

Top 100
Global
Innovator
for 10 years

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



User-Friendly Options

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



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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



iS7 is Dependable Because it Has High Performance and Reliability.



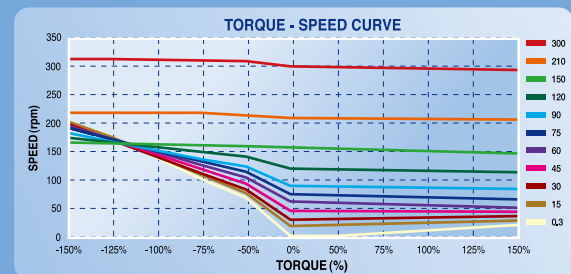
iS7 Feature | Reliability & High Performance

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

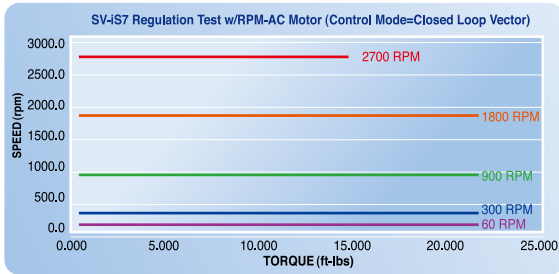


High Performance

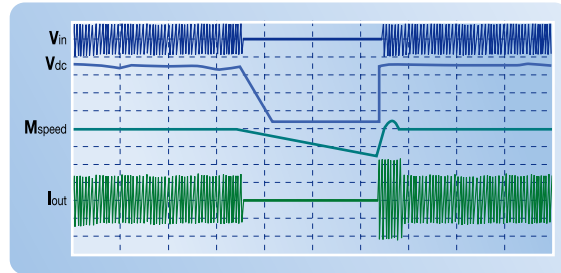
Sensored Vector Realizing Precise Speed/Torque Control

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

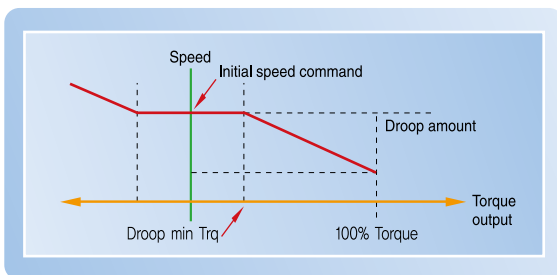


Powerful Performance

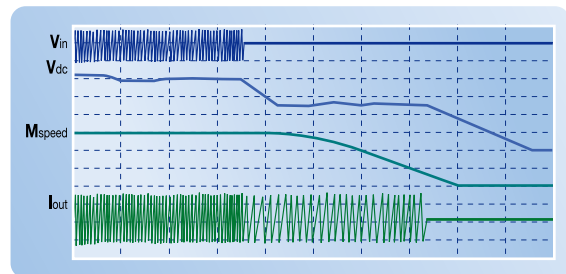
V/F Control, V/F PG, Slip Compensation, Sensorless Vector Control

Automatic Torque Balance Droop Control

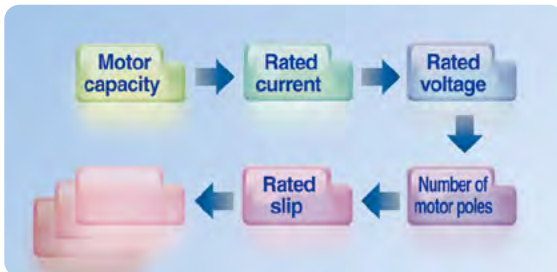
Droop control algorithm adjusts changeable torque driven by speed. This algorithm is easily applicable to open loop linking driving and load sharing driving.



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



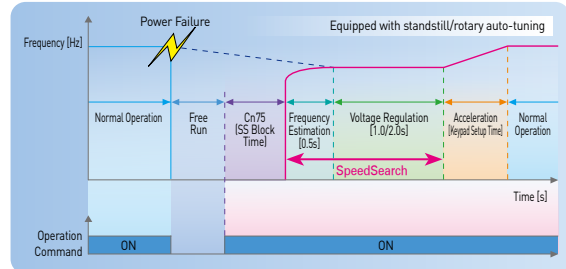
Easy Start Parameter Setting



Power and Flux Braking for Maximum Deceleration

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.



iS7 Feature | Flexibility & Expansion

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)

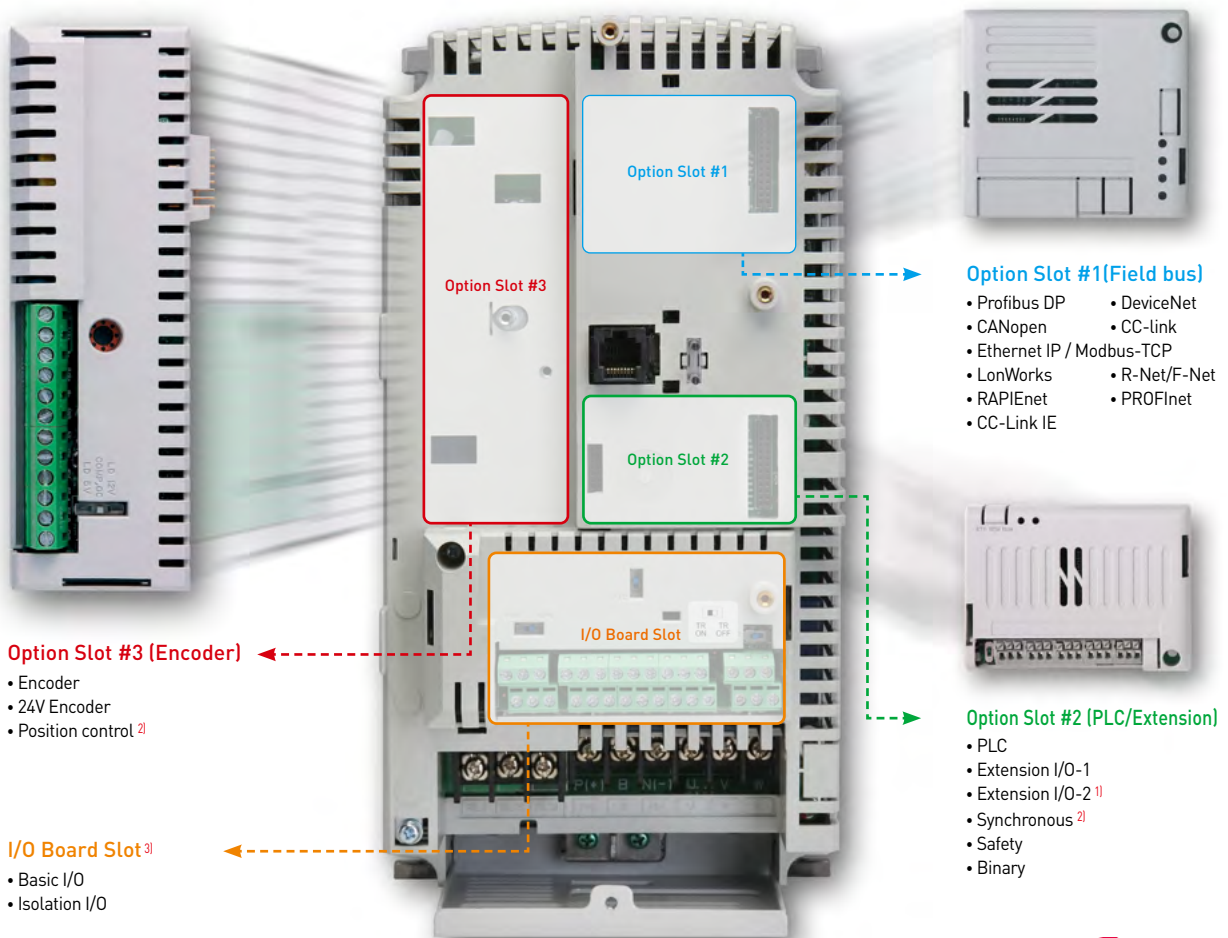


- The heat sink can be mounted outside of the panel in case the space is limited.
- 0.75~75kW (1~100HP)



User-Friendly Options

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



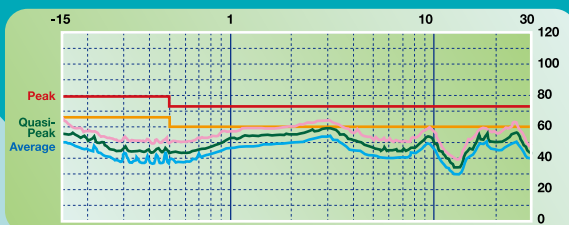
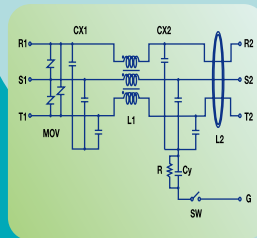
iS7 is Convenient Because it Has a User Friendly Interface.



iS7 Feature | Convenience & Environment

Convenience Environment

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



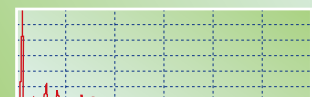
DC Reactor Built-in for Harmonic Reduction and Power Factor Improvement



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

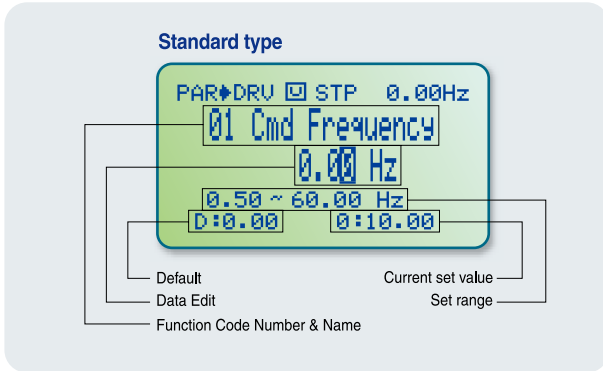


Input Current and THD Analysis

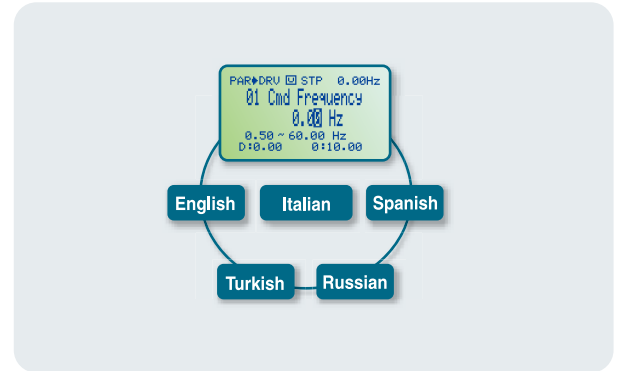


THD : 29.3% PF : 95.9%

Widened Graphic LCD Keypad

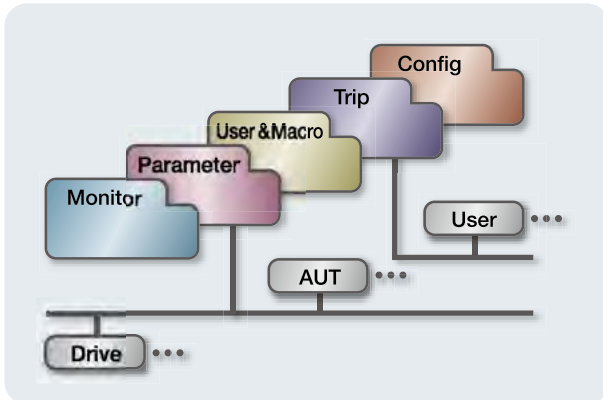


Multi-Language Support (5 Languages)

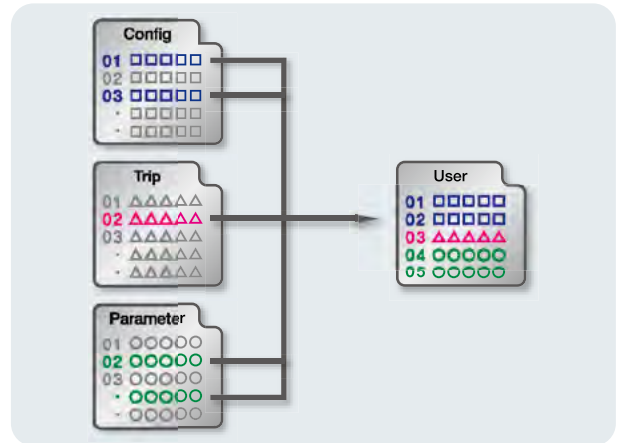


Convenience Through User-Friendly Interface

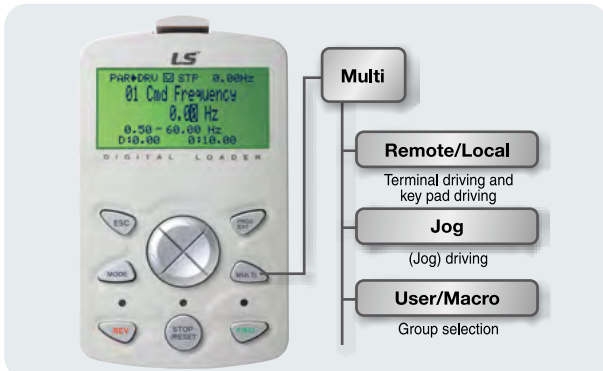
Efficient Architecture of 5-Mode 15-Parameter Groups



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

STARVERT iS7 Feature | Variety 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 Machine

- 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



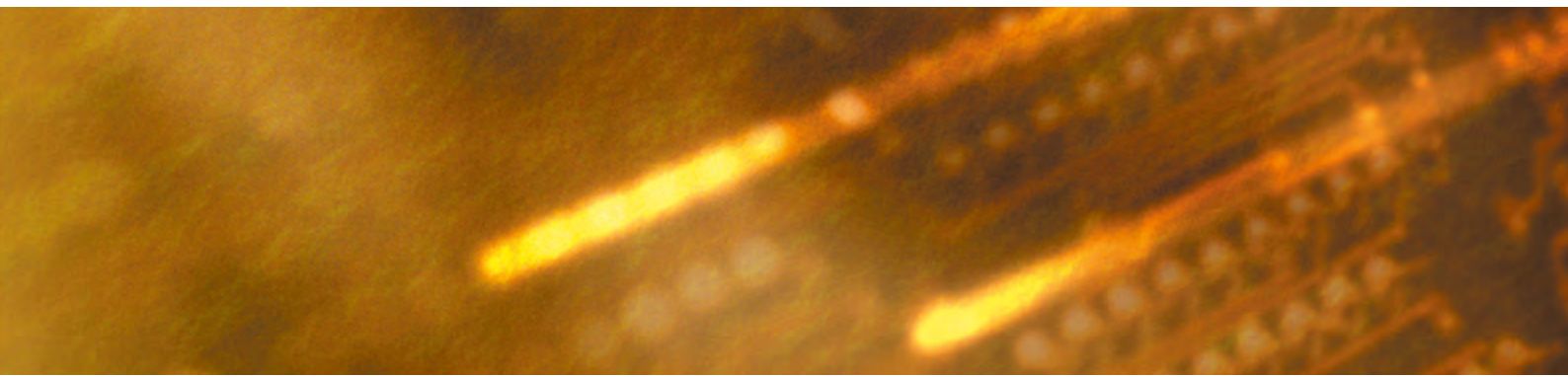
Elevator

- 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



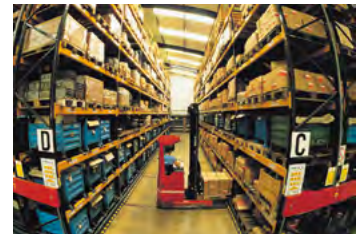
Crane/Hoist

- 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 Machine

- 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

| 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 iS7-2S0 | SV0220 iS7-4NO(F)(D) | SV0300 iS7-4NO(D) |
| 37kW | SV0300 iS7-2S0 | SV0370 iS7-2S0 | SV0300 iS7-4NO(D) | SV0370 iS7-4NO(D) |
| 45kW | SV0370 iS7-2S0 | SV0450 iS7-2S0 | SV0370 iS7-4NO(D) | SV0450 iS7-4NO(D) |
| 55kW | SV0450 iS7-2S0 | SV0550 iS7-2S0 | SV0450 iS7-4NO(D) | SV0550 iS7-4NO(D) |
| 75kW | SV0550 iS7-2S0 | SV0750 iS7-2S0 | SV0550 iS7-4NO(D) | SV0750 iS7-4NO(D) |
| 90kW | SV0750 iS7-2S0 | | SV0750 iS7-4NO(D) | SV0900 iS7-4S0D |
| 110kW | | | SV0900 iS7-4S0D | SV1100 iS7-4S0D |
| 132kW | | | SV1100 iS7-4S0D | SV1320 iS7-4S0D |
| 160kW | | | SV1320 iS7-4S0D | SV1600 iS7-4S0D |
| 185kW | | | SV1600 iS7-4S0D | SV1850 iS7-4S0D |
| 220kW | | | SV1850 iS7-4S0D | SV2200 iS7-4S0D |
| 280kW | | | SV2200 iS7-4S0D | SV2800 iS7-4S0 |
| 315kW | | | SV2800 iS7-4S0 | SV3150 iS7-4S0 |
| 375kW | | | SV3150 iS7-4S0 | SV3750 iS7-4S0 |
| 450kW | | | SV3750 iS7-4S0 | |

※ (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 | | UL | | Customized Product | |
| | 0008 | 0.75 [kW] | | 2 | 3-Phase 200~230[V] | O | Open | W | Winder |
| | 0015 | 1.5 [kW] | | 4 | 3-Phase 380~480[V] | E | Enclosed UL type 1 ^{*1} | S | Synchronous |
| | 0022 | 2.2 [kW] | | | | P | Enclosed UL type 12 ^{*2} | T | Safety ^{*5} |
| | 0037 | 3.7 [kW] | | | | | | V ^{*4} | Marine |
| | 0055 | 5.5 [kW] | | Keypad | | Filter | | Customization | |
| | 0075 | 7.5 [kW] | | N | NON | Blank | NON | W: Web control, S: Synchronization, V: Vessel E: High efficiency | |
| | 0110 | 11 [kW] | | S | GLCD (Graphic loader) | F | EMC filter | DC Reactor | |
| | 0150 | 15 [kW] | | | | | | Blank | NON |
| | 0185 | 18.5 [kW] | | | | | | D | DC reactor |
| | 0220 | 22 [kW] | | | | | | R | DB resistor ^{*3} (Inner mounted) |
| | 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 | | | | | | | |

^{*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 product is the option of WEB product.
 Applicable capacity is from 0.75 to 375 kW of iS7 products.
^{*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.

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.

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 | 2800 | 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 ~ P8 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

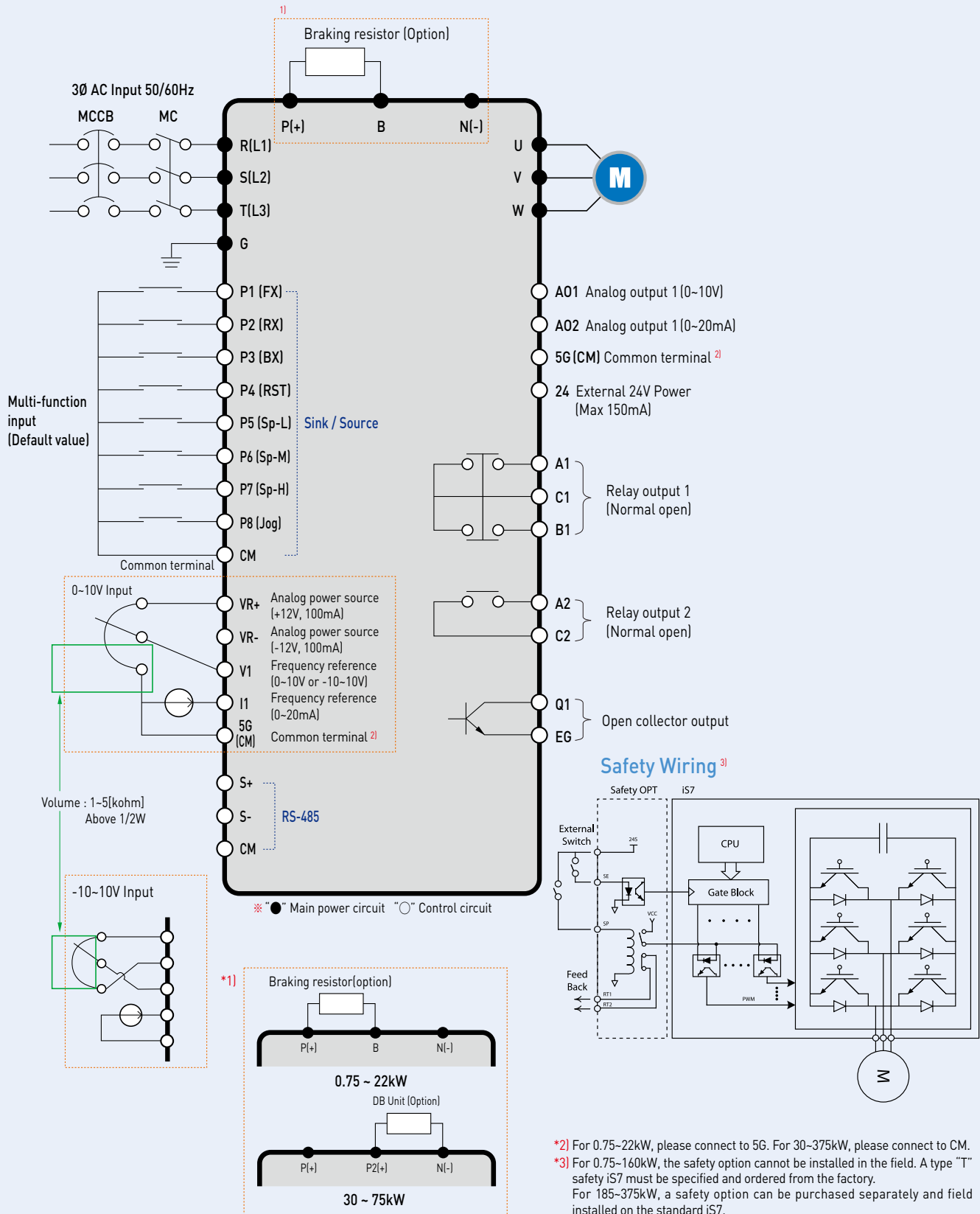
| | |
|--|---|
| Trip | Over voltage, low voltage, over current, over current detection, drive overheat, motor thermal protection, phase loss protection, overload protection, communication error, frequency command loss, hardware failure, cooling fan failure, pre-PID failure, no motor trip, external brake 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

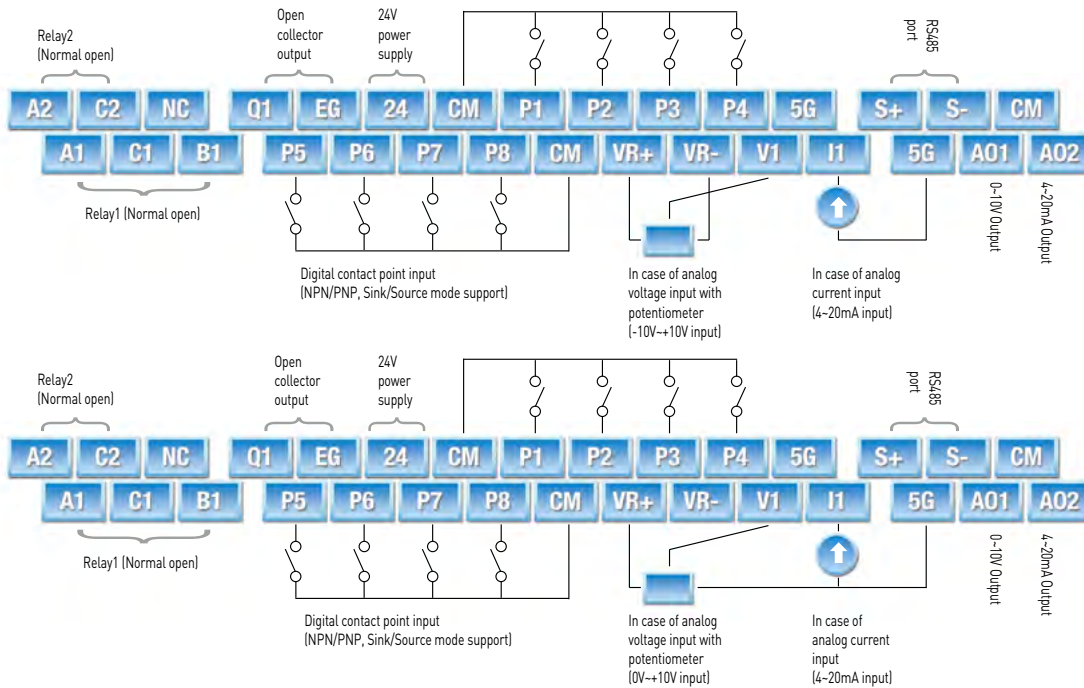
| | |
|--------------------------|---|
| Cooling Method | Forced air blast cooling: 0.75 ~ 15kW(200/400V class), 22kW(400V class) Inhalation cooling: 22 ~ 75kW(200V class), 30~375kW(400V class) |
| Protection Structure | 0.75~22kW(200V), 0.75~75kW(400V): Open type IP 21(default), UL enclosed type 1 (Option) 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)



*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.

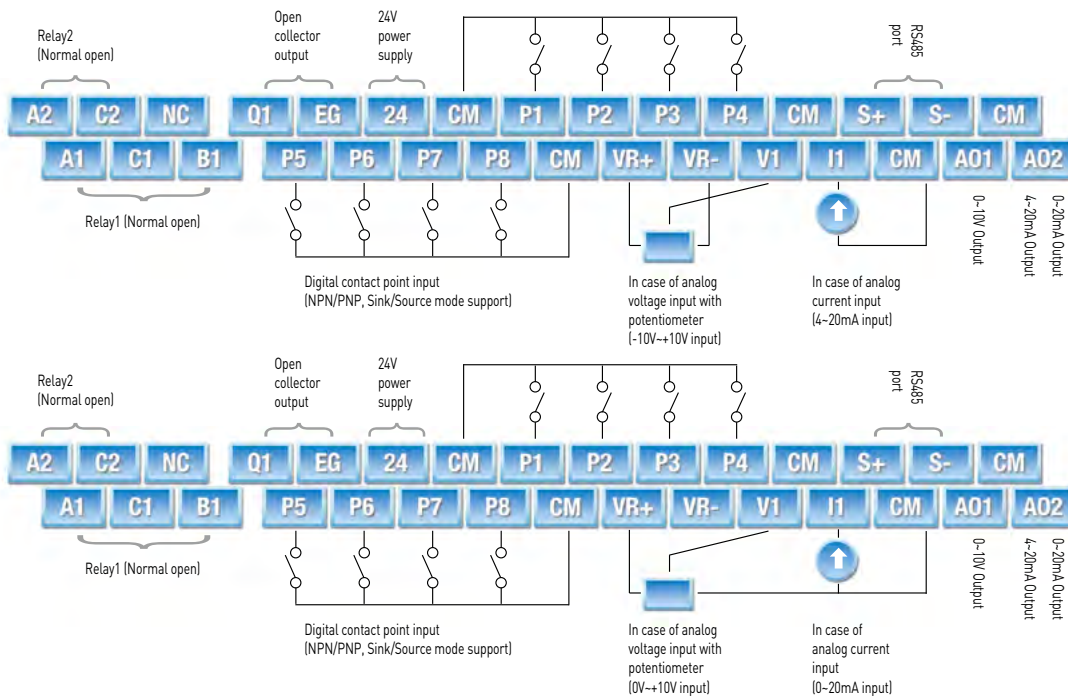
0.75~22kW (Basic I/O)



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 resistance 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 C | 200V | 30 ~ 37kW | LSLV0370DBU-2LN | Group 5 |
| | | | 45 ~ 55kW, 75kW | LSLV0370DBU-2HN | Group 6 |
| | | | | LSLV0750DBU-2LN | Group 5 |
| | | | 400V | 30 ~ 37kW | LSLV0750DBU-2HN |
| | | LSLV0370DBU-4LN | | | Group 5 |
| | | 45 ~ 55kW, 75kW | | LSLV0370DBU-4HN | Group 6 |
| | | | | 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 | | | | |

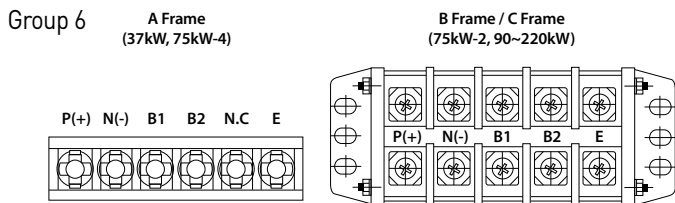
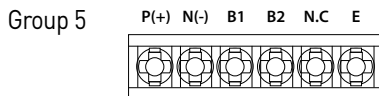
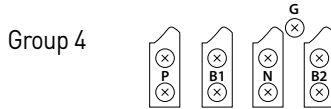
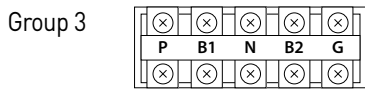
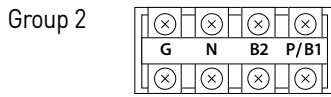
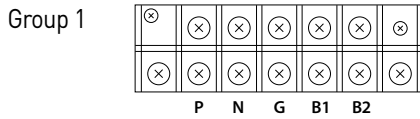
1) It is not necessary to option type dynamic braking unit for IS7 0.75~22kW(200V, 400V) because basically the dynamic braking unit is built in.

2) You must refer to dynamic braking unit manual for usage recommended dynamic braking unit in the table above due to changeable table.

3) Resistance/watt/braking torque/%ED of DB Resistor for type A DB Unit refer to the table of "6)DB Resistors". And in case of Type C refer to the manual of DB Unit.

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

Terminal Arrangement of Dynamic Braking Unit



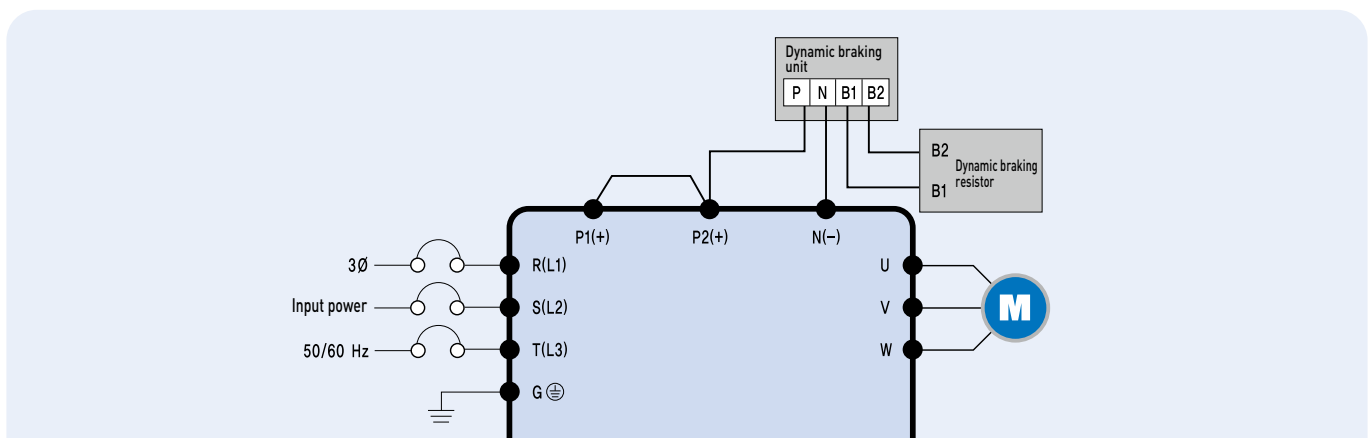
| Terminal | Function |
|----------|--|
| G | Ground terminal |
| B2 | Terminal for connection with B2 of DBU |
| B1 | Terminal for connection with B1 of DBU |
| N | Terminal for connection with N of drive |
| P | Terminal for connection with P1 of drive |

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

| 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 |

| 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 referring 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 | - | - | - | |
| | 37 | 4.5 | 7000 | - | 100% Braking Torque, 10%ED | - | - |
| | 45 | 3.5 | 10000 | - | | - | - |
| | 55 | 3 | 15000 | - | | - | - |
| | 75 | 2.5 | 20000 | - | | - | - |
| 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 be 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

High Performance Standard
AC Drive iS7

PROFINet

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



RAPINet

- RAPINet 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



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



RAPINet+ (2Port)

- Ethernet IP, Modbus TCP,
RAPINet Protocol Support
- Ring / Line Topology
- 100Mbps Communication Speed
- Full Duplex Support
- P2P Max 2words,
Smart Expansion Max 8words
- Max. 64 connection points



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)



CanOpen

- 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



R-Net/F-Net

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



Lonworks

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



24V(DC) Auxiliary Power Supply

- Supplying 5V to the iS7 Drive Control PCB by receiving external DC 24V power
- Even if the Drive is powered off, available to communicate with the controller by supplying power to the Control PCB



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.



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 (0~20mA) 1 point analog output : voltage (-10V~10V) 1 point, current (0~20mA) 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 (0~20mA) 2 point digital output (TR) 2 points

Ext-2 is available for web customized version only



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 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 veritas) |
| 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/A0 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 Shipping) 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)

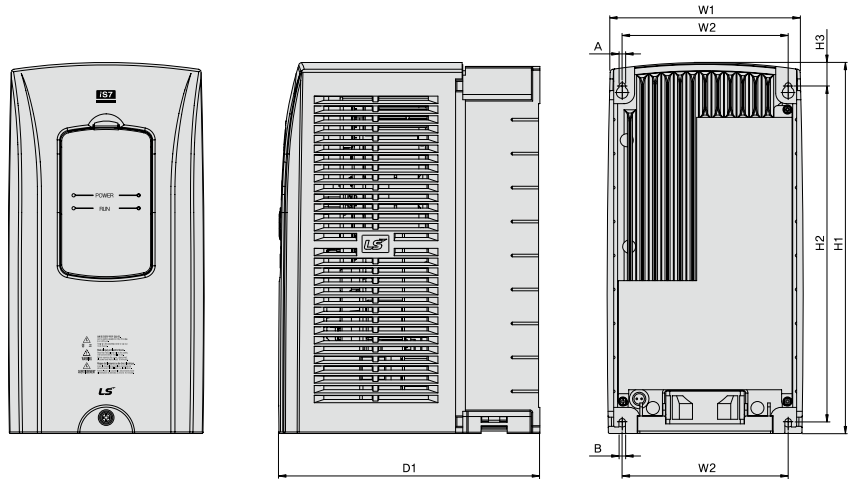
| | |
|-------------------------|---|
| Certification Institute | KR (Korean resister) |
| Certificate Number | PTD25585-AC003 |
| Certified Model Types | SV-iS7 Series (Range: 0.75 kW~75 kW, 200V / 0.75 kW~375 kW, 400V) |
| Compliance | Korean resister's rules for classification of steel ships |

Marine Certification

| 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)

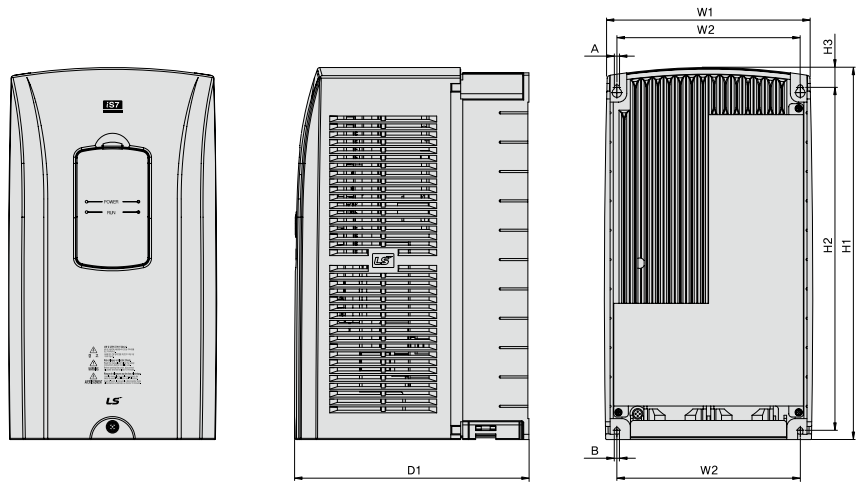
SV0008 ~ 0037iS7 (200V/400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|--------------------|---------------|---------------|----------------|----------------|--------------|---------------|-------------|-------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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) | 5.5 | 4.5 | 5.0 | 4.5 |

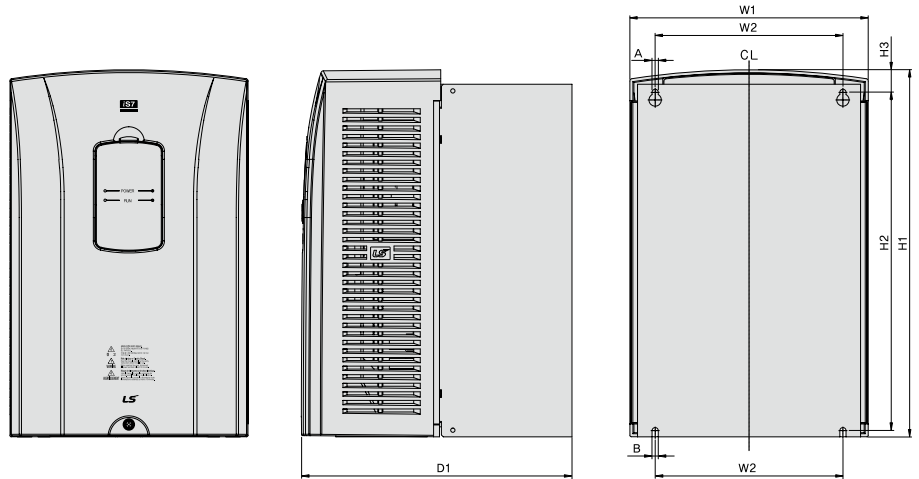
SV0055 ~ 0075iS7 (200V/400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|--------------------|---------------|---------------|----------------|----------------|--------------|---------------|-------------|-------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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) | 10 | 8.4 | 9.3 | 7.7 |

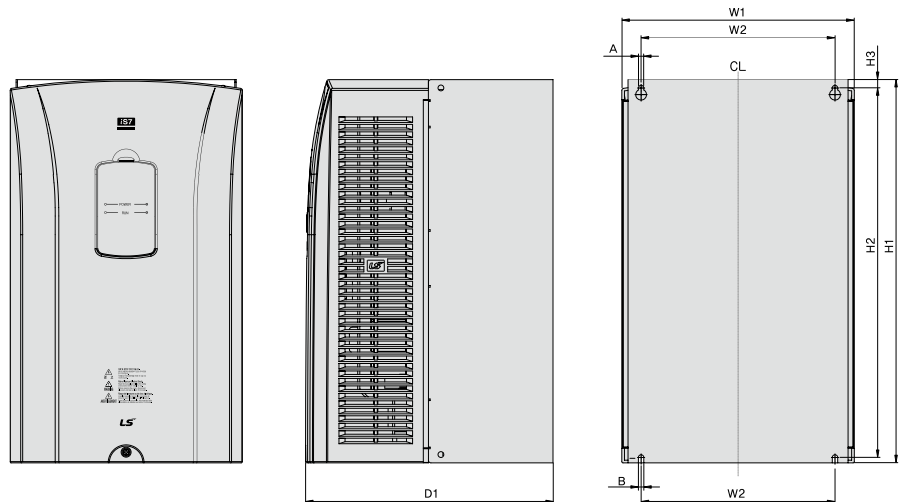
SV0110 ~ 0150iS7 (200V/400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|--------------------|---------------|-----------------|----------------|----------------|----------------|----------------|---------------|---------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0110~0150iS7-2/4 | 250 (9.84) | 214.6 (8.44) | 385 (15.15) | 355 (13.97) | 23.6 (0.92) | 284 (11.18) | 6.5 (0.25) | 6.5 (0.25) | 20 | 17.2 | 16.8 | 14 |

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

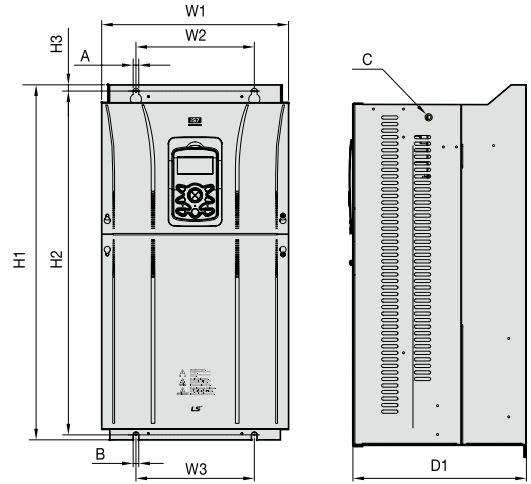


mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|----------------|----------------|-----------------|------------------|----------------|----------------|----------------|---------------|---------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0185iS7-2/4 | 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) | 30 / 27.4 | 27 / 23.5 | 25.9 / 23.3 | 22.9 / 19.7 |
| SV0220iS7-2/4 | | | | | | | | | 30 / 27.4 | 25.8 / 23.5 | 25.9 / 23.5 | 22.9 / 20.1 |

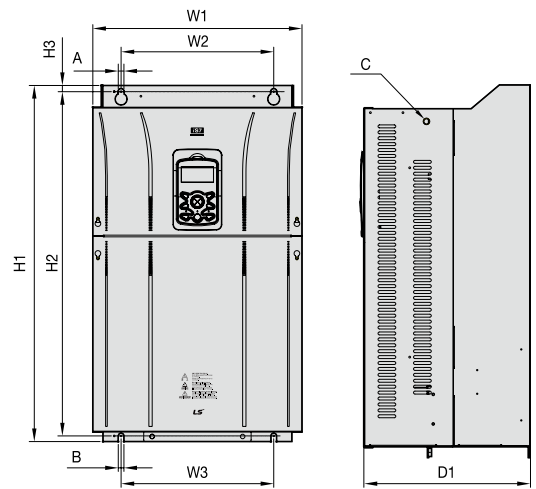
SV0300iS7 (200V Class, IP00 Type)

| 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] | 10 [0.39] | 9 [0.35] | M8 |
| Applied Drives | Weight [kg] | | | | | | | | |
| | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type | | | | | |
| SV0300iS7-2 | - | - | - | 29.5 | | | | | |



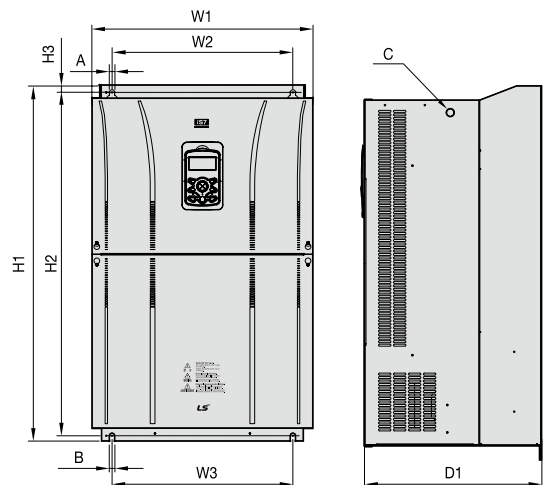
SV0370 ~ 0450iS7 (200V Class, IP00 Type)

| 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 |
| Applied Drives | Weight [kg] | | | | | | | | |
| | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type | | | | | |
| SV0370~ 0450iS7-2 | - | - | - | 44 | | | | | |

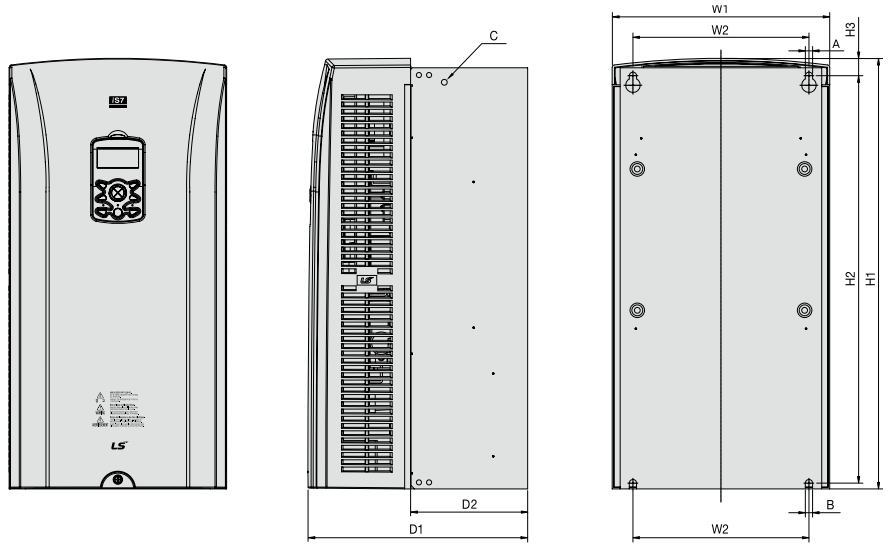


SV0550 ~ 0750iS7 (200V Class, IP00 Type)

| 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 |
| Applied Drives | Weight [kg] | | | | | | | | |
| | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type | | | | | |
| SV0550~ 0750iS7-2 | - | - | - | 72.5 | | | | | |



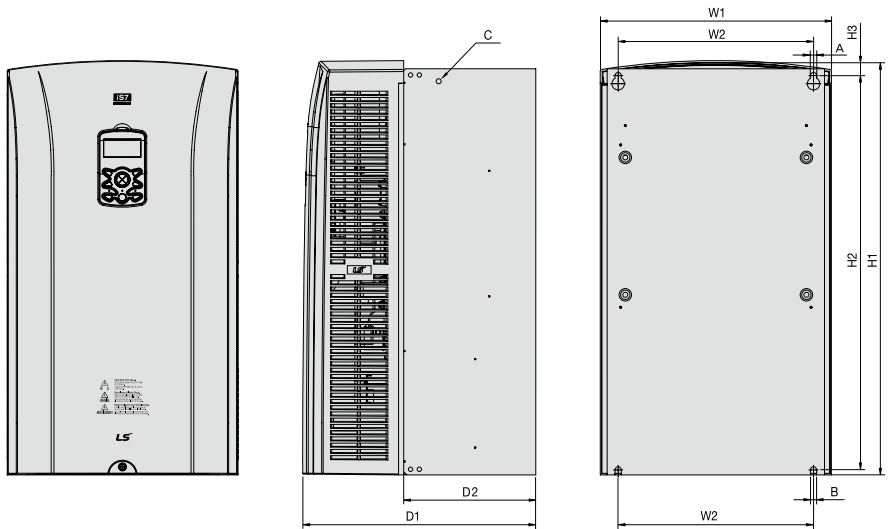
SV0300 ~ 0450iS7 (400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | D2 | A | B | C | Weight [kg] | | | |
|------------------|----------------|-----------------|----------------|----------------|----------------|------------------|---------------|--------------|--------------|----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0300~0450iS7-4 | 300 (11.81) | 242.8 (9.55) | 594 (23.39) | 562 (22.12) | 24.1 (0.94) | DCR type | | 10 (0.39) | 10 (0.39) | M8 | - | - | 41 | 28 |
| | | | | | | 303.2 (11.94) | 161 (6.33) | | | | | | | |

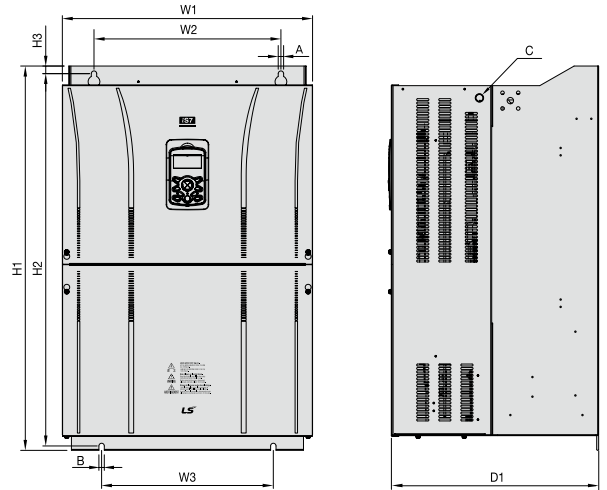
SV0550 ~ 0750iS7 (400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | D2 | A | B | C | Weight [kg] | | | |
|------------------|----------------|------------------|------------------|------------------|----------------|------------------|-----------------|--------------|--------------|----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0550~0750iS7-4 | 370 (14.57) | 312.8 (12.31) | 663.4 (26.12) | 631.4 (24.85) | 24.1 (0.94) | DCR type | | 10 (0.39) | 10 (0.39) | M8 | - | - | 63 | 45 |
| | | | | | | 373.3 (14.70) | 211.5 (8.32) | | | | | | | |

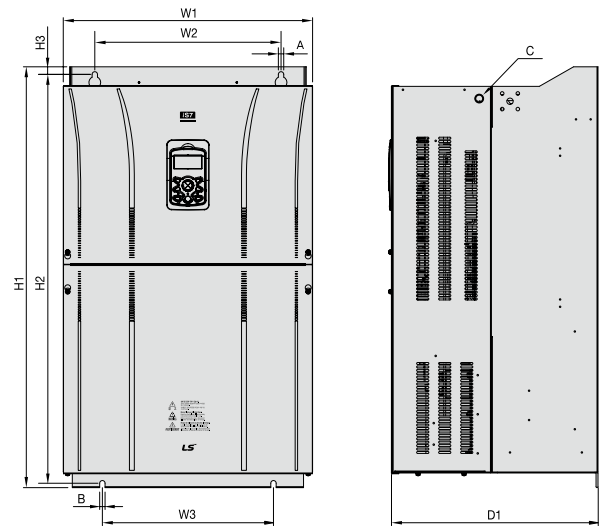
SV0900/1100iS7 (400V Class, IP00 Type)



mm(inches)

| Applied Drives | W1 | W2 | W3 | H1 | H2 | H3 | D1 | A | B | C | Weight [kg] | | | |
|----------------------|----------------|---------------|----------------|------------------|----------------|----------------|------------------|--------------|--------------|-----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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 | - | - | 101 | - |

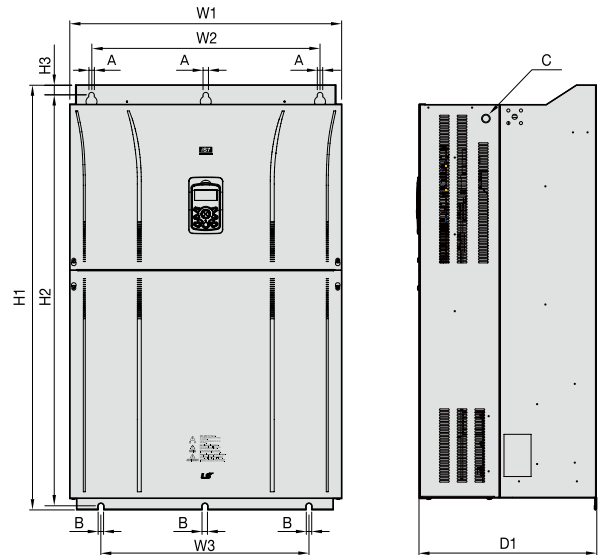
SV1320/1600iS7 (400V Class, IP00 Type)



mm(inches)

| Applied Drives | W1 | W2 | W3 | H1 | H2 | H3 | D1 | A | B | C | Weight [kg] | | | |
|----------------------|----------------|---------------|----------------|----------------|------------------|----------------|------------------|--------------|--------------|-----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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 | - | - | 114 | - |

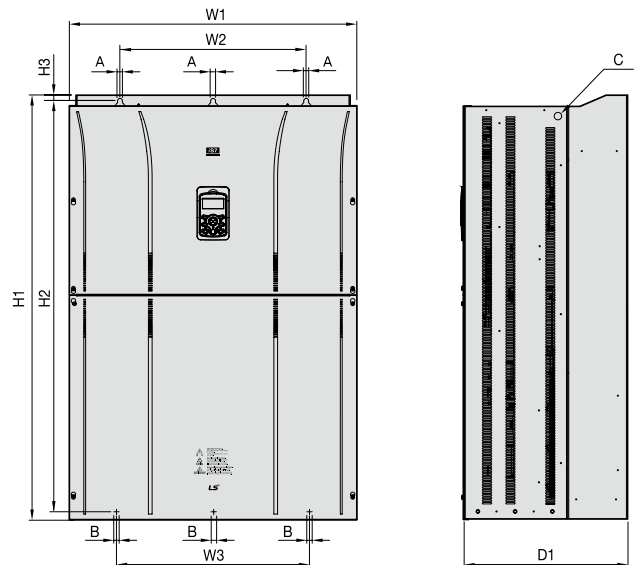
SV1850/SV2200iS7 (400V Class, IP00 Type)



mm(inches)

| Applied Drives | W1 | W2 | W3 | H1 | H2 | H3 | D1 | A | B | C | Weight [kg] | | | |
|------------------|----------------|----------------|----------------|-----------------|-------------------|----------------|------------------|--------------|--------------|-----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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 | - | - | 200 | - |

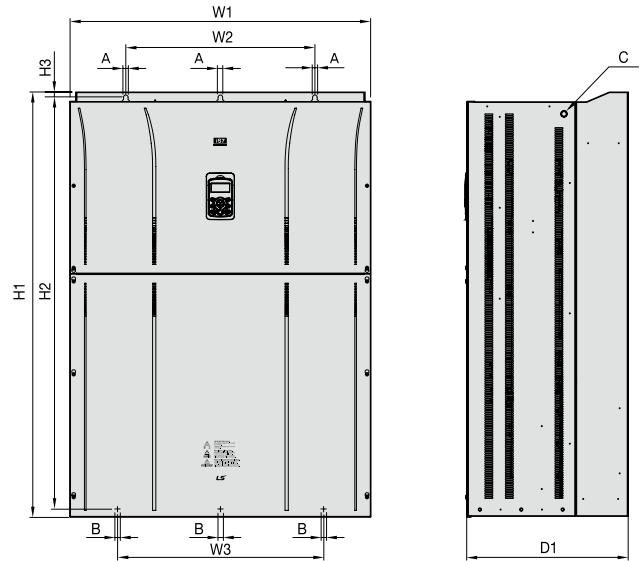
SV2800iS7 (400V Class, IP00 Type)



mm(inches)

| Applied Drives | W1 | W2 | W3 | H1 | H2 | H3 | D1 | A | B | C | Weight [kg] | | | |
|----------------|----------------|----------------|----------------|-------------------|-----------------|--------------|----------------|--------------|--------------|-----|------------------------|----------------|----------------|--------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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 | - | - | - | 252 |

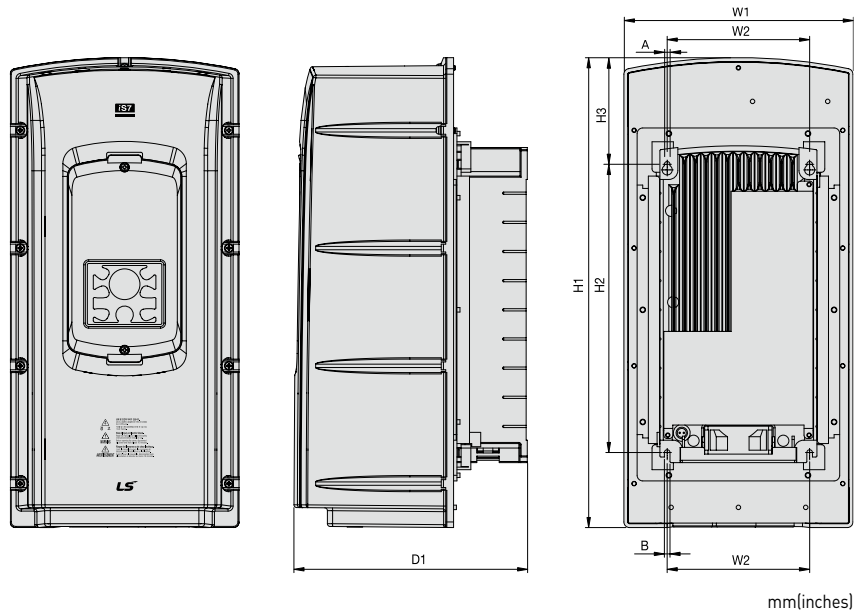
SV3150/3750iS7 (400V Class, IP00 Type)



mm(inches)

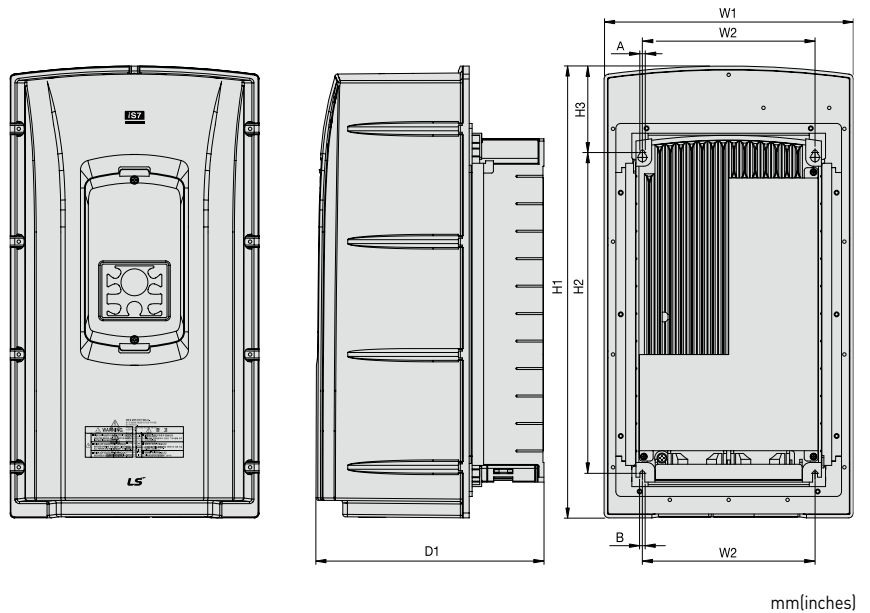
| Applied Drives | W1 | W2 | W3 | H1 | H2 | H3 | D1 | A | B | C | Weight [kg] | | | |
|----------------------|----------------|----------------|----------------|-------------------|-------------------|----------------|----------------|--------------|--------------|-----|---------------------------|-------------------|-------------------|-----------------|
| | | | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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 | - | - | - | 352 |

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



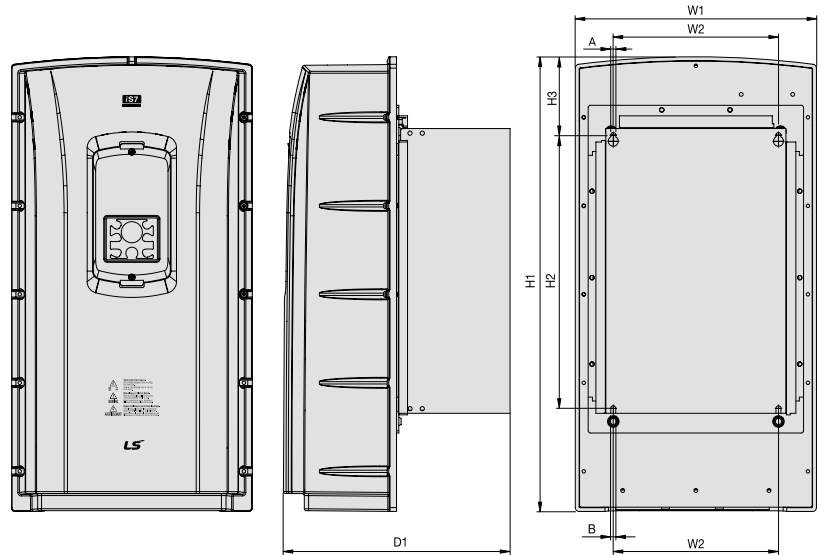
| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|--------------------|-----------------|---------------|----------------|----------------|----------------|---------------|-------------|-------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| 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) | 8.2 | 7.2 | 7.7 | 6.7 |

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



| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|----------------|----------------|---------------|------------------|----------------|----------------|-----------------|-------------|-------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0055iS7-2/4 | 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) | 12.8 | 10.2 | 12.1 | 9.5 |
| SV0075iS7-2/4 | | | | | | | | | 12.9 | 10.3 | 12.2 | 9.6 |

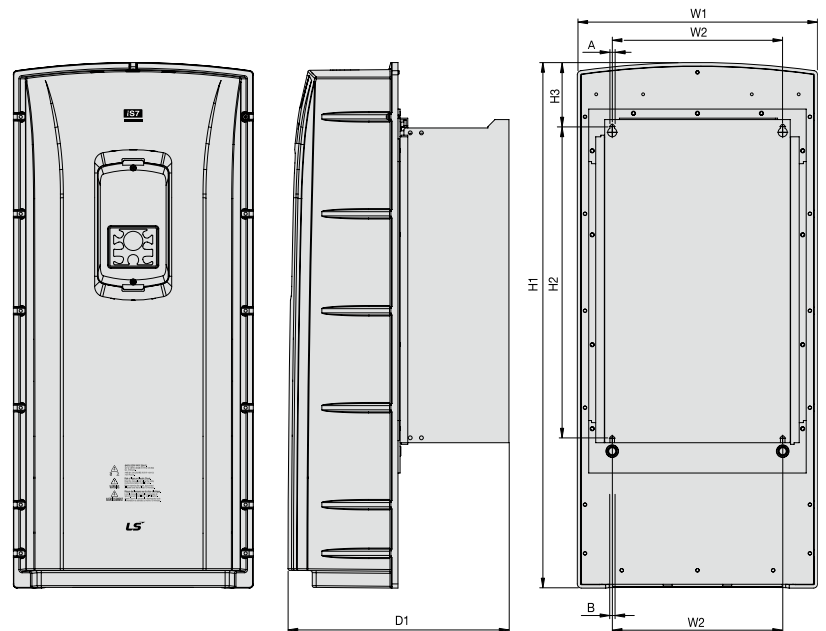
SV0110 ~ 0150iS7 (200V/400V Class)



mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|----------------|------------------|-----------------|------------------|----------------|-----------------|------------------|---------------|---------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0110iS7-2/4 | 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) | 25.6 | 22.8 | 22.4 | 19.6 |
| SV0150iS7-2/4 | | | | | | | | | 25.9 | 23.1 | 22.7 | 19.9 |

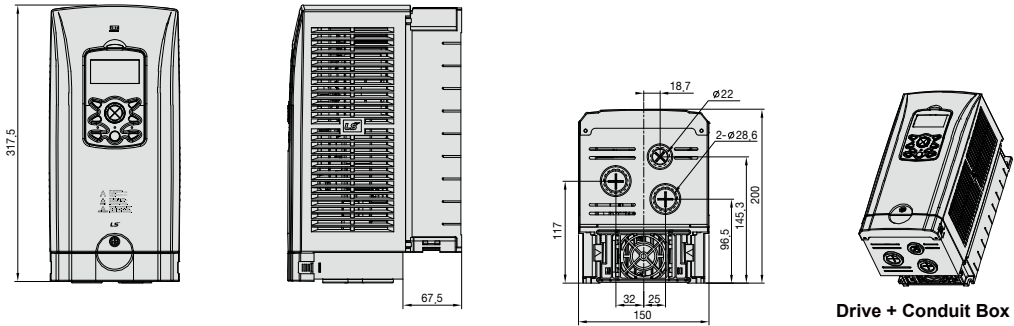
SV0185 ~ 0220iS7 (200V/400V Class)



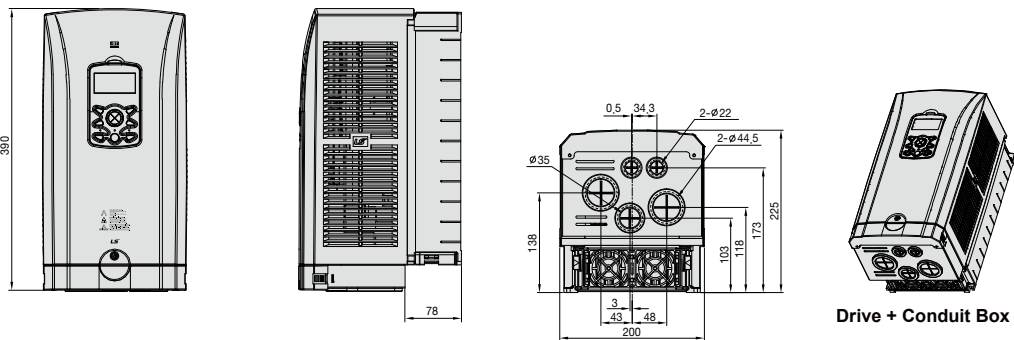
mm(inches)

| Applied Drives | W1 | W2 | H1 | H2 | H3 | D1 | A | B | Weight [kg] | | | |
|--------------------------|------------------|-----------------|------------------|----------------|----------------|------------------|---------------|---------------|------------------------|----------------|----------------|--------------|
| | | | | | | | | | w/built-in EMC and DCR | w/built-in EMC | w/built-in DCR | non-DCR type |
| SV0185~ SV0220iS7-2/4 | 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) | 38.3/34.9 | 34.2/31 | 34.1/31 | 29.9/27.1 |

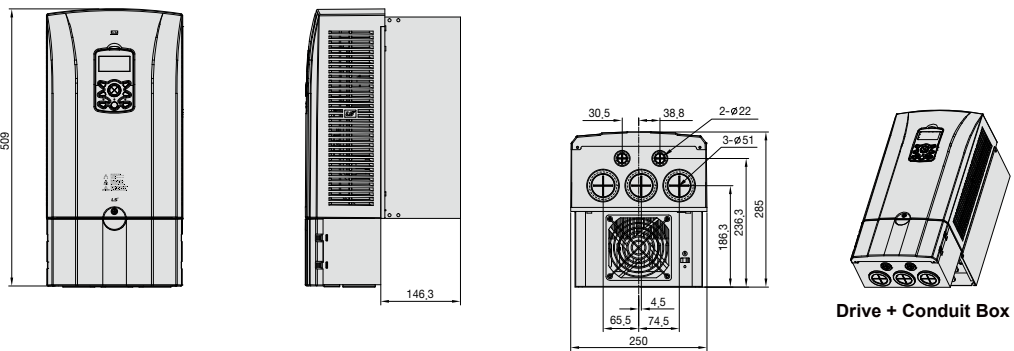
SV0008 ~ 0037iS7 (200V/400V Class)



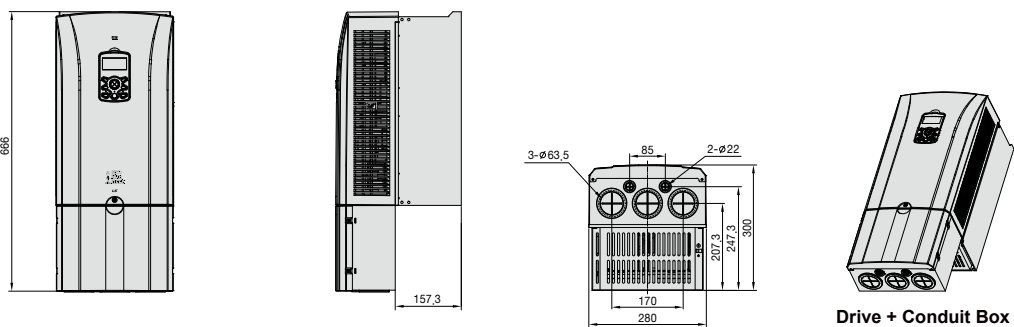
SV0055 ~ 0075iS7 (200V/400V Class)



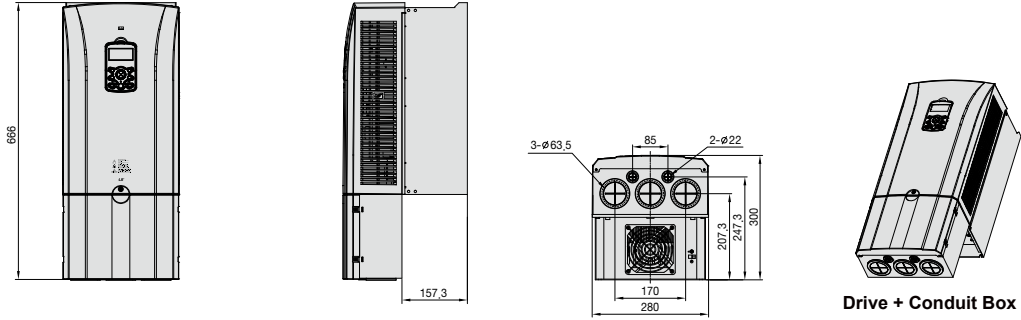
SV0110 ~ 0150iS7 (200V/400V Class)



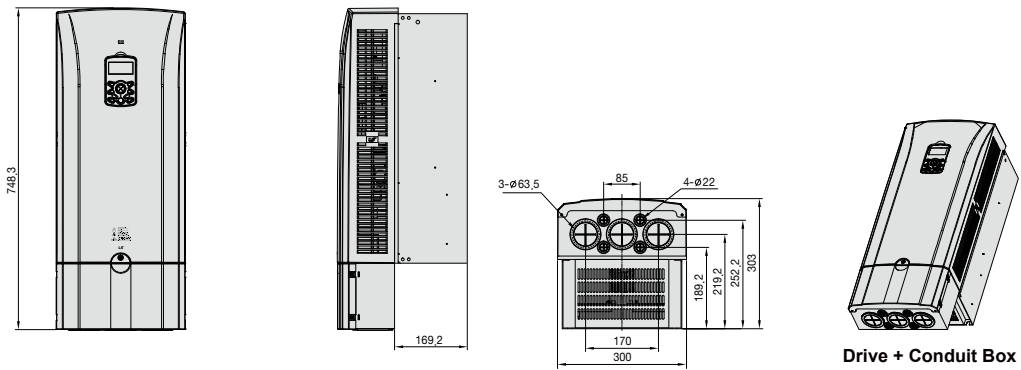
SV0185 ~ 0220iS7 (200V Class)



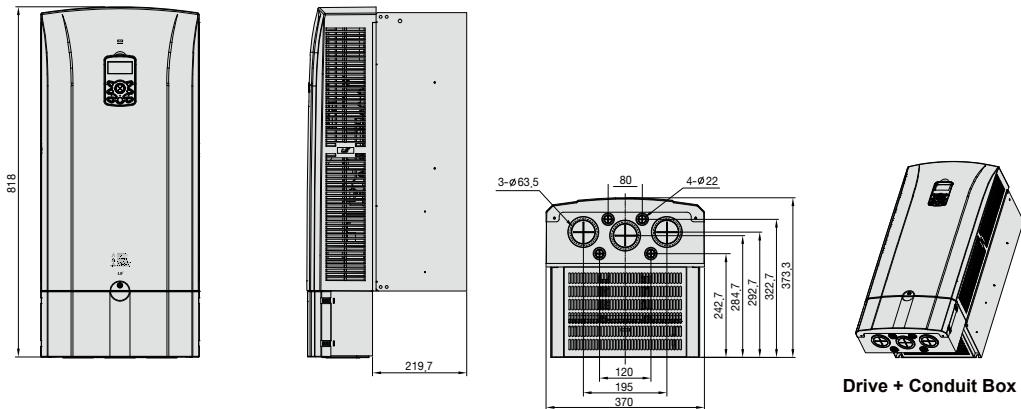
SV0185 ~ 0220iS7 (400V Class)



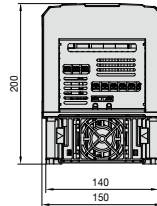
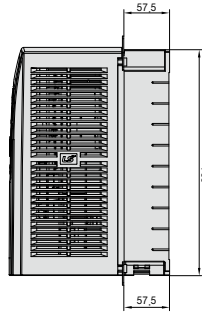
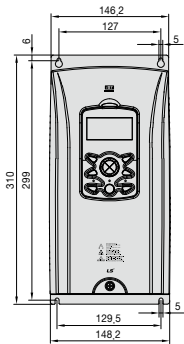
SV0300 ~ 0450iS7 (400V Class)



SV0550 ~ 0750iS7 (400V Class)

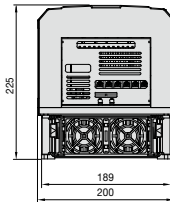
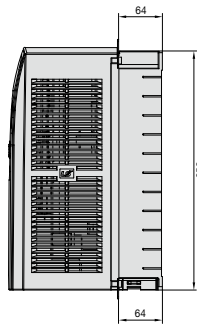
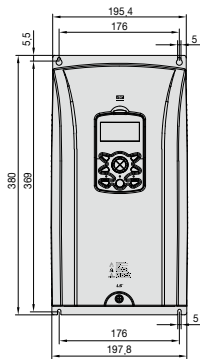


Dimensions (Flange Option)



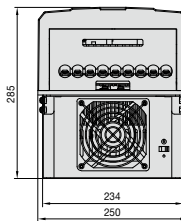
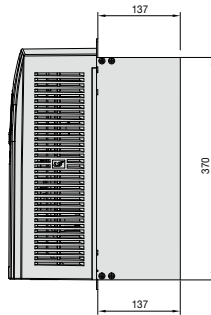
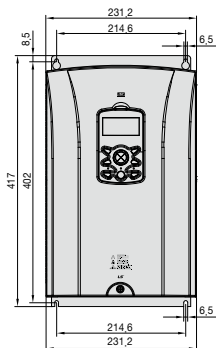
Drive + Flange

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



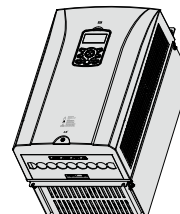
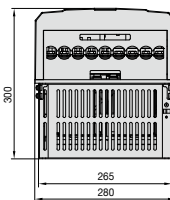
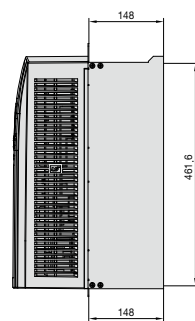
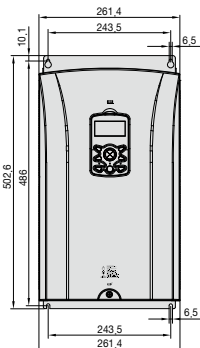
Drive + Flange

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



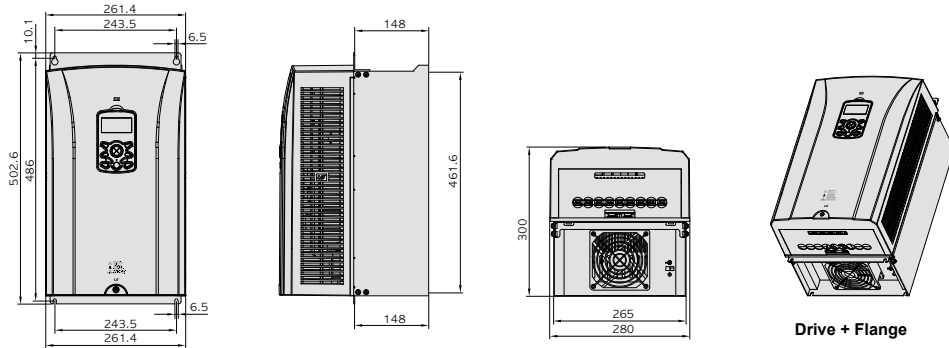
Drive + Flange

SV0185 ~ 0220iS7 (200V Class)

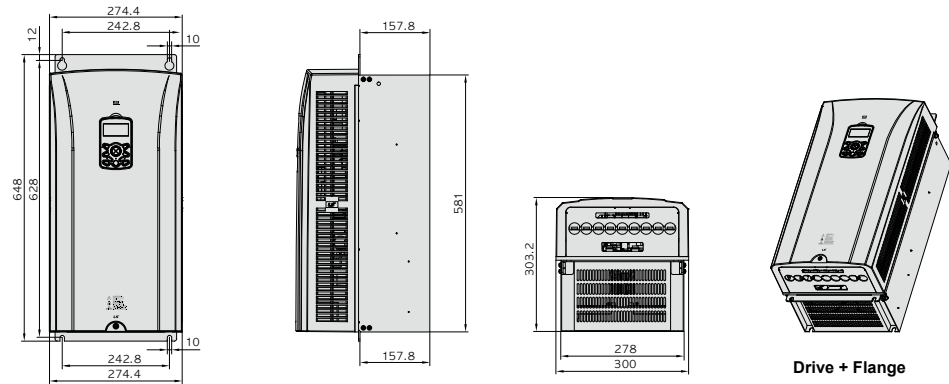


Drive + Flange

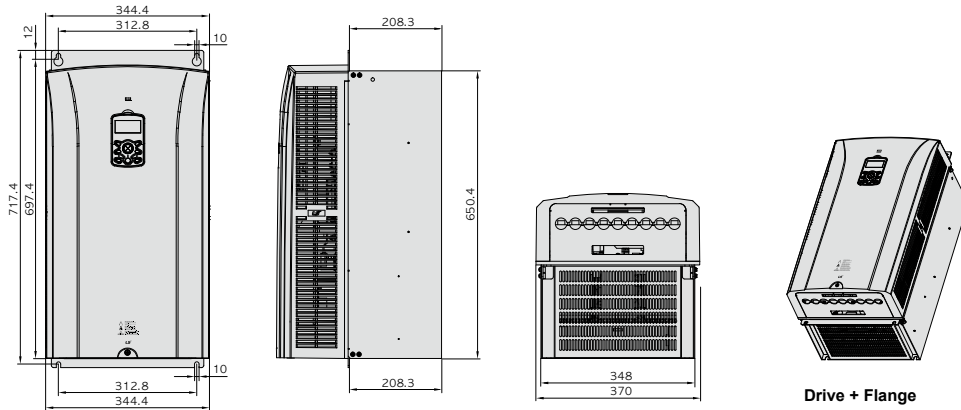
SV0185 ~ 0220iS7 (400V Class)



SV0300 ~ 0450iS7 (400V Class)



SV0550 ~ 0750iS7 (400V Class)



Frame Dimensions and Weight (UL Enclosed Type1, IP21 Type)

| Inverter Capacity | W(mm) | H(mm) | D(mm) | Weight[Kg] w/ built-in EMC and DCR | Weight[Kg] w/ built-in EMC | Weight[Kg] w/ built-in DCR | Weight[Kg] non-DCR types |
|-------------------|-------|-------|-------|--|----------------------------------|----------------------------------|--------------------------------|
| SV0008iS7-2/4 | 150 | 284 | 200 | 5.5 | 4.5 | 5.0 | 4.5 |
| SV0015iS7-2/4 | | | | | | | |
| SV0022iS7-2/4 | | | | | | | |
| SV0037iS7-2/4 | | | | | | | |
| SV0055iS7-2/4 | 200 | 355 | 225 | 10 | 8.4 | 9.3 | 7.7 |
| SV0075iS7-2/4 | | | | | | | |
| SV0110iS7-2/4 | 250 | 385 | 284 | 20 | 17.2 | 16.8 | 14 |
| SV0150iS7-2/4 | | | | | | | |
| SV0185iS7-2 | 280 | 461.6 | 298 | 30 | 27 | 25.9 | 22.9 |
| SV0220iS7-2 | | | | | 25.8 | | |
| SV0185iS7-4 | | | | 27.4 | 23.5 | 23.3 | 19.7 |
| SV0220iS7-4 | | | | | | 27.4 | |
| SV0300iS7-2 | 300 | 570 | 265.2 | - | - | - | 29.5 |
| SV0370iS7-2 | 370 | 630 | 281.2 | - | - | - | 44 |
| SV0450iS7-2 | | | | | | | |
| SV0550iS7-2 | 445 | 750 | 355.6 | - | - | - | 72.5 |
| SV0750iS7-2 | | | | | | | |

Note) • The weight specified in the table indicates the total weight of the product without packaging, which includes the built-in parts, such as the EMC filter and DCR.
 • The built-in EMC filter and DCR are not available for 30-75 kW (200 V) products.

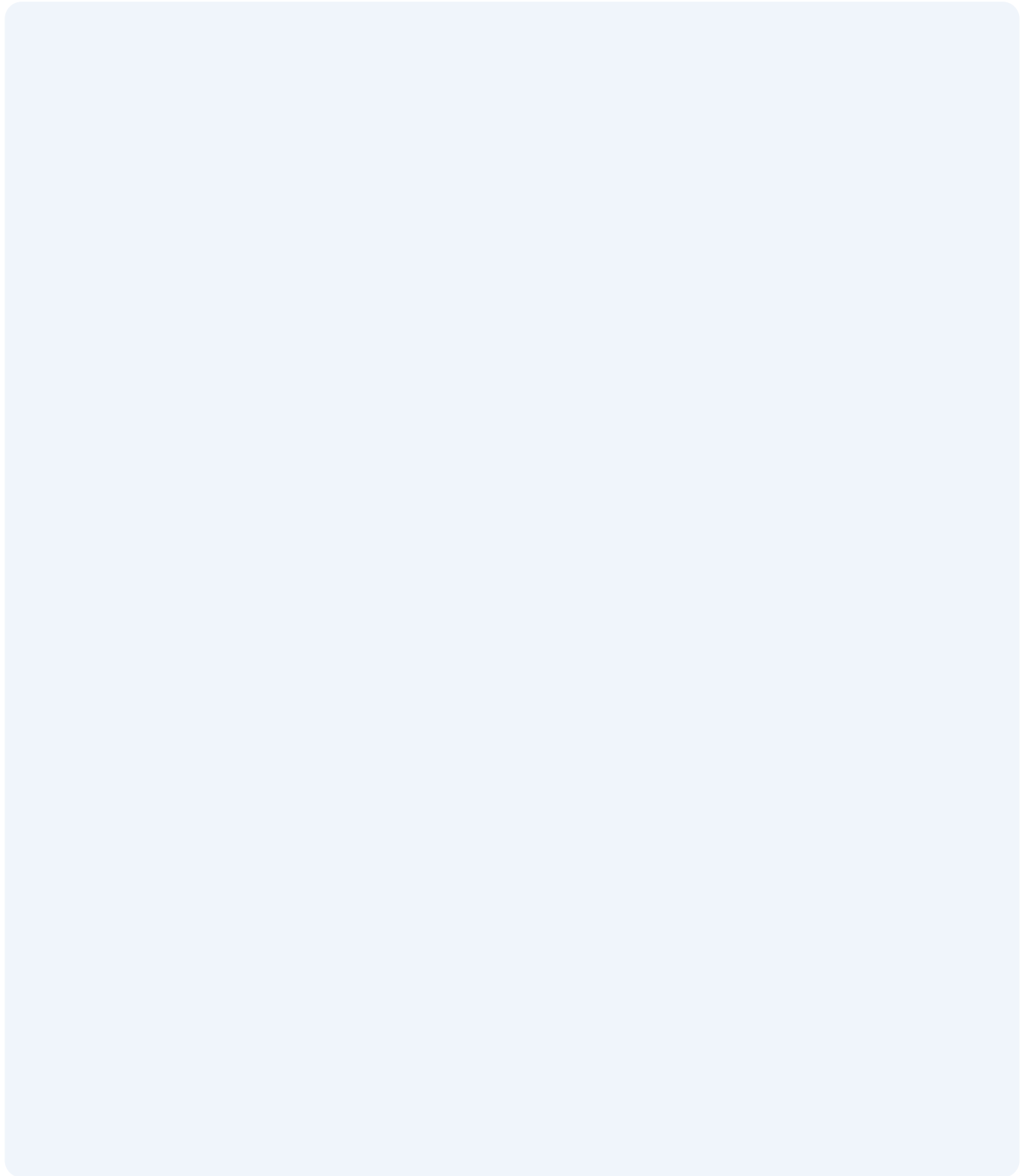
| Inverter Capacity | W(mm) | H(mm) | D(mm) | Weight[Kg] w/ built-in EMC and DCR | Weight[Kg] w/ built-in EMC | Weight[Kg] w/ built-in DCR | Weight[Kg] non-DCR types |
|-------------------|-------|--------|-------|--|----------------------------------|----------------------------------|--------------------------------|
| SV0300iS7-4 | 300 | 594 | 300.4 | - | - | 41 | 28 |
| SV0370iS7-4 | | | | - | - | | |
| SV0450iS7-4 | | | | - | - | | |
| SV0550iS7-4 | 370 | 663.4 | 371 | - | - | 63 | 45 |
| SV0750iS7-4 | | | | - | - | | |
| SV0900iS7-4 | 510 | 784 | 423 | - | - | 101 | - |
| SV1100iS7-4 | | | | - | - | | - |
| SV1320iS7-4 | | 861 | | - | - | 114 | - |
| SV1600iS7-4 | | | | - | - | | - |
| SV1850iS7-4 | 690 | 1078 | 450 | - | - | 200 | - |
| SV2200iS7-4 | | | | - | - | | - |
| SV2800iS7-4 | 771 | 1138 | 440 | - | - | - | 252 |
| SV3150iS7-4 | 922 | 1302.5 | 495 | - | - | - | 352 |
| SV3750iS7-4 | | | | - | - | - | |

Note) • The weight specified in the table indicates the total weight of the product without packaging, which includes built-in parts, such as the EMC filter and DCR.
 • 300-220 kW (400 V) products have built-in DCR only.
 • 280-375 kW (400 V) products are provided without a built-in EMC filter and DCR.

Frame Dimensions and Weight (UL Enclosed Type12, IP54 Type)

| Inverter Capacity | W(mm) | H(mm) | D(mm) | Weight[Kg] w/ built-in EMC and DCR | Weight[Kg] w/ built-in EMC | Weight[Kg] w/ built-in DCR | Weight[Kg] non-DCR types |
|-------------------|-------|-------|-------|--|----------------------------------|----------------------------------|--------------------------------|
| SV0008iS7-2/4 | 204 | 419 | 208 | 8.2 | 7.2 | 7.7 | 6.7 |
| SV0015iS7-2/4 | | | | | | | |
| SV0022iS7-2/4 | | | | | | | |
| SV0037iS7-2/4 | | | | | | | |
| SV0055iS7-2/4 | 254 | 461 | 232 | 12.8 | 10.2 | 12.1 | 9.5 |
| SV0075iS7-2/4 | | | | 12.9 | 10.3 | 12.2 | 9.6 |
| SV0110iS7-2/4 | 313 | 591 | 294 | 25.6 | 22.8 | 22.4 | 19.6 |
| SV0150iS7-2/4 | | | | 25.9 | 23.1 | 22.7 | 19.9 |
| SV0185iS7-2 | 343 | 751 | 316 | 38.3 | 34.2 | 34.1 | 29.9 |
| SV0220iS7-2 | | | | | | | |
| SV0185iS7-4 | | | | 34.9 | 31 | 31 | 27.1 |
| SV0220iS7-4 | | | | | | | |

- Note)** • The weight specified in the table indicates the total weight of the product without packaging, which includes the built-in parts, such as the EMC filter and DCR.
• Only 0.75-22 kW products are available in IP 54 Type specifications.





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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