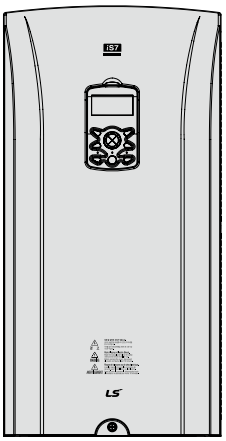
mm(inches)

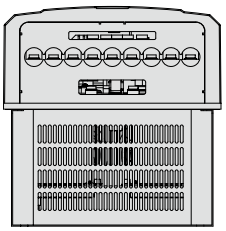
Applied Drives	W1	W2/W3	H1	H2	H3	D1	A	B	C
SV0550~ 0750iS7-2	465 (18.3)	381 (15.0)	750 (29.52)	723.5 (28.48)	15.5 (0.61)	355.6 (14.0)	11 (0.43)	11 (0.43)	M16

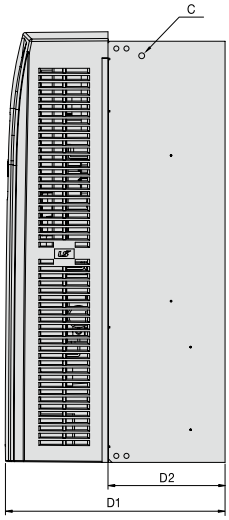


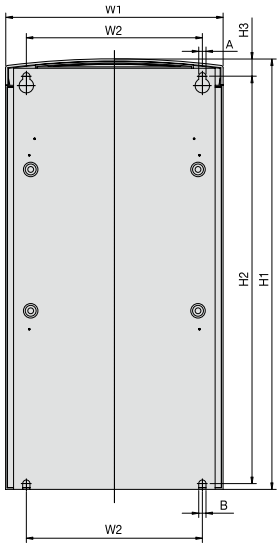
Dimensions (UL Enclosed Type1, IP21 Type)

SV0300 ~ 0450iS7 (400V Class)





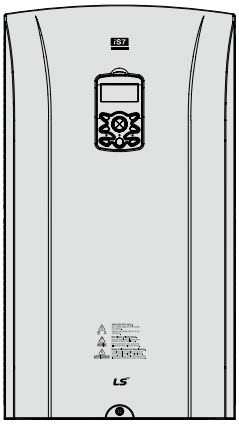


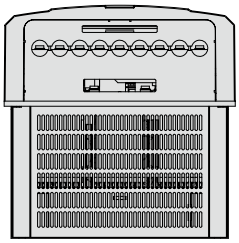


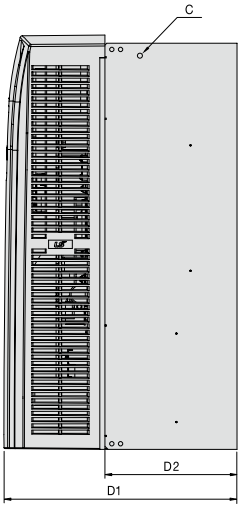
mm(inches)

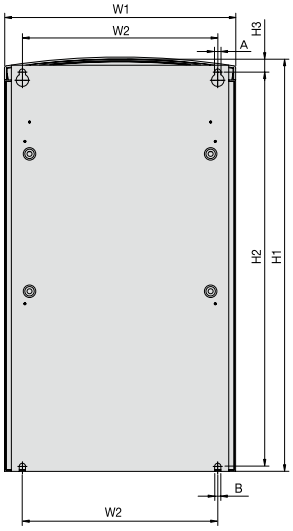
Applied Drives	W1	W2	H1	H2	H3	D1	D2	A	B	C
						DCR type				
SV0300~ 0450iS7-4	300.1 (11.81)	242.8 (9.55)	594.1 (23.38)	562 (22.12)	24.1 (0.94)	302.7 (11.92)	161 (6.33)	10 (0.39)	10 (0.39)	M8

SV0550 ~ 0750iS7 (400V Class)





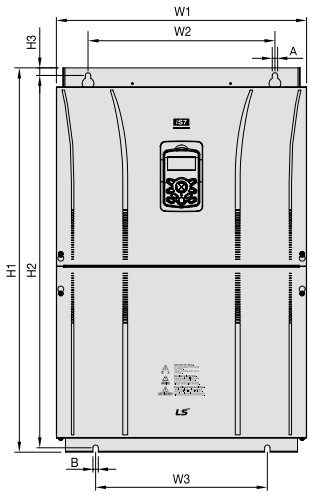


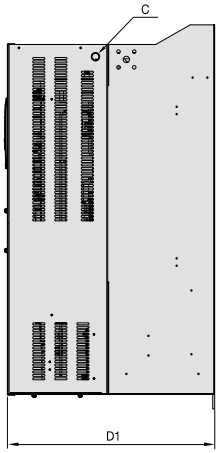


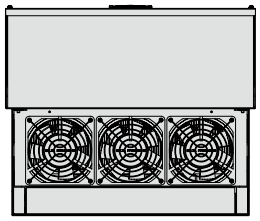
mm(inches)

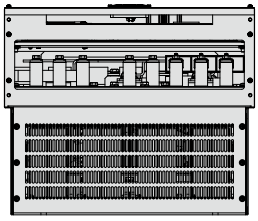
Applied Drives	W1	W2	H1	H2	H3	D1	D2	A	B	C
						DCR type				
SV0550~ 0750iS7-4	370.1 (14.57)	312.8 (12.31)	663.5 (26.12)	631.4 (24.85)	24.1 (0.94)	373 (14.69)	211.5 (8.32)	10 (0.39)	10 (0.39)	M8

SV0900/1100iS7 (400V Class, IP00 Type)





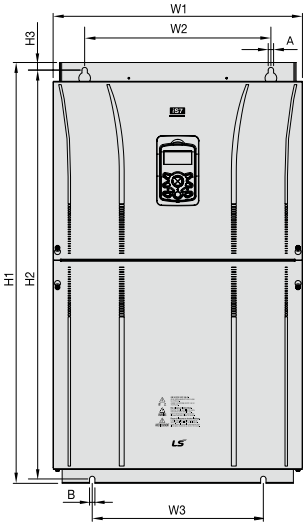


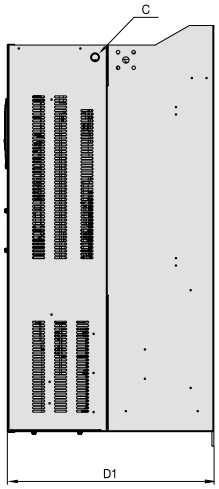


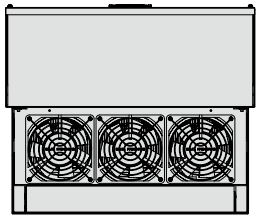
mm(inches)

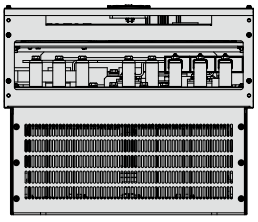
Applied Drives	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV0900/ 1100iS7-4	510 (20.07)	381 (15.0)	350 (13.77)	783.5 (30.84)	759 (29.88)	15.5 (0.61)	422.6 (16.63)	11 (0.43)	11 (0.43)	M16

SV1320/1600iS7 (400V Class, IP00 Type)







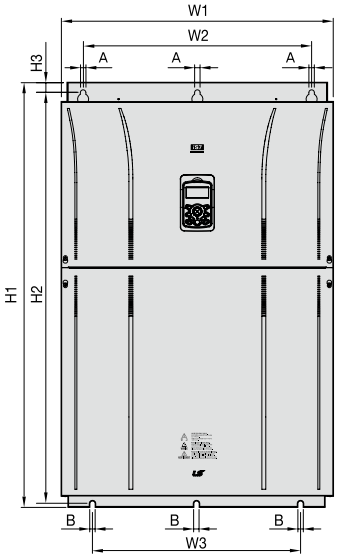


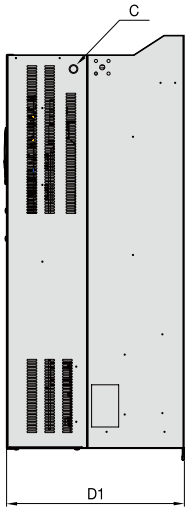
mm(inches)

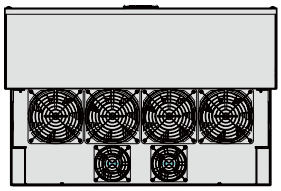
Applied Drives	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV1320/ 1600iS7-4	510 (20.07)	381 (15.0)	350 (13.77)	861 (33.89)	836.5 (32.93)	15.5 (0.61)	422.6 (16.63)	11 (0.43)	11 (0.43)	M16

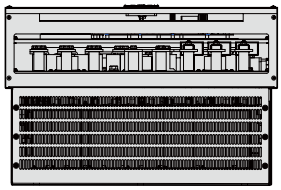
Dimensions (UL Enclosed Type1, IP21 Type)

SV1850/SV2200iS7 (400V Class, IP00 Type)





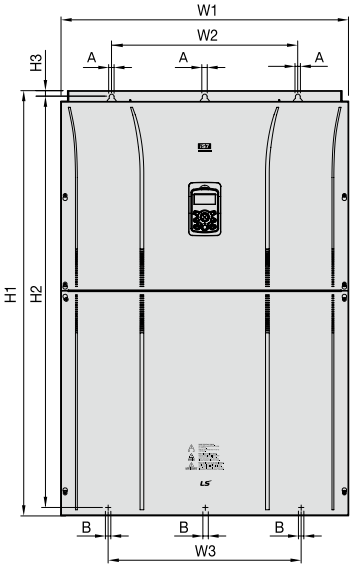


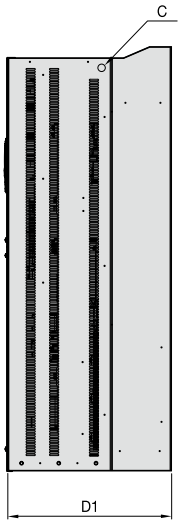


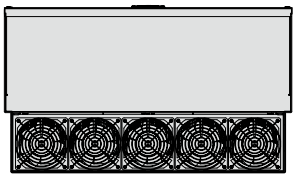
mm(inches)

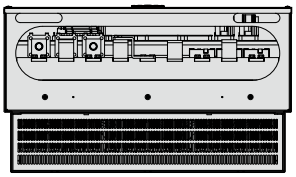
Applied Drives	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV1850/ 2200iS7-4	690 (27.16)	581 (22.87)	528 (20.79)	1078 (42.44)	1043.5 (41.08)	25.5 (1.00)	449.6 (17.70)	14 (0.55)	15 (0.59)	M20

SV2800iS7 (400V Class, IP00 Type)





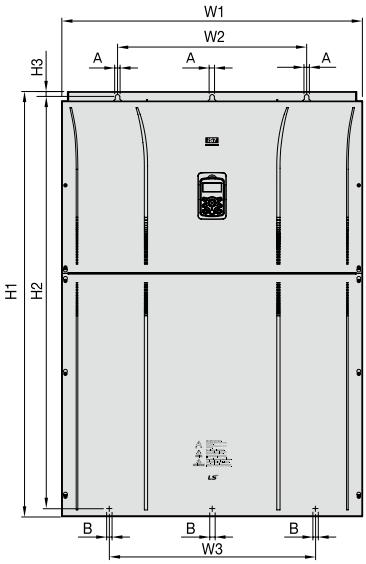


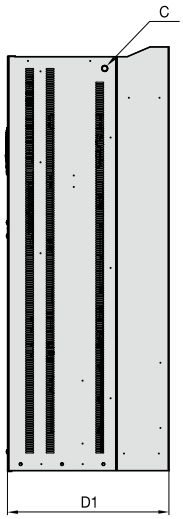


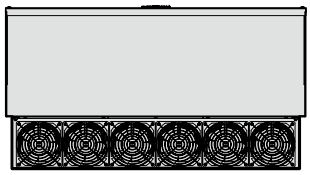
mm(inches)

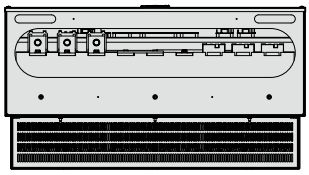
Applied Drives	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV2800iS7-4	772 (30.39)	500 (19.69)	500 (19.69)	1140.5 (44.90)	1110 (43.70)	15 (0.59)	442 (17.40)	13 (0.51)	13 (0.51)	M16

SV3150/3750iS7 (400V Class, IP00 Type)







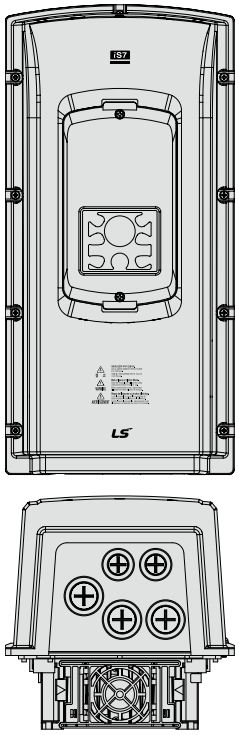


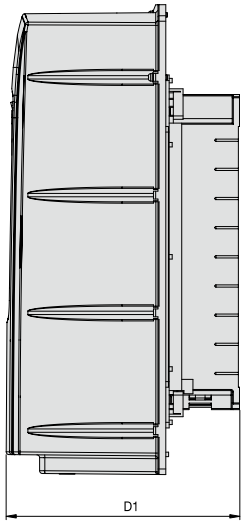
mm(inches)

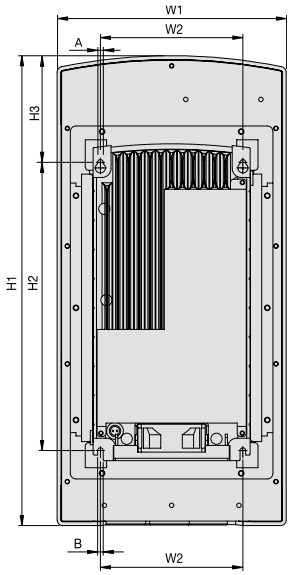
Applied Drives	W1	W2	W3	H1	H2	H3	D1	A	B	C
SV3150/ 3750iS7-4	922 (36.30)	580 (22.83)	580 (22.83)	1302.5 (51.28)	1271.5 (50.06)	15.5 (0.61)	495 (19.49)	14 (0.55)	14 (0.55)	M16

Dimensions (UL Enclosed Type12, IP54 Type)

SV0008 ~ 0037iS7 (200V/400V Class)



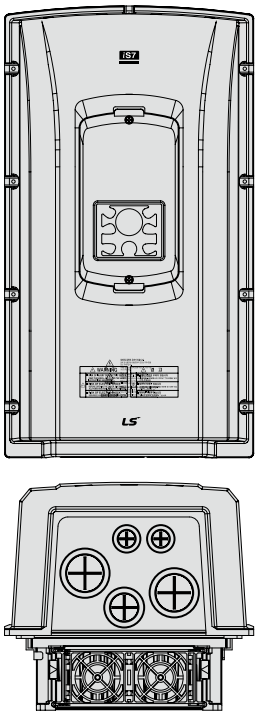


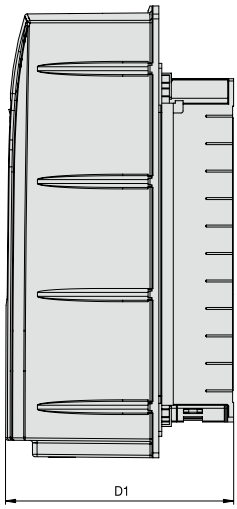


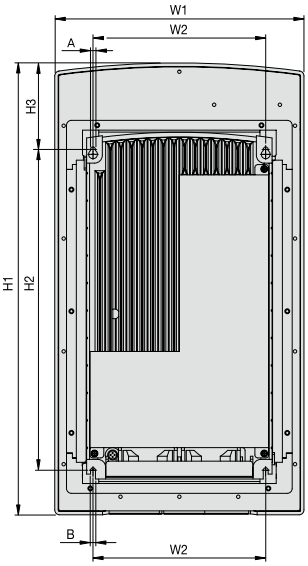
mm(inches)

Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0008~ 0037iS7-2/4	204.2 (8.04)	127 (5.00)	419 (16.49)	257 (10.12)	95.1 (3.74)	208 (8.18)	5 (0.19)	5 (0.19)

SV0055 ~ 0075iS7 (200V/400V Class)



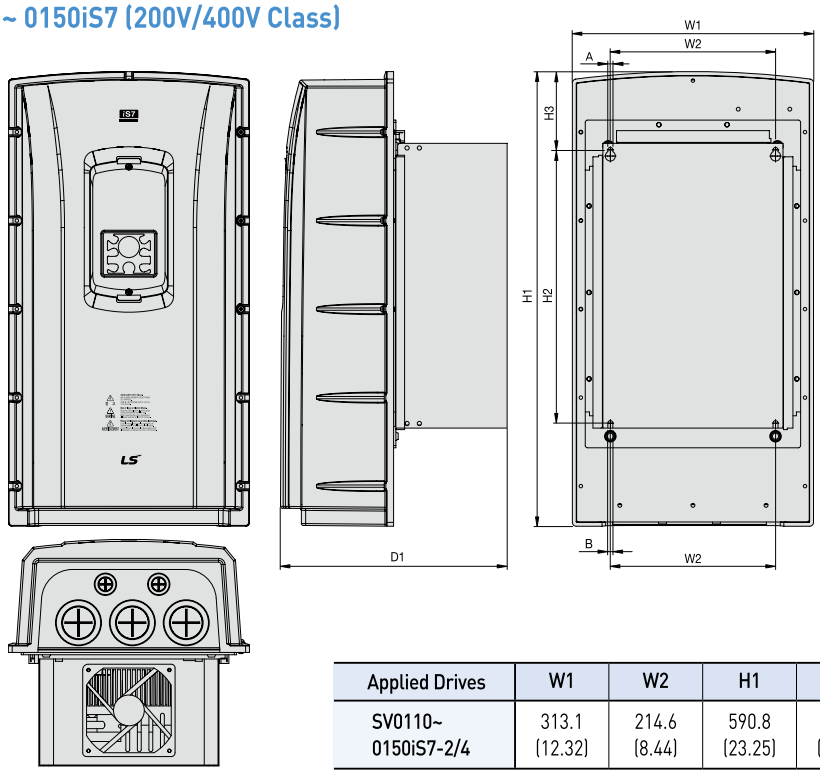




mm(inches)

Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0055~ 0075iS7-2/4	254 (10.00)	176 (6.92)	460.6 (18.13)	327 (12.87)	88.1 (3.46)	232.3 (9.14)	5 (0.19)	5 (0.19)

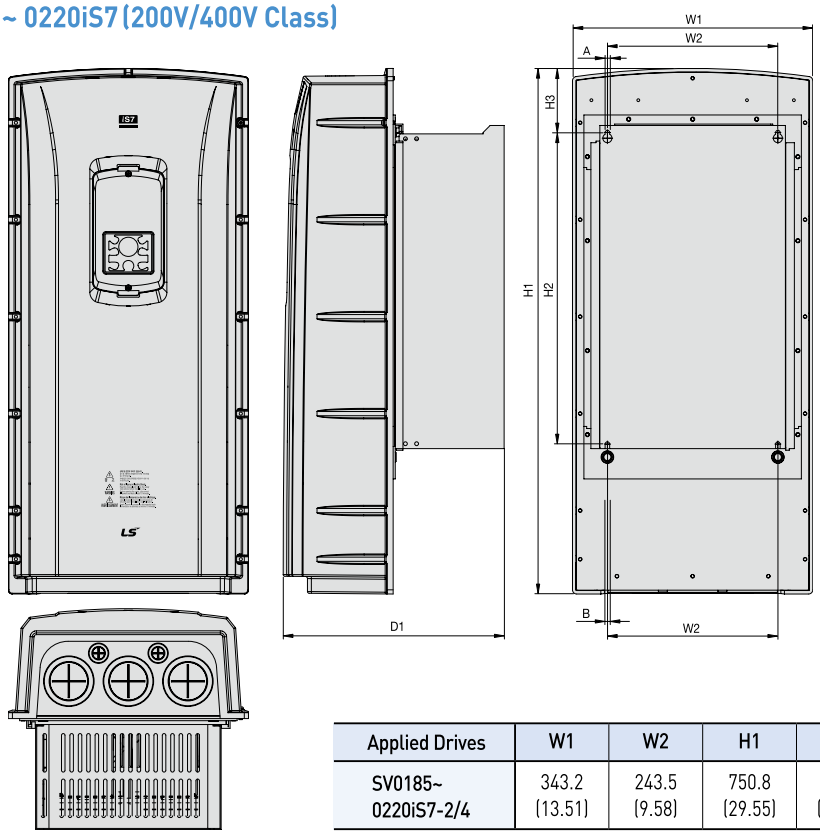
SV0110 ~ 0150iS7 (200V/400V Class)



mm(inches)

Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0110~ 0150iS7-2/4	313.1 (12.32)	214.6 (8.44)	590.8 (23.25)	355 (13.97)	101.7 (4.00)	294.4 (11.59)	6.5 (0.25)	6.5 (0.25)

SV0185 ~ 0220iS7 (200V/400V Class)

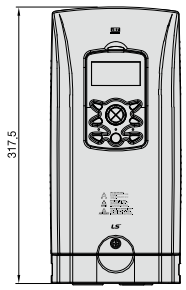


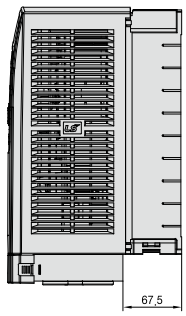
mm(inches)

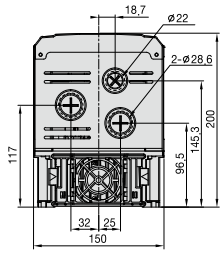
Applied Drives	W1	W2	H1	H2	H3	D1	A	B
SV0185~ 0220iS7-2/4	343.2 (13.51)	243.5 (9.58)	750.8 (29.55)	445 (17.51)	91.6 (3.60)	315.5 (12.42)	6.5 (0.25)	6.5 (0.25)

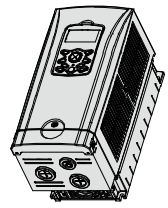
Dimensions (Conduit Option)

SV0008 ~ 0037iS7 (200V/400V Class)



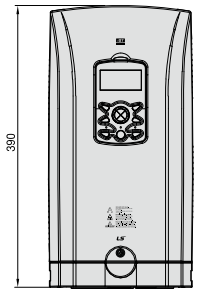


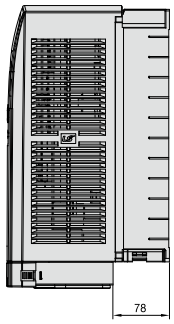


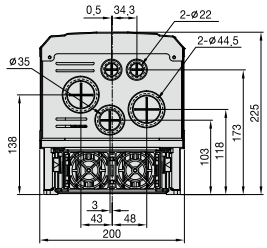


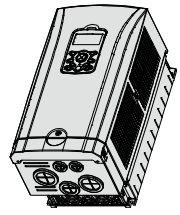
Drive + Conduit Box

SV0055 ~ 0075iS7 (200V/400V Class)



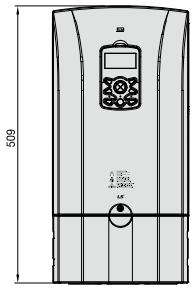


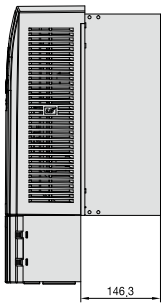


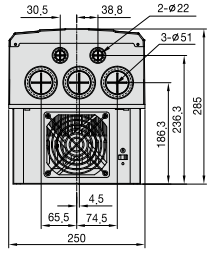


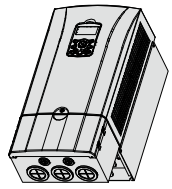
Drive + Conduit Box

SV0110 ~ 0150iS7 (200V/400V Class)



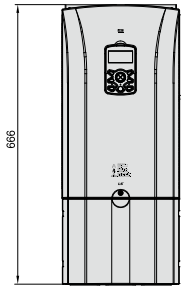


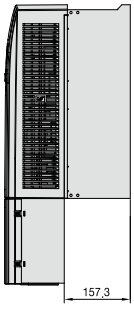


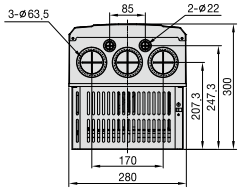


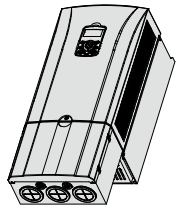
Drive + Conduit Box

SV0185 ~ 0220iS7 (200V Class)



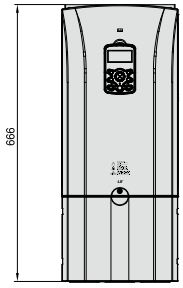


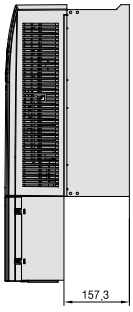


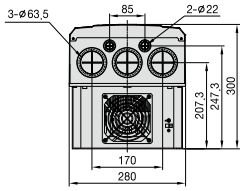


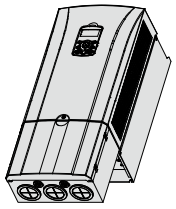
Drive + Conduit Box

SV0185 ~ 0220iS7 (400V Class)



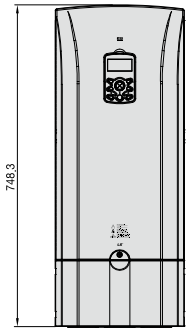


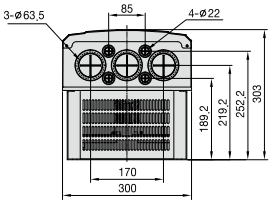


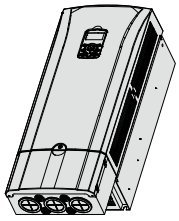


Drive + Conduit Box

SV0300 ~ 0450iS7 (400V Class)

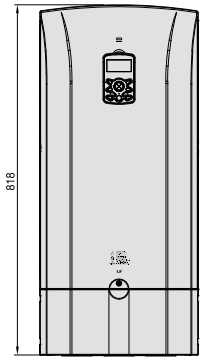


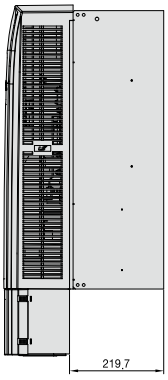


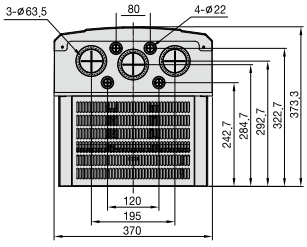


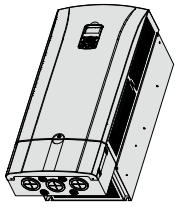
Drive + Conduit Box

SV0550 ~ 0750iS7 (400V Class)





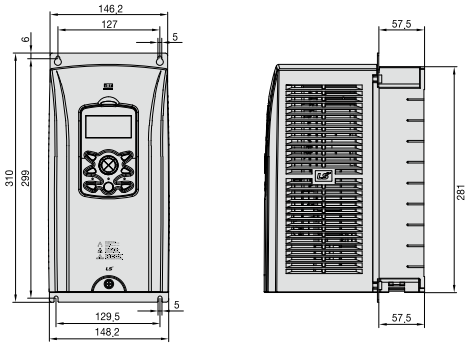


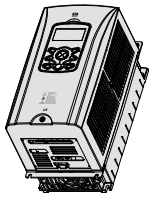


Drive + Conduit Box

Dimensions (Flange Option)

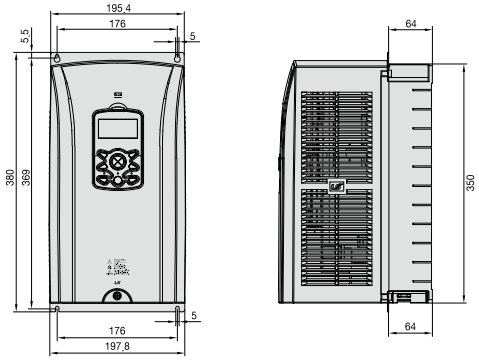
SV0008 ~ 0037iS7 (200V/400V Class)





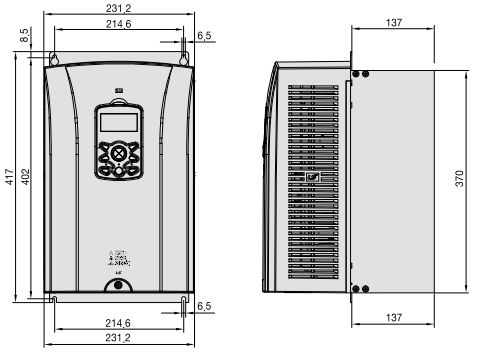
Drive + Flange

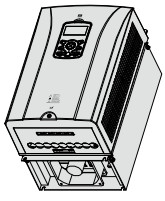
SV0055 ~ 0075iS7 (200V/400V Class)



Drive + Flange

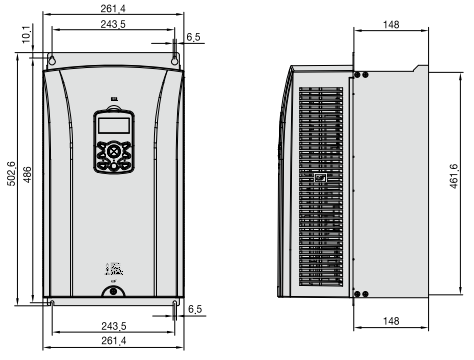
SV0110 ~ 0150iS7 (200V/400V Class)

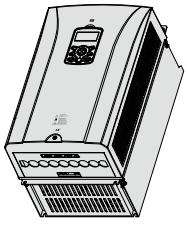




Drive + Flange

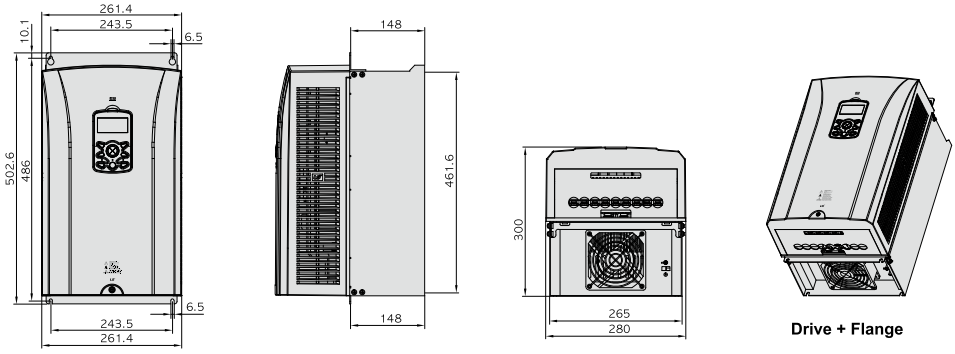
SV0185 ~ 0220iS7 (200V Class)



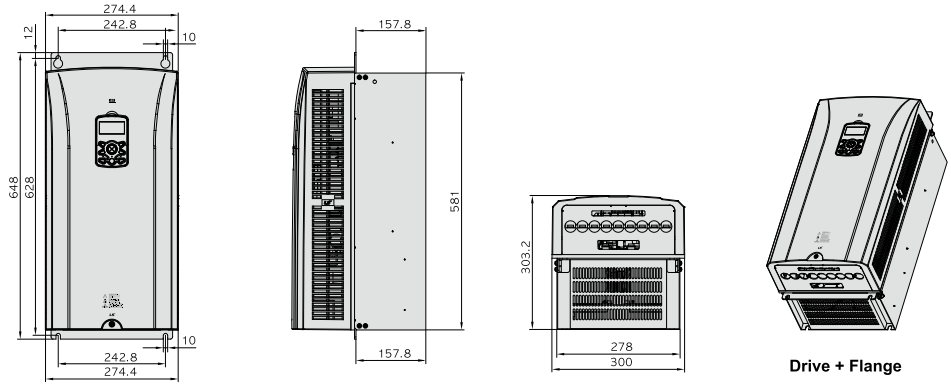


Drive + Flange

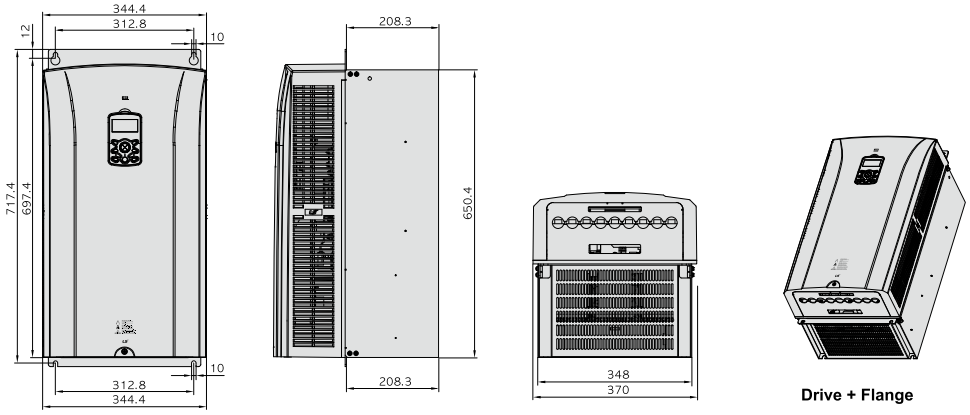
SV0185 ~ 0220iS7 (400V Class)



SV0300 ~ 0450iS7 (400V Class)



SV0550 ~ 0750iS7 (400V Class)



FUTURING SMART ENERGY

We open up a brighter future through
efficient and convenient energy solutions.

Safety Instructions

- For your safety, please read user's manual thoroughly before operating.
- Contact the nearest authorized service facility for examination, repair, or adjustment.
- Please contact qualified service technician when you need maintenance.
  Do not disassemble or repair by yourself!
- Any maintenance and inspection shall be performed by the personnel having expertise concerned.

- According to The WEEE Directive, please do not discard the device with your household waste.

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