

Top 100
Global
Innovator
for 10 years

Fan and Pump Drive **H100**

3-phase 200~240V 0.75~18.5kW
3-phase 380~480V 0.75~500kW



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LS ELECTRIC

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HVAC Drive H100



Convenience

- Communication Module Exclusive for Fan and Pump-BACnet
- Global Specifications Compliant-UL Plenum Rated



Compact

- Side-by-Side Installation
- Reduced Size



Safety

- Soft Fill Control
- Multiple-motor Control
- Fire Mode



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



Marine Certifications

ABS, BV, CCS, DNV/GL, KR, LR, NK, RINA, RS



Innovative Energy Reduction: The LS H100 drive solution is here for you.

The LSLV-H100 sets the standard for the drive industry. Environmentally friendly water treatment and Fan and Pump systems incorporate the outstanding energy-saving benefits of the LSLV-H100 for fans and pumps.



Convenience

LSLV-H100 drives include a user-friendly keypad designed exclusively for the Fan and Pump market and satisfy various needs of customers.



Keypad Exclusive for Fan and Pump

- Used to issue commands, configure drive parameters, and for monitoring drive status
- HAND Mode (Local Control Mode) or AUTO Mode (Remote Control Mode) can be selected.
 - HAND Mode : Used when selecting frequency or run/stop commands.
 - AUTO Mode : Drive operated using the keypad, multifunctional terminal block and communications.
- Fault Status Monitoring

Cancel (ESC) Key

- While in the Edit state, previously saved data are used
- When pressed while switching codes within the group, it is switched to the very first mode of group.
- When pressed while switching modes, it reverts back to the monitor mode.

Program (PROG/ENT) Key

- When pressed once, it is changed to Parameter Edit state.
- When pressed after changes, the changed data are saved.

Left/Right Key

- It is used to switch between groups. (Cursor is used under the Edit state.)

Up/Down Key

- It is used to switch between codes and edit data values.

Hand (HAND) Key

- It is used to select Keypad (HAND) operation
- Speed control (HAND key UP/DOWN)

Auto (OFF) Key

- Off mode or fault reset

Multifunction (MULTI) Key

- It is used to register user codes.

Auto (AUTO) Key

- It is used to select AUTO operation.

Built-in EMC Filter

- A built-in EMC filter to respond to the specifications for noise reduction
 - 400V 0.75~30kW, 110~500kW Built-in as default (C3)
 - 400V 37~55kW Built-in option can be selected (C3)
- ※ 75~90kW satisfies EMC specifications even without a filter.

Global Specifications Compliant

UL Plenum Rated

(American standards for conditioner fire safety)

- ※ Suitable for compartment for air handling/air conditioning

Communication Module

- RS-485 capability is built-in: Modbus-RTU, Metasys N2
- BACnet MS/TP is embedded as standard
- LonWorks option can be added

Easy to Change Cooling Fan

It is easy to change a cooling fan without opening the cover of a drive.

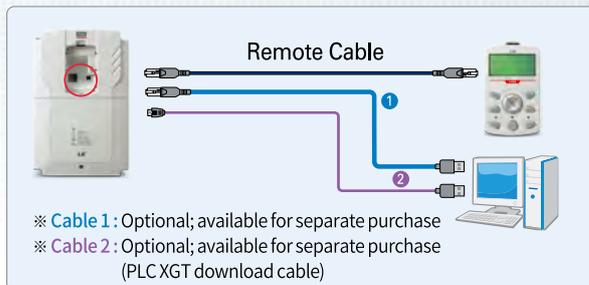


Flange Type

If the space is too small, a heat sink can be installed outside the panel.

Software Exclusive for LS Drives

DriveView9 can be connected using USB Port or RJ45 terminal.



DC Reactor

- A built-in DC Reactor effective to improve power factor and reduce THD is installed.
- DC Reactor built-in as standard for 400V 37~500kW

Specification Level Option (Conduit Kit)

- Acquired UL open type & enclosed type 1 certification
- When the conduit option is used, the drive meets UL Enclosed Type 1 specifications



LED Feedback

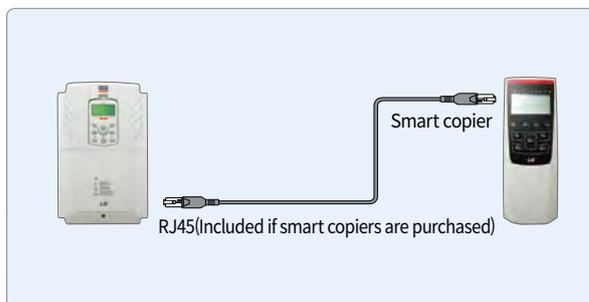
LED is on in case of normal operation;
 LED is flickering if errors such as communication occur.

Parameters Read/Write

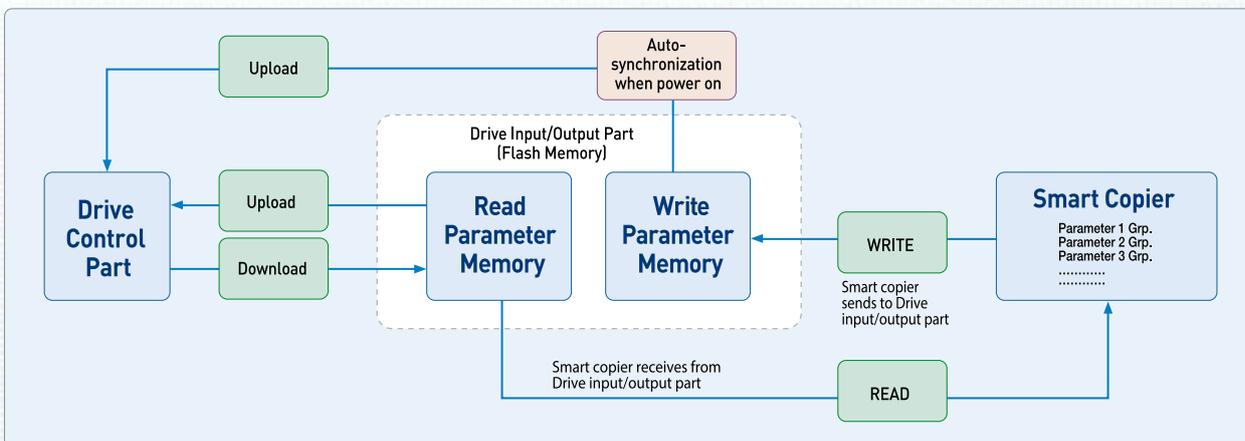
It is possible to read and write parameters saved in a drive or a smart copier.

Easy to Install

Parameter saved in the smart copier can be downloaded to both the drive I/O and the control part.



Data Flow in Smart Copier





Compact

LSLV-H100 drives are miniaturized to reduce the space for installation, allowing the effective configuration of environment inside and outside a control panel.



Size Reduction

34%

Reduced Size

Main components are optimally deployed through thermal radiation analysis and 3D design to reduce size by 34% compared to iP5A (Volume based).

Side-by-Side Installation

The size of control board is significantly reduced when multiple drives are installed by minimizing distance between products installed.

※ Side-by-side installation is unavailable for 37-500kW





Safety

LSVL-H100 drives are intelligent drives equipped with various protective and operation functions for continuously stable operation in response to external environmental changes.

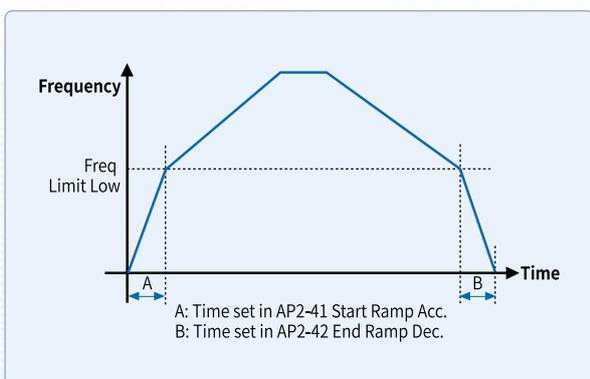
Multi Motor Control

MMC is used when a single drive is used to control multiple motors in pump systems. It can control 1 main motor and 5 auxiliary motors (8 motors if extension I/O installed.)



Start Ramp & End Ramp

Prevents pump damage by changing ramp using acceleration/deceleration time setting upon initial pump operation and stop.

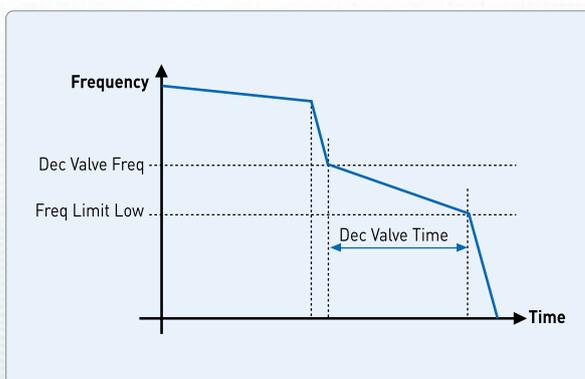


Pump Clean

Upon pump operation, the efficiency of pumps may decline when foreign substances are stuck in an impeller. Pump Clean removes the foreign substances to extend the pump life and reduce any loss.

Dec Valve Ramp

Prevents pump and pipe damages caused by sudden pressure changes when pumps are stopped or a pump valve is closed, deceleration time can be set.



Load Tuning

Establishes load (current & power) curves based on drive frequency so as to make load characteristics curve required for 'Under Load' and 'Pump Clean.'

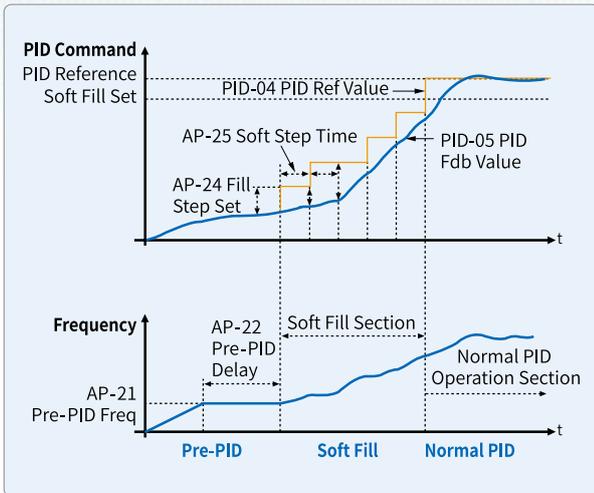


Safety

With reinforced system-based functions and performance, LSVL-H100 drives not only provide optimum solution to applications for cooling/heating and water treatment, but also ensure energy saving and pleasant environment.

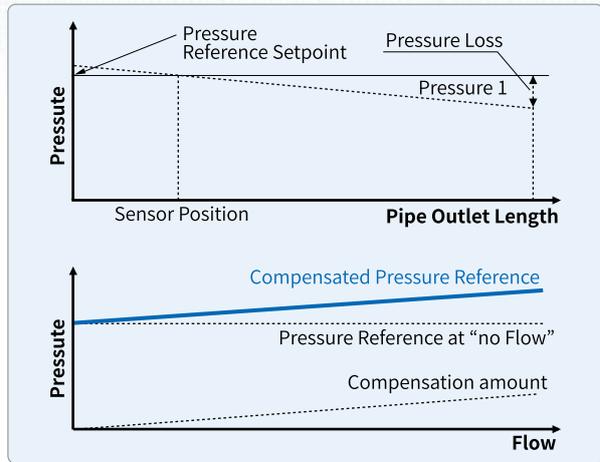
Soft Fill Operation

Prevents pump damages caused by dramatic pressure changes during initial operation of pumps or inside pumps.



Flow Compensation

Compensates for hydraulic loss that occurs when the length of pipes is long, adding compensation rate depending on the inverter output frequency.



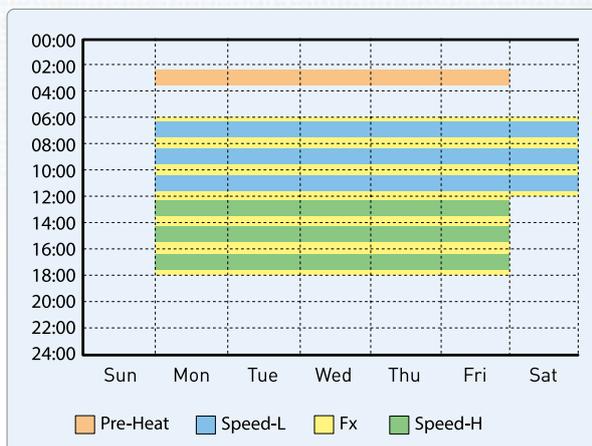
PC Setup Software

DriveView9 can be connected using USB port or RJ45 terminal.

Scheduling (Time Event: Real Time Clock)

RTC (Real Time Clock) is used so that selected functions are operable during the set time.

(Possible to set different functions including Fx, Rx, multiple acceleration/deceleration time, multiple frequency, PID related functions and pre-heat.)



Aux Motor PID Compensation

Pipe flow increases and conduit pressure decreases as the number of auxiliary motors increases.

To compensate this, 'Aux Motor PID Compensation' is used to compensate pressure loss suitable for the given motor when operating auxiliary motors.

Fire Mode

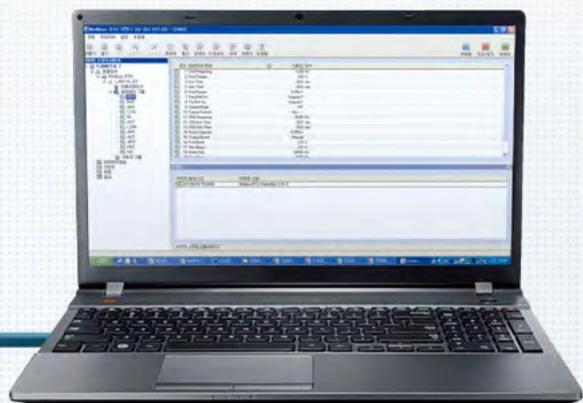
When an emergency such as fire occurs at suction/exhaust fans, but hardware did not fail nor had a critical defect, the drive is continuously operated to protect other systems under the set frequency and direction.

Energy-saving Display (Payback Counter)

Commercial energy consumption is compared to the amount of energy used by the drive to calculate the amount of energy saved.

Power-on Resume

When the drive restarts after it was stopped due to power interruption upon communication control, 'Power-on Resume' is used to follow the previous control command.



Sleep, Sleep Boost, Wake-up

It is used to put the drive on standby and restarts it using PID in order to reduce motor loss as much as possible.

Auto Torque Boost

The drive outputs voltage for the drive by controlling the level of boost to fit the load by itself.

Lubrication Control

When a control command is made in the Flow/Oiling Systems, lubrication signals are output for a certain period before the motors are started.

Drive control is immediately started from the signal output point until the signals are turned off after the set time.

Damper Control

When a Damper exists in the system configuration, the drive will command the Damper to open/close or receive feedback signals for protection.

Level Detection

When the drive is operated under frequency that is beyond the set frequency and source (voltage, current, and etc.) values to be detected are above or below the user set values, it generates a trip or activates a relay for protective operation.

Detection of Pipe Broken

Upon PID operation, pipe damages or leakage is detected to display a warning or a trip.

Under Load Protection

When running pumps including No Flow and Dry Pumps under the set frequency, the drive issues warning functions; and when trip is generated, Free-Run, stop after deceleration can be selected via parameters.

Pre-Heat

Pre-heats motors by outputting direct current when the motors are at fixed time state in order to prevent condensation of the motors.

KEB, Kinetic Energy Buffering

Upon loss or momentary interruption of input power, if KEB is set, the drive maintains DC Link Voltage using regeneration energy of the motor is used during the interruption period.

Macro Setting

If a particular application is selected, frequently used parameters and set values are changed and registered in a macro group.

| Motor Rating | 3-Phase 200V | 3-Phase 400V |
|--------------|--------------------|--------------------|
| 0.75 kW | LSLV0008H100-2CONN | LSLV0008H100-4COFN |
| 1.5 kW | LSLV0015H100-2CONN | LSLV0015H100-4COFN |
| 2.2 kW | LSLV0022H100-2CONN | LSLV0022H100-4COFN |
| 3.7 kW | LSLV0037H100-2CONN | LSLV0037H100-4COFN |
| 5.5 kW | LSLV0055H100-2CONN | LSLV0055H100-4COFN |
| 7.5 kW | LSLV0075H100-2CONN | LSLV0075H100-4COFN |
| 11 kW | LSLV0110H100-2CONN | LSLV0110H100-4COFN |
| 15 kW | LSLV0150H100-2CONN | LSLV0150H100-4COFN |
| 18.5 kW | LSLV0185H100-2CONN | LSLV0185H100-4COFN |
| 22 kW | | LSLV0220H100-4COFN |
| 30 kW | | LSLV0300H100-4COFN |
| 37 kW | | LSLV0370H100-4COND |
| 45 kW | | LSLV0450H100-4COND |
| 55 kW | | LSLV0550H100-4COND |
| 75 kW | | LSLV0750H100-4COFD |
| 90 kW | | LSLV0900H100-4COFD |
| 110 kW | | LSLV1100H100-4COFD |
| 132 kW | | LSLV1320H100-4COFD |
| 160 kW | | LSLV1600H100-4COFD |
| 185 kW | | LSLV1850H100-4COFD |
| 220 kW | | LSLV2200H100-4COFD |
| 250 kW | | LSLV2500H100-4COFD |
| 315 kW | | LSLV3150H100-4COFD |
| 355 kW | | LSLV3550H100-4COFD |
| 400 kW | | LSLV4000H100-4COFD |
| 500 kW | | LSLV5000H100-4COFD |

※75-90kW satisfies EMC class 3

| | | |
|---|--|------------------------------------|
| LSLV0055H100-4COFN | | Model Name |
| INPUT | 380-480V 3Phase 50/60Hz 12.2A | Power Source Specifications |
| OUTPUT | 0-Input V 12A 9.1kVA Ser. No 55025310146 Inspected by D. K. YU MSIP-REM-LSR-XXXXXXX | Output Specifications |
|  | | |
|  | | Made in Korea |



| LSLV | 0055 | H100 | - | 4 | C | O | F | N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------|------------|---------------------------|--------------------|-------------------|----------|----------------|-----------|-----------|------------|------------|-------------|-----------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------|------------|------------|------------|-----------|------------|--|-----------|-----------|------------|--|--|---------------|-------------------------------|--|---|
| Series Name | | | | Input Voltage | Keypad Type | EMC Filter | | Reactor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th colspan="4">Motor Capacity</th> </tr> </thead> <tbody> <tr><td>0008-0.75kW</td><td>0150-15kW</td><td>0750-75kW</td><td>2500-250kW</td></tr> <tr><td>0015-1.5kW</td><td>0185-18.5kW</td><td>0900-90kW</td><td>3150-315kW</td></tr> <tr><td>0022-2.2kW</td><td>0220-22kW</td><td>1100-110kW</td><td>3550-355kW</td></tr> <tr><td>0037-3.7kW</td><td>0300-30kW</td><td>1320-132kW</td><td>4000-400kW</td></tr> <tr><td>0055-5.5kW</td><td>0370-37kW</td><td>1600-160kW</td><td>5000-500kW</td></tr> <tr><td>0075-7.5kW</td><td>0450-45kW</td><td>1850-185kW</td><td></td></tr> <tr><td>0110-11kW</td><td>0550-55kW</td><td>2200-220kW</td><td></td></tr> </tbody> </table> | | | | Motor Capacity | | | | 0008-0.75kW | 0150-15kW | 0750-75kW | 2500-250kW | 0015-1.5kW | 0185-18.5kW | 0900-90kW | 3150-315kW | 0022-2.2kW | 0220-22kW | 1100-110kW | 3550-355kW | 0037-3.7kW | 0300-30kW | 1320-132kW | 4000-400kW | 0055-5.5kW | 0370-37kW | 1600-160kW | 5000-500kW | 0075-7.5kW | 0450-45kW | 1850-185kW | | 0110-11kW | 0550-55kW | 2200-220kW | | 2 : 3-phase 200~240V 4 : 3-phase 380~480V | C: LCD Keypad | F: Built-in EMC N: Non EMC | | D: Built in DC Reactor N: Non DC Reactor |
| Motor Capacity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0008-0.75kW | 0150-15kW | 0750-75kW | 2500-250kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0015-1.5kW | 0185-18.5kW | 0900-90kW | 3150-315kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0022-2.2kW | 0220-22kW | 1100-110kW | 3550-355kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0037-3.7kW | 0300-30kW | 1320-132kW | 4000-400kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0055-5.5kW | 0370-37kW | 1600-160kW | 5000-500kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0075-7.5kW | 0450-45kW | 1850-185kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0110-11kW | 0550-55kW | 2200-220kW | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | UL Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | O: UL Open E: UL Type1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

3-Phase 200V (0.75~18.5kW)

| Model Name LSLV□□□□H100-2□□□□ | | 0008 | 0015 | 0022 | 0037 | 0055 | 0075 | 0110 | 0150 | 0185 |
|-------------------------------|----------------------|--|------|------|------|------|------|------|------|------|
| Applied Motor | HP | 1.0 | 2.0 | 3.0 | 5.0 | 7.5 | 10 | 15 | 20 | 25 |
| | kW | 0.75 | 1.5 | 2.2 | 3.7 | 5.5 | 7.5 | 11 | 15 | 18.5 |
| Output Rating | Rated Capacity (kVA) | 1.9 | 3.0 | 4.5 | 6.1 | 8.4 | 11.4 | 16.0 | 21.3 | 26.3 |
| | Rated Current | 5 | 8 | 12 | 16 | 22 | 30 | 42 | 56 | 69 |
| | Output Frequency | 0~400Hz | | | | | | | | |
| | Output Voltage (V) | 3-Phase 200~240V | | | | | | | | |
| Input Rating | Service Voltage (V) | 3-Phase 200~240VAC (-15%~+10%) / 1-Phase 240VAC (-5%~+10%) | | | | | | | | |
| | Input Frequency | 3-Phase 50~60Hz(5%) / 1-Phase 50~60Hz(5%) | | | | | | | | |
| | Rated Current (A) | 4.9 | 8.4 | 12.9 | 17.5 | 23.7 | 32.7 | 46.4 | 62.3 | 77.2 |
| Weight (kg) | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 4.6 | 7.1 |

3-Phase 400V (0.75~22kW)

| Model Name LSLV□□□□H100-4□□□□ | | 0008 | 0015 | 0022 | 0037 | 0055 | 0075 | 0110 | 0150 | 0185 | 0220 |
|-------------------------------|----------------------|--|------|------|------|------|------|------|------|------|------|
| Applied Motor | HP | 1.0 | 2.0 | 3.0 | 5.0 | 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 |
| Output Rating | Rated Capacity (kVA) | 1.9 | 3.0 | 4.5 | 6.1 | 9.1 | 12.2 | 18.3 | 23.0 | 29.0 | 34.3 |
| | Rated Current | 2.5 | 4 | 6 | 8 | 12 | 16 | 24 | 30 | 38 | 45 |
| | Output Frequency | 0~400Hz | | | | | | | | | |
| | Output Voltage (V) | 3-Phase 380~480V | | | | | | | | | |
| Input Rating | Service Voltage (V) | 3-Phase 380~480VAC (-15%~+10%) / 1-Phase 480VAC (-5%~+10%) | | | | | | | | | |
| | Input Frequency | 3-Phase 50~60Hz(5%) / 1-Phase 50~60Hz(5%) | | | | | | | | | |
| | Rated Current (A) | 2.4 | 4.2 | 6.5 | 8.7 | 12.2 | 17.5 | 26.5 | 33.4 | 42.5 | 50.7 |
| Weight (kg) | | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.4 | 4.6 | 4.8 | 7.5 |

3-Phase 400V (30~90kW)

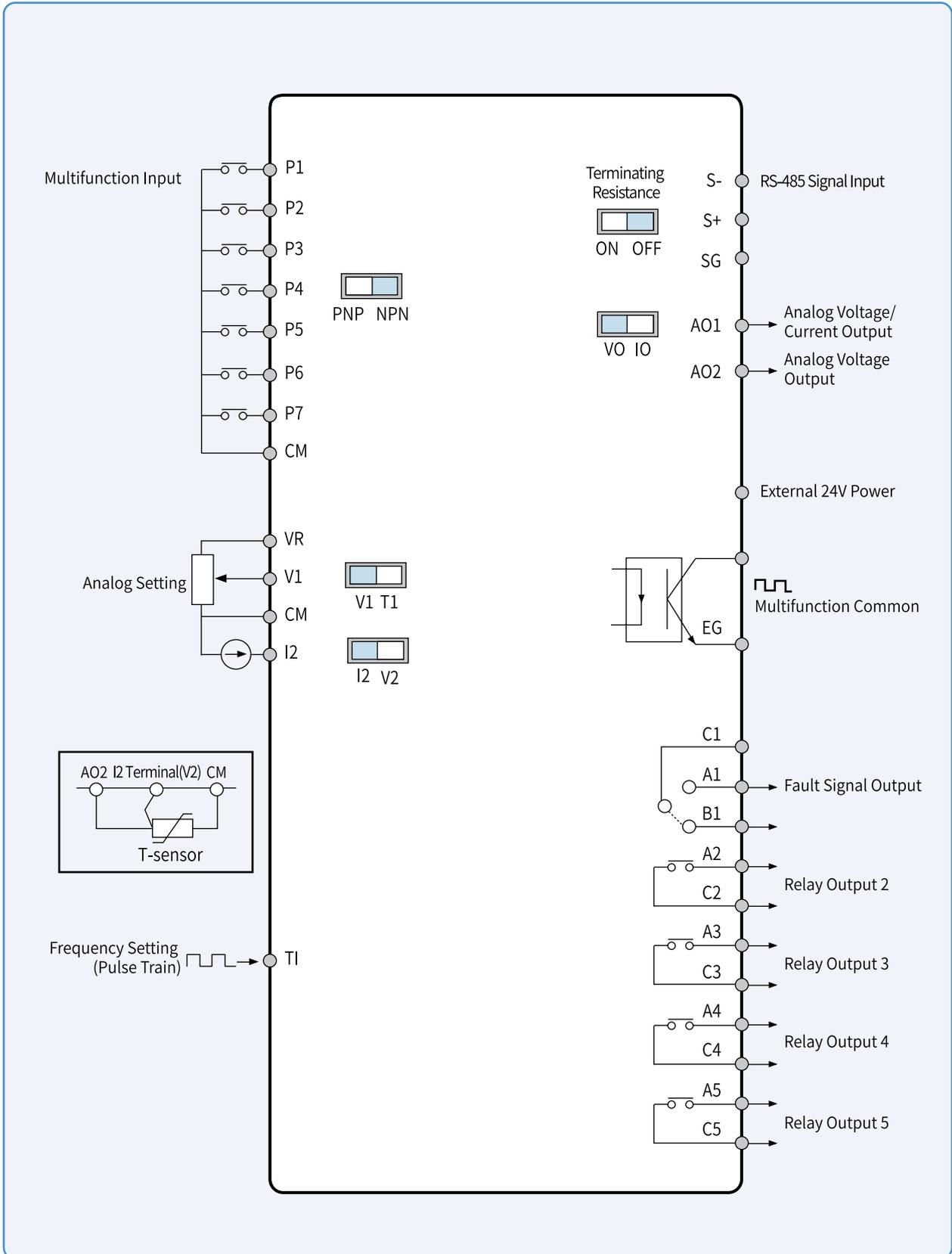
| Model Name LSLV□□□□H100-4□□□□ | | 0300 | 0370 | 0450 | 0550 | 0750 | 0900 |
|-------------------------------|----------------------|--|------|------|-------|-------|-------|
| Applied Motor | HP | 40 | 50 | 60 | 75 | 100 | 125 |
| | kW | 30 | 37 | 45 | 55 | 75 | 90 |
| Output Rating | Rated Capacity (kVA) | 46.5 | 57.1 | 69.4 | 82.0 | 108.2 | 128.8 |
| | Rated Current | 61 | 75 | 91 | 107 | 142 | 169 |
| | Output Frequency | 0~400Hz | | | | | |
| | Output Voltage (V) | 3-Phase 380~480V | | | | | |
| Input Rating | Service Voltage (V) | 3-Phase 380~480VAC (-15%~+10%) / 1-Phase 480VAC (-5%~+10%) | | | | | |
| | Input Frequency | 3-Phase 50~60Hz(5%) / 1-Phase 50~60Hz(5%) | | | | | |
| | Rated Current (A) | 69.1 | 69.3 | 84.6 | 100.1 | 133.6 | 160.0 |
| Weight (kg) / EMC Built-in | 7.5 | 26 | 35 | 35 | 43 | | |
| Weight (kg) / Non EMC | - | 25 | 34 | 34 | | | |

3-Phase 400V (110~500kW)

| Model Name LSLV□□□□H100-4□□□□ | | 1100 | 1320 | 1600 | 1850 | 2200 | 2500 | 3150 | 3550 | 4000 | 5000 |
|-------------------------------|----------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Applied Motor | HP | 150 | 200 | 250 | 300 | 350 | 400 | 500 | 550 | 650 | 800 |
| | kW | 110 | 132 | 160 | 185 | 220 | 250 | 315 | 355 | 400 | 500 |
| Output Rating | Rated Capacity (kVA) | 170 | 201 | 248 | 282 | 329 | 367 | 467 | 520 | 587 | 733 |
| | Rated Current | 223 | 264 | 325 | 370 | 432 | 481 | 613 | 683 | 770 | 962 |
| | Output Frequency | 0~400Hz | | | | | | | | | |
| | Output Voltage (V) | 3-Phase 380~500V | | | | | | | | | |
| Input Rating | Service Voltage (V) | 3-Phase 380~500VAC(-15%~+10%) | | | | | | | | | |
| | Input Frequency | 50~60Hz(±5%) | | | | | | | | | |
| | Rated Current (A) | 215.1 | 254.6 | 315.3 | 358.9 | 419.1 | 469.3 | 598.1 | 666.4 | 751.3 | 938.6 |
| Weight (kg) | | 55.8 | 55.8 | 74.7 | 74.7 | 120.0 | 120.0 | 185.5 | 185.5 | 185.5 | 265 |

- Motor capacity is based on use of 4-pole standard motors.
- 200V Class is for 220V and 400V Class is for 440V.
- Rated output current is limited depending on the carrier frequency (CON-04) setting.
- 400V 0.75~30kW, 110~500kW, EMC filter is built-in as default. [C3]
- 400V 37~55kW, EMC filter is provided as built-in product option. [C3]
- 400V 75~90kW, products satisfy EMC specifications even without a filter.

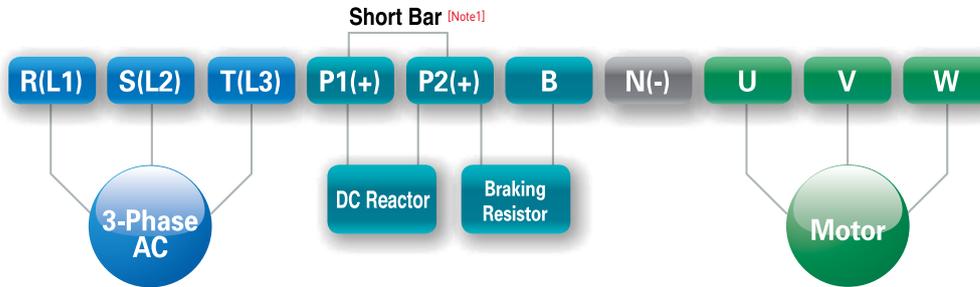
| Item | | Description | | |
|-----------------------------------|---|--|--|--|
| Control | Control Mode | V/F control, slip compensation | | |
| | Frequency Set Resolution | Digital command: 0.01Hz | | |
| | | Analog command: 0.06Hz (based on 60Hz) | | |
| | Control Degree of Frequency | 1% of the maximum output frequency | | |
| | V/F Pattern | Linear, squared overload reduction and user V/F | | |
| | Overload Capacity | 0.75-90kW | Rated Current: 120% 1 minute | |
| 110-500kW | | Rated Current: 110% 1 minute | | |
| Torque Boost | Manual torque boost, Automatic torque boost | | | |
| Control (Operation) | Drive Mode | Optional: Keypad, terminal board or communication control | | |
| | Frequency Setting | Analog mode: -10~10V, 0~10V, 0~20mA | | |
| | | Digital mode: Keypad and pulse train input | | |
| | Control Functions | PID control, 3-Wire control, Frequency limitation, Secondary Functions, Forward/Reverse rotation prohibited, DC braking, Commercial power switching, Speed search, Power braking, Reduction of leakage, Up-Down control, DC braking Flux braking, Frequency pump, Slip compensation, Automatic restart, Automatic tuning, Energy buffering control, Energy-saving control | | |
| | Input | Multifunctional Terminal (7 points) | The following functions can be set using IN-65~71 code parameters between PNP(Source) and NPN(Sink). | |
| | | | Forward Operation, Reset, Emergency stop, Multi-step frequency – High/Mid/Low, DC braking during stop, Pre-Heat, Frequency increase, 3-Wire, Optional: Acceleration, deceleration or stop, MMC interlock, Reverse Operation, Pump cleaning, External trip, Jog control, Multi-step acceleration/deceleration-High/Mid/Low, Secondary motor selection, RTC(Time event function), Frequency decrease, Analog command frequency fixation, Switching to normal operation during PID operation, | |
| | | Pulse Train | 0~32kHz, Low Level: 0~0.8V, High Level: 3.5~12V | |
| | Output | Multifunctional Open Collector Terminal | Failure output & drive control status output: | DC 26V, 50mA or below |
| | | Failure (Fault) Relay Terminal | | N.O. : AC 250V, 2A or below, DC30V, 3A or below N.C. : AC 250V, 1A or below, DC30V, 1A or below |
| | | Multifunctional Relay Terminal | | AC250V, 5A or below, DC30V, 5A or below |
| Analog Output | | 0~12Vdc(0~20mA): Optional among frequency, output current, output voltage and DC voltage. | | |
| | Pulse Train | Maximum 32kHz, 0~12V | | |
| Protective Functions | Trip | Over-current trip, Trip caused by external signals, ARM short-circuit current trip, Overheat trip, Pipe broken trip, Input open-phase trip Ground trip, Motor overheat trip, IO board connection trip, No Motor trip, Parameter Write trip, Emergency stop trip, Command loss trip, External memory error, CPU watchdog trip, Motor under-load trip, Overvoltage trip, Temperature sensor trip, Drive overheat, Option trip, Output open-phase trip, Drive overload trip, Fan trip, Low voltage trip during operation, Low voltage trip, Analog input error, Motor overload trip, Keypad command loss trip, Damper trip, Level Detect trip, All auxiliary motor failure trip, Pump clean failure (fault) | | |
| | Warning | Command loss trip warning, overload warning, under-load warning, drive overload warning, fan operation warning, damping resistance brake percentage warning, capacitor life warning, pump clean warning, Fire Mode warning and LDT warning | | |
| | Instant Power Interruption | Below 8 ms: Continuous operation (within the rated input voltage and rated output) 8 ms or above: Automatic restart operation | | |
| Structure/Operational Environment | Cooling mode | Forced air-cooling | | |
| | Protective structure | IP20/UL Open(default), UL Enclosed Type 1(option), IP30(Keypad) | | |
| | Ambient temperature | With no ice or frost at -10~50°C(14~122°F) (At 40°C or above, derating of 2.5%/1°C current. At 50°C, 75% of the rated current is operable). | | |
| | Ambient humidity | Relative humidity of 95% RH or below (without dew formation) | | |
| | Storage temperature | -20 ~ 65 °C (-4~149°F) | | |
| | Surrounding Environment | Environment Level: 3C3(IEC60721-3-3) classifications (for SO2, H2S, CL2, NO2) No corrosive gas and flammable gas (except SO2, H2S, CL2, NO2), no oil mist and dust etc., indoors | | |
| | Altitude | Maximum 1000m above sea level for standard operation. From 1000 to 4000m, the rated input voltage and rated output current of the drive must be derated by 1% for every 100m. | | |
| | Vibration | 9.8m/sec ² (1.0G) or below | | |
| Ambient atmospheric pressure | 70-106kPa | | | |



※The default value is displayed in blue color

Power Terminal Marks & Details

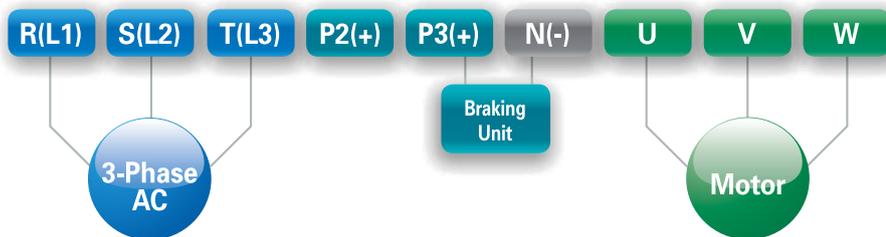
0.75~30kW(3-Phase)



| Terminal Mark | Name | Description |
|-----------------------|---------------------------|---|
| R(L1) / S(L2) / T(L3) | AC power input terminal | Mains supply AC power connections. |
| P1(+) / P2(+) | DC reactor terminal | DC Reactor wiring connection. (When you use the DC Reactor, must remove shortbar.) |
| P2(+) / N(-) | DC link terminal | DC voltage terminals. |
| P2(+) / B | Braking resistor terminal | Braking resistor wiring connection. |
| U / V / W | Motor output terminal | 3-phase induction motor wiring connections. |

Note1 Short Bar should be removed when wiring DC Reactor.

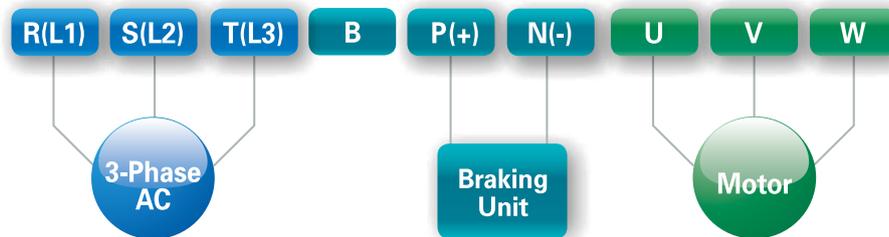
37~90kW(3-Phase)



| Terminal Mark | Name | Description |
|-----------------------|-------------------------|---|
| R(L1) / S(L2) / T(L3) | AC power input terminal | Mains supply AC power connections. |
| P2(+) / N(-) | DC link terminal | DC voltage terminals. |
| P3(+) / N(-) | Brake unit terminal | Brake unit wiring connection. |
| U / V / W | Motor output terminal | 3-phase induction motor wiring connections. |

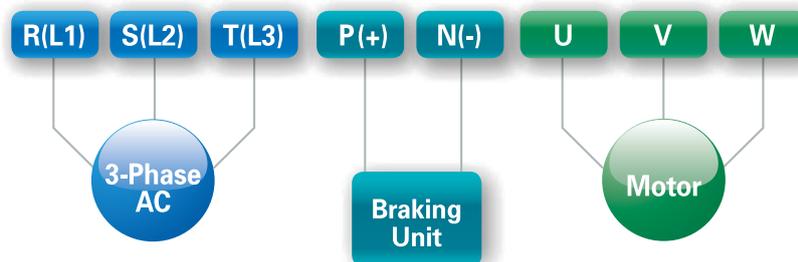
Power Terminal Marks & Details

110~250kW (3-Phase)



| Terminal Mark | Name | Description |
|-----------------------|--|--|
| R(L1) / S(L2) / T(L3) | AC power input terminal | Mains supply AC power connections. |
| B | - | It can not be used. |
| P(+)/ N(-) | DC link terminal (or Brake unit terminal) | Connect to DC voltage terminal. (or Brake unit wiring connection) |
| U / V / W | Motor output terminal | 3-phase induction motor wiring connections. |

315~500kW (3-Phase)



| Terminal Mark | Name | Description |
|-----------------------|--|---|
| R(L1) / S(L2) / T(L3) | AC power input terminal | Mains supply AC power connections. |
| P(+)/ N(-) | DC link terminal (or Brake unit terminal) | Connect to DC voltage terminal (or Brake unit wiring connection) |
| U / V / W | Motor output terminal | 3-phase induction motor wiring connections. |

0.75kW~500kW



※ Please refer to the below which manufactured before 2020 October 12th. (H100 0.75~90kW)



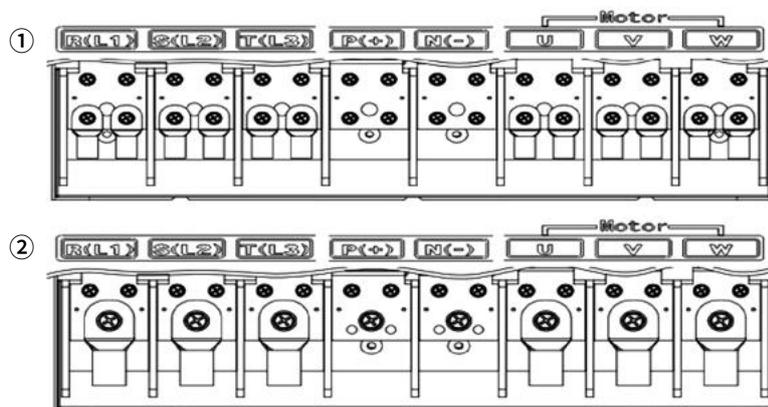
Input Terminal Marks & Details

| Classification | Terminal Mark | Name | Description |
|-----------------------------|---------------|--|--|
| Selection of Contact Points | P1-P7 | Multifunctional Input 1-7 Terminal | It can be used by setting multifunctional input. Default values from the factory are as follows: •P1: Fx •P2: Rx •P3: BX •P4: RST •P5: Speed-L •P6: Speed-M •P7: Speed-H |
| | CM | Sequence Common Terminal | Common terminal of contact point input and analog I/O terminal |
| Analog Input | VR | Power Terminal for Frequency Setting | Power for analog frequency setting: •Max. output voltage: 12V •Max. output current: 12mA •Volume resistivity: 1~10kΩ |
| | V1 | Frequency Setting(Voltage) Terminal | Frequency is set depending on the voltage supplied to V1 terminal. •Unipolar: 0~10V(Max. 12V) •Bipolar: -10~10V(Max. ±12V) |
| | I2 | Frequency Setting (Current/Voltage) Terminal | Frequency is set depending on the current capacity supplied to I2 terminal. V2 can be used by selecting analog voltage/current input terminal setting switch (SW4). •Input current: 0~20mA •Max. input current: 24mA •Input resistance 249Ω |
| | TI | Frequency Setting (Pulse Train) Terminal | Frequency is set as 0~32kHz. Low Level : 0~0.8V, High Level : 3.5~12V |

Output/Communication Terminal Marks & Details

| Classification | Terminal Mark | Name | Description |
|----------------|------------------------------|---|---|
| Analog Output | A0 | Voltage/Current Output Terminal | One of the following is chosen and output: Output frequency, output current, output voltage and DC voltage. The following voltage/current output can be chosen by selecting analog voltage/current output terminal setting switch (SW5). •Output voltage: 0-10V •Max. output voltage/current: 12V, 10mA •Output current: 0-20mA •Max. output current: 20mA •Factory default value: Frequency |
| Contact Point | Q1 | Multifunctional (Open Collector) Output/Pulse Output Terminal | As a multifunctional output signal or pulse output, one of the following is chosen: Output frequency, output current, output voltage and DC voltage. DC 26V, 50mA or below Pulse output terminal •Output frequency: 0-32kHz •Output voltage: 0-12V |
| | EG | Common Terminal | Common ground terminal for external power of open collector |
| | 24 | 24V Power Terminal ^(Note) | •Max. output current: 100mA •Do not use external 24V except for PNP-mode terminal block |
| | A1/C1/B1 | Abnormal Signal Output/Multifunctional Output Terminal | When power is cut-off to protect the product, signals or multifunctional signals are output. (N.O. : AC250V 2A or below, DC 30V 3A or below N.C. : AC250V 1A or below and DC 30V 1A or below) •At abnormal state: A1-C1 connected (B1-C1 disconnected) •At normal state: B1-C1 connected (A1-C1 disconnected) •Factory default value: Frequency |
| | A2/C2 - A5/C5 | Multifunctional Relay Output A Contact Point | Multifunctional output terminal such as signals at operation is defined and used. (AC 250V 5A or below and DC 30V 5A or below) |
| S+/S-/SG | RS-485 Signal Input Terminal | RS-485 signal line | |

^{Note} Available only when used in PNP mode.



Wire connection method

- In the connection diagram ① above, connect 2 wires per bolt using the provided bolts.
 - This is the method recommended by LS Electric.
- In the above wiring diagram ②, after removing the two bolts provided in ①, the user Obtain a bolt suitable for the product capacity and connect the 2 wires of the wire.
 - Bolt size: 315-400kW (M12×L20), 500kW (M16×L30)

Earth Wire & I/O Wiring Specifications

| Product (kW) | | Ground Wire | | I/O Wiring | | | |
|-----------------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|------------------|
| | | mm ² | AWG | mm ² | | AWG | |
| | | | | R/S/T | U/V/W | R/S/T | U/V/W |
| 3-Phase 200V Class | 0.75 | 3.5 | 12 | 1.5 | 1.5 | 16 | 16 |
| | 1.5 | | | | | | |
| | 2.2 | | | | | | |
| | 3.7 | | | | | | |
| | 5.5 | 10 | 10 | 4 | 4 | 12 | 12 |
| | 7.5 | | | 6 | 6 | 10 | 10 |
| | 11 | | | 10 | 10 | 8 | 8 |
| | 15 | 14 | 6 | 16 | 16 | 6 | 6 |
| | 18.5 | | | 25 | 22 | 4 | 4 |
| 3-Phase 400V Class | 0.75 | 2 | 14 | 1.5 | 1.5 | 16 | 16 |
| | 1.5 | | | | | | |
| | 2.2 | | | | | | |
| | 3.7 | | | | | | |
| | 5.5 | 4 | 12 | 2.5 | 2.5 | 14 | 14 |
| | 7.5 | | | 4 | 2.5 | 12 | 14 |
| | 11 | | | 4 | 4 | 12 | 12 |
| | 15 | 16 | 9 | 6 | 6 | 10 | 10 |
| | 18.5 | | | 16 | 10 | 6 | 8 |
| | 22 | 14 | 6 | 16 | 10 | 6 | 8 |
| | 30 | | | 25 | 16 | 4 | 6 |
| | 37 | 25 | 4 | 25 | 25 | 4 | 4 |
| | 45 | | | 25 | 25 | 4 | 4 |
| | 55 | | | 50 | 50 | 1/0 | 1/0 |
| | 75 | 38 | 2 | 70 | 70 | 1/0 | 1/0 |
| | 90 | | | 70 | 70 | 1/0 | 1/0 |
| | 110 | 50X2 | 1X2 | 70X2 | 70X2 | 1/0 x2 300 | 1/0 x2 300 |
| | 132 | | | 95X2 | 95X2 | 2/0 x2 400 | 2/0 x2 400 |
| | 160 | 50X2 70X2 | 1/0 x2 | 95X2 | 95X2 | 4/0 x2 | 4/0 x2 |
| | 185 | 70x2 95x2 | 3/0 x2 | 120X2 | 120X2 | 250 x2 | 250 x2 |
| | 220 | 95x2 | 250x2 | 150X2 | 150X2 | 300 x2 | 300 x2 |
| | 250 | | 300 x2 | 185X2 | 185X2 | 350 x2 | 350 x2 |
| | 315 | 60X4 150X2 | 2/0 x4, | 120X4, 400X2 | 120X4, 400X2 | 250 x4 800 x2 | 250 x4 800 x2 |
| 355 | 70X4 150X2 | 3/0 x4 | | | | | |
| 400 | 95X4 200X2 | 4/0 x4 | | | | | |
| 500 | 120X4, 350X2 | 4/0 x4 750X2 | 185X4, 630X2 | 185X4, 630X2 | 350 x4 1500 x2 | 350 x4 1500 x2 | |

Input/Output Terminal Screw Specifications

| Product (kW) | | Terminal Screw Size | Screw Torque (Kgf.cm/Nm) |
|-----------------------|------|---------------------|--------------------------|
| 3-Phase 200V Class | 0.75 | M4 | 12.2~14.3/1.2~1.4 |
| | 1.5 | | |
| | 2.2 | | |
| | 3.7 | | |
| | 5.5 | | |
| | 7.5 | | |
| | 11 | | |
| | 15 | M5 | 20.4~24.5/2.0~2.4 |
| 18.5 | | | |
| Product (kW) | | Terminal Screw Size | Screw Torque (Kgf.cm/Nm) |
| 3-Phase 400V Class | 0.75 | M4 | 12.2~14.3/1.2~1.4 |
| | 1.5 | | |
| | 2.2 | | |
| | 3.7 | | |
| | 5.5 | | |
| | 7.5 | | |
| | 11 | | |
| | | | |

| Product (kW) | | Terminal Screw Size | Screw Torque (Kgf.cm/Nm) |
|-----------------------|-------|----------------------|--------------------------|
| 3-Phase 400V Class | 15 | M5 | 20.4~24.5/2.0~2.4 |
| | 18.5 | | |
| | 22 | | |
| | 30 | | |
| | 37 | M8 | 56.12~67.3/5.5~6.6 |
| | 45 | | |
| | 55 | | |
| | 75 | | |
| | 90 | | |
| | 110 | M10 | 89.7~122.0/8.8~11.96 |
| | 132 | | |
| | 160 | | |
| | 185 | M12 | 182.4~215.0/17.87~21.07 |
| | 220 | | |
| | 250 | | |
| | 315 | | |
| 355 | M8x2 | 6.12~9.18/6~9 | |
| 400 | M12x1 | | 182.4~215.0/17.87~21.07 |
| 500 | M10x2 | 89.7~122.0/8.8~11.96 | |

Control Circuit Wiring Specifications

| Item | Wire Thickness | |
|----------------------------------|-----------------|-------|
| | mm ² | AWG |
| P1~P7/CM/VR/V1/I2/24/T1 | 0.33~1.25 | 16~22 |
| A01/A02/CM/Q1/EG | 0.33~2.0 | 14~22 |
| A1/B1/C1/A2/C2/A3/C3/A4/C4/A5/C5 | 0.33~2.0 | 14~22 |
| S+, S-, SG | 0.75 | 18 |

Control Circuit Terminal Screw Specifications

| Terminal | Terminal Screw Size | Screw Torque(kgf.cm/Nm) |
|---|---------------------|-------------------------|
| P1~P7/CM/VR/V1/I2/A0/Q1/EG/ 24/T1/TO/SA,SB,SC/S+,S-,SG | M2 | 2.2~2.5/0.22~0.25 |
| A1/B1/C1 | M2.6 | 4.0/0.4 |

| PNP Mode (Source) | NPN Mode (Sink) |
|---|--|
| <p>PNP/NPN setting switch (SW2) should be set as PNP. CM terminal is a common contact input signal terminal, and P24 terminal is a 24V internal power terminal. When external 24V is used, the external power terminal and the CM terminal should be connected.</p> | <p>PNP/NPN setting switch (SW2) should be set as NPN. CM terminal is a common contact input signal terminal, and P24 terminal is a 24V internal power terminal. Initial setting when shipped out of the factory is NPN mode.</p> |

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|------|-----------------|------------------------------|----------------|--------------------------|-----------------|-----------------------------|---|
| 00 | - | Jump code | Jump Code | 1~99 | 9 | O | |
| 01 | 0h1101 | Target frequency | Cmd Frequency | 0.00, Low Freq~High Freq | 0.00 | O | |
| 02 | 0h1102 | Keypad run direction setting | Keypad Run Dir | 0 | Reverse | 0 | O |
| | | | | 1 | Forward | | |
| 03 | 0h1103 | Acceleration time | Acc Time | 0,0-600,0(sec) | 20.0 | 0.75~90kW | O |
| | | | | | 60.0 | 110~250kW | |
| | | | | | 100.0 | 315~500kW | |
| 04 | 0h1104 | Deceleration time | Dec Time | 0,0-600,0(sec) | 30.0 | 0.75~90kW | O |
| | | | | | 90.0 | 110~250kW | |
| | | | | | 150.0 | 315~500kW | |
| 05 | 0h1105 | Hand off-Auto key lock | KPD H.O.A Lock | 0 | Locked | 1: During Run | Δ |
| | | | | 0 | Locked | | |
| | | | | 1 | During Run | | |
| | | | | 2 | Unlocked | | |
| 06 | 0h1106 | Run command method | Cmd Source | 0 | Keypad | 1: Fx/Rx-1 | Δ |
| | | | | 1 | Fx/Rx-1 | | |
| | | | | 2 | Fx/Rx-2 | | |
| | | | | 3 | RS-485 | | |
| | | | | 4 | Field Bus | | |
| | | | | 5 | Time Event | | |
| 07 | 0h1107 | Frequency setting method | Freq Ref Src | 0 | Keypad-1 | 0: Keypad-1 | Δ |
| | | | | 1 | Keypad-2 | | |
| | | | | 2 | V1 | | |
| | | | | 4 | V2 | | |
| | | | | 5 | I2 | | |
| | | | | 6 | Int 485 | | |
| | | | | 7 | Field Bus | | |
| | | | | 9 | Pulse | | |
| | | | | 10 ¹ | V3 | | |
| | | | | 11 | I3 | | |
| 08 | 0h1108 | Selecto how to use AUTO mode | AUTO Mode Sel | 0 | Enabled | 1: Disabled | Δ |
| | | | | 1 | Disabled | | |
| 09 | 0h1109 | Control mode | Control Mode | 0 | V/F | 0: V/F | Δ |
| | | | | 1 | Slip Compen | | |
| 11 | 0h110B | Jog frequency | Jog Frequency | 0,00, Low Freq~High Freq | 10.00 | O | |
| 12 | 0h110C | Jog acceleration time | Jog Acc Time | 0,0-600,0(sec) | 20.0 | O | |
| 13 | 0h110D | Jog deceleration time | Jog Dec Time | 0,0-600,0(sec) | 30.0 | O | |
| 14 | 0h110E | Motor capacity | Motor Capacity | 0 | 0.2 kW(0.3HP) | Depen dent on motor setting | Δ |
| | | | | 1 | 0.4 kW(0.5HP) | | |
| | | | | 2 | 0.75 kW(1.0HP) | | |
| | | | | 3 | 1.1 kW(1.5HP) | | |
| | | | | 4 | 1.5 kW(2.0HP) | | |
| | | | | 5 | 2.2 kW(3.0HP) | | |
| | | | | 6 | 3.0 kW(4.0HP) | | |
| | | | | 7 | 3.7 kW(5.0HP) | | |
| | | | | 8 | 4.0 kW(5.5HP) | | |
| | | | | 9 | 5.5 kW(7.5HP) | | |
| | | | | 10 | 7.5 kW(10.0HP) | | |
| | | | | 11 | 11.0 kW(15.0HP) | | |
| | | | | 12 | 15.0 kW(20.0HP) | | |
| | | | | 13 | 18.5 kW(25.0HP) | | |
| | | | | 14 | 22.0 kW(30.0HP) | | |
| | | | | 15 | 30.0 kW(40.0HP) | | |
| | | | | 16 | 37.0 kW(50.0HP) | | |
| 17 | 45.0 kW(60.0HP) | | | | | | |

* O: Possible to write during operation Δ: Possible to write during stop X: Ban on writing

¹ 10(V3)~11(I3)¹ of DRV-07 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-------------------|--|----------------|--------------------------|-------------------|----------------------------|---|
| 14 | 0h110E | Motor capacity | Motor Capacity | 18 | 55.0 kW(75.0HP) | Dependent on motor setting | Δ |
| | | | | 19 | 75.0 kW(100.0HP) | | |
| | | | | 20 | 90.0 kW(125.0HP) | | |
| | | | | 21 | 110.0 kW(150.0HP) | | |
| | | | | 22 | 132.0 kW(220.0HP) | | |
| | | | | 23 | 160.0 kW(250.0HP) | | |
| | | | | 24 | 185.0 kW(300.0HP) | | |
| | | | | 25 | 220.0 kW(350.0HP) | | |
| | | | | 26 | 250.0 kW(400.0HP) | | |
| | | | | 27 | 315.0 kW(500.0HP) | | |
| | | | | 28 | 355.0 kW(550.0HP) | | |
| 29 | 400.0 kW(650.0HP) | | | | | | |
| 30 | 500.0 kW(800.0HP) | | | | | | |
| 15 | 0h110F | Torque boosting | Torque Boost | 0 | Manual | 0: Manual | Δ |
| | | | | 1 | Auto 1 | | |
| | | | | 2 | Auto 2 | | |
| 16 ¹ | 0h1110 | Forward torque boost | Fwd Boost | 0.0~15.0(%) | 2.0 | 0.75~90kW | Δ |
| | | | | | 1.0 | 110~500kW | |
| 17 | 0h1111 | Reverse torque boost | Rev Boost | 0.0~15.0(%) | 2.0 | 0.75~90kW | Δ |
| | | | | | 1.0 | 110~500kW | |
| 18 | 0h1112 | Base frequency | Base Freq | 30.00~400.00(Hz) | 60.00 | Δ | |
| 19 | 0h1113 | Start frequency | Start Freq | 0.01~10.00(Hz) | 0.50 | Δ | |
| 20 | 0h1114 | Maximum frequency | Max Freq | 40.00~400.00(Hz) | 60.00 | Δ | |
| 21 | 0h1115 | Speed unit selection | Hz/Rpm Sel | 0 | Hz Display | 0: Hz Display | O |
| | | | | 1 | Rpm Display | | |
| 24 | 0h1118 | Select whether to use the HAND key | Hand Key Sel | 0 | None | 0: None | Δ |
| | | | | 1 | Disabled | | |
| 25 | 0h1119 | Hand mode command frequency | HAND Cmd Freq | 0.00, Low Freq~High Freq | 0.00 | O | |
| 26 | 0h111A | Hand mode command frequency setting method | HAND Ref Mode | 0 | HAND Parameter | 0 : HAND Parameter | Δ |
| | | | | 1 | Follow AUTO | | |
| 30 | 0h111E | kW/HP Unit Sel | KW/HP Unit Sel | 0 | kW | 1 : HP | O |
| | | | | 1 | HP | | |
| 91 | 0h115B | SmartCopy | SmartCopy | | | 0: None | Δ |
| | | | | | | | |
| 98 | 0h1162 | I/O S/W Version display | I/O S/W Ver | - | - | - | X |

* O: Possible to write during operation Δ: Possible to write during stop X: Ban on writing
¹ DRV-16~DRV-17 code appears when DRV-15 code is set as 0(Manual).

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|---|---------------|------------------|------------------------------------|--------------|---|
| 00 | - | Jump Code | Jump Code | 1~99 | 20 | 0 | |
| 01 | 0h1201 | Auxiliary command setting method | Aux Ref Src | 0 | None | 0: None | Δ |
| | | | | 1 | V1 | | |
| | | | | 3 | V2 | | |
| | | | | 4 | I2 | | |
| | | | | 6 | Pulse | | |
| | | | | 7 | RS-485 | | |
| | | | | 8 | FieldBus | | |
| | | | | 10 | EPID1 Output | | |
| | | | | 11 | EPID1 Fdb Val | | |
| | | | | 12 ¹ | V3 | | |
| | | | | 13 | I3 | | |
| 02 ² | 0h1202 | Auxiliary command run type | Aux Calc Type | 0 | M+(G*A) | 0: M+(G*A) | Δ |
| | | | | 1 | Mx (G*A) | | |
| | | | | 2 | M/(G*A) | | |
| | | | | 3 | M+[M*(G*A)] | | |
| | | | | 4 | M+G*2[A-50%] | | |
| | | | | 5 | M*[G*2[A-50%]] | | |
| | | | | 6 | M/[G*2[A-50%]] | | |
| | | | | 7 | M+M*G*2[A-50%] | | |
| 03 | 0h1203 | Auxiliary command gain | Aux Ref Gain | -200.0 ~200.0[%] | 100.0 | 0 | |
| 04 | 0h1204 | Second run command method | Cmd 2nd Src | 0 | Keypad | 1: Fx/Rx-1 | Δ |
| | | | | 1 | Fx/Rx-1 | | |
| | | | | 2 | Fx/Rx-2 | | |
| | | | | 3 | RS-485 | | |
| | | | | 4 | FieldBus | | |
| | | | | 5 | Time Event | | |
| 05 | 0h1205 | Second frequency setting method | Freq 2nd Src | 0 | Keypad-1 | 0 : Keypad-1 | Δ |
| | | | | 1 | Keypad-2 | | |
| | | | | 2 | V1 | | |
| | | | | 4 | V2 | | |
| | | | | 5 | I2 | | |
| | | | | 6 | RS-485 | | |
| | | | | 7 | FieldBus | | |
| | | | | 9 | Pulse | | |
| | | | | 10 ³ | V3 | | |
| | | | | 11 | I3 | | |
| | | | | 07 | 0h1207 | | |
| 1 | Square | | | | | | |
| 2 | User V/F | | | | | | |
| 3 | Square 2 | | | | | | |
| 08 | 0h1208 | Acceleration/Deceleration reference frequency | Ramp T Mode | 0 | Max Freq | 0:MaxFreq | Δ |
| | | | | 1 | Delta Freq | | |
| 09 | 0h1209 | Time unit setting | Time Scale | 0 | 0,01 sec | 1: 0,1 sec | Δ |
| | | | | 1 | 0,1 sec | | |
| | | | | 2 | 1 sec | | |
| 10 | 0h120A | Input power frequency | 60/50 Hz Sel | 0 | 60Hz | 0: 60Hz | Δ |
| | | | | 1 | 50Hz | | |
| 11 | 0h120B | Number of motor poles | Pole Number | 2~48 | Varies according to the motor type | Δ | |
| 12 | 0h120C | Rated slip speed | Rated Slip | 0~3000(Rpm) | | Δ | |
| 13 | 0h120D | Rated current of motor | Rated Curr | 1.0~1000.0(A) | | Δ | |
| 14 | 0h120E | No-load current of motor | Noload Curr | 0.0~1000.0(A) | | Δ | |
| 15 | 0h120F | Rated voltage of motor | Rated Volt | 0,170~480(V) | | 0 | Δ |
| 16 | 0h1210 | Motor efficiency | Efficiency | 70~100(%) | Varies according to the motor type | Δ | |
| 18 | 0h1212 | Power display adjustment | Trim Power % | 70~130(%) | 100 | Δ | |

¹ '12[V3]-13[I3]' of BAS-01 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information

² BAS-02-BAS-03 code appears when BAS-01 code is not 0(None).

³ '10[V3]-11[I3]' of BAS-05 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|------------------------|---------------|--------------------------|------------------------------------|------------|---|
| 19 | 0h1213 | Input power voltage | AC Input Volt | 170-264V | 0.75-18.5kW | 220V | O |
| | | | | 320-528V | 0.75-90kW | 380V | |
| | | | | 320-550V | 110-500kW | | |
| 20 | - | Automatic tuning | Auto Tuning | 0 | None | 0: None | Δ |
| | | | | 1 | All(rotation type) | | |
| | | | | 2 | ALL(static type) | | |
| | | | | 3 | Rs+Lsigma(rotation type) | | |
| 21 | - | Stator resistance | Rs | 0.000-9.999(Ω) | Varies according to the motor type | Δ | |
| 22 | - | Leakage inductance | Lsigma | 0.00-99.99(mH) | | | |
| 41 ¹ | 0h1229 | User frequency 1 | User Freq 1 | 0.00-Max. frequency(Hz) | 15.00 | Δ | |
| 42 | 0h122A | Uservoltage 1 | User Volt 1 | 0-100(%) | 25 | Δ | |
| 43 | 0h122B | Userfrequency 2 | User Freq 2 | 0.00-Max. frequency(Hz) | 30.00 | Δ | |
| 44 | 0h122C | Uservoltage 2 | User Volt 2 | 0-100(%) | 50 | Δ | |
| 45 | 0h122D | Userfrequency 3 | User Freq 3 | 0.00-Max. frequency(Hz) | 45.00 | Δ | |
| 46 | 0h122E | Uservoltage 3 | User Volt 3 | 0-100(%) | 75 | Δ | |
| 47 | 0h122F | Userfrequency 4 | User Freq 4 | 0.00-Max. frequency(Hz) | 60.00 | Δ | |
| 48 | 0h1230 | Uservoltage 4 | User Volt 4 | 0-100(%) | 100 | Δ | |
| 50 ² | 0h1232 | Multi-stepfrequency 1 | Step Freq-1 | 0.00, Low Freq-High Freq | 10.00 | O | |
| 51 | 0h1233 | Multi-stepfrequency 2 | Step Freq-2 | 0.00, Low Freq-High Freq | 20.00 | O | |
| 52 | 0h1234 | Multi-stepfrequency 3 | Step Freq-3 | 0.00, Low Freq-High Freq | 30.00 | O | |
| 53 | 0h1235 | Multi-stepfrequency 4 | Step Freq-4 | 0.00, Low Freq-High Freq | 40.00 | O | |
| 54 | 0h1236 | Multi-stepfrequency 5 | Step Freq-5 | 0.00, Low Freq-High Freq | 50.00 | O | |
| 55 | 0h1237 | Multi-stepfrequency 6 | Step Freq-6 | 0.00, Low Freq-High Freq | 60.00 | O | |
| 56 | 0h1238 | Multi-step frequency 7 | Step Freq-7 | 0.00, Low Freq-High Freq | 60.00 | O | |
| 70 | 0h1246 | Multi-step acc. time 1 | Acc Time-1 | 0.0-600.0(sec) | 20.0 | O | |
| 71 | 0h1247 | Multi-stepdec.time 1 | Dec Time-1 | 0.0-600.0(sec) | 20.0 | O | |
| 72 ³ | 0h1248 | Multi-step acc. time 2 | Acc Time-2 | 0.0-600.0(sec) | 30.0 | O | |
| 73 | 0h1249 | Multi-stepdec.time 2 | Dec Time-2 | 0.0-600.0(sec) | 30.0 | O | |
| 74 | 0h124A | Multi-step acc. time 3 | Acc Time-3 | 0.0-600.0(sec) | 40.0 | O | |
| 75 | 0h124B | Multi-stepdec.time 3 | Dec Time-3 | 0.0-600.0(sec) | 40.0 | O | |
| 76 | 0h124C | Multi-step acc. time 4 | Acc Time-4 | 0.0-600.0(sec) | 50.0 | O | |
| 77 | 0h124D | Multi-stepdec.time 4 | Dec Time-4 | 0.0-600.0(sec) | 50.0 | O | |
| 78 | 0h124E | Multi-step acc. time 5 | Acc Time-5 | 0.0-600.0(sec) | 40.0 | O | |
| 79 | 0h124F | Multi-stepdec.time 5 | Dec Time-5 | 0.0-600.0(sec) | 40.0 | O | |
| 80 | 0h1250 | Multi-stepacc.time 6 | Acc Time-6 | 0.0-600.0(sec) | 30.0 | O | |
| 81 | 0h1251 | Multi-stepdec.time 6 | Dec Time-6 | 0.0-600.0(sec) | 30.0 | O | |
| 82 | 0h1252 | Multi-step acc. time 7 | Acc Time-7 | 0.0-600.0(sec) | 20.0 | O | |
| 83 | 0h1253 | Multi-stepdec.time 7 | Dec Time-7 | 0.0-600.0(sec) | 20.0 | O | |

¹ BAS-41-BAS-48 code appears when either BAS-07 or M2-25 code is set as 2(User V/F).

² BAS-50-BAS-56 code appears when one of IN-65~71 codes is set as Speed-L/M/H.

³ BAS-72-83 are displayed when IN-65-71 is set to 'Xcel-L/M/H'

| Code | Comm. No. | Name | LCD Display | Set Range | | Default | Attribute* | |
|-----------------|-----------|--|----------------|--|---------------|----------------|------------|---|
| 00 | - | Jump code | Jump Code | 1~99 | | 24 | O | |
| 01 | 0h1301 | Acceleration pattern | Acc Pattern | 0 | Linear | 0: Linear | Δ | |
| 02 | 0h1302 | Deceleration pattern | Dec Pattern | 1 | S-curve | | Δ | |
| 03 ¹ | 0h1303 | S-shaped acceleration start point slope | Acc S Start | 1~100(%) | | 40 | Δ | |
| 04 | 0h1304 | S-shaped acceleration end point slope | Acc S End | 1~100(%) | | 40 | Δ | |
| 05 ² | 0h1305 | S-shaped acceleration start point slope | Dec S Start | 1~100(%) | | 40 | Δ | |
| 06 | 0h1306 | S-shaped acceleration end point slope | Dec S End | 1~100(%) | | 40 | Δ | |
| 07 | 0h1307 | Start mode | Start Mode | 0 | Acc | 0: Accel | Δ | |
| | | | | 1 | DC-Start | | | |
| 08 | 0h1308 | Stop mode | Stop Mode | 0 | Dec | 0: Decel | Δ | |
| | | | | 1 | DC-Brake | | | |
| | | | | 2 | Free-Run | | | |
| | | | | 4 | Power Braking | | | |
| 09 | 0h1309 | Selecting direction prohibited for rotation | Run Prevent | 0 | None | 0: None | Δ | |
| | | | | 1 | Forward Prev | | | |
| | | | | 2 | Reverse Prev | | | |
| 10 | 0h130A | Start when power is on | Power-on Run | 0 | No | 0: No | O | |
| | | | | 1 | Yes | | | |
| 11 ³ | 0h130B | Start delay time when power is on | Power-On Delay | 0,0~6000,0(sec) | | 0.0 | O | |
| 12 ⁴ | 0h130C | DC braking time at startup | DC-Start Time | 0,0~6000,0(sec) | | 0.00 | Δ | |
| 13 | 0h130D | Amount of applied DC | DC Inj Level | 0~200(%) | | 50 | Δ | |
| 14 ⁵ | 0h130E | Output blocking time | DC-Block Time | 0,00~60,00(sec) | | 0.00 | 0.75~90kW | Δ |
| | | | | | | 2.00 | 110~500kW | Δ |
| 15 | 0h130F | DC braking time | DC-Brake Time | 0,00~60,00(sec) | | 1.00 | Δ | |
| 16 | 0h1310 | DC brake level | DC-Brake Level | 0~200(%) | | 50 | Δ | |
| 17 | 0h1311 | DC brake frequency | DC-Brake Freq | Start frequency~60.00(Hz) | | 5.00 | Δ | |
| 18 | 0h1312 | Keypad operation Power On Run function selection | KPD Pwr-on Run | 0 | No | 0: No | O | |
| | | | | 1 | Yes | | | |
| 19 | 0h1313 | Keypad operation Power On Run delay time | KPD Pwr-on Dly | 0,0~600,0(sec) | | 0.0 | O | |
| 20 | 0h1314 | Dwell frequency upon acceleration | Acc Dwell Freq | Start frequency~Max. frequency(Hz) | | 5.00 | Δ | |
| 21 | 0h1315 | Dwell time upon acceleration | Acc Dwell Time | 0,0~60,0(sec) | | 0.0 | Δ | |
| 22 | 0h1316 | Dwell frequency upon deceleration | Dec Dwell Freq | Start frequency~Max. frequency(Hz) | | 5.00 | Δ | |
| 23 | 0h1317 | Dwell time upon deceleration | Dec Dwell Time | 0,0~60,0(sec) | | 0.0 | Δ | |
| 24 | 0h1318 | Frequency limit | Freq Limit | 0 | No | 0: No | Δ | |
| | | | | 1 | Yes | | | |
| 25 | 0h1319 | Low frequency limit | Freq Limit Lo | 0.00~High frequency limit(Hz) | | 0.50 | Δ | |
| 26 | 0h131A | High frequency limit | Freq Limit Hi | Low frequency limit~ Max. frequency (Hz) | | Max. frequency | Δ | |
| 27 | 0h131B | Frequency jump | Jump Freq | 0 | No | 0: No | Δ | |
| | | | | 1 | Yes | | | |
| 28 ⁶ | 0h131C | Jump frequency: low limit 1 | Jump Lo 1 | 0.00~ Jump frequency: high limit 1(Hz) | | 10.00 | O | |
| 29 | 0h131D | Jump frequency: high limit 1 | Jump Hi 1 | Jump frequency: low limit 1~Max. frequency(Hz) | | 15.00 | O | |
| 30 | 0h131E | Jump frequency: low limit 2 | Jump Lo 2 | 0.00~ Jump frequency: high limit 2(Hz) | | 20.00 | O | |
| 31 | 0h131F | Jump frequency: high limit 2 | Jump Hi 2 | Jump frequency: low limit 2~Max. frequency(Hz) | | 25.00 | O | |
| 32 | 0h1320 | Jump frequency: low limit 3 | Jump Lo 3 | 0.00~ Jump frequency: high limit 3(Hz) | | 30.00 | O | |
| 33 | 0h1321 | Jump frequency: high limit 3 | Jump Hi 3 | Jump frequency: low limit 3~Max. frequency(Hz) | | 35.00 | O | |
| 50 | 0h1332 | Energy-saving mode | E-Save Mode | 0 | None | 0: None | Δ | |
| | | | | 1 | Manual | | | |
| | | | | 2 | Auto | | | |
| 51 ⁷ | 0h1333 | Energy-saving rate | Energy Save | 0~30(%) | | 0 | O | |
| 52 | 0h1334 | Energy-saving point search time | E-Save Det T | 0~100,0(sec) | | 20.0 | Δ | |

¹ ADV-03~ADV-04 codes appear when ADV-01 code is set as 1(S-curve).

² ADV-05~ADV-06 codes appear when ADV-02 code is set as 1(S-curve).

³ ADV-11 code appears when ADV-10 code is set as 1(Yes).

⁴ ADV-12 code appears when ADV-07 code is set as 1(Dc-Start).

⁵ ADV-14 code appears when ADV-08 code is set as 1(DC-Brake).

⁶ ADV-28~ADV-33 codes appears when ADV-27 code is set as 1(Yes).

⁷ ADV-51 is displayed when ADV-50 is set to '1 (Manual)'.

ADV-52 is displayed when ADV-50 is set to '2 (Auto)'.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|---|-----------------|--|---------------|------------------|---|
| 60 | 0h133C | Acc/Dec. time switching frequency | Xcel Change Fr | 0.00~Max. frequency(Hz) | 0.00 | Δ | |
| 64 | 0h1340 | Cooling fan control | Fan Control | 0 | During Run | 0: During Run | O |
| | | | | 1 | Always ON | | |
| | | | | 2 | Temp Control | | |
| 65 | 0h1341 | Saving up/down run frequency | U/D Save Mode | 0 | No | 0:No | O |
| | | | | 1 | Yes | | |
| 66 | 0h1342 | Output contact point on/off control | On/Off Ctrl Src | 0 | None | 0: None | O |
| | | | | 1 | V1 | | |
| | | | | 3 | V2 | | |
| | | | | 4 | I2 | | |
| | | | | 6 | Pulse | | |
| | | | | 7 ¹ | V3 | | |
| | | | | 8 | I3 | | |
| 67 | 0h1343 | Output contact point on level | On-Ctrl Level | Output contact point off level ~ 100.00(%) | 90.00 | Δ | |
| 68 | 0h1344 | Output contact point off level | Off-Ctrl Level | -100.00~Output contact point on level (%) | 10.00 | Δ | |
| 70 | 0h1346 | Safe run mode or not | Run En Mode | 0 | Always Enable | 0: Always Enable | Δ |
| | | | | 1 | DI Dependent | | |
| 71 ² | 0h1347 | Safe run stop mode | Run Dis Stop | 0 | Free-Run | 0: Free-Run | Δ |
| | | | | 1 | Q-Stop | | |
| | | | | 2 | Q-Stop Resume | | |
| 72 | 0h1348 | Safe run deceleration time | Q-Stop Time | 0,0-600,0 (sec) | 5.0 | O | |
| 74 | 0h134A | Regeneration avoid function or not | RegenAvd Sel | 0 | No | 0: No | Δ |
| | | | | 1 | Yes | | |
| 75 | 0h134B | Regeneration avoid: working voltage level | RegenAvd Level | 200V : 300~400V | 350 | Δ | |
| | | | | 400V : 600~800V | 700 | | |
| 76 ³ | 0h134C | Compensation frequency limit of regeneration avoidance | CompFreq Limit | 0.00~10.00Hz | 1.00 | Δ | |
| 77 | 0h134D | Regeneration avoid P gain | RegenAvd Pgain | 0.0~100.0% | 50.0 | O | |
| 78 | 0h134E | Regeneration avoid I gain | RegenAvd I gain | 20~30000(msec) | 500 | O | |
| 87 | 0h1357 | Setting the over-modulation mode | OVM Mode Sel | 0 | No | 1: Yes | Δ |
| | | | | 1 | Yes | | |

¹ '10[V3]~11[I3]' of ADV-66 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

² ADV-71~ADV-72 codes appear when ADV-70 code is set as 1(DI Dependent).

³ ADV-76~78 are displayed when ADV-74 is set to '1 (Yes)'.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|---|----------------|---------------------|--|-------------------|---|
| 00 | - | Jump code | Jump Code | 1-99 | 4 | O | |
| 04 | 0h1404 | Carrier frequency | Carrier Freq | 1.0-15.0(kHz) | 3.0 | 0.75-30kW | O |
| | | | | 1.0-10.0(kHz) | | 37-55kW | |
| | | | | 1.0-7.0(kHz) | 2.0 | 75/900kW | |
| | | | | 1.0-5.0(kHz) | 1.5 | 110-355kW | |
| | | | | 1.0-4.0(kHz) | | 400-500kW | |
| 05 | 0h1405 | Switching mode | PWM Mode | 0 | Normal PWM | 0: Normal PWM | Δ |
| | | | | 1 | Lowleakage PWM | | |
| 13 | 0h140D | Hunting prevention function used or not | AHR Sel | 0 | No | 1 | Δ |
| | | | | 1 | Yes | | |
| 14 | 0h140E | Hunting prevention Pgain | AHR P-Gain | 0-32767 | 1000 | O | |
| 15 | 0h140F | Hunting prevention start frequency | AHR Low Freq | 0-AHR High Freq | 0.5 | O | |
| 16 | 0h1410 | Hunting prevention end frequency | AHR High Freq | AHR Low Freq-400.00 | 400.00 | O | |
| 17 | 0h1411 | Hunting prevention compensation voltage limit | AHR limit | 0-20 | 2 | O | |
| 21 ¹ | 0h1415 | Auto torque boost filter gain | ATB Filt Gain | 1-9999(msec) | 10 | O | |
| 22 | 0h1416 | Auto torque boost voltage gain | ATB Volt Gain | 0.0-300.0% | 100.0 | O | |
| 70 | 0h1446 | Speed search mode or not | SS Mode | 0 | Flying Start-1 | 0: Flying Start-1 | Δ |
| | | | | 1 | Flying Start-2 | | |
| 71 | 0h1447 | Speed search run or not | Speed Search | Bit | 0000-1111 | 0000 | Δ |
| | | | | Bit 0 | Speed search | | |
| | | | | Bit 1 | Restart after trips (other than LV trip) | | |
| | | | | Bit 2 | Restart after instantaneous interruption | | |
| | | | | Bit 3 | Power-on run | | |
| 72 ² | 0h1448 | Speed search reference current | SS Sup-Current | 50-120(%) | 90 | 0.75-250kW | O |
| | | | | | 80 | 315-500kW | |
| 73 ³ | 0h1449 | Speed search proportional gain | SS P-Gain | 0-9999 | Flying Start-1 : 100 Flying Start-2 : Varies according to the motor type | | O |
| 74 | 0h144A | Speed search integral gain | SS I-Gain | 0-9999 | Flying Start-1 : 200 Flying Start-2 : Varies according to the motor type | | |
| 75 | 0h144B | Output block time before speed search | SS Block Time | 0,0-60,0(sec) | 1.0 | Δ | |
| 77 | 0h144D | Energy buffering or not | KEB Select | 0 | No | 0: No | Δ |
| | | | | 1 | Yes | | |
| 78 ⁴ | 0h144E | Energy buffering start level | KEB Start Lev | 110.0-140.0(%) | 125.0 | 0.75-90kW | Δ |
| | | | | | 115.0 | 110-500kW | |
| 79 | 0h144F | Energy buffering stop level | KEB Stop Lev | 125.0 ~ 145.0(%) | 130.0 | 0.75-90kW | Δ |
| | | | | | 125.0 | 110-500kW | |
| 80 | 0h1450 | Energy buffering slip gain | KEB Slip Gain | 1-20000 | 300 | O | |
| 81 | 0h1451 | Energy buffering P gain | KEB P Gain | 1-20000 | 1000 | O | |
| 82 | 0h1452 | Energy buffering I gain | KEB I Gain | 1-20000 | 500 | O | |
| 83 | 0h1453 | Energy buffering acceleration time | KEB Acc Time | 0,0-600,0(sec) | 10.0 | 0.75-90kW | O |
| | | | | | 30.0 | 110-500kW | |

¹ CON-21-CON-22 codes appear when DRV-15 is set as Auto 2.

² CON-72 code appears when Flying Start-1 is set and when any one bit of CON-71 code is set as 1.

³ CON-73-CON-75 codes appear when any one bit of CON-71 code is set as 1.

⁴ CON-78-CON-83 codes appear when CON-77 code is set as 1(Yes)

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|----------|--|----------------|---------------------------------------|-----------------|-------------|---|
| 00 | - | Jump code | Jump Code | 1-99 | 65 | O | |
| 01 | 0h1501 | Frequency upon maximum input by analog | Freq at 100% | Start frequency ~ Max. frequency (Hz) | Max. frequency | O | |
| 05 ¹ | 0h1505 | V1 Input level display | V1 Monitor(V) | 0~12.00(V) or -12.00~12.00(V) | 0.00 | X | |
| 06 | 0h1506 | V1 input polarity selection | V1 Polarity | 0 | Unipolar | 0: Unipolar | Δ |
| | | | | 1 | Bipolar | | |
| 07 | 0h1507 | V1 input filter time constant | V1 Filter | 0-10000(msec) | 10 | O | |
| 08 | 0h1508 | V1 input minimum voltage | V1 Volt x1 | 0.00~10.00(V) | 0.00 | O | |
| 09 | 0h1509 | Output % at V1 minimum voltage | V1 Perc y1 | 0.00~100.00(%) | 0.00 | O | |
| 10 | 0h150A | V1 input maximum voltage | V1 Volt x2 | 0.00~12.00(V) | 10.00 | O | |
| 11 | 0h150B | Output % at V1 maximum voltage | V1 Perc y2 | 0.00~100.00(%) | 100.00 | O | |
| 12 ² | 0h150C | V1 input minimum voltage | V1-Volt x1' | -10.00~0.00(V) | 0.00 | O | |
| 13 | 0h150D | Output % at V1 minimum voltage | V1-Perc y1' | -100.00~0.00(%) | 0.00 | O | |
| 14 | 0h150E | V1 input maximum voltage | V1-Volt x2' | -12.00~0.00(V) | -10.00 | O | |
| 15 | 0h150F | Output % at V1 maximum voltage | V1-Perc y2' | -100.00~0.00(%) | -100.00 | O | |
| 16 | 0h1510 | Changing V1 rotation direction | V1 Inverting | 0 | No | 0: No | O |
| | | | | 1 | Yes | | |
| 17 | 0h1511 | V1 quantizing level | V1 Quantizing | 0.00 ³ , 0.04~10.00(%) | 0.04 | O | |
| 20 ⁴ | 0h1514 | Temperature display | T1 Monitor(V) | 0.00~100.00(%) | - | X | |
| 35 ⁵ | 0h1523 | V2 input display | V2 Monitor(V) | 0.00~12.00(V) | 0.00 | O | |
| 37 | 0h1525 | V2 input filter constant time | V2 Filter | 0-10000(msec) | 10 | O | |
| 38 | 0h1526 | V2 input minimum voltage | V2 Volt x1 | 0.00~10.00(V) | 0.00 | O | |
| 39 | 0h1527 | Output % at V2 minimum voltage | V2 Perc y1 | 0.00~100.00(%) | 0.00 | O | |
| 40 | 0h1528 | V2 input maximum voltage | V2 Volt x2 | 0.00~10.00(V) | 10.00 | O | |
| 41 | 0h1529 | Output % at V2 maximum voltage | V2 Perc y2 | 0.00~100.00(%) | 100.00 | O | |
| 46 | 0h152E | Changing V2 rotation direction | V2 Inverting | 0 | No | 0: No | O |
| | | | | 1 | Yes | | |
| 47 | 0h152F | V2 quantizing level | V2 Quantizing | 0.00 ⁶ , 0.04~10.00(%) | 0.04 | O | |
| 50 ⁷ | 0h1532 | I2 input display | I2 Monitor(mA) | 0~24(mA) | 0 | O | |
| 52 | 0h1534 | I2 input filter constant time | I2 Filter | 0-10000(msec) | 10 | O | |
| 53 | 0h1535 | I2 input minimum current | I2 Curr x1 | 0.00~20.00(mA) | 4.00 | O | |
| 54 | 0h1536 | Output % at I2 minimum current | I2 Perc y1 | 0.00~100.00(%) | 0.00 | O | |
| 55 | 0h1537 | I2 input maximum current | I2 Curr x2 | 0.00~24.00(mA) | 20.00 | O | |
| 56 | 0h1538 | Output % at I2 maximum current | I2 Perc y2 | 0.00~100.00(%) | 100.00 | O | |
| 61 | 0h153D | Changing I2 rotation direction | I2 Inverting | 0 | No | 0: No | O |
| | | | | 1 | Yes | | |
| 62 | 0h153E | I2 quantizing level | I2 Quantizing | 0.00 ⁸ , 0.04~10.00(%) | 0.04 | O | |
| 65 | 0h1541 | P1 terminal function setting | P1 Define | 0 | None | 1: Fx | Δ |
| | | | | 1 | Fx | | |
| 66 | 0h1542 | P2 terminal function setting | P2 Define | 2 | Rx | 2: Rx | Δ |
| 67 | 0h1543 | P3 terminal function setting | P3 Define | 3 | RST | 5: BX | Δ |
| 68 | 0h1544 | P4 terminal function setting | P4 Define | 4 | Disparo externo | 3: RST | Δ |
| 69 | 0h1545 | P5 terminal function setting | P5 Define | 5 | BX | 7: Sp-L | Δ |
| 70 | 0h1546 | P6 terminal function setting | P6 Define | 6 | JOG | 8: Sp-M | Δ |
| 71 | 0h1547 | P7 terminal function setting | P7 Define | 7 | Speed-L | 9: Sp-H | Δ |
| | | | | 8 | Speed-M | | |
| | | | | 9 | Speed-H | | |
| | | | | 11 | XCEL-L | | |
| | | | | 12 | XCEL-M | | |
| | | | | 13 | XCEL-H | | |
| | | | | 14 | XCEL Stop | | |
| | | | | 15 | RUN Enable | | |
| | | | | 16 | 3-Wire | | |
| | | | | 17 | 2nd Source | | |
| | | | | 18 | Exchange | | |

¹ IN-05' setting range can be changed according to the 'IN-06' settings. ² IN-12~IN-17 codes appear when IN-06 code is set as 1[Bipolar].
³ When set as 0, Quantizing is not available. ⁴ IN-20 code appears when analog voltage/current input terminal setting switch (SW3) is set as T1.
⁵ IN-35~IN-47 codes appear when analog voltage/current input terminal setting switch (SW4) is set as V2
⁶ When set as 0, Quantizing is not available.
⁷ IN-50~IN-62 codes appear when analog voltage/current input terminal setting switch (SW5) is set as I2
⁸ When set as 0, Quantizing is not available.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|----------------|---|--------------------|----------------------------------|---------------------|------------|---|
| 71 | 0h1547 | P7 terminal function setting | P7 Define | 19 | Up | 9:Sp-H | Δ |
| | | | | 20 | Down | | |
| | | | | 22 | U/D Clear | | |
| | | | | 23 | Analog Hold | | |
| | | | | 24 | I-Term Clear | | |
| | | | | 25 | PID Openloop | | |
| | | | | 26 | PID Gain2 | | |
| | | | | 27 | PID Ref Change | | |
| | | | | 28 | 2nd Motor | | |
| | | | | 29 | Interlock 1 | | |
| | | | | 30 | Interlock 2 | | |
| | | | | 31 | Interlock 3 | | |
| | | | | 32 | Interlock 4 | | |
| | | | | 33 | Interlock 5 | | |
| | | | | 34 | Pre Excite | | |
| | | | | 35 | Timer In | | |
| | | | | 37 | dis Aux Ref | | |
| | | | | 38 | FWD JOG | | |
| | | | | 39 | REV JOG | | |
| | | | | 40 | Fire Mode | | |
| | | | | 41 | EPID1 Run | | |
| | | | | 42 | EPID1 ltermClr | | |
| | | | | 43 | Time Event En | | |
| | | | | 44 | Pre Heat | | |
| | | | | 45 | Damper Open | | |
| | | | | 46 | PumpClean | | |
| | | | | 47 | EPID2 Run | | |
| | | | | 48 | EPID2 ltermClr | | |
| 49 | Sleep Wake Chg | | | | | | |
| 50 | PID Step Ref L | | | | | | |
| 51 | PID Step Ref M | | | | | | |
| 52 | PID Step Ref H | | | | | | |
| 53 ¹ | Interlock6 | | | | | | |
| 54 | Interlock7 | | | | | | |
| 55 | Interlock8 | | | | | | |
| 56 | HAND State | | | | | | |
| 83 | 0h1553 | DI On Delay Selection | DI On DelayEn | 000 0000 - 111 1111 | 111 1111 | Δ | |
| 84 | 0h1554 | DI Off Delay Selection | DI Off DelayEn | 0000 000 - 1111 111 | 111 1111 | Δ | |
| 85 | 0h1555 | Multifunction input terminal on filter | DI On Delay | 0-10000[msec] | 10 | O | |
| 86 | 0h1556 | Multifunction input terminal off filter | DI Off Delay | 0-10000[msec] | 3 | O | |
| 87 | 0h1557 | Multifunction input contact point selection | DI NC/NO Sel | P7-P1 | | 000 0000 | Δ |
| | | | | 0 | A Contact Point(NO) | | |
| | | | | 1 | B Contact Point(NC) | | |
| 89 | 0h1559 | Multi-step command delay time | InCheck Time | 1-5000[msec] | 1 | Δ | |
| 90 | 0h155A | Multifunction input terminal status | DI Status | P7-P1 | | 000 0000 | O |
| | | | | 0 | Open (Off) | | |
| | | | | 1 | Access (On) | | |
| 91 | 0h155B | Pulse input display | Pulse Monitor(kHz) | 0.00-50.00(kHz) | 0.00 | X | |
| 92 | 0h155C | TI input filter constant time | TI Filter | 0-9999[msec] | 10 | O | |
| 93 | 0h155D | TI input minimum pulse | TI Pls x1 | 0-TI Pls x2 | 0.00 | O | |
| 94 | 0h153E | Output % at TI minimum pulse | TI Perc y1 | 0.00-100.00(%) | 0.00 | O | |
| 95 | 0h155F | TI input maximum pulse | TI Pls x2 | 0.00-32,00(kHz) | 32.00 | O | |
| 96 | 0h1560 | Output % at TI maximum pulse | TI Perc y2 | 0-100(%) | 100.00 | O | |
| 97 | 0h1561 | Changing TI rotation direction | TI Inverting | 0 | No | 0: No | O |
| | | | | 1 | Yes | | |
| 98 | 0h1562 | TI quantizing level | TI Quantizing | 0.00 ² ,0.04-10.00(%) | 0.04 | O | |

¹ 53(Interlock6)~55(Interlock8)' of IN-65~71 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information

² Quantizing is disabled if '0' is selected.

Output Terminal Block Function Group (OUT)

Energy Saving Drive

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|------|--------------|----------------------------|---------------|--|----------------------------------|--------------|---|
| 00 | - | Jump code | JumpCode | 1-99 | 30 | 0 | |
| 01 | 0h1601 | Analog output 1 item | AO1 Mode | 0 | Frequency | 0: Frequency | 0 |
| | | | | 1 | Output Current | | |
| | | | | 2 | Output Voltage | | |
| | | | | 3 | DCLink Voltage | | |
| | | | | 4 | Output Power | | |
| | | | | 7 | Target Freq | | |
| | | | | 8 | Ramp Freq | | |
| | | | | 9 | PID Ref Value | | |
| | | | | 10 | PID Fdb Value | | |
| | | | | 11 | PID Output | | |
| | | | | 12 | Constant | | |
| | | | | 13 | EPID1 Output | | |
| | | | | 14 | EPID1 RefVal | | |
| | | | | 15 | EPID1 FdbVal | | |
| | | | | 16 | EPID2 Output | | |
| | | | | 17 | EPID2 RefVal | | |
| | | | | 18 | EPID2 FdbVal | | |
| | | | | 02 | 0h1602 | | |
| 03 | 0h1603 | Analog output 1 bias | AO1 Bias | -100.0~100.0(%) | 0.0 | 0 | |
| 04 | 0h1604 | Analog output 1 filter | AO1 Filter | 0-10000(msec) | 5 | 0 | |
| 05 | 0h1605 | Analog constant output 1 | AO1 Const % | 0.0~100.0(%) | 0.0 | 0 | |
| 06 | 0h1606 | Analog output 1 monitor | AO1 Monitor | 0.0~1000.0(%) | 0.0 | X | |
| 07 | 0h1607 | Analog output 2 item | AO2 Mode | Same as the selection range of OUT-02 AO1 Mode | 0: Frequency | 0 | |
| 08 | 0h1608 | Analog output 2 gain | AO2 Gain | -1000.0~1000.0(%) | 100.0 | 0 | |
| 09 | 0h1609 | Analog output 2 bias | AO2 Bias | -100.0~100.0(%) | 0.0 | 0 | |
| 10 | 0h160A | Analog output 2 filter | AO2 Filter | 0-10000(msec) | 5 | 0 | |
| 11 | 0h160B | Analog constant output 2 | AO2 Const % | 0.0~100.0(%) | 0.0 | 0 | |
| 12 | 0h160C | Analog output 2 monitor | AO2 Monitor | 0.0~1000.0(%) | 0.0 | X | |
| 30 | 0h161E | Trip output item | Trip Out Mode | Bit | 000~111 | 010 | 0 |
| | | | | Bit 0 | Low voltage trip generated | | |
| | | | | Bit 1 | Trip other than low voltage trip | | |
| | | | | Bit 2 | Final failure of auto restart | | |
| 31 | 0h161F | Multifunction relay 1 item | Relay 1 | 0 | None | 23: Trip | 0 |
| | | | | 1 | FDT-1 | | |
| | | | | 2 | FDT-2 | | |
| | | | | 3 | FDT-3 | | |
| | | | | 4 | FDT-4 | | |
| | | | | 5 | Over Load | | |
| | | | | 6 | IOL | | |
| | | | | 7 | Under Load | | |
| | | | | 8 | Fan Warning | | |
| | | | | 9 | Stall | | |
| | | | | 10 | Over Voltage | | |
| | | | | 11 | Low Voltage | | |
| | | | | 12 | Over Heat | | |
| | | | | 13 | Lost Command | | |
| | | | | 14 | Run | | |
| | | | | 15 | Stop | | |
| | | | | 16 | Steady | | |
| | | | | 17 | Drive Line | | |
| 18 | Comm Line | | | | | | |
| 19 | Speed Search | | | | | | |
| 20 | Ready | | | | | | |

| Code | Comm. No | Name | LCD Display | Set Range | | Default | Attribute* |
|------|--------------|--|----------------|--------------------------|----------------------|--------------|------------|
| 31 | 0h161F | Multifunction relay 1 item | Relay 1 | 21 | MMC | 23:Trip | 0 |
| | | | | 22 | Timer Out | | |
| | | | | 23 | Trip | | |
| | | | | 24 | Lost Keypad | | |
| | | | | 25 | DB Warn%ED | | |
| | | | | 26 | On/Off Control | | |
| | | | | 27 | Fire Mode | | |
| | | | | 28 | Pipe Broken | | |
| | | | | 29 | Damper Err | | |
| | | | | 30 | Lubrication | | |
| | | | | 31 | Pump Clean | | |
| | | | | 32 | Level Detect | | |
| | | | | 33 | Damper Control | | |
| | | | | 34 | CAP.Warning | | |
| 35 | Fan Exchange | | | | | | |
| 32 | 0h1620 | Multifunction relay 2 item | Relay 2 | 36 | AUTO State | 14:RUN | 0 |
| 33 | 0h1621 | Multifunction relay 3 item | Relay 3 | 37 | Hand State | 0: None | 0 |
| 34 | 0h1622 | Multifunction relay 4 item | Relay 4 | 38 | TO | 0: None | 0 |
| 35 | 0h1623 | Multifunction relay 5 item | Relay 5 | 39 | Except Date | 0: None | 0 |
| 36 | 0h1624 | Multifunction output 1 item | Q1 Define | 40 | KEB Operating | 0: None | 0 |
| | | | | 41 | BrokenBelt | | |
| | | | | 42 | Sleep | | |
| 41 | 0h1629 | Multifunction output monitor | DO Status | DO Status | | 000000 | X |
| 50 | 0h1632 | Multifunction output ON delay | DO On Delay | 0.00-100.00(sec) | | 0.00 | 0 |
| 51 | 0h1633 | Multifunction output OFF delay | DO Off Delay | 0.00-100.00(sec) | | 0.00 | 0 |
| 52 | 0h1634 | Multifunction output, Multifunction relay Contact point selection | DO NC/NO Sel | Q1, Relay5-Relay1 | | 000000 | Δ |
| | | | | 0 | A Contact Point (NO) | | |
| | | | | 1 | B Contact Point (NC) | | |
| 53 | 0h1635 | Trip output ON delay | TripOut OnDly | 0.00-100.00(sec) | | 0.00 | 0 |
| 54 | 0h1636 | Trip output OFF delay | TripOut OffDly | 0.00-100.00(sec) | | 0.00 | 0 |
| 55 | 0h1637 | Timer ON delay | TimerOn Delay | 0.00-100.00(sec) | | 0.00 | 0 |
| 56 | 0h1638 | Timer OFF delay | TimerOff Delay | 0.00-100.00(sec) | | 0.00 | 0 |
| 57 | 0h1639 | Detection frequency | FDT Frequency | 0.00-Max. frequency (Hz) | | 30.00 | 0 |
| 58 | 0h163A | Detection frequency bandwidth | FDT Band | 0.00-Max. frequency (Hz) | | 10.00 | 0 |
| 61 | 0h163D | Pulse output item | TO Mode | 0 | Frequency | 0: Frequency | 0 |
| | | | | 1 | Output Current | | |
| | | | | 2 | Output Voltage | | |
| | | | | 3 | DCLink Voltage | | |
| | | | | 4 | Output Power | | |
| | | | | 7 | Target Freq | | |
| | | | | 8 | Ramp Freq | | |
| | | | | 9 | PID RefValue | | |
| | | | | 10 | PID Fdb Value | | |
| | | | | 11 | PID Output | | |
| | | | | 12 | Constant | | |
| | | | | 13 | EPID1 Output | | |
| | | | | 14 | EPID1 RefVal | | |
| | | | | 15 | EPID1 FdbVal | | |
| | | | | 16 | EPID2 Output | | |
| | | | | 17 | EPID2 RefVal | | |
| | | | | 18 | EPID2 FdbVal | | |
| | | | | 62 | 0h163E | | |
| 63 | 0h163F | Pulse output bias | TO Bias | -100.0-100.0(%) | | 0.0 | 0 |
| 64 | 0h1640 | Pulse output filter | TO Filter | 0-10000(msec) | | 5 | 0 |
| 65 | 0h1641 | Pulse output constant output 2 | TO Const % | 0.0-100.0(%) | | 0.0 | 0 |
| 66 | 0h1642 | Pulse output monitor | TO Monitor | 0.0-1000.0(%) | | 0.0 | 0 |

| Code | Comm. No | Name | LCD Display | Set Range | | Default | Attribute* |
|-----------------|-------------------------|--------------------------------------|----------------|---------------|------------|---------------|------------|
| 00 | - | Jump code | Jump Code | 1-99 | | 20 | 0 |
| 01 | 0h1701 | Built-in communication drive ID | Int485 St ID | 1-250 | | 1 | 0 |
| 02 | 0h1702 | Built-in communication protocol | Int485 Proto | 0 | ModBus RTU | 0: ModBus RTU | 0 |
| | | | | 2 | LS INV 485 | | |
| | | | | 4 | BACnet RTU | | |
| | | | | 5 | Metasys-N2 | | |
| 03 | 0h1703 | Built-in communication speed | Int485 BaudR | 0 | 1200 bps | 3: 9600 bps | 0 |
| | | | | 1 | 2400 bps | | |
| | | | | 2 | 4800 bps | | |
| | | | | 3 | 9600 bps | | |
| | | | | 4 | 19200 bps | | |
| | | | | 5 | 38400 bps | | |
| | | | | 6 | 56 Kbps | | |
| | | | | 7 | 76.8Kbps | | |
| 8 | 115.2 Kbps ¹ | | | | | | |
| 04 | 0h1704 | Built-in communication frame setting | Int485 Mode | 0 | D8/PN/S1 | 0: D8/PN/S 1 | 0 |
| | | | | 1 | D8/PN/S2 | | |
| | | | | 2 | D8/PE/S1 | | |
| | | | | 3 | D8/PO/S1 | | |
| 05 | 0h1705 | Send delay after receiving | Resp Delay | 0-1000(msec) | | 5 | 0 |
| 06 ² | 0h1706 | Communication option S/W version | FBUS S/W Ver | - | | - | 0 |
| 07 | 0h1707 | Communication option drive ID | FBUS ID | 0-255 | | 1 | 0 |
| 08 | 0h1708 | Field bus communication speed | FBUS BaudRate | - | | 12Mbps | 0 |
| 09 | 0h1709 | Communication option LED status | FieldBus LED | - | | - | 0 |
| 20 | 0h1714 | BACnet maximum master count | BAC Max Master | 1-127 | | 127 | 0 |
| 21 | 0h1715 | BACnet device number 1 | BAC Dev Inst1 | 0-4194 | | 237 | 0 |
| 22 | 0h1716 | BACnet device number 2 | BAC Dev Inst2 | 0-999 | | 0 | 0 |
| 23 | 0h1717 | BACnet password | BAC PassWord | 0-32767 | | 0 | 0 |
| 28 | 0h171C | USB protocol | USB Protocol | 0 | Modbus RTU | 2: LS INV 485 | 0 |
| | | | | 2 | LS INV 485 | | |
| 30 | 0h171E | Output parameter count | ParaStatus Num | 0-8 | | 3 | 0 |
| 31 | 0h171F | Output communication no. 1 | Para Stauts-1 | 0000-FFFF Hex | | 000A | 0 |
| 32 | 0h1720 | Output communication no. 2 | Para Stauts-2 | 0000-FFFF Hex | | 000E | 0 |
| 33 | 0h1721 | Output communication no. 3 | Para Stauts-3 | 0000-FFFF Hex | | 000F | 0 |
| 34 | 0h1722 | Output communication no. 4 | Para Stauts-4 | 0000-FFFF Hex | | 0000 | 0 |
| 35 | 0h1723 | Output communication no. 5 | Para Stauts-5 | 0000-FFFF Hex | | 0000 | 0 |
| 36 | 0h1724 | Output communication no. 6 | Para Stauts-6 | 0000-FFFF Hex | | 0000 | 0 |
| 37 | 0h1725 | Output communication no. 7 | Para Stauts-7 | 0000-FFFF Hex | | 0000 | 0 |
| 38 | 0h1726 | Output communication no. 8 | Para Stauts-8 | 0000-FFFF Hex | | 0000 | 0 |
| 50 | 0h1732 | Input parameter count | Para Ctrl Num | 0-8 | | 2 | 0 |
| 51 | 0h1733 | Input communication no. 1 | Para Control-1 | 0000-FFFF Hex | | 0005 | 0 |
| 52 | 0h1734 | Input communication no. 2 | Para Control-2 | 0000-FFFF Hex | | 0006 | 0 |
| 53 | 0h1735 | Input communication no. 3 | Para Control-3 | 0000-FFFF Hex | | 0000 | 0 |
| 54 | 0h1736 | Input communication no. 4 | Para Control-4 | 0000-FFFF Hex | | 0000 | 0 |
| 55 | 0h1737 | Input communication no. 5 | Para Control-5 | 0000-FFFF Hex | | 0000 | 0 |
| 56 | 0h1738 | Input communication no. 6 | Para Control-6 | 0000-FFFF Hex | | 0000 | 0 |
| 57 | 0h1739 | Input communication no. 7 | Para Control-7 | 0000-FFFF Hex | | 0000 | 0 |
| 58 | 0h173A | Input communication no. 8 | Para Control-8 | 0000-FFFF Hex | | 0000 | 0 |
| 70 | 0h1746 | Communication multifunction input 1 | Virtual DI 1 | 0 | None | 0: None | 0 |
| 71 | 0h1747 | Communication multifunction input 2 | Virtual DI 2 | 1 | Fx | 0: None | 0 |
| 72 | 0h1748 | Communication multifunction input 3 | Virtual DI 3 | 2 | Rx | 0: None | 0 |
| 73 | 0h1749 | Communication multifunction input 4 | Virtual DI 4 | 3 | RST | 0: None | 0 |

¹ 115,200 bps

² COM-06-09 are displayed only when a communication option card is installed. Please refer to the communication option manual for details.

| Code | Comm. No | Name | LCD Display | Set Range | | Default | Attribute* |
|-----------------|----------------|--|----------------|-----------------------|----------------|-----------|------------|
| 74 | 0h174A | Communication multifunction input 5 | Virtual DI 5 | 4 | External Trip | 0: None | O |
| 75 | 0h174B | Communication multifunction input 6 | Virtual DI 6 | 5 | BX | 0: None | O |
| 76 | 0h174C | Communication multifunction input 7 | Virtual DI 7 | 6 | JOG | 0: None | O |
| 77 | 0h174D | Communication multifunction input 8 | Virtual DI 8 | 7 | Speed-L | 0: None | O |
| | | | | 8 | Speed-M | | |
| | | | | 9 | Speed-H | | |
| | | | | 11 | XCEL-L | | |
| | | | | 12 | XCEL-M | | |
| | | | | 13 | XCEL-H | | |
| | | | | 14 | XCEL-Stop | | |
| | | | | 15 | Run Enable | | |
| | | | | 16 | 3-wire | | |
| | | | | 17 | 2nd source | | |
| | | | | 18 | Exchange | | |
| | | | | 19 | Up | | |
| | | | | 20 | Down | | |
| | | | | 22 | U/D Clear | | |
| | | | | 23 | Analog Hold | | |
| | | | | 24 | I-Term Clear | | |
| | | | | 25 | PID Openloop | | |
| | | | | 26 | PID Grain 2 | | |
| | | | | 27 | PID Ref Change | | |
| | | | | 28 | 2nd Motor | | |
| | | | | 29 | Interlock1 | | |
| | | | | 30 | Interlock2 | | |
| | | | | 31 | Interlock3 | | |
| | | | | 32 | Interlock4 | | |
| | | | | 33 | Interlock5 | | |
| | | | | 34 | Pre Excite | | |
| | | | | 35 | Timer In | | |
| | | | | 37 | Dis Aux Ref | | |
| | | | | 38 | FWD JOG | | |
| | | | | 39 | REV JOG | | |
| | | | | 40 | Fire Mode | | |
| | | | | 41 | EPID1 Run | | |
| | | | | 42 | EPID1 ltermClr | | |
| 43 | Time Event En | | | | | | |
| 44 | Pre Heat | | | | | | |
| 45 | Damper Open | | | | | | |
| 46 | Pump Clean | | | | | | |
| 47 | EPID2 Run | | | | | | |
| 48 | EPID2 ltermClr | | | | | | |
| 49 | Sleep Wake Chg | | | | | | |
| 50 | PID Step Ref L | | | | | | |
| 51 | PID Step Ref M | | | | | | |
| 52 | PID Step Ref H | | | | | | |
| 53 ¹ | Interlock6 | | | | | | |
| 54 | Interlock7 | | | | | | |
| 55 | Interlock8 | | | | | | |
| 56 | HAND State | | | | | | |
| 82 | 0h1756 | Communication multifunction input monitoring | Virt DI Status | 0000 0000 - 1111 1111 | | 0000 0000 | Δ |
| 83 | 0h1714 | BACnet maximum master number | BAC Max Master | 1~127 | | 127 | O |
| 84 | 0h1715 | BACnet device number1 | BAC Dev Inst1 | 0~4194 | | 237 | O |
| 85 | 0h1716 | BACnet device number2 | BAC Dev Inst2 | 0~999 | | 0 | O |
| 86 | 0h1717 | BACnet password | BAC PassWord | 0~32767 | | 0 | O |
| 96 | 0h173C | Communication operation auto resume | PowerOn Resume | 0 | No | 0: No | Δ |

¹ '53 [Interlock6]~55[Interlock8]' of COM-70~77 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

Application Function Group (PID)

Energy Saving Drive

| Code | Comm. No | Name | LCD Display | Set Range | | Default | Attribute* | | | | | | |
|------|----------------|--|----------------|-------------------|---------------|--------------|------------|--|----------------|---|-------------|-------------|---|
| 00 | - | Jump code | Jump Code | 1~99 | | 50 | O | | | | | | |
| 01 | 0h1801 | PID function selection | PID Sel | 0 | No | 0: No | Δ | | | | | | |
| | | | | 1 | Yes | | | | | | | | |
| 02 | 0h1802 | E-PID selection | E-PID Sel | 0 | No | 0: No | O | | | | | | |
| | | | | 1 | Yes | | | | | | | | |
| 03 | 0h1803 | PID output monitor | PID Output | - | | - | X | | | | | | |
| 04 | 0h1804 | PID reference monitor | PID Ref Value | - | | - | X | | | | | | |
| 05 | 0h1805 | PID feedback monitor | PID Fdb Value | - | | - | X | | | | | | |
| 06 | 0h1806 | PID error monitor value | PID Err Value | - | | - | X | | | | | | |
| 10 | 0h180A | PID reference 1 source selection | PID Ref 1 Src | 0 | KeyPad | 0: Keypad | Δ | | | | | | |
| | | | | 1 | V1 | | | | | | | | |
| | | | | 3 | V2 | | | | | | | | |
| | | | | 4 | I2 | | | | | | | | |
| | | | | 5 | Int 485 | | | | | | | | |
| | | | | 6 | Fieldbus | | | | | | | | |
| | | | | 8 | Pulse | | | | | | | | |
| | | | | 9 | EPID1 Output | | | | | | | | |
| | | | | 10 ¹ | V3 | | | | | | | | |
| | | | | 11 | I3 | | | | | | | | |
| 11 | 0h180B | PID reference 1 keypad value | PID Ref 1 Set | Unit Min~Unit Max | | Unit Default | O | | | | | | |
| 12 | 0h180C | PID reference 1 auxiliary source selection | PID Ref1AuxSrc | 0 | None | 0: None | Δ | | | | | | |
| | | | | 1 | V1 | | | | | | | | |
| | | | | 3 | V2 | | | | | | | | |
| | | | | 4 | I2 | | | | | | | | |
| | | | | 6 | Pulse | | | | | | | | |
| | | | | 7 | Int 485 | | | | | | | | |
| | | | | 8 | FieldBus | | | | | | | | |
| | | | | 10 | EPID1 Output | | | | | | | | |
| | | | | 11 | E-PID Fdb Val | | | | | | | | |
| | | | | 12 ² | V3 | | | | | | | | |
| | | | | 13 | I3 | | | | | | | | |
| | | | | 13 | 0h180D | | | PID reference 1 auxiliary mode selection | PID Ref1AuxMod | 0 | M/(G*A) | 0: M+(G* A) | O |
| | | | | | | | | | | 1 | M+(M*(G*A)) | | |
| 2 | M+G*2*(A-50) | | | | | | | | | | | | |
| 3 | M*(G*2*(A-50)) | | | | | | | | | | | | |
| 4 | M/(G*2*(A-50)) | | | | | | | | | | | | |
| 5 | M+M*G*2*(A-50) | | | | | | | | | | | | |
| 6 | M/(G*2*(A-50)) | | | | | | | | | | | | |
| 7 | M+M*G*2*(A-50) | | | | | | | | | | | | |
| 8 | (M-A)^2 | | | | | | | | | | | | |
| 9 | M^2+A^2 | | | | | | | | | | | | |
| 10 | MAX(M, A) | | | | | | | | | | | | |
| 11 | MIN(M, A) | | | | | | | | | | | | |
| 12 | (M + A)/2 | | | | | | | | | | | | |
| 13 | Root(M+A) | | | | | | | | | | | | |
| 14 | 0h180E | PID reference 1 auxiliary gain | PID Ref1 Aux G | -200.0~200.0(%) | | 0.0 | O | | | | | | |
| 15 | 0h180F | PID reference 2 source selection | PID Ref 2 Src | 0 | Keypad | 0: Keypad | Δ | | | | | | |
| | | | | 1 | V1 | | | | | | | | |
| | | | | 3 | V2 | | | | | | | | |
| | | | | 4 | I2 | | | | | | | | |
| | | | | 5 | Int 485 | | | | | | | | |
| | | | | 6 | Fieldbus | | | | | | | | |
| | | | | 8 | Pulse | | | | | | | | |
| | | | | 9 | E-PID Output | | | | | | | | |
| | | | | 10 ³ | V3 | | | | | | | | |
| | | | | 11 | I3 | | | | | | | | |
| 16 | 0h1810 | PID reference 2 keypad value | PID Ref 2 Set | Unit Min~Unit Max | | Unit Default | O | | | | | | |
| 17 | 0h1811 | PID reference 2 auxiliary source selection | PID Ref2AuxSrc | 0 | None | 0: None | Δ | | | | | | |
| | | | | 1 | V1 | | | | | | | | |

¹ *10(V3)~11(I3)* of PID-10 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

² *12(V3)~13(I3)* of PID-12 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

³ *10(V3)~11(I3)* of PID-15 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|---------------|---|----------------|-----------------|----------------|------------|---|
| 17 | 0h1811 | PID reference 2 auxiliary source selection | PID Ref2AuxSrc | 3 | V2 | 0: None | O |
| | | | | 4 | I2 | | |
| | | | | 6 | Pulse | | |
| | | | | 7 | RS-485 | | |
| | | | | 8 | FieldBus | | |
| | | | | 10 | EPID1 Output | | |
| | | | | 11 | EPID1 Fdb Val | | |
| | | | | 12 ¹ | V3 | | |
| 18 | 0h1812 | PID reference 2 auxiliary mode selection | PID Ref2AuxMod | 0 | M+(G*A) | 0: M+(G*A) | O |
| | | | | 1 | M*(G*A) | | |
| | | | | 2 | M/(G*A) | | |
| | | | | 3 | M+(M*(G*A)) | | |
| | | | | 4 | M+G*2*(A-50) | | |
| | | | | 5 | M*(G*2*(A-50)) | | |
| | | | | 6 | M/(G*2*(A-50)) | | |
| | | | | 7 | M+M*G*2*(A-50) | | |
| | | | | 8 | (M-A)^2 | | |
| | | | | 9 | M^2+A^2 | | |
| | | | | 10 | MAX(M, A) | | |
| | | | | 11 | MIN(M, A) | | |
| | | | | 12 | (M+A)/2 | | |
| 13 | Root(M+A) | | | | | | |
| 19 | 0h1813 | PID reference 2 auxiliary gain | PID Ref2 Aux G | -200.0~200.0(%) | 0.0 | O | |
| 20 | 0h1814 | PID feedback selection | PID Fdb Source | 0 | V1 | 0: V1 | Δ |
| | | | | 2 | V2 | | |
| | | | | 3 | I2 | | |
| | | | | 4 | Int 485 | | |
| | | | | 5 | FieldBus | | |
| | | | | 7 | Pulse | | |
| | | | | 8 | EPID1 Output | | |
| | | | | 9 | EPID1 Fdb Val | | |
| | | | | 10 ² | V3 | | |
| | | | | 11 | I3 | | |
| | | | | 21 | 0h1815 | | |
| 1 | V1 | | | | | | |
| 3 | V2 | | | | | | |
| 4 | I2 | | | | | | |
| 6 | Pulse | | | | | | |
| 7 | Int 485 | | | | | | |
| 8 | FieldBus | | | | | | |
| 10 | EPID1 Output | | | | | | |
| 11 | EPID1 Fdb Val | | | | | | |
| 12 ³ | V3 | | | | | | |
| 13 | I3 | | | | | | |
| 22 | 0h1816 | PID feedback auxiliary mode selection | PID Fdb AuxMod | 0 | M+(G*A) | 0: M+(G*A) | O |
| | | | | 1 | M*(G*A) | | |
| | | | | 2 | M/(G*A) | | |
| | | | | 3 | M+(M*(G*A)) | | |
| | | | | 4 | M+G*2*(A-50) | | |
| | | | | 5 | M*(G*2*(A-50)) | | |
| | | | | 6 | M/(G*2*(A-50)) | | |
| | | | | 7 | M+M*G*2*(A-50) | | |
| | | | | 8 | (M-A)^2 | | |
| | | | | 9 | M^2+A^2 | | |
| | | | | 10 | MAX(M, A) | | |
| | | | | 11 | MIN(M, A) | | |
| | | | | 12 | (M+A)/2 | | |
| 13 | Root(M+A) | | | | | | |

¹ '12(V3)~13(I3)' of PID-17 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

² '10(V3)~11(I3)' of PID-20 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

³ '12(V3)~13(I3)' of PID-21 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|------|----------|--|----------------|-------------------------|--|----------------|---|
| 23 | 0h1817 | PID feedback auxiliary gain | PID Fdb Aux G | -200.0~200.0(%) | 0.0 | 0 | |
| 24 | 0h1818 | PID feedback band | PID Fdb Band | 0~Unit Band | 0.00 | 0 | |
| 25 | 0h1819 | PID controller P-Gain 1 | PID P-Gain 1 | 0.00~300.00(%) | 50.00 | 0 | |
| 26 | 0h181A | PID controller I-Time 1 | PID I-Time 1 | 0.0~200.0(sec) | 10.0 | 0 | |
| 27 | 0h181B | PID controller D-Time 1 | PID D-Time 1 | 0.00~1.00(sec) | 0.00 | 0 | |
| 28 | 0h181C | PID controller feedforward compensation gain | PID FFGain | 0.0~1000.0(%) | 0.0 | 0 | |
| 29 | 0h181D | PID output filter | PID Out LPF | 0.00~10.00(s) | 0.00 | 0 | |
| 30 | 0h181E | PID output high limit | PID Limit Hi | PID Limit Lo~100.00 | 100.00 | 0 | |
| 31 | 0h181F | PID output low limit | PID Limit Lo | -100.00~Limite Alto PID | 0.00 | 0 | |
| 32 | 0h1820 | PID controller P-Gain 2 | PID P-Gain 2 | 0.00~300.00(%) | 50.0 | 0 | |
| 33 | 0h1821 | PID controller I-Time 2 | PID I-Time 2 | 0.0~200.0(sec) | 10.0 | 0 | |
| 34 | 0h1822 | PID controller D-Time 2 | PID D-Time 2 | 0.00~1.00(sec) | 0.00 | 0 | |
| 35 | 0h1823 | PID output mode | PID Out Mode | 0 | PID Output | 4: PID or Main | 0 |
| | | | | 1 | PID+ Main Freq | | |
| | | | | 2 | PID+EPID1 Out | | |
| | | | | 3 | PID+EPID1+Main | | |
| | | | | 4 | PID or Main | | |
| 36 | 0h1824 | PID output inversion | PID Out Inv | 0 | No | 0: No | Δ |
| | | | | 1 | Yes | | |
| 37 | 0h1825 | PID output scale | PID Out Scale | 0.1~1000.0(%) | 100.0 | Δ | |
| 40 | 0h1828 | PID multi-step reference value 1 | PID Step Ref 1 | Unit Min~Unit Max | Unit Default | 0 | |
| 41 | 0h1829 | PID multi-step reference value 2 | PID Step Ref 2 | Unit Min~Unit Max | Unit Default | 0 | |
| 42 | 0h182A | PID multi-step reference value 3 | PID Step Ref 3 | Unit Min~Unit Max | Unit Default | 0 | |
| 43 | 0h182B | PID multi-step reference value 4 | PID Step Ref 4 | Unit Min~Unit Max | Unit Default | 0 | |
| 44 | 0h182C | PID multi-step reference value 5 | PID Step Ref 5 | Unit Min~Unit Max | Unit Default | 0 | |
| 45 | 0h182D | PID multi-step reference value 6 | PID Step Ref 6 | Unit Min~Unit Max | Unit Default | 0 | |
| 46 | 0h182E | PID multi-step reference value 7 | PID Step Ref 7 | Unit Min~Unit Max | Unit Default | 0 | |
| 50 | 0h1832 | PID controller unit selection | PID Unit Sel | Refer to Unit List | | 1: % | 0 |
| | | | | 0 | CUST | | |
| | | | | 1 | % | | |
| | | | | 2 | PSI | | |
| | | | | 3 | °F | | |
| | | | | 4 | °C | | |
| | | | | 5 | inWC | | |
| | | | | 6 | inM | | |
| | | | | 7 | mBar | | |
| | | | | 8 | Bar | | |
| | | | | 9 | Pa | | |
| | | | | 10 | kPa | | |
| | | | | 11 | Hz | | |
| | | | | 12 | rpm | | |
| | | | | 13 | V | | |
| | | | | 14 | A | | |
| | | | | 15 | kW | | |
| | | | | 16 | HP | | |
| | | | | 17 | mpm | | |
| | | | | 18 | ft | | |
| | | | | 19 | m/s | | |
| | | | | 20 | m ³ /s (m ³ /Sec) | | |
| | | | | 21 | m ³ /m(m ³ /min) | | |
| | | | | 22 | m ³ /h (m ³ /Hora) | | |
| | | | | 23 | l/s | | |
| | | | | 24 | l/m | | |
| | | | | 25 | l/h | | |
| | | | | 26 | kg/s | | |
| | | | | 27 | kg/m | | |
| 28 | kg/h | | | | | | |
| 29 | gl/s | | | | | | |

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|------|----------|-------------------------------|----------------|-----------|------------------|--------------------------------------|---|
| 50 | 0h1832 | PID controller unit selection | PID Unit Sel | 30 | g/m | 1: % | 0 |
| | | | | 31 | g/h | | |
| | | | | 32 | ft/s | | |
| | | | | 33 | f3/s (ft3/Sec) | | |
| | | | | 34 | f3/m (ft3/Min) | | |
| | | | | 35 | f3/h (ft3/Hour) | | |
| | | | | 36 | lb/s | | |
| | | | | 37 | lb/m | | |
| | | | | 38 | lb/h | | |
| | | | | 39 | ppm | | |
| 40 | pps | | | | | | |
| 51 | 0h1833 | PID unit scale | PID Unit Scale | 0 | x100 | 2: x 1 | 0 |
| | | | | 1 | x10 | | |
| | | | | 2 | x1 | | |
| | | | | 3 | x0.1 | | |
| | | | | 4 | x0.01 | | |
| 52 | 0h1834 | PID control 0% set value | PID Unit 0% | X100 | -30000-Unit Max | Rangevaries accordingto PID50setting | 0 |
| | | | | X10 | -3000.0-Unit Max | | |
| | | | | X1 | -300.00-Unit Max | | |
| | | | | X0.1 | -30.000-Unit Max | | |
| | | | | X0.01 | -3.0000-Unit Max | | |
| 53 | 0h1835 | PID control 100% set value | PID Unit 100% | X100 | Unit Min-30000 | Rangevaries accordingto PID50setting | 0 |
| | | | | X10 | Unit Min-3000.0 | | |
| | | | | X1 | Unit Min-300.00 | | |
| | | | | X0.1 | Unit Min-30.000 | | |
| | | | | X0.01 | Unit Min-3.0000 | | |

| Code | Comm. No | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|----------|-------------------------------------|----------------|------------------------------|------------------|----------------------------------|---|
| 00 | - | Jump code | Jump Code | 1-99 | 1 | 0 | |
| 01 | 0h1901 | EPID1 Mode selection | EPID1 Mode | 0 | None | 0: None | 0 |
| | | | | 1 | Always ON | | |
| | | | | 2 | During Run | | |
| | | | | 3 | DI dependent | | |
| 02 ² | 0h1902 | EPID1 output monitor value | EPID1 Output | -100.00~100.00% | 0.00 | X | |
| 03 | 0h1903 | EPID1 reference monitor value | EPID1 Ref Val | - | - | X | |
| 04 | 0h1904 | EPID1 feedback monitor value | EPID1 Fdb Val | - | - | X | |
| 05 | 0h1905 | EPID1 error monitor value | EPID1 Err Val | - | - | X | |
| 06 | 0h1906 | EPID1 command source selection | EPID1 Ref Src | 0 | Keypad | 0: KeyPad | Δ |
| | | | | 1 | V1 | | |
| | | | | 3 | V2 | | |
| | | | | 4 | I2 | | |
| | | | | 5 | Int485 | | |
| | | | | 6 | FieldBus | | |
| | | | | 8 | Pulse | | |
| | | | | 9 ³ | V3 | | |
| | | | | 10 | I3 | | |
| | | | | 07 | 0h1907 | | |
| 08 | 0h1908 | EPID1 feedback source selection | EPID1 Fdb Src | 0 | V1 | 0: V1 | 0 |
| | | | | 2 | V2 | | |
| | | | | 3 | I2 | | |
| | | | | 4 | Int485 | | |
| | | | | 5 | FieldBus | | |
| | | | | 7 | Pulse | | |
| | | | | 8 ⁴ | V3 | | |
| | | | | 9 | I3 | | |
| 09 | 0h1909 | EPID1 P-Gain | EPID1 P-Gain | 0.00~300.00(%) | 50.00 | 0 | |
| 10 | 0h190A | EPID1 I-Time | EPID1 I-Time | 0.0~200.0(sec) | 10.0 | 0 | |
| 11 | 0h190B | EPID1 D-Time | EPID1 D-Time | 0.00~1.00(sec) | 0.00 | 0 | |
| 12 | 0h190C | EPID1 feedforward compensation gain | EPID1 FF-Gain | 0.0~1000.0 (%) | 0.0 | 0 | |
| 13 | 0h190D | EPID1 output filter | EPID1 Out LPF | 0.00~10.00(sec) | 0.00 | 0 | |
| 14 | 0h190E | EPID1 output high limit | EPID1 Limit Hi | EPID1 Limit Lo ~100.00 | 100.00 | 0 | |
| 15 | 0h190F | EPID1 output low limit | EPID1 Limit Lo | -100.00~Lim Alto EPID2 | 0.00 | 0 | |
| 16 | 0h1910 | EPID1 output inversion | EPID1 Out Inv | 0 | No | 0: No | 0 |
| | | | | 1 | Yes | | |
| 17 | 0h1911 | EPID1 unit | EPID1 Unit Sel | Refer to the EPID Unit table | 1: % | 0 | |
| 18 | 0h1912 | EPID1 unit scale | EPID1 Unit Scl | 0 | X100 | 2: X1 | 0 |
| | | | | 1 | X10 | | |
| | | | | 2 | X1 | | |
| | | | | 3 | X0.1 | | |
| | | | | 4 | X0.01 | | |
| 19 | 0h1913 | EPID1 unit 0% | EPID1 Unit0% | X100 | -30000~Unit Max | Varies according to unit setting | 0 |
| | | | | X10 | -3000.0~Unit Max | | |
| | | | | X1 | -300.00~Unit Max | | |
| | | | | X0.1 | -30.000~Unit Max | | |
| | | | | X0.01 | -3.0000~Unit Max | | |
| 20 | 0h1914 | EPID1 unit 100% | EPID1 Unit100% | X100 | Unit Min~30000 | Varies according to unit setting | 0 |
| | | | | X10 | Unit Min~3000.0 | | |
| | | | | X1 | Unit Min~300.00 | | |
| | | | | X0.1 | Unit Min~30.000 | | |
| | | | | X0.01 | Unit Min~3.0000 | | |

¹ EPID Group is displayed when PID-02 code is set to 'Yes'.

² EPID-02~EPID-20 codes appear when EPID-01 code is not 0(None).

³ '9(V3)~10(I3)' of EPID-06 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

⁴ '8(V3)~9(I3)' of EPID-08 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

| Code | Comm. No | Name | LCD Display | Set Range | | Default | Attribute* |
|-----------------|----------|-------------------------------------|----------------|------------------------------|------------------|----------------------------------|------------|
| 31 | 0h191F | EPID2 Mode selection | EPID2 Mode | 0 | None | 0: None | O |
| | | | | 1 | Always ON | | |
| | | | | 2 | During Run | | |
| | | | | 3 | DI dependent | | |
| 32 ¹ | 0h1920 | EPID2 output monitor value | EPID2 Output | -100.00~100.00% | | 0.00 | X |
| 33 | 0h1921 | EPID2 reference monitor value | EPID2 Ref Val | - | | - | X |
| 34 | 0h1922 | EPID2 feedback monitor value | EPID2 Fdb Val | - | | - | X |
| 35 | 0h1923 | EPID2 error monitor value | EPID2 Err Val | - | | - | X |
| 36 | 0h1924 | EPID2 command source selection | EPID2 Ref Src | 0 | Keypad | 0: KeyPad | Δ |
| | | | | 1 | V1 | | |
| | | | | 2 | I1 | | |
| | | | | 3 | V2 | | |
| | | | | 4 | I2 | | |
| | | | | 5 | RS-485 | | |
| | | | | 6 | FieldBus | | |
| | | | | 8 | Pulse | | |
| | | | | 9 | V3 | | |
| | | | | 10 ² | I3 | | |
| 37 | 0h1925 | EPID2 keypad command value | EPID2 Ref Set | Unit Min~Unit Max | | Unit Min | O |
| 38 | 0h1926 | EPID2 feedback source selection | EPID2 Fdb Src | 0 | V1 | 0: V1 | O |
| | | | | 2 | V2 | | |
| | | | | 3 | I2 | | |
| | | | | 4 | RS-485 | | |
| | | | | 5 | FieldBus | | |
| | | | | 7 | Pulse | | |
| | | | | 8 | V3 | | |
| | | | | 9 ³ | I3 | | |
| | | | | 39 | 0h1927 | | |
| 40 | 0h1928 | EPID2 I-Time | EPID2 I-Time | 0.0-200.0(sec) | | 10.0 | O |
| 41 | 0h1929 | EPID2 D-Time | EPID2 D-Time | 0.00-1.00(sec) | | 0.00 | O |
| 42 | 0h192A | EPID2 feedforward compensation gain | EPID2 FF-Gain | 0.0~1000.0 (%) | | 0.0 | O |
| 43 | 0h192B | EPID2 output filter | EPID2 Out LPF | 0.00-10.00(sec) | | 0.00 | O |
| 44 | 0h192C | EPID2 output high limit | EPID2 Limit Hi | EPID2 Limit Lo~100.00 | | 100.00 | O |
| 45 | 0h192D | EPID2 output low limit | EPID2 Limit Lo | -100.00~EPID2 Limit Hi | | 0.00 | O |
| 46 | 0h192E | EPID2 output inversion | EPID2 Out Inv | 0 | No | 0: No | O |
| | | | | 1 | Yes | | |
| 47 | 0h192F | EPID2 unit | EPID2 Unit Sel | Refer to the EPID Unit table | | 0: CUST | O |
| 48 | 0h1930 | EPID2 unit scale | EPID2 Unit Scl | 0 | X100 | 2: X1 | O |
| | | | | 1 | X10 | | |
| | | | | 2 | X1 | | |
| | | | | 3 | X0.1 | | |
| | | | | 4 | X0.01 | | |
| 49 | 0h1931 | EPID2 unit 0% | EPID2 Unit0% | X100 | -30000~Unit Max | Varies according to unit setting | O |
| | | | | X10 | -3000.0~Unit Max | | |
| | | | | X1 | -300.00~Unit Max | | |
| | | | | X0.1 | -30.000~Unit Max | | |
| | | | | X0.01 | -3.0000~Unit Max | | |
| 50 | 0h1932 | EPID2 unit 100% | EPID2 Unit100% | X100 | Unit Min~30000 | Varies according to unit setting | O |
| | | | | X10 | Unit Min~3000.0 | | |
| | | | | X1 | Unit Min~300.00 | | |
| | | | | X0.1 | Unit Min~30.000 | | |
| | | | | X0.01 | Unit Min~3.0000 | | |

¹ EPID-32~EPID-50 codes appear when EPID-31 code is not 0(None).

² '9(V3)~10(I3)' of EPID-36 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information.

³ '8(V3)~9(I3)' of EPID-38 are available when Extension IO option is equipped. Refer to Extension IO option manual for more detail information

Application 1 Function Group

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|---|-----------------|--------------------------|----------------|-----------------|---|
| 00 | - | Jump code | Jump Code | 1~99 | 20 | 0 | |
| 05 | 0h1A05 | Sleep boost level | Sleep Bst Set | 0.00~Unit Max | 0.00 | 0 | |
| 06 | 0h1A06 | Sleep boost speed | Sleep Bst Freq | 0.00, Low Freq~High Freq | 60.00 | 0 | |
| 07 | 0h1A07 | PID sleep mode 1 delay time | PID Sleep 1 DT | 0.0~6000.0(sec) | 20.0 | 0 | |
| 08 | 0h1A08 | PID sleep mode 1 frequency | PID Sleep1 Freq | 0.00, Low Freq~High Freq | 0.00 | 0 | |
| 09 | 0h1A09 | PID wakeup 1 delay time | PID WakeUp1 DT | 0.0~6000.0(sec) | 20.0 | 0 | |
| 10 | 0h1A0A | PID wakeup 1 value | PID WakeUp1 Dev | 0.00~Unit Band | 20.00 | 0 | |
| 11 | 0h1A0B | PID sleep mode 2 delay time | PID Sleep 2 DT | 0.0~6000.0(sec) | 20.0 | 0 | |
| 12 | 0h1A0C | PID sleep mode 2 frequency | PID Sleep2 Freq | 0.00, Low Freq~High Freq | 0.00 | 0 | |
| 13 | 0h1A0D | PID wakeup 2 delay time | PID WakeUp2 DT | 0.0~6000.0(sec) | 20.0 | 0 | |
| 14 | 0h1A0E | PID wakeup 2 value | PID WakeUp2 Dev | 0.00~Unit Band | 20.00 | 0 | |
| 20 | 0h1A14 | Soft Fill function used or not | Soft Fill Sel | 0 | No | 0 : No | 0 |
| | | | | 1 | Yes | | |
| 21 | 0h1A15 | Pre-PID run frequency | Pre-PID Freq | Low Freq~High Freq | 30.00 | 0 | |
| 22 | 0h1A16 | Pre-PID holding time | Pre-PID Delay | 0.0~600.0(sec) | 60.0 | 0 | |
| 23 | 0h1A17 | Soft Fill exit value | Soft Fill Set | Unit Min~Unit Max | 20.00 | 0 | |
| 24 | 0h1A18 | Soft Fill reference increase level | Fill Step Set | 0.00~Unit Band | 2.00 | 0 | |
| 25 | 0h1A19 | Soft Fill reference increase cycle | Fill Step Time | 0~9999(sec) | 20 | 0 | |
| 26 | 0h1A1A | Soft Fill difference | Fill Fdb Diff | 0.00~Unit Band | 0.00 | 0 | |
| 30 | 0h1A1E | Flow Comp function used or not | Flow Comp Sel | 0 | No | 0 : No | 0 |
| | | | | 1 | Yes | | |
| 31 | 0h1A1F | Max Comp value | Max Comp Value | 0.00~Unit Band | 0.00 | 0 | |
| 40 ¹ | 0h1A28 | MMC function selection | MMC Sel | 0 | None | 0 : No | Δ |
| | | | | 1 | Single Ctrl | | |
| | | | | 2 | Multi Follower | | |
| | | | | 3 | Multi Master | | |
| | | | | 4 | Serve Drv | | |
| 41 ² | 0h1A29 | Bypass selection | Regul Bypass | 0 | No | 0 : No | Δ |
| | | | | 1 | Yes | | |
| 42 | 0h1A2A | Selecting number of auxiliary motors | Num of Aux | 1~5 | 5 | Δ | |
| 43 | 0h1A2B | Selecting starting auxiliary motors | Starting Aux | 1~5 | 1 | Δ | |
| 44 | 0h1A2C | Display number of running auxiliary motors | Aux Motor Run | - | - | X | |
| 45 | 0h1A2D | Display priority of 1~4 auxiliary motor | Aux Priority 1 | - | - | X | |
| 46 | 0h1A2E | Display priority of 5~8 auxiliary motor | Aux Priority 2 | - | - | X | |
| 48 | 0h1A30 | Setting auxiliary motor operation when stopped | Aux All Stop | 0 | No | 1: Yes | 0 |
| | | | | 1 | Yes | | |
| 49 | 0h1A31 | Sequence of auxiliary motor stop | FIFO/FILO | 0 | FILO | 0: FILO | Δ |
| | | | | 1 | FIFO | | |
| 50 | 0h1A32 | Aux. motor operating pressure difference | Actual Pr Diff | 0~100(%) | 2 | 0 | |
| 51 | 0h1A33 | Main motor acceleration time when the number of aux. motors decreases | Aux Acc Time | 0.0~600.0(sec) | 2.0 | 0 | |
| 52 | 0h1A34 | Main motor deceleration time when the number of aux. motors increase | Aux Dec Time | 0.0~600.0(sec) | 2.0 | 0 | |
| 53 | 0h1A35 | Aux. motor start delay time | Aux Start DT | 0.0~3600.0(sec) | 60.0 | 0 | |
| 54 | 0h1A36 | Aux. motor stop delay time | Aux Stop DT | 0.0~3600.0(sec) | 60.0 | 0 | |
| 55 | 0h1A37 | Auto change mode selection | Auto Ch Mode | 0 | None | 1: AUX Exchange | Δ |
| | | | | 1 | AUX Exchange | | |
| | | | | 2 | Main Exchange | | |
| 56 | 0h1A38 | Auto change time | Auto Ch Time | 00:00~99:00 | 72:00 | 0 | |
| 57 | 0h1A39 | Auto change frequency | Auto Ch Level | Low Freq~High Freq | 20.00 | 0 | |
| 58 | 0h1A3A | Auto change operation time | Auto Op Time | - | - | X | |
| 59 | 0h1A3B | Auxiliary motor pressure difference | 0 ~ 100(%) | 0 ~ 100(%) | 2 | 0 | |
| 60 | 0h1A3C | Target frequency of Aux motor during Multi Master | Aux Stop Diff | Low Freq ~ High Freq | 60.00 | 0 | |
| 61 | 0h1A3D | First auxiliary motor start frequency | Start Freq 1 | Low Freq~High Freq | 45.00 | 0 | |
| 62 | 0h1A3E | Second auxiliary motor start frequency | Start Freq 2 | Low Freq~High Freq | 45.00 | 0 | |
| 63 | 0h1A3F | Third auxiliary motor start frequency | Start Freq 3 | Low Freq~High Freq | 45.00 | 0 | |
| 64 | 0h1A40 | Fourth auxiliary motor start frequency | Start Freq 4 | Low Freq~High Freq | 45.00 | 0 | |
| 65 | 0h1A41 | Fifth auxiliary motor start frequency | Start Freq 5 | Low Freq~High Freq | 45.00 | 0 | |

¹ Set PID-1 to 'YES' to configure AP1-40.

² Set AP1-40 to 'YES' to configure AP1-41

Application 1 Function Group

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|---|----------------|--------------------|----------|------------|---|
| 66 | 0h1A42 | #6 auxiliary motor stop frequency | Start Freq 6 | Low Freq~High Freq | 45.00 | 0 | |
| 67 | 0h1A43 | #7 auxiliary motor stop frequency | Start Freq 7 | Low Freq~High Freq | 45.00 | 0 | |
| 68 | 0h1A44 | #8 auxiliary motor stop frequency | Start Freq 8 | Low Freq~High Freq | 45.00 | 0 | |
| 70 | 0h1A46 | First auxiliary motor stop frequency | Stop Freq 1 | Low Freq~High Freq | 20.00 | 0 | |
| 71 | 0h1A47 | Second auxiliary motor stop frequency | Stop Freq 2 | Low Freq~High Freq | 20.00 | 0 | |
| 72 | 0h1A48 | Third auxiliary motor stop frequency | Stop Freq 3 | Low Freq~High Freq | 20.00 | 0 | |
| 73 | 0h1A49 | Fourth auxiliary motor stop frequency | Stop Freq 4 | Low Freq~High Freq | 20.00 | 0 | |
| 74 | 0h1A4A | Fifth auxiliary motor stop frequency | Stop Freq 5 | Low Freq~High Freq | 20.00 | 0 | |
| 75 | 0h1A4B | #6 auxiliary motor stop frequency | Stop Freq 6 | Low Freq~High Freq | 20.00 | 0 | |
| 76 | 0h1A4C | #7 auxiliary motor stop frequency | Stop Freq 7 | Low Freq~High Freq | 20.00 | 0 | |
| 77 | 0h1A4D | #8 auxiliary motor stop frequency | Stop Freq 8 | Low Freq~High Freq | 20.00 | 0 | |
| 80 | 0h1A50 | Reference compensation of first aux. motor | Aux1 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 81 | 0h1A51 | Reference compensation of second aux. motor | Aux2 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 82 | 0h1A52 | Reference compensation of third aux. motor | Aux3 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 83 | 0h1A53 | Reference compensation of fourth aux. motor | Aux4 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 84 | 0h1A54 | Reference compensation of fifth aux. motor | Aux5 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 85 | 0h1A55 | #6 auxiliary motor reference compensation | Aux6 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 86 | 0h1A56 | #7 auxiliary motor reference compensation | Aux7 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 87 | 0h1A57 | #8 auxiliary motor reference compensation | Aux8 Ref Comp | 0.00~Unit Band | 0.00 | 0 | |
| 90 | 0h1A5A | Interlock selection | Interlock | 0 | No | 0: No | 0 |
| | | | | 1 | Yes | | |
| 91 | 0h1A5B | Delay time before running the next main motor when interlock/auto change occurs at the main motor | Interlock DT | 0.1~360.0(Sec) | 5.0 | 0 | |
| 95 ¹ | 0h1A5F | Selection of Auxiliary motor to display [AP1-96] [AP1-97] | AuxRunTime Sel | 0: Aux 1 | 0: Aux 1 | 0 | |
| | | | | 1: Aux 2 | | | |
| | | | | 2: Aux 3 | | | |
| | | | | 3: Aux 4 | | | |
| | | | | 4: Aux 5 | | | |
| | | | | 5: Aux 6 | | | |
| | | | | 6: Aux 7 | | | |
| 7: Aux 8 | | | | | | | |
| 96 | 0h1A60 | Operation time(Day) of Auxiliary motor selected in [AP1-95] | AuxRunTime Day | 0 ~ 65535 | 0 | 0 | |
| 97 | 0h1A61 | Operation time of Auxiliary motor selected in [AP1-95] (Hour:Minute) | AuxRunTime Min | 00:00 ~ 23:59 | 00:00 | 0 | |
| 98 | 0h1A62 | Deleting operation time of Auxiliary motor | AuxRunTime Clr | 0 | None | 0: None | 0 |
| | | | | 1 | All | | |
| | | | | 2 | Aux 1 | | |
| | | | | 3 | Aux 2 | | |
| | | | | 4 | Aux 3 | | |
| | | | | 5 | Aux 4 | | |
| | | | | 6 | Aux 5 | | |
| | | | | 7 | Aux 6 | | |
| | | | | 8 | Aux 7 | | |
| 9 | Aux 8 | | | | | | |

¹AP1-95~98 is available when MMC and Master Follower functions are performed.

Application 2 Function Group

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|--|------------------|------------------------------|----------------|------------|---|
| 00 | - | Jump code | Jump Code | 1~99 | 40 | 0 | |
| 01 ¹ | 0h1B01 | Load curve tuning | Load Tune | 0 | No | No | Δ |
| | | | | 1 | Yes | | |
| 02 | 0h1B02 | Load curve: Low Freq | Load Fit Lfreq | Base Freq*15%~Load Fit HFreq | 30.00 | Δ | |
| 03 | 0h1B03 | Current at Low Freq | Load Fit LCurr | 0.0~80.0(%) | 40.0 | Δ | |
| 04 | 0h1B04 | Power at Low Freq | Load Fit LPwr | 0.0~80.0(%) | 30.0 | Δ | |
| 08 | 0h1B08 | Load curve: High Freq | Load Fit Hfreq | Load Fit LFreq~High Freq | 51.00 | Δ | |
| 09 | 0h1B09 | Current at High Freq | Load Fit HCurr | Load Fit HCurr~200.0(%) | 80.0 | Δ | |
| 10 | 0h1B0A | Power at High Freq | Load Fit HPwr | Load Fit HPwr~200.0(%) | 80.0 | Δ | |
| 11 | 0h1B0B | Load curve current | Load Curve Cur | - | - | X | |
| 12 | 0h1B0C | Load curve power | Load Curve Pwr | - | - | X | |
| 15 | 0h1B0F | Pump Clean Setting 1 | Pump Clean Mode1 | 0 | None | 0: None | 0 |
| | | | | 1 | DI Dependent | | |
| | | | | 2 | Output Power | | |
| | | | | 3 | Output Current | | |
| 16 | 0h1B10 | Pump Clean Setting 2 | Pump Clean Mode2 | 0 | None | 0: None | Δ |
| | | | | 1 | Start | | |
| | | | | 2 | Stop | | |
| | | | | 3 | Start&Stop | | |
| 17 | 0h1B11 | Pump clean load setting | PC Curve Rate | 0.1~200.0(%) | 100.0 | 0 | |
| 18 | 0h1B12 | Pump clean reference band | PC Curve Band | 0.0~100.0(%) | 5.0 | 0 | |
| 19 | 0h1B13 | Pump clean operation delay time | PC Curve DT | 0.0~6000.0(sec) | 60.0 | 0 | |
| 20 | 0h1B14 | Pump clean available area holding time | PC Start DT | 0.0~6000.0(sec) | 10.0 | 0 | |
| 21 | 0h1B15 | Operation time when forward/reverse switching | PC Step DT | 0.1~6000.0(sec) | 5.0 | 0 | |
| 22 | 0h1B16 | Pump clean acceleration time | PC Acc Time | 0.0~600.0(sec) | 10.0 | 0 | |
| 23 | 0h1B17 | Pump clean deceleration time | PC Dec Time | 0.0~600.0(sec) | 10.0 | 0 | |
| 24 | 0h1B18 | Forward step steady time | Fwd SteadyTime | 0.0~600.0(sec) | 10.0 | 0 | |
| 25 | 0h1B19 | Forward step steady frequency | Fwd SteadyFreq | 0.00, Low Freq~High Freq | 30.00 | 0 | |
| 26 | 0h1B1A | Reverse step steady time | Rev SteadyTime | 0.0~600.0(sec) | 10.0 | 0 | |
| 27 | 0h1B1B | Reverse step steady frequency | Rev SteadyFreq | 0.00, Low Freq~High Freq | 30.00 | 0 | |
| 28 | 0h1B1C | Number of forward/reverse steps during pump cleaning | PC Num of Steps | 1~10 | 2 | 0 | |
| 29 | 0h1B1D | Pump clean cycle monitoring | Repeat Num Mon | - | - | X | |
| 30 | 0h1B1E | Number of repeated pump cleaning | Repeat Num Set | 0~10 | 2 | 0 | |
| 31 | 0h1B1F | Operation after pump clean completion | PC End Mode | 0 | Stop | 0: Stop | Δ |
| | | | | 1 | Run | | |
| 32 | 0h1B20 | Continuous Pump Clean limit time | PC Limit Time | 6~60(min) | 10 | 0 | |
| 33 | 0h1B21 | Continuous Pump Clean limit number | PC Limit Num | 0~10 | 3 | 0 | |
| 38 | 0h1B26 | Dec Valve operation frequency | Dec Valve Freq | Low Freq~High Freq | 40.00 | 0 | |
| 39 | 0h1B27 | Dev Valve deceleration time | Dev Valve Time | 0.0~6000.0(sec) | 0.0 | 0 | |
| 40 | 0h1B28 | Start & End Ramp selection | Start&End Ramp | 0 | No | 0: No | Δ |
| | | | | 1 | Yes | | |
| 41 | 0h1B29 | Start Ramp acceleration time | Start Ramp Acc | 0.0~600.0(sec) | 10.0 | 0 | |
| 42 | 0h1B2A | End Ramp deceleration time | End Ramp Dec | 0.0~600.0(sec) | 10.0 | 0 | |
| 45 | 0h1B2D | Damper check time | Damper DT | 0.0~600.0(sec) | 5.0 | 0 | |
| 46 | 0h1B2E | Lubrication operation time | Lub Op Time | 0.0~600.0(sec) | 5.0 | 0 | |
| 48 ¹ | 0h1B30 | Preheat level | Pre Heat Level | 1~100(%) | 20 | 0 | |
| 49 | 0h1B31 | Preheat duty ratio | Pre Heat Duty | 1~100(%) | 30 | 0 | |
| 50 | 0h1B32 | DC input delay time | DC Inj Delay T | 0.0~600.0(sec) | 60.0 | 0 | |
| 87 | 0h1B57 | 1st MOTOR average POWER | M1 AVG PWR | 0.1~500.0(kW) | - | 0 | |
| 88 | 0h1B58 | 2nd MOTOR average POWER | M2 AVG PWR | 0.1~500.0(kW) | - | 0 | |
| 89 | 0h1B59 | Cost per kWh | Cost per kWh | 0.0~1000.0 | 0.0 | 0 | |
| 90 | 0h1B5A | kWh energy saved | Saved kWh | - | 0.0 | X | |
| 91 | 0h1B5B | MWh energy saved | Saved MWh | - | 0 | X | |
| 92 | 0h1B5C | Saved cost up to 1000 unit | Saved Cost1 | - | 0.0 | X | |
| 93 | 0h1B5D | Saved cost up to 1000 unit | Saved Cost2 | - | 0 | X | |
| 94 | 0h1B5E | Reduced CO2 conversion Factor | CO2 Factor | 0.0~5.0 | 0.0 | 0 | |
| 95 | 0h1B5F | CO2 reduction (unit: Ton) | Saved CO2 -1 | - | 0.0 | X | |

¹ Set the operation mode to AUTO to configure AP2-01

² AP2-48-AP2-49 codes appear when one of IN-65-71 codes is set as Pre-Heat.

Application 2 Function Group

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|------|-----------|-----------------------------|--------------|-----------|---------|------------|---|
| 96 | 0h1B60 | CO2 reduction (unit: kT on) | Saved CO2-2 | - | 0 | X | |
| 97 | 0h1B61 | Reset of energy saved | Reset Energy | 0 | No | 0.No | Δ |
| | | | | 1 | Yes | | |

¹ Set the operation mode to AUTO to configure AP2-01

² AP2-48-AP2-49 codes appear when one of IN-65-71 codes is set as Pre-Heat.

Application 3 Function Group

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|----------------------------------|-----------------|-----------------------------|------------|-------------|---|
| 00 | - | Jump code | Jump Code | 1-99 | 70 | 0 | |
| 01 | 0h1C01 | Current date | Now Date | 01/01/2000-12/31/2099(Date) | 01/01/2000 | 0 | |
| 02 | 0h1C02 | Current time | Now Time | 0:00-23:59(Min) | 0:00 | 0 | |
| 03 | 0h1C03 | Current weekday | Now Weekday | 0000000-1111111(Bit) | 0000001 | 0 | |
| 04 | 0h1C04 | Summer Time start date | Summer T Start | 01/01~Summer T Stop | 04/01 | 0 | |
| 05 | 0h1C05 | Summer Time end date | Summer T Stop | Summer T Start-12/31(Date) | 11/30 | 0 | |
| 06 ¹ | 0h1C06 | Date format | Date Format | 0 | YYYY/MM/DD | Date Format | 0 |
| | | | | 1 | MM/DD/YYYY | | |
| | | | | 2 | DD/MM/YYYY | | |
| 10 | 0h1C0A | Period connection status | Period Status | - | - | X | |
| 11 | 0h1C0B | Time Period 1 start time setting | Period1 Start T | 00:00-24:00 | 24:00 | 0 | |
| 12 | 0h1C0C | Time Period 1 stop time setting | Period1 Stop T | Period1 StartT-24:00(Min) | 24:00 | 0 | |
| 13 | 0h1C0D | Time Period 1 day setting | Period1 Day | 0000000-1111111(Bit) | 0000000 | 0 | |
| 14 | 0h1C0E | Time Period 2 start time setting | Period2 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 15 | 0h1C0F | Time Period 2 stop time setting | Period2 Stop T | Period2 StartT-24:00(Min) | 24:00 | 0 | |
| 16 | 0h1C10 | Time Period 2 day setting | Period2 Day | 0000000-1111111(Bit) | 0000000 | 0 | |
| 17 | 0h1C11 | Time Period 3 start time setting | Period3 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 18 | 0h1C12 | Time Period 3 stop time setting | Period3 Stop T | Period3 StartT-24:00(Min) | 24:00 | 0 | |
| 19 | 0h1C13 | Time Period 3 day setting | Period3 Day | 0000000-1111111(Bit) | 0000000 | 0 | |
| 20 | 0h1C14 | Time Period 4 start time setting | Period4 StartT | 00:00-24:00(Min) | 24:00 | 0 | |
| 21 | 0h1C15 | Time Period 4 stop time setting | Period4 Stop T | Period4 StartT-24:00(Min) | 24:00 | 0 | |
| 22 | 0h1C16 | Time Period 4 day setting | Period4 Day | 0000000-1111111(Bit) | 0000000 | 0 | |
| 30 | 0h1C1E | Except1 Date start time setting | Except1 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 31 | 0h1C1F | Except1 Date stop time setting | Except1 Stop T | Except1 StartT-24:00(Min) | 24:00 | 0 | |
| 32 | 0h1C20 | Except1 Date setting | Except1Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 33 | 0h1C21 | Except2 Date start time setting | Except2 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 34 | 0h1C22 | Except2 Date stop time setting | Except2 Stop T | Except2 StartT-24:00(Min) | 24:00 | 0 | |
| 35 | 0h1C23 | Except2 Date setting | Except2Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 36 | 0h1C24 | Except3 Date start time setting | Except3 StartT | 00:00-24:00(Min) | 24:00 | 0 | |
| 37 | 0h1C25 | Except3 Date stop time setting | Except3 Stop T | Except3 StartT-24:00(Min) | 24:00 | 0 | |
| 38 | 0h1C26 | Except3Date setting | Except3Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 39 | 0h1C27 | Except4 Date start time setting | Except4 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 40 | 0h1C28 | Except4 Date stop time setting | Except4 Stop T | Except4 StartT-24:00(Min) | 24:00 | 0 | |
| 41 | 0h1C29 | Except4Date setting | Except4Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 42 | 0h1C2A | Except5 Date start time setting | Except5 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 43 | 0h1C2B | Except5 Date stop time setting | Except5 Stop T | Except5 StartT-24:00(Min) | 24:00 | 0 | |
| 44 | 0h1C2C | Except5 Date setting | Except5 Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 45 | 0h1C2D | Except6 Date start time setting | Except6 Start T | 00:00-24:00(Min) | 24:00 | 0 | |
| 46 | 0h1C2E | Except6 Date stop time setting | Except6 Stop T | Except6 StartT-24:00(Min) | 24:00 | 0 | |
| 47 | 0h1C2F | Except6 Date setting | Except6 Date | 01/01-12/31(Date) | 01/01 | 0 | |
| 48 | 0h1C30 | Except7 Date start time setting | Except7 StartT | 00:00-24:00(Min) | 24:00 | 0 | |
| 49 | 0h1C31 | Except7 Date stop time setting | Except7 Stop T | Except7 StartT-24:00(Min) | 24:00 | 0 | |

¹ The date format can be changed according to the AP3-06 settings.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|------|-----------|---------------------------------|-----------------|----------------------------------|-----------------|------------|---|
| 50 | 0h1C32 | Except7 Date setting | Except7 Date | 01/01~12/31(Date) | 01/01 | 0 | |
| 51 | 0h1C33 | Except8 Date start time setting | Except8 Start T | 00:00~24:00(Min) | 24:00 | 0 | |
| 52 | 0h1C34 | Except8 Date stop time setting | Except8 Stop T | Except8 StartT~24:00(Min) | 24:00 | 0 | |
| 53 | 0h1C35 | Except8 Date setting | Except8 Date | 01/01~12/31(Date) | 01/01 | 0 | |
| 70 | 0h1C46 | Time Event function setting | Time Event En | 0 | No | 0: NO | Δ |
| | | | | 1 | Yes | | |
| 71 | 0h1C47 | Time Event setting status | T-Event Status | - | - | X | |
| 72 | 0h1C48 | Time Event 1 connection setting | T-Event1Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 73 | 0h1C49 | Time Event 1 selection | T-Event1Define | 0 | None | 0: None | Δ |
| | | | | 1 | Fx | | |
| | | | | 2 | Rx | | |
| | | | | 3 | Speed-L | | |
| | | | | 4 | Speed-M | | |
| | | | | 5 | Speed-H | | |
| | | | | 7 | Xcel-L | | |
| | | | | 8 | Xcel-M | | |
| | | | | 9 | Xcel-H | | |
| | | | | 10 | Xcel Stop | | |
| | | | | 11 | Run Enable | | |
| | | | | 12 | 2nd Source | | |
| | | | | 13 | Exchange | | |
| | | | | 14 | Analog Hold | | |
| | | | | 15 | I-Term Clear | | |
| | | | | 16 | PID Openloop | | |
| | | | | 17 | PID Gain 2 | | |
| | | | | 18 | PID Ref Change | | |
| | | | | 19 | 2nd Motor | | |
| | | | | 20 | Timer In | | |
| | | | | 21 | Dias Aux Ref | | |
| | | | | 22 | EPID1 Run | | |
| | | | | 23 | EPID1 ITermClr | | |
| | | | | 24 | Pre Heat | | |
| | | | | 25 | EPID2 RUn | | |
| | | | | 26 | EPID2 ITerm Clr | | |
| | | | | 27 | PID Gain 2 | | |
| | | | | 28 | PID Ref Change | | |
| | | | | 29 | PID Step Ref M | | |
| | | | | 30 | PID Step Ref H | | |
| 74 | 0h1C4A | Time Event 2 connection setting | T-Event2Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 75 | 0h1C4B | Time Event 2 selection | T-Event2Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 76 | 0h1C4C | Time Event 3 connection setting | T-Event2Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 77 | 0h1C4D | Time Event 3 selection | T-Event3Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 78 | 0h1C4E | Time Event 4 connection setting | T-Event4Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 79 | 0h1C4F | Time Event 4 selection | T-Event4Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 80 | 0h1C50 | Time Event 5 connection setting | T-Event5Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 81 | 0h1C51 | Time Event 5 selection | T-Event5Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 82 | 0h1C52 | Time Event 6 connection setting | T-Event6Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 83 | 0h1C53 | Time Event 6 selection | T-Event6Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 84 | 0h1C54 | Time Event 7 connection setting | T-Event7Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 85 | 0h1C55 | Time Event 7 selection | T-Event7Define | Same as the AP3-73 setting range | 0: None | Δ | |
| 86 | 0h1C56 | Time Event 8 connection setting | T-Event8Period | 000000000000~111111111111 | 000000000000 | Δ | |
| 87 | 0h1C57 | Time Event 8 selection | T-Event8Define | Same as the AP3-73 setting range | 0: None | Δ | |

¹ The date format can be changed according to the AP3-06 settings.

| Code | Comm. No. | Name | LCD Display | Set Range | | Default | | Attribute* |
|-----------------|-------------|--|----------------|--------------------------|--------------------------------|-------------------|-----------|------------|
| 00 | - | Jump code | Jump Code | 1~99 | | 40 | | 0 |
| 05 | 0h1D05 | I/O open phase protection | Phase Loss Chk | Bit | 00~11 | 00 | 0 | Δ |
| | | | | Bit 0 | Fault trips other than LV trip | | | |
| | | | | Bit 1 | LV trip | | | |
| 06 | 0h1D06 | Input open phase voltage band | IPOV Band | 1~100[V] | | 15 | | 0 |
| 07 | 0h1D07 | Trip deceleration time | Trip Dec Time | 0.0~600.0(sec) | | 3.0 | 0.75~90kW | 0 |
| | | | | | | 90.0 | 110~500kW | |
| 08 | 0h1D08 | Start upon trip reset | RST Restart | Bit | 00~11 | 00 | 0 | 0 |
| | | | | Bit 0 | Fault trips other than LV trip | | | |
| | | | | Bit 1 | LV trip | | | |
| 09 | 0h1D09 | Auto retry number | Retry Number | 0~10 | | 0 | | 0 |
| 10 | 0h1D0A | Auto retry delay time | Retry Delay | 0.0~600.0(sec) | | 5.0 | | 0 |
| 11 | 0h1D0B | Operation when keypad command is lost | Lost KPD Mode | 0 | None | 0: None | 0 | 0 |
| | | | | 1 | Warning | | | |
| | | | | 2 | Free-Run | | | |
| | | | | 3 | Dec | | | |
| 12 | 0h1D0C | Operation when speed command is lost | Lost Cmd Mode | 0 | None | 0: None | 0 | 0 |
| | | | | 1 | Free-Run | | | |
| | | | | 2 | Dec | | | |
| | | | | 3 | Hold Input | | | |
| | | | | 4 | Hold Output | | | |
| 5 | Lost Preset | | | | | | | |
| 13 ¹ | 0h1D0D | Time to decide lost speed command | Lost Cmd Time | 0.1~120.0(sec) | | 1.0 | | 0 |
| 14 | 0h1D0E | Operation frequency when speed command is lost | Lost Preset F | 0.00, Low Freq~High Freq | | 0.00 | | 0 |
| 15 | 0h1D0F | Level to decide lost analog input | AI Lost Level | 0 | Half of x1 | 0: Half of x1 | 0 | 0 |
| | | | | 1 | Below x 1 | | | |
| 17 | 0h1D11 | Overload warning selection | OL Warn Select | 0 | No | 0: No | 0 | 0 |
| | | | | 1 | Yes | | | |
| 18 | 0h1D12 | Overload warning level | OL Warn Level | 30~OL Trip Level(%) | | 110 | | 0 |
| 19 | 0h1D13 | Overload warning time | OL Warn Time | 0.0~30.0(sec) | | 10.0 | | 0 |
| 20 | 0h1D14 | Operation at overload trip | OL Trip Select | 0 | None | 1: Free-Run | 0 | 0 |
| | | | | 1 | Free-Run | | | |
| | | | | 2 | Dec | | | |
| 21 | 0h1D15 | Overload trip level | OL Trip Level | 30~150(%) | | 120 | | 0 |
| 22 | 0h1D16 | Overload trip time | OL Trip Time | 0.0~60.0(sec) | | 60.0 | | 0 |
| 23 | 0h1D17 | Under-load warning source selection | UL Source | 0 | Output Current | 0: Output Current | Δ | Δ |
| | | | | 1 | Output Power | | | |
| 24 | 0h1D18 | Under-load warning detection band | UL Band | 0.0~100.0(%) | | 10.0 | | Δ |
| 25 | 0h1D19 | Under-load warning selection | UL Warn Sel | 0 | No | 0: No | 0 | 0 |
| | | | | 1 | Yes | | | |
| 26 | 0h1D1A | Under-load warning time | UL Warn Time | 0.0~600.0(sec) | | 10.0 | | 0 |
| 27 | 0h1D1B | Under-load trip selection | Op Sel for UL | 0 | None | 0: None | 0 | 0 |
| | | | | 1 | Free-Run | | | |
| | | | | 2 | Dec | | | |
| | | | | 3 | Sleep | | | |
| 28 | 0h1D1C | Under-load trip time | UL Op Time | 0.0~600.0(sec) | | 30.0 | | 0 |
| 31 | 0h1D1F | Operation at No Motor trip | No Motor Trip | 0 | None | 0: None | 0 | 0 |
| | | | | 1 | Free-Run | | | |
| 32 | 0h1D20 | No Motor trip | No Motor Level | 1~100(%) | | 5 | | 0 |
| 33 | 0h1D21 | No Motor detection time | No Motor Time | 0.1~10.0(sec) | | 3.0 | | 0 |
| 34 | 0h1D22 | Operation after detection by overheat motor sensor | Thermal-T Sel | 0 | None | 0: None | 0 | 0 |
| | | | | 1 | Free-Run | | | |
| | | | | 2 | Dec | | | |
| 35 | 0h1D23 | Overheat motor sensor input selection | Thermal In Src | 0 | Thermal In | 0: Thermal In | 0 | 0 |
| | | | | 1 | V2 | | | |
| 36 | 0h1D24 | Overheat motor sensor failure level | Thermal-T Lev | 0.0~100.0(%) | | 50.0 | | 0 |

¹ PRT-13~PRT-15 codes appear when PRT-12 code is not set as 0: None.

| Code | Comm. No. | Name | LCD Display | Set Range | | Default | Attribute* |
|-----------------|---------------|--|----------------|---|-------------------|-------------------|------------|
| 37 | 0h1D25 | Overheat motor sensor failure area | Thermal-T | 0 | Low | 0: Low | 0 |
| | | | | 1 | High | | |
| 38 ¹ | 0h1D26 | Overheat motor detection sensor | ThermalMonitor | - | | - | X |
| 40 | 0h1D28 | Overheat motor trip selection | ETH Trip Sel | 0 | None | 0: None | 0 |
| | | | | 1 | Free-Run | | |
| | | | | 2 | Dec | | |
| 41 | 0h1D29 | Motor cooling fan type | Motor Cooling | 0 | Self-cool | 0: Selfcool | 0 |
| | | | | 1 | Forced-cool | | |
| 42 | 0h1D2A | Overheat prevention: 1 min. rating | ETH 1min | ETH Cont~150(%) | | 120 | 0 |
| 43 | 0h1D2B | Overheat prevention: continuous rating | ETH Cont | 50~120(%) | | 100 | 0 |
| 44 | 0h1D2C | Fire Mode setting password | Fire Mode PW | 0~9999 | | 0 | 0 |
| 45 ² | 0h1D2D | Fire Mode setting | Fire Mode Sel | 0 | None | 0: None | 0 |
| | | | | 1 | Fire Mode | | |
| | | | | 2 | Test Mode | | |
| 46 ³ | 0h1D2E | Fire Mode direction setting | Fire Mode Dir | 0 | Reverse | 1: Forward | 0 |
| | | | | 1 | Forward | | |
| 47 ⁴ | 0h1D2F | Fire Mode speed setting | Fire Mode Freq | 0~max Freq | | 60.00 | 0 |
| 48 | 0h1D30 | Fire Mode operation count | Fire Mode Cnt | - | | 0 | X |
| 50 | 0h1D32 | Stall prevention & flux breaking | Stall Prevent | Bit | 0000~1111 | 0100 | Δ |
| | | | | Bit 0 | Accelerating | | |
| | | | | Bit 1 | In constant speed | | |
| | | | | Bit 2 | Decelerating | | |
| | | | | Bit 3 | Flux Braking | | |
| 51 | 0h1D33 | Stall frequency 1 | Stall Freq 1 | Start frequency~Stall frequency 2(Hz) | | 60.00 | 0 |
| 52 | 0h1D34 | Stall level 1 | Stall Level 1 | 30~150(%) | | 130 | Δ |
| 53 | 0h1D35 | Stall frequency 2 | Stall Freq 2 | Start frequency 1~Stall frequency 3(Hz) | | 60.00 | 0 |
| 54 | 0h1D36 | Stall level 2 | Stall Level 2 | 30~150(%) | | 130 | Δ |
| 55 | 0h1D37 | Stall frequency 3 | Stall Freq 3 | Start frequency 2~Stall frequency 4(Hz) | | 60.00 | 0 |
| 56 | 0h1D38 | Stall level 3 | Stall Level 3 | 30~150(%) | | 130 | Δ |
| 57 | 0h1D39 | Stall frequency 4 | Stall Freq 4 | Stall frequency 3~Max. frequency (Hz) | | 60.00 | 0 |
| 58 | 0h1D3A | Stall level 4 | Stall Level 4 | 30~150(%) | | 130 | Δ |
| 59 | 0h1D3B | Flux Braking voltage gain | Flux Brake Kp | 5.5~90kW | 0~150(%) | 0 | 0 |
| | | | | 110~500kW | 0~10(%) | | |
| 60 | 0h1D3C | Pipe broken detection setting | PipeBroken Sel | 0 | None | 0: None | 0 |
| | | | | 1 | Warning | | |
| | | | | 2 | Free-Run | | |
| | | | | 3 | Dec | | |
| 61 | 0h1D3D | Pipe broken detection level | PipeBroken Lev | 0~100.0(%) | | 97.5 | 0 |
| 62 | 0h1D3E | Pipe broken detection time setting | PipeBroken DT | 0.0~6000.0(Sec) | | 10.0 | 0 |
| 66 | 0h1D42 | Damping resistance use rate | DB Warn %ED | 0~30(%) | | 0 | 0 |
| 70 | 0h1D46 | Level detection mode selection | LDT Sel | 0 | None | 0: None | 0 |
| | | | | 1 | Warning | | |
| | | | | 2 | Free-Run | | |
| | | | | 3 | Dec | | |
| 71 | 0h1D47 | Setting level detection mode | LDT Area Sel | 0 | Below Level | 0: Below Level | 0 |
| | | | | 1 | Above Level | | |
| 72 | 0h1D48 | Level detection source | LDT Source | 0 | Output Current | 0: Output Current | 0 |
| | | | | 1 | DC Link Voltage | | |
| | | | | 2 | Output Voltage | | |
| | | | | 3 | kW | | |
| | | | | 4 | HP | | |
| | | | | 5 | V1 | | |
| | | | | 6 | V2 | | |
| | | | | 7 | I2 | | |
| | | | | 8 | PID Ref Value | | |
| | | | | 9 | PID Fdb Value | | |
| | | | | 10 | PID Output | | |
| | | | | 11 | EPID1 Fdb Val | | |
| 12 | EPID2 Fdb Val | | | | | | |

¹ PRT-38 code appears when PRT-34 code is not 0: None.

² PRT-45 can only be set when PRT-44 is in Fire mode. To change the mode in PRT-44, create a new password for PRT-44.

³ PRT-46~47 are displayed when PRT-45 is not set to 0 (NONE).

⁴ When Fire mode is set at PRT-45, PRT-46 is automatically set to forward, and the frequency set at PRT-47 cannot be edited. When PRT-45 is set to Test mode, PRT-46 and PRT-47 settings are editable.

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|-----------------|-----------|--|------------------|--------------------|--------------------|-------------|---|
| 73 | 0h1D49 | Level detection delay time | LDT Dly Time | 0-9999(sec) | 2 | 0 | |
| 74 | 0h1D4A | Level detection reference value | LDT Level | Setting per source | Setting per source | 0 | |
| 75 | 0h1D4B | Level detection bandwidth | LDT Band width | Setting per source | Setting per source | 0 | |
| 76 | 0h1D4C | Level detection frequency | LDT Freq | 0.00-High Freq[Hz] | 20.00 | 0 | |
| 77 | 0h1D4D | Level detection trip restart | LDT Restart DT | 0.0-3000.0 | 60.0 | | |
| 79 | 0h1D4F | Cooling fan failure selection | FAN Trip Mode | 0 | Trip | 0: Trip | 0 |
| | | | | 1 | Warning | | |
| 80 | 0h1D50 | Operation upon option trip | Opt Trip Mode | 0 | None | 1: Free-Run | 0 |
| | | | | 1 | Free-Run | | |
| | | | | 2 | Dec | | |
| | | | | | | | |
| 81 | 0h1D51 | Low voltage delay time | LVT Delay | 0.0-60.0(sec) | 0.0 | Δ | |
| 82 | 0h1D52 | Selection of low voltage during operation | LV2 Trip Sel | 0 | No | 1: No | Δ |
| | | | | 1 | Yes | | |
| 83 | 0h1D53 | CAP. life diagnosis current level | CAP. Diag Perc | 10-100(%) | 0 | 0 | |
| 84 ¹ | - | CAP. life diagnosis mode | CAP. Diag | 0 | None | 0: None | Δ |
| | | | | 1 | Cap.Diag 1 | | |
| | | | | 2 | Cap.Diag 2 | | |
| | | | | 3 | Cap.Init | | |
| 85 | 0h1D55 | CAP. life diagnosis level 1 | CAP. Level1 | 50.0-95.0(%) | 0.0 | Δ | |
| 86 ² | 0h1D56 | CAP. life diagnosis level 2 | CAP. Level2 | - | 0.0 | X | |
| 87 | 0h1D57 | Fan use accumulation % | Fan Time Perc | - | 0 | X | |
| 88 | 0h1D58 | Fan exchange warning level | Fan Exchange | 0.0-100.0(%) | 0.0 | 0 | |
| 90 | 0h1D5A | Battery low voltage selection | Low Battery | 0 | None | 0: None | 0 |
| | | | | 1 | Warning | | |
| 91 | 0h1D5B | Setting the function of Broken belt | Broken Belt Sel | 0 | None | 0: None | Δ |
| | | | | 1 | Warning | | |
| | | | | 2 | Free-Run | | |
| 92 | 0h1D5C | Operating the frequency of Broken belt | Broken Belt Freq | 15.00-MaxFreq | 15.00 | Δ | |
| 93 | 0h1D5D | Motor torque current | Current Trq | - | - | X | |
| 94 | 0h1D5E | Torque current of operating Broken belt | Broken Belt Trq | 0.0-100.0(%) | 10.0 | Δ | |
| 95 | 0h1D5F | Delay of operating Broken belt | Broken Belt Dly | 0-600.0(sec) | 10.0 | Δ | |
| 96 | 0h1D60 | LDT Auto restart count | LDT Rst Cnt | 0-6000 | 1 | Δ | |
| 97 | 0h1D61 | LDT Auto restart cycle count | LDT Rst Cnt M | - | - | X | |
| 98 | 0h1D62 | LDT Auto restart cycle Initialization time | LDT Rst Cnt T | - | - | Δ | |

¹ PRT-84 is displayed when PRT-83 is set to more than '0(%)'. PRT- 84 can only be set in Auto-State.

² PRT-86 is read only.

Motor 2 (2nd Motor) Function Group (M2)¹

Energy Saving Drive

| Code | Comm. No. | Name | LCD Display | Set Range | Default | Attribute* | |
|------|-----------|--|----------------|-----------------------------|------------------------------------|------------|---|
| 00 | - | Jump Code | Jump Code | 1-99 | 14 | 0 | |
| 04 | 0h1E04 | Acceleration time | M2-Acc Time | 20.0 | 0.75-90kW | - | 0 |
| | | | | 60.0 | 110-250kW | | |
| | | | | 100.0 | 315-500kW | | |
| 05 | 0h1E05 | Deceleration time | M2-Dec Time | 30.0 | 0.75-90kW | - | 0 |
| | | | | 90.0 | 110-250kW | | |
| | | | | 150.0 | 315-500kW | | |
| 06 | 0h1E06 | Motor capacity | M2-Capacity | 0 | 0.2kW(0.3HP) | - | Δ |
| | | | | 1 | 0.4kW(0.5HP) | | |
| | | | | 2 | 0.75kW(1.0HP) | | |
| | | | | 3 | 1.1kW(1.5HP) | | |
| | | | | 4 | 1.5kW(2.0HP) | | |
| | | | | 5 | 2.2kW(3.0HP) | | |
| | | | | 6 | 3.0kW(4.0HP) | | |
| | | | | 7 | 3.7 kW(5.0HP) | | |
| | | | | 8 | 4.0 kW(5.5HP) | | |
| | | | | 9 | 5.5 kW(7.5HP) | | |
| | | | | 10 | 7.5 kW(10.0HP) | | |
| | | | | 11 | 11.0 kW(15.0HP) | | |
| | | | | 12 | 15.0 kW(20.0HP) | | |
| | | | | 13 | 18.5 kW(25.0HP) | | |
| | | | | 14 | 22.0 kW(30.0HP) | | |
| | | | | 15 | 30.0 kW(40.0HP) | | |
| | | | | 16 | 37.0 kW(50.0HP) | | |
| | | | | 17 | 45.0 kW(60.0HP) | | |
| | | | | 18 | 55.0 kW(75.0HP) | | |
| | | | | 19 | 75.0 kW(100.0HP) | | |
| | | | | 20 | 90.0 kW(125.0HP) | | |
| | | | | 21 | 110.0 kW(150.0HP) | | |
| | | | | 22 | 132.0 kW(200.0HP) | | |
| | | | | 23 | 160.0 kW(250.0HP) | | |
| | | | | 24 | 185.0 kW(300.0HP) | | |
| | | | | 25 | 220.0 kW(350.0HP) | | |
| | | | | 26 | 250.0 kW(400.0HP) | | |
| | | | | 27 | 315.0 kW(500.0HP) | | |
| | | | | 28 | 355.0 kW(550.0HP) | | |
| | | | | 29 | 400.0 kW(650.0HP) | | |
| | | | | 30 | 500.0 kW(800.0HP) | | |
| 07 | 0h1E07 | Base frequency | M2-Base Freq | 30.00-400.00(Hz) | 60.00 | Δ | |
| 08 | 0h1E08 | Control mode | M2-Ctrl Mode | 0 | V/F | 0:V/F | Δ |
| | | | | 2 | Slip Compen | | |
| 10 | 0h1E0A | Number of motor poles | M2-Pole Num | 2-48 | Varies according to the motor type | Δ | |
| 11 | 0h1E0B | Rated slip speed | M2-Rated Slip | 0-3000(Rpm) | | | |
| 12 | 0h1E0C | Motor: rated current | M2-Rated Curr | 1.0-1000.0(A) | | | |
| 13 | 0h1E0D | Motor: no load current | M2-Noload Curr | 0.0-1000.0(A) | | | |
| 14 | 0h1E0E | Motor: rated voltage | M2-Rated Volt | 0 ² , 170-480(V) | | | |
| 15 | 0h1E0F | Motor efficiency | M2-Efficiency | 70-100(%) | | | |
| 17 | - | Stator resistance | M2-Rs | 0.000-9.999(Ω) | | | |
| 18 | 0h1E12 | Leakage inductance | M2-Lsigma | 0.00-99.99(mH) | | | |
| 25 | 0h1E19 | V/F pattern | M2-V/F Patt | 0 | Linear | 0: Linear | Δ |
| | | | | 1 | Square | | |
| | | | | 2 | User V/F | | |
| 26 | 0h1E1A | Forward torque boost | M2-Fwd Boost | 0.0-15.0(%) | 2.0 | 0.75-90kW | Δ |
| | | | | 0.0-15.0(%) | 1.0 | 110-500kW | |
| 27 | 0h1E1B | Reverse torque boost | M2-Rev Boost | 0.0-15.0(%) | 2.0 | 0.75-90kW | Δ |
| | | | | 0.0-15.0(%) | 1.0 | 110-500kW | |
| 28 | 0h1E1C | Stall prevention level | M2-Stall Lev | 30-150(%) | 130 | Δ | |
| 29 | 0h1E1D | Overheat prevention: 1 min rating | M2-ETH 1min | 100-150(%) | 120 | Δ | |
| 30 | 0h1C1E | Overheat prevention: continuous rating | M2-ETH Cont | 50-120(%) | 100 | Δ | |

¹ Motor 2 Function Group appears when one of N-65~71 codes is set as 26(2nd MOTOR). ² Refer to the 4.15-motor output voltage adjustment

TripMode(TRPLast-x)

| Code | Name | LCD Display | Set Range | | Default | Reference |
|------|--|----------------|-----------|-----|----------------|-----------|
| 00 | Fault (Failure) type display | Trip Name(x) | - | | - | - |
| 01 | Operation frequency under failure | Output Freq | - | | - | - |
| 02 | Output current under failure | Output Current | - | | - | - |
| 03 | Acceleration/Deceleration status under failure | Inverter State | - | | - | - |
| 04 | DC part voltage | DCLink Voltage | - | | - | - |
| 05 | NTC temperature | Temperature | - | | - | - |
| 06 | Input terminal block status | DI State | - | | 0000 0000 | - |
| 07 | Output terminal block status | DO State | - | | 000 | - |
| 08 | Failure time after power input | Trip On Time | - | | 00/00/00 00:00 | - |
| 09 | Failure time after operation start | Trip Run Time | - | | 00/00/00 00:00 | - |
| 10 | Deletion of failure history | Trip Delete? | 0 | No | - | |
| | | | 1 | Yes | | |

Configuration (Config.) Mode (CNF)

| Code | Name | LCD Display | Set Range | | Default | Reference |
|-----------------|-----------------------------|----------------|-------------|----------------|-------------------|-----------|
| 00 | Jump code | Jump Code | 1-99 | | 42 | |
| 01 | Keypad language selection | Language Sel | 0 : English | | 0 : English | |
| 02 | LCD contrast adjustment | LCD Contrast | - | | - | |
| 10 | Drive S/W version | Inv S/W Ver | - | | - | |
| 11 | LCD loader S/W version | KeypadS/W Ver | - | | - | |
| 12 | LCD loader title version | KPD Title Ver | - | | - | |
| 20 | Status window display items | Anytime Para | 0 | Frequency | 0: Frequency | |
| 21 | Monitor mode display | Monitor Line-1 | 1 | Speed | 0: Frequency | |
| 22 | Monitor mode display item 2 | Monitor Line-2 | 2 | Output Current | 2: Output Current | |
| 23 | Monitor mode display item 3 | Monitor Line-3 | 3 | Output Voltage | 3: Output Voltage | |
| | | | 4 | Output Power | | |
| | | | 5 | WHour Counter | | |
| | | | 6 | DCLink Voltage | | |
| | | | 7 | DI State | | |
| | | | 8 | DO State | | |
| | | | 9 | V1 Monitor(V) | | |
| | | | 10 | V1 Monitor(%) | | |
| | | | 13 | V2 Monitor(V) | | |
| | | | 14 | V2 Monitor(%) | | |
| | | | 15 | I2 Monitor(mA) | | |
| | | | 16 | I2 Monitor(%) | | |
| | | | 17 | PID Output | | |
| | | | 18 | PID Ref Value | | |
| 19 | PID Fdb Value | | | | | |
| 20 | EPID1 Out | | | | | |
| 21 | EPID1 Ref Val | | | | | |
| 22 | EPID1 Fdb Val | | | | | |
| 23 | EPID2 Out | | | | | |
| 24 | EPID2 Ref Val | | | | | |
| 25 | EPID2 Fdb Val | | | | | |
| 24 | Monitor mode initialization | Mon Mode Init | 0 | No | 0: No | |
| | | | 1 | Yes | | |
| 30 ¹ | Option slot 1 type | Option-1 Type | - | - | - | |
| 31 ¹ | Option slot 2 type | Option-2 Type | - | - | - | |
| 32 ¹ | Option slot 3 type | Option-3 Type | - | - | - | |
| 40 | Parameter initialization | Parameter Init | 0 | No | 0: No | |
| | | | 1 | All Grp | | |
| | | | 2 | DRV Grp | | |
| | | | 3 | BAS Grp | | |
| | | | 4 | ADV Grp | | |

¹ For details, refer to option manual.

| Code | Name | LCD Display | Set Range | | Default | Reference |
|-----------------|--|-----------------|----------------|----------------|-------------|-----------|
| 40 | Parameter initialization | Parameter Init | 5 | CON Grp | 0: No | |
| | | | 6 | IN Grp | | |
| | | | 7 | OUT Grp | | |
| | | | 8 | COM Grp | | |
| | | | 9 | PID Grp | | |
| | | | 10 | EPI Grp | | |
| | | | 11 | AP1 Grp | | |
| | | | 12 | AP2 Grp | | |
| | | | 13 | AP3 Grp | | |
| | | | 14 | PRT Grp | | |
| 41 | Changed parameter display | Changed Para | 0 | View All | 0: View All | |
| | | | 1 | View Changed | | |
| 42 | Multifunction key items | Multi Key Set | 0 | None | 0: None | |
| | | | 1 | UserGrp Selkey | | |
| 43 | Macro function items | Macro Select | 0 | Basic | 0: Basic | |
| | | | 1 | Compressor | | |
| | | | 2 | Supply Fan | | |
| | | | 3 | Exhaust Fan | | |
| | | | 4 | Cooling Tower | | |
| | | | 5 | Circul. Pump | | |
| | | | 6 | Vacuum Pump | | |
| 44 | Deletion of trip history | Erase All Trip | 0 | 0-9999 | 0: No | |
| | | | 1 | 0-9999 | | |
| 45 | Deletion of user registration code | UserGrp AllDel | 0 | 0-9999 | 0: No | |
| | | | 1 | 0-9999 | | |
| 46 | Read parameter | Parameter Read | 0 | Date Format | 0: No | |
| | | | 1 | Date Format | | |
| 47 | Write parameter | Parameter Write | 0 | Date Format | 0: No | |
| | | | 1 | Date Format | | |
| 48 | Save parameter | Parameter Save | 0 | No | 0: No | |
| | | | 1 | Yes | | |
| 50 | Hide parameter mode | View Lock Set | 0-9999 | | Un-locked | |
| 51 | Parameter mode hide password | View Lock Pw | 0-9999 | | Password | |
| 52 | Lock parameter change | Key Lock Set | 0-9999 | | Un-locked | |
| 53 | Parameter change lock password | Key Lock Pw | 0-9999 | | Password | |
| 60 | Additional title update | Add Title Up | 0 | No | 0: No | |
| | | | 1 | Yes | | |
| 61 | Easy parameter setting | EasyStart On | 0 | No | 1: Yes | |
| | | | 1 | Yes | | |
| 62 | Reset of power consumption | WHCount Reset | 0 | No | 0: No | |
| | | | 1 | Yes | | |
| 70 ¹ | Accumulated inverter motion time | On-time | 00000DAY 00:00 | | - | |
| 71 ² | Accumulated inverter operation time | Run-time | 00000DAY 00:00 | | - | |
| 72 | Reset of accumulated drive run time | Time Reset | 0 | No | 0: No | |
| | | | 1 | Yes | | |
| 73 ³ | Real Time | Real Time | Date Format | | - | |
| 74 ⁴ | Accumulated cooling fan operation time | Fan Time | 00000DAY 00:00 | | - | |
| 75 | Reset of cooling fan run time | Fan Time Rst | 0 | No | 0: No | |
| | | | 1 | Yes | | |

¹ Date format is changed depending on the setting of 46: P3-06 (CNF-70 Default Date Format)

² Date format is changed depending on the setting of 46: P3-06 (CNF-71 Default Date Format)

³ Date format is changed depending on the setting of 46: P3-06 (CNF-73 Default Date Format)

⁴ Date format is changed depending on the setting of 46: P3-06 (CNF-74 Default Date Format)

Compressor(MC1) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75-90kW | 10.0 |
| | | | 110-250kW | 30.0 |
| | | | 315-500kW | 50.0 |
| 2 | DRV 4 | Dec Time | 0.75-90kW | 20.0 |
| | | | 110-250kW | 60.0 |
| | | | 315-500kW | 100.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 9 | Control Mode | 1: Slip Compen | |
| 5 | DRV 11 | JOG Frequency | 20.00 | |
| 6 | DRV 12 | JOG Acc Time | 20.00 | |
| 7 | DRV 13 | JOG Dec Time | 13.0 | |
| 8 | DRV 15 | Torque Boost | 20.0 | |
| 9 | BAS 70 | Acc Time-1 | 1: Auto1 10.0 | |
| 10 | BAS 71 | Dec Time-1 | 20.0 | |
| 11 | ADV 10 | Power-on Run | 1: Yes | |
| 12 | ADV 65 | U/D Save Mode | 1: Yes | |
| 13 | CON 4 | Carrier Freq | 3.0 | |
| 14 | CON 70 | SS Mode | 0: Flying Start-1 | |
| 15 | CON 77 | KEB Select | 1: Yes | |
| 16 | OUT 32 | Relay 2 | 14: Run | |
| 17 | PID 1 | PID Sel | 1: Yes | |
| 18 | PID 3 | PID Output | 0.00 | |
| 19 | PID 4 | PID Ref Value | - | |
| 20 | PID 5 | PID Fdb Value | - | |
| 21 | PID 10 | PID Ref 1 Src | 4: I2 | |
| 22 | PID 11 | PID Ref 1 Set | 0.5000 | |

• The table shows parameters shown in a macro group for each macro type.

Supply Fan(MC2) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75-90kW | 20.0 |
| | | | 110-250kW | 60.0 |
| | | | 315-500kW | 100.0 |
| 2 | DRV 4 | Dec Time | 0.75-90kW | 30.0 |
| | | | 110-250kW | 90.0 |
| | | | 315-500kW | 150.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 11 | JOG Frequency | 15.00 | |
| 5 | BAS 7 | V/F Pattern | 0: Linear | |
| 6 | BAS 70 | Acc Time-1 | 20.0 | |
| 7 | BAS 71 | Dec Time-1 | 30.0 | |
| 8 | ADV 10 | Power-on Run | 1: Yes | |
| 9 | ADV 50 | E-Save Mode | 2: Auto | |
| 10 | ADV 64 | FAN Control | 2: Temp Control | |
| 11 | ADV 65 | U/D Save Mode | 1: Yes | |
| 12 | CON 4 | Carrier Freq | 3.0 | |
| 13 | CON 70 | SS Mode | 1: Flying Start-2 | |
| 14 | CON 77 | KEB Select | 1: Yes | |
| 15 | OUT 32 | Relay 2 | 10: Over Voltage | |
| 16 | PID 1 | PID Sel | 1: Yes | |
| 17 | PID 3 | PID Output | - | |
| 18 | PID 4 | PID Ref Value | - | |
| 19 | PID 5 | PID Fdb Value | - | |
| 20 | PID 10 | PID Ref 1 Src | 4: I2 | |

| Macro Code | Code | LCD Display | Default |
|------------|--------|-----------------|---------------------------------|
| 23 | PID 25 | PID P-Gain 1 | 70.00 |
| 24 | PID 26 | PID I-Time 1 | 5.0 |
| 25 | PID 50 | PID Unit Sel | 5: inWC |
| 26 | PID 51 | PID Unit Scale | 4: x 0.01 |
| 27 | AP1 8 | PID Sleep1 Freq | 5.00 |
| 28 | AP1 21 | Pre-PID Freq | 30.00 |
| 29 | AP1 22 | Pre-PID Delay | 120.0 |
| 30 | PRT 8 | RST Restart | 11 |
| 31 | PRT 9 | Retry Number | 3 |
| 32 | PRT 10 | Retry Delay | 4.0 |
| 33 | PRT 11 | Lost KPD Mode | 3: Dec |
| 34 | PRT 12 | Lost Cmd Mode | 2: Dec |
| 35 | PRT 13 | Lost Cmd Time | 4.0 |
| 36 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 37 | PRT 42 | ETH 1min | 120 |
| 38 | PRT 52 | Stall Level 1 | 130 |
| 39 | PRT 66 | DB Warn %ED | 10 |
| 40 | PRT 70 | LDT Sel | 1: Warning |
| 41 | PRT 72 | LDT Source | 0: Output Current |
| 42 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 43 | PRT 76 | LDT Freq | 20.00 |
| 44 | M2 4 | M2-Acc Time | 10.0 |
| 45 | M2 5 | M2-Dec Time | 20.0 |
| 46 | M2 8 | M2-Ctrl Mode | 1: Slip Compen |
| 47 | M2 28 | M2-Stall Lev | 125 |
| 48 | M2 29 | M2-ETH 1min | 120 |

| Macro Code | Code | LCD Display | Default |
|------------|--------|----------------|---------------------------------|
| 21 | PID 11 | PID Ref 1 Set | 0.5000 |
| 22 | PID 25 | PID P-Gain 1 | 40.00 |
| 23 | PID 26 | PID I-Time 1 | 20.0 |
| 24 | PID 36 | PID Out Inv | 1: Yes |
| 25 | PID 50 | PID Unit Sel | 5: inWC |
| 26 | PID 51 | PID Unit Scale | 4: x 0.01 |
| 27 | AP1 21 | Pre-PID Freq | 30.00 |
| 28 | AP1 22 | Pre-PID Delay | 120.0 |
| 29 | PRT 8 | RST Restart | 11 |
| 30 | PRT 9 | Retry Number | 0 |
| 31 | PRT 10 | Retry Delay | 20.0 |
| 32 | PRT 11 | Lost KPD Mode | 3: Dec |
| 33 | PRT 12 | Lost Cmd Mode | 3: Hold Input |
| 34 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 35 | PRT 42 | ETH 1min | 120 |
| 36 | PRT 52 | Stall Level 1 | 130 |
| 37 | PRT 70 | LDT Sel | 1: Warning |
| 38 | PRT 72 | LDT Source | 0: Output Current |
| 39 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 40 | PRT 76 | LDT Freq | 10.00 |
| 41 | PRT 77 | LDT Restart DT | 500.0 |
| 42 | M2 25 | M2-V/F Patt | 1: Square |
| 43 | M2 28 | M2-Stall Lev | 110 |
| 44 | M2 29 | M2-ETH 1min | 110 |

Exhaust Fan(MC3) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75~90kW | 20.0 |
| | | | 110~250kW | 60.0 |
| | | | 315~500kW | 100.0 |
| 2 | DRV 4 | Dec Time | 0.75~90kW | 30.0 |
| | | | 110~250kW | 90.0 |
| | | | 315~500kW | 150.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 11 | JOG Frequency | 15.00 | |
| 5 | BAS 7 | V/F Pattern | 1: Square | |
| 6 | BAS 70 | Acc Time-1 | 20.0 | |
| 7 | BAS 71 | Dec Time-1 | 30.0 | |
| 8 | BAS 72 | Acc Time-2 | 22.5 | |
| 9 | BAS 73 | Dec Time-2 | 32.5 | |
| 10 | BAS 74 | Acc Time-3 | 25.0 | |
| 11 | BAS 75 | Dec Time-3 | 35.0 | |
| 12 | BAS 76 | Acc Time-4 | 27.5 | |
| 13 | BAS 77 | Dec Time-4 | 37.5 | |
| 14 | BAS 78 | Acc Time-5 | 30.0 | |
| 15 | BAS 80 | Acc Time-6 | 32.5 | |
| 16 | BAS 81 | Dec Time-6 | 42.5 | |
| 17 | BAS 82 | Acc Time-7 | 35.0 | |
| 18 | BAS 83 | Dec Time-7 | 45.0 | |
| 19 | ADV 10 | Power-on Run | 1: Yes | |
| 20 | ADV 50 | E-Save Mode | 2: Auto | |
| 21 | ADV 64 | FAN Control | 2: Temp Control | |
| 22 | ADV 65 | U/D Save Mode | 1: Yes | |
| 23 | CON 4 | Carrier Freq | 3.0 | |
| 24 | CON 70 | SS Mode | 1: Flying Start-2 | |
| 25 | CON 77 | KEB Select | 1: Yes | |
| 26 | OUT 32 | Relay 2 | 10: Over Voltage | |

Cooling Tower(MC4) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75~90kW | 20.0 |
| | | | 110~250kW | 60.0 |
| | | | 315~500kW | 100.0 |
| 2 | DRV 4 | Dec Time | 0.75~90kW | 30.0 |
| | | | 110~250kW | 90.0 |
| | | | 315~500kW | 150.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 11 | JOG Frequency | 15.00 | |
| 5 | BAS 7 | V/F Pattern | 1: Square | |
| 6 | BAS 70 | Acc Time-1 | 20.0 | |
| 7 | BAS 71 | Dec Time-1 | 30.0 | |
| 8 | BAS 72 | Acc Time-2 | 22.5 | |
| 9 | BAS 73 | Dec Time-2 | 32.5 | |
| 10 | BAS 74 | Acc Time-3 | 25.0 | |
| 11 | BAS 75 | Dec Time-3 | 35.0 | |
| 12 | BAS 76 | Acc Time-4 | 27.5 | |
| 13 | BAS 77 | Dec Time-4 | 37.5 | |
| 14 | BAS 78 | Acc Time-5 | 30.0 | |
| 15 | BAS 80 | Acc Time-6 | 32.5 | |
| 16 | BAS 81 | Dec Time-6 | 42.5 | |
| 17 | BAS 82 | Acc Time-7 | 42.5 | |
| 18 | BAS 83 | Dec Time-7 | 45.0 | |
| 19 | ADV 10 | Power-on Run | 1: Yes | |
| 20 | ADV 50 | E-Save Mode | 2: Auto | |
| 21 | ADV 64 | FAN Control | 2: Temp Control | |
| 22 | ADV 65 | U/D Save Mode | 1: Yes | |
| 23 | CON 4 | Carrier Freq | 3.0 | |
| 24 | CON 70 | SS Mode | 1: Flying Start-2 | |
| 25 | CON 77 | KEB Select | 1: Yes | |

| Macro Code | Code | LCD Display | Default |
|------------|--------|----------------|---------------------------------|
| 27 | PID 1 | PID Sel | 1: Yes |
| 28 | PID 3 | PID Output | - |
| 29 | PID 4 | PID Ref Value | - |
| 30 | PID 5 | PID Fdb Value | - |
| 31 | PID 10 | PID Ref 1 Src | 4: I2 |
| 32 | PID 11 | PID Ref 1 Set | 0.5000 |
| 33 | PID 25 | PID P-Gain 1 | 35.00 |
| 34 | PID 26 | PID I-Time 1 | 15.0 |
| 35 | PID 36 | PID Out Inv | 1: Yes |
| 36 | PID 50 | PID Unit Sel | 5: inWC |
| 37 | PID 51 | PID Unit Scale | 4: x0.01 |
| 38 | AP1 21 | Pre-PID Freq | 30.00 |
| 39 | PRT 8 | RST Restart | 11 |
| 40 | PRT 9 | Retry Number | 0 |
| 41 | PRT 10 | Retry Delay | 10.0 |
| 42 | PRT 11 | Lost KPD Mode | 3: Dec |
| 43 | PRT 12 | Lost Cmd Mode | 3: Hold Input |
| 44 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 45 | PRT 42 | ETH 1min | 120 |
| 46 | PRT 52 | Stall Level 1 | 130 |
| 47 | PRT 70 | LDT Sel | 1: Warning |
| 48 | PRT 72 | LDT Area Sel | 0: Output Current |
| 49 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 50 | PRT 76 | LDT Freq | 10.00 |
| 51 | PRT 77 | LDT Restart DT | 300.0 |
| 52 | M2 4 | M2-Acc Time | 10.0 |
| 53 | M2 5 | M2-Dec Time | 20.0 |
| 54 | M2 25 | M2-V/F Patt | 1: Square |
| 55 | M2 28 | M2-Stall Lev | 110 |
| 56 | M2 29 | M2-ETH 1min | 110 |

| Macro Code | Code | LCD Display | Default |
|------------|--------|----------------|---------------------------------|
| 26 | OUT 32 | Relay 2 | 10: Over Voltage |
| 27 | PID 1 | PID Sel | 1: Yes |
| 28 | PID 3 | PID Output | - |
| 29 | PID 4 | PID Ref Value | - |
| 30 | PID 5 | PID Fdb Value | - |
| 31 | PID 10 | PID Ref 1 Src | 4: I2 |
| 32 | PID 11 | PID Ref 1 Set | 50.00 |
| 33 | PID 25 | PID P-Gain 1 | 40.00 |
| 34 | PID 26 | PID I-Time 1 | 15.0 |
| 35 | PID 36 | PID Out Inv | 1: Yes |
| 36 | PID 50 | PID Unit Sel | 3: °F |
| 37 | PID 51 | PID Unit Scale | 2: x1 |
| 38 | AP1 21 | Pre-PID Freq | 30.00 |
| 39 | AP1 22 | Pre-PID Delay | 120.0 |
| 40 | PRT 8 | RST Restart | 11 |
| 41 | PRT 9 | Retry Number | 0 |
| 42 | PRT 10 | Retry Delay | 10.0 |
| 43 | PRT 11 | Lost KPD Mode | 3: Dec |
| 44 | PRT 12 | Lost Cmd Mode | 3: Hold Input |
| 45 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 46 | PRT 42 | ETH 1min | 120 |
| 47 | PRT 52 | Stall Level 1 | 130 |
| 48 | PRT 70 | LDT Sel | 1: Warning |
| 49 | PRT 72 | LDT Source | 0: Output Current |
| 50 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 51 | PRT 76 | LDT Freq | 10.00 |
| 52 | PRT 77 | LDT Restart DT | 300.0 |
| 53 | M2 25 | M2-V/F Patt | 1: Square |
| 54 | M2 28 | M2-Stall Lev | 110 |
| 55 | M2 29 | M2-ETH 1min | 110 |

Circular Pump (MC5) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75-90kW | 30.0 |
| | | | 110-250kW | 90.0 |
| | | | 315-500kW | 150.0 |
| 2 | DRV 4 | Dec Time | 0.75-90kW | 50.0 |
| | | | 110-250kW | 150.0 |
| | | | 315-500kW | 250.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 9 | Control Mode | 1: Slip Compen | |
| 5 | DRV 11 | JOG Frequency | 15.00 | |
| 6 | DRV 12 | JOG Acc Time | 30.0 | |
| 7 | DRV 13 | JOG Dec Time | 50.0 | |
| 8 | DRV 15 | Torque Boost | 1: Auto1 | |
| 9 | BAS 7 | V/F Pattern | 1: Square | |
| 10 | BAS 70 | Acc Time-1 | 30.0 | |
| 11 | BAS 71 | Dec Time-1 | 50.0 | |
| 12 | BAS 72 | Acc Time-2 | 32.0 | |
| 13 | BAS 73 | Dec Time-2 | 52.0 | |
| 14 | BAS 74 | Acc Time-3 | 34.0 | |
| 15 | BAS 75 | Dec Time-3 | 54.0 | |
| 16 | BAS 76 | Acc Time-4 | 36.0 | |
| 17 | BAS 77 | Dec Time-4 | 56.0 | |
| 18 | BAS 78 | Acc Time-5 | 38.0 | |
| 19 | BAS 79 | Dec Time-5 | 58.0 | |
| 20 | BAS 80 | Acc Time-6 | 40.0 | |
| 21 | BAS 81 | Dec Time-6 | 59.0 | |
| 22 | BAS 82 | Acc Time-7 | 42.0 | |
| 23 | BAS 83 | Dec Time-7 | 60.0 | |
| 24 | ADV 10 | Power-on Run | 1: Yes | |
| 25 | ADV 25 | Freq Limit Lo | 20.00 | |
| 26 | ADV 50 | E-Save Mode | 2: Auto | |
| 27 | ADV 64 | FAN Control | 2: Temp Control | |
| 28 | ADV 65 | U/D Save Mode | 1: Yes | |
| 29 | CON 4 | Carrier Freq | 3.0 | |
| 30 | CON 70 | SS Mode | 0: Flying Start-1 | |
| 31 | CON 77 | KEB Select | 1: Yes | |

| Macro Code | Code | LCD Display | Default |
|------------|--------|-----------------|---------------------------------|
| 32 | OUT 32 | Relay 2 | 14: Run |
| 33 | PID 1 | PID Sel | 1: Yes |
| 34 | PID 3 | PID Output | - |
| 35 | PID 4 | PID Ref Value | - |
| 36 | PID 5 | PID Fdb Value | - |
| 37 | PID 10 | PID Ref 1 Src | 4: 12 |
| 38 | PID 11 | PID Ref 1 Set | 50.00 |
| 39 | PID 25 | PID P-Gain 1 | 50.00 |
| 40 | PID 26 | PID I-Time 1 | 5.0 |
| 41 | PID 50 | PID Unit Sel | 2: PSI |
| 42 | PID 51 | PID Unit Scale | 3: x0.1 |
| 43 | AP1 8 | PID Sleep1 Freq | 10.00 |
| 44 | AP1 21 | Pre-PID Freq | 30.00 |
| 45 | AP1 22 | Pre-PID Delay | 120.0 |
| 46 | PRT 8 | RST Restart | 11 |
| 47 | PRT 9 | Retry Number | 3 |
| 48 | PRT 10 | Retry Delay | 5.0 |
| 49 | PRT 11 | Lost KPD Mode | 3: Dec |
| 50 | PRT 12 | Lost Crnd Mode | 2: Dec |
| 51 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 52 | PRT 42 | ETH 1min | 120 |
| 53 | PRT 52 | Stall Level 1 | 130 |
| 54 | PRT 60 | PipeBroken Sel | 1: Warning |
| 55 | PRT 61 | PipeBroken Lev | 90.0 |
| 56 | PRT 62 | Pipe Broken DT | 22.0 |
| 57 | PRT 70 | LDT Sel | 1: Warning |
| 58 | PRT 72 | LDT Source | 0: Output Current |
| 59 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 60 | PRT 76 | LDT Freq | 10.00 |
| 61 | PRT 77 | LDT Restart DT | 100.0 |
| 62 | M2 4 | M2-Acc Time | 10.0 |
| 63 | M2 5 | M2-Dec Time | 20.0 |
| 64 | M2 25 | M2-V/F Patt | 1: Square |
| 65 | M2 28 | M2-Stall Lev | 125 |
| 66 | M2 29 | M2-ETH 1min | 120 |

Vacuum Pump (MC6) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|---------------|-------------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75~90kW | 30.0 |
| | | | 110~250kW | 90.0 |
| | | | 315~500kW | 150.0 |
| 2 | DRV 4 | Dec Time | 0.75~90kW | 60.0 |
| | | | 110~250kW | 180.0 |
| | | | 315~500kW | 300.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 9 | Control Mode | 1: Slip Compen | |
| 5 | DRV 11 | JOG Frequency | 20.00 | |
| 6 | DRV 12 | JOG Acc Time | 30.0 | |
| 7 | DRV 13 | JOG Dec Time | 60.0 | |
| 8 | DRV 15 | Torque Boost | 1: Auto1 | |
| 9 | BAS 7 | V/F Pattern | 1: Square | |
| 10 | BAS 70 | Acc Time-1 | 30.0 | |
| 11 | BAS 71 | Dec Time-1 | 50.0 | |
| 12 | BAS 72 | Acc Time-2 | 32.0 | |
| 13 | BAS 73 | Dec Time-2 | 52.0 | |
| 14 | BAS 74 | Acc Time-3 | 34.0 | |
| 15 | BAS 75 | Dec Time-3 | 54.0 | |
| 16 | BAS 76 | Acc Time-4 | 36.0 | |
| 17 | BAS 77 | Dec Time-4 | 56.0 | |
| 18 | BAS 78 | Acc Time-5 | 38.0 | |
| 19 | BAS 79 | Dec Time-5 | 58.0 | |
| 20 | BAS 80 | Acc Time-6 | 40.0 | |
| 21 | BAS 81 | Dec Time-6 | 59.0 | |
| 22 | BAS 82 | Acc Time-7 | 42.0 | |
| 23 | BAS 83 | Dec Time-7 | 60.0 | |
| 24 | ADV 10 | Power-on Run | 1: Yes | |
| 25 | ADV 25 | Freq Limit Lo | 40.00 | |
| 26 | ADV 64 | FAN Control | 2: Temp Control | |
| 27 | ADV 65 | U/D Save Mode | 1: Yes | |
| 28 | CON 4 | Carrier Freq | 3.0 | |
| 29 | CON 70 | SS Mode | 0: Flying Start-1 | |
| 30 | CON 77 | KEB Select | 1: Yes | |

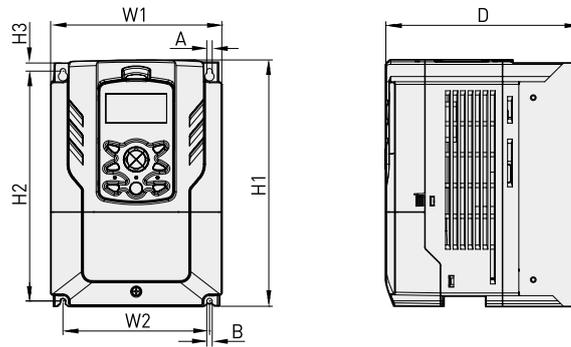
Constant Torque(MC7) Group

| Macro Code | Code | LCD Display | Default | |
|------------|--------|--------------|----------------|-------|
| 0 | - | Jump Code | 1: CODE | |
| 1 | DRV 3 | Acc Time | 0.75~90kW | 30.0 |
| | | | 110~250kW | 90.0 |
| | | | 315~500kW | 150.0 |
| 2 | DRV 4 | Dec Time | 0.75~90kW | 20.0 |
| | | | 110~250kW | 60.0 |
| | | | 315~500kW | 100.0 |
| 3 | DRV 7 | Freq Ref Src | 1: Keypad-2 | |
| 4 | DRV 9 | Control Mode | 1: Slip Compen | |
| 5 | DRV 12 | JOG Acc Time | 10.0 | |
| 6 | DRV 13 | JOG Dec Time | 20.0 | |
| 7 | DRV 15 | Torque Boost | 1: Auto1 | |
| 8 | BAS 70 | Acc Time-1 | 10.0 | |
| 9 | BAS 71 | Dec Time-1 | 20.0 | |
| 10 | BAS 72 | Acc Time-2 | 12.5 | |
| 11 | BAS 73 | Dec Time-2 | 22.5 | |
| 12 | BAS 74 | Acc Time-3 | 15.0 | |
| 13 | BAS 75 | Dec Time-3 | 25.0 | |
| 14 | BAS 76 | Acc Time-4 | 17.5 | |
| 15 | BAS 77 | Dec Time-4 | 27.5 | |
| 16 | BAS 78 | Acc Time-5 | 20.0 | |
| 17 | BAS 79 | Dec Time-5 | 30.0 | |
| 18 | BAS 80 | Acc Time-6 | 22.5 | |
| 19 | BAS 81 | Dec Time-6 | 32.5 | |

| Macro Code | Code | LCD Display | Default |
|------------|--------|----------------|---------------------------------|
| 31 | OUT 32 | Relay 2 | 14: Run |
| 32 | PID 1 | PID Sel | 1: Yes |
| 33 | PID 3 | PID Output | - |
| 34 | PID 4 | PID Ref Value | - |
| 35 | PID 5 | PID Fdb Value | - |
| 36 | PID 10 | PID Ref 1 Src | 4: I2 |
| 37 | PID 11 | PID Ref 1 Set | 5.000 |
| 38 | PID 25 | PID P-Gain 1 | 50.00 |
| 39 | PID 26 | PID I-Time 1 | 2.5 |
| 40 | PID 50 | PID Unit Sel | 5: inWC |
| 41 | PID 51 | PID Unit Scale | 3: x0.1 |
| 42 | AP1 21 | Pre-PID Freq | 30.00 |
| 43 | PRT 8 | RST Restart | 11 |
| 44 | PRT 9 | Retry Number | 3 |
| 45 | PRT 10 | Retry Delay | 4.0 |
| 46 | PRT 11 | Lost KPD Mode | 3: Dec |
| 47 | PRT 12 | Lost Cmd Mode | 3: Hold npvt |
| 48 | PRT 40 | ETH Trip Sel | 1: Free Run |
| 49 | PRT 42 | ETH 1min | 120 |
| 50 | PRT 52 | Stall Level 1 | 130 |
| 51 | PRT 60 | PipeBroken Sel | 1: Warning |
| 52 | PRT 61 | PipeBroken Lev | 90.0 |
| 53 | PRT 62 | Pipe Broken DT | 22.0 |
| 54 | PRT 66 | DB Warn %ED | 10 |
| 55 | PRT 70 | LDT Sel | 1: Warning |
| 56 | PRT 72 | LDT Source | 0: Output Input |
| 57 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 58 | PRT 76 | LDT Freq | 15.00 |
| 59 | PRT 77 | LDT Restart DT | 100.0 |
| 60 | M2 4 | M2-Acc Time | 10.0 |
| 61 | M2 5 | M2-Dec Time | 20.0 |
| 62 | M2 8 | M2-Ctrl Mode | 1: Slip Compen |
| 63 | M2 25 | M2-V/F Patt | 1: Square |
| 64 | M2 28 | M2-Stall Lev | 125 |
| 65 | M2 29 | M2-ETH 1min | 120 |

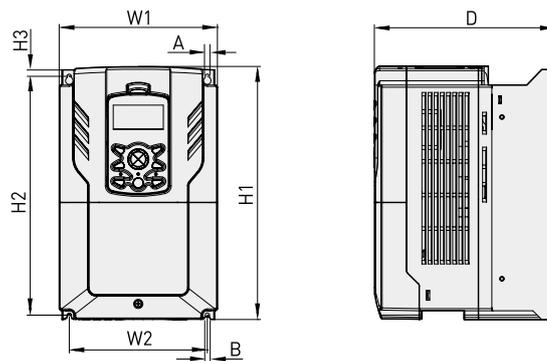
| Macro Code | Code | LCD Display | Default |
|------------|--------|----------------|---------------------------------|
| 20 | BAS 82 | Acc Time-7 | 25.0 |
| 21 | BAS 83 | Dec Time-7 | 35.0 |
| 22 | ADV 1 | Acc Pattern | 1: S-curve |
| 23 | ADV 2 | Dec Pattern | 1: S-curve |
| 24 | ADV 25 | Freq Limit Lo | 20.00 |
| 25 | ADV 74 | RegenAvd Sel | 1: Yes |
| 26 | CON 4 | Carrier Freq | 3.0 |
| 27 | CON 70 | SS Mode | 0: Flying Start-1 |
| 28 | CON 77 | KEB Select | 1: Yes |
| 29 | OUT 32 | Relay 2 | 14: Run |
| 30 | API 21 | Pre-PID Freq | 30.00 |
| 31 | API 22 | Pre-PID Delay | 120.0 |
| 32 | PRT 12 | Lost Cmd Mode | 2: Dec |
| 33 | PRT 40 | ETH Trip Sel | 2: Dec |
| 34 | PRT 66 | DB Warn %ED | 10 |
| 35 | PRT 70 | LDT Sel | 1: Warning |
| 36 | PRT 72 | LDT Source | 0: Output Current |
| 37 | PRT 75 | LDT Band Width | 10% of max. value of LDT source |
| 38 | PRT 76 | LDT Freq | 5.00 |
| 39 | PRT 77 | LDT Restart DT | 250.0 |
| 40 | M2 4 | M2-Acc Time | 10.0 |
| 41 | M2 5 | M2-Dec Time | 20.0 |
| 42 | M2 8 | M2-Ctrl Mode | 1: Slip Compen |

IP 20 Type



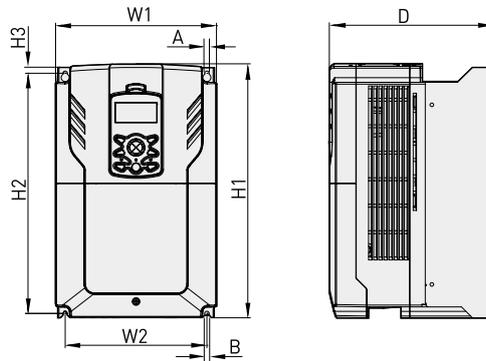
Unit: mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|-----------|-----------|-----------|-------------|------------|-----------|---------|---------|-----|
| 3-Phase 200V | LSLV0008H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0015H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0022H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0037H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0055H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0075H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0110H100-2 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| 3-Phase 400V | LSLV0008H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0015H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0022H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0037H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0055H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0075H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |
| | LSLV0110H100-4 | 160(6.30) | 137(5.39) | 232(9.13) | 216.5(8.52) | 10.5(0.41) | 181(7.13) | 5(0.20) | 5(0.20) | 3.3 |



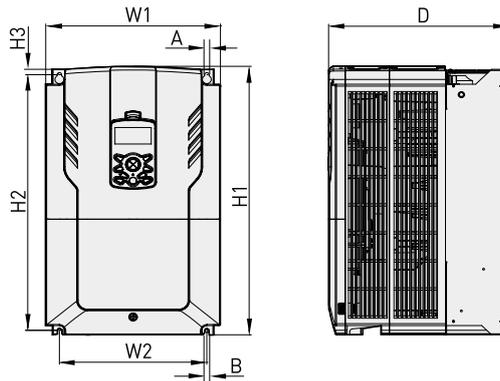
Unit: mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|-----------|-----------|------------|--------------|------------|-------------|---------|---------|-----|
| 3-Phase 200V | LSLV0150H100-2 | 180(7.09) | 157(6.18) | 290(44.42) | 273.7(10.78) | 11.3(0.45) | 205.3(8.08) | 5(0.20) | 5(0.20) | 4.6 |
| 3-Phase 400V | LSLV0150H100-4 | 180(7.09) | 157(6.18) | 290(44.42) | 273.7(10.78) | 11.3(0.45) | 205.3(8.08) | 5(0.20) | 5(0.20) | 4.6 |
| | LSLV0185H100-4 | 180(7.09) | 157(6.18) | 290(44.42) | 273.7(10.78) | 11.3(0.45) | 205.3(8.08) | 5(0.20) | 5(0.20) | 4.8 |



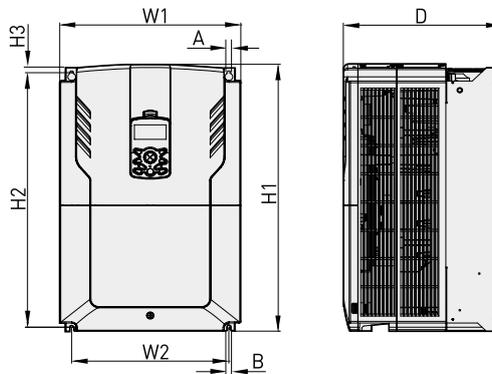
Unit:mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|-----------|-------------|------------|------------|----------|-------------|---------|---------|-----|
| 3-Phase 200V | LSLV0185H100-2 | 220(8.66) | 193.8(7.63) | 350(13.78) | 331(13.03) | 13(0.51) | 223.2(8.79) | 6(0.24) | 6(0.24) | 7.1 |
| | LSLV0220H100-4 | 220(8.66) | 193.8(7.63) | 350(13.78) | 331(13.03) | 13(0.51) | 223.2(8.79) | 6(0.24) | 6(0.24) | 7.5 |
| 3-Phase 400V | LSLV0300H100-4 | 220(8.66) | 193.8(7.63) | 350(13.78) | 331(13.03) | 13(0.51) | 223.2(8.79) | 6(0.24) | 6(0.24) | 7.5 |



Unit:mm(inches)

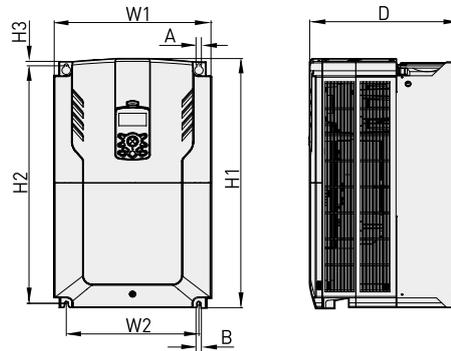
| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|------------|-----------|------------|--------------|----------|------------|---------|---------|----|
| 3-Phase 400V | LSLV0370H100-4 | 275(10.83) | 232(9.13) | 450(17.72) | 428.5(16.87) | 14(0.55) | 284(11.18) | 7(0.28) | 7(0.28) | 26 |



Unit:mm(inches)

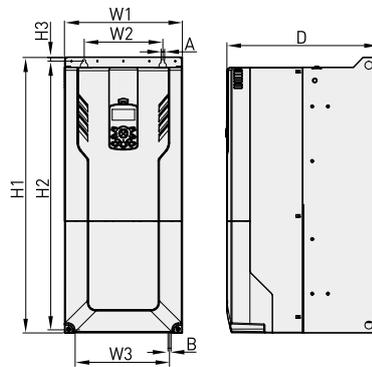
| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|------------|------------|------------|--------------|----------|------------|---------|---------|----|
| 3-Phase 400V | LSLV0450H100-4 | 325(12.08) | 282(11.10) | 510(20.08) | 486.5(19.15) | 16(0.63) | 284(11.18) | 7(0.28) | 7(0.28) | 35 |
| | LSLV0550H100-4 | 325(12.08) | 282(11.10) | 510(20.08) | 486.5(19.15) | 16(0.63) | 284(11.18) | 7(0.28) | 7(0.28) | 35 |

IP 20 Type



Unit:mm(inches)

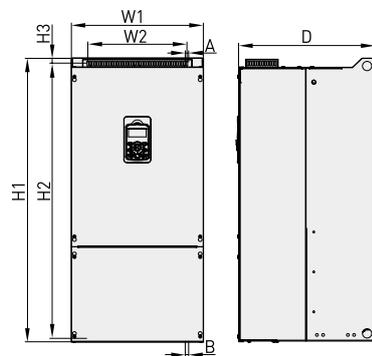
| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|------------|------------|------------|--------------|----------|------------|---------|---------|----|
| 3-Phase 400V | LSLV0750H100-4 | 325(12.08) | 275(10.83) | 550(21.65) | 524.5(20.65) | 16(0.63) | 309(12.80) | 9(0.35) | 9(0.35) | 43 |
| | LSLV0900H100-4 | 325(12.08) | 275(10.83) | 550(21.65) | 524.5(20.65) | 16(0.63) | 309(12.80) | 9(0.35) | 9(0.35) | 43 |



Unit:mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|------------|------------|------------|--------------|-----------|------------|---------|---------|------|
| 3-Phase 400V | LSLV1100H100-4 | 300(11.81) | 200(7.87) | 706(27.80) | 688.5(27.11) | 9.5(0.37) | 386(15.20) | 9(0.35) | 9(0.35) | 55.8 |
| | LSLV1320H100-4 | 300(11.81) | 200(7.87) | 706(27.80) | 688.5(27.11) | 9.5(0.37) | 386(15.20) | 9(0.35) | 9(0.35) | 55.8 |
| | LSLV1600H100-4 | 380(14.96) | 300(11.81) | 705(27.76) | 685.5(26.99) | 9.5(0.37) | 396(15.59) | 9(0.35) | 9(0.35) | 74.7 |
| | LSLV1850H100-4 | 380(14.96) | 300(11.81) | 705(27.76) | 685.5(26.99) | 9.5(0.37) | 396(15.59) | 9(0.35) | 9(0.35) | 74.7 |

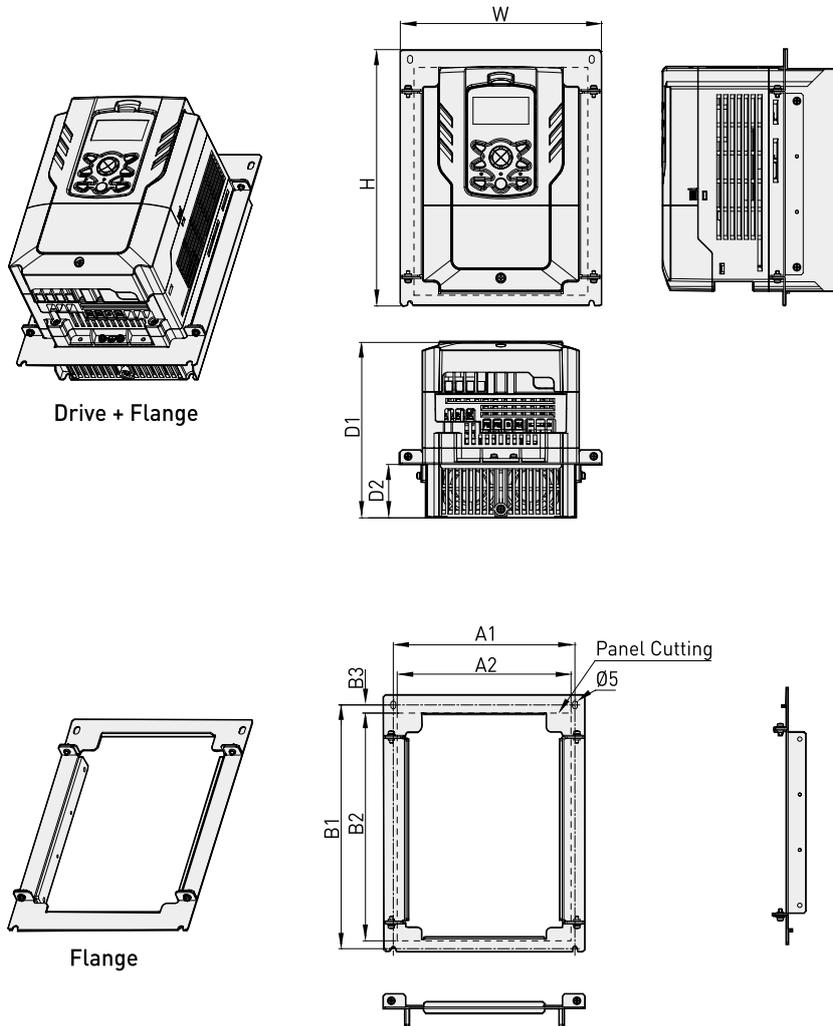
IP 00 Type



Unit:mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D | A | B | kg |
|-----------------|----------------|-------------|------------|--------------|--------------|------------|------------|----------|----------|-------|
| 3-Phase 400V | LSLV2200H100-4 | 426 (16.77) | 320(12.60) | 922.3(36.31) | 895.5(35.26) | 15.5(0.61) | 440(17.32) | 11(0.43) | 11(0.43) | 120 |
| | LSLV2500H100-4 | 426 (16.77) | 320(12.60) | 922.3(36.31) | 895.5(35.26) | 15.5(0.61) | 440(17.32) | 11(0.43) | 11(0.43) | 120 |
| | LSLV3150H100-4 | 600(23.62) | 420(16.54) | 1000(39.37) | 972(38.27) | 15(0.59) | 500(19.69) | 14(0.55) | 14(0.55) | 185.5 |
| | LSLV3550H100-4 | 600(23.62) | 420(16.54) | 1000(39.37) | 972(38.27) | 15(0.59) | 500(19.69) | 14(0.55) | 14(0.55) | 185.5 |
| | LSLV4000H100-4 | 600(23.62) | 420(16.54) | 1000(39.37) | 972(38.27) | 15(0.59) | 500(19.69) | 14(0.55) | 14(0.55) | 185.5 |
| | LSLV5000H100-4 | 776(30.55) | 500(19.69) | 1054(41.50) | 1021(40.20) | 20(0.79) | 500(19.69) | 14(0.55) | 14(0.55) | 265 |

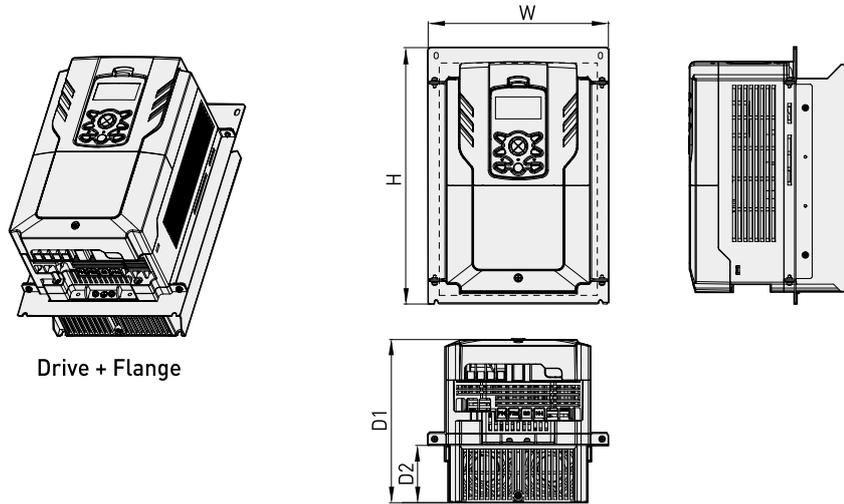
Flange



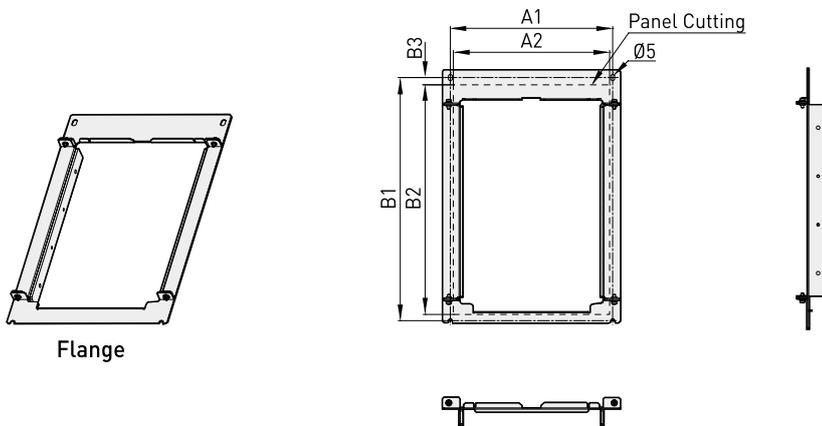
Unit:mm(inches)

| Product (Model) | | W | H | D1 | D2 | A1 | A2 | B1 | B2 | B3 | kg |
|-----------------|----------------|-----------|--------------|-----------|------------|-----------|-----------|-------------|-----------|-----------|-----|
| 3-Phase 200V | LSLV0008H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0015H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0022H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0037H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0055H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0075H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0110H100-2 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| 3-Phase 400V | LSLV0008H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0015H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0022H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0037H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0055H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0075H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |
| | LSLV0110H100-4 | 206(8.11) | 264.5(10.41) | 181(7.13) | 55.1(2.17) | 186(7.32) | 178(7.01) | 251.5(9.90) | 235(9.25) | 8.4(0.33) | 3.7 |

Flange



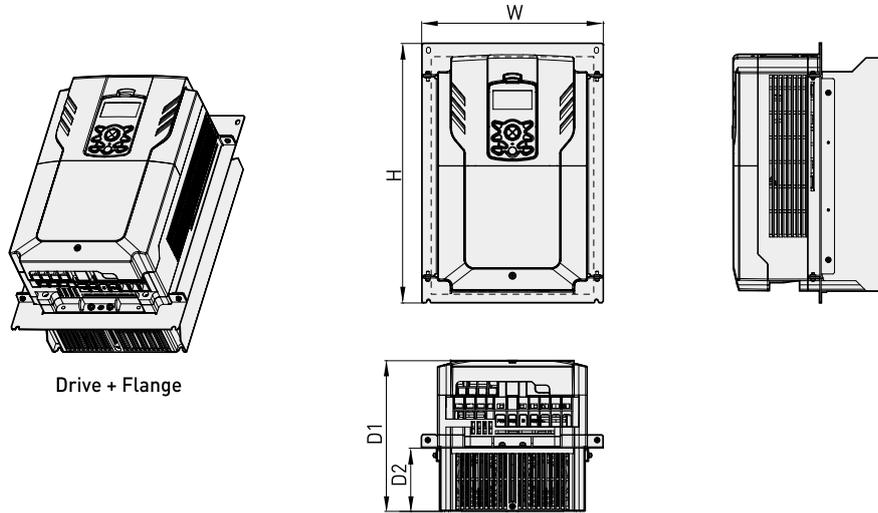
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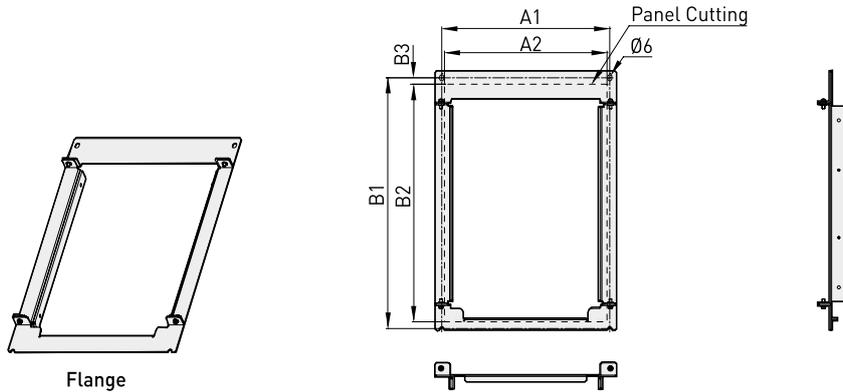
Flange

Unit:mm(inches)

| Product (Model) | | W | H | D1 | D2 | A1 | A2 | B1 | B2 | B3 | kg |
|-----------------|----------------|-------------|--------------|-------------|------------|-------------|-------------|--------------|--------------|-----------|-----|
| 3-Phase 200V | LSLV0150H100-2 | 225.2(8.87) | 322.7(12.70) | 205.3(8.08) | 72.1(2.84) | 205.2(8.08) | 197.5(7.78) | 309.7(12.19) | 292.5(11.52) | 9.3(0.34) | 5.2 |
| 3-Phase 400V | LSLV0150H100-4 | 225.2(8.87) | 322.7(12.70) | 205.3(8.08) | 72.1(2.84) | 205.2(8.08) | 197.5(7.78) | 309.7(12.19) | 292.5(11.52) | 9.3(0.34) | 5.2 |
| | LSLV0185H100-4 | 225.2(8.87) | 322.7(12.70) | 205.3(8.08) | 72.1(2.84) | 205.2(8.08) | 197.5(7.78) | 309.7(12.19) | 292.5(11.52) | 9.3(0.34) | 5.4 |



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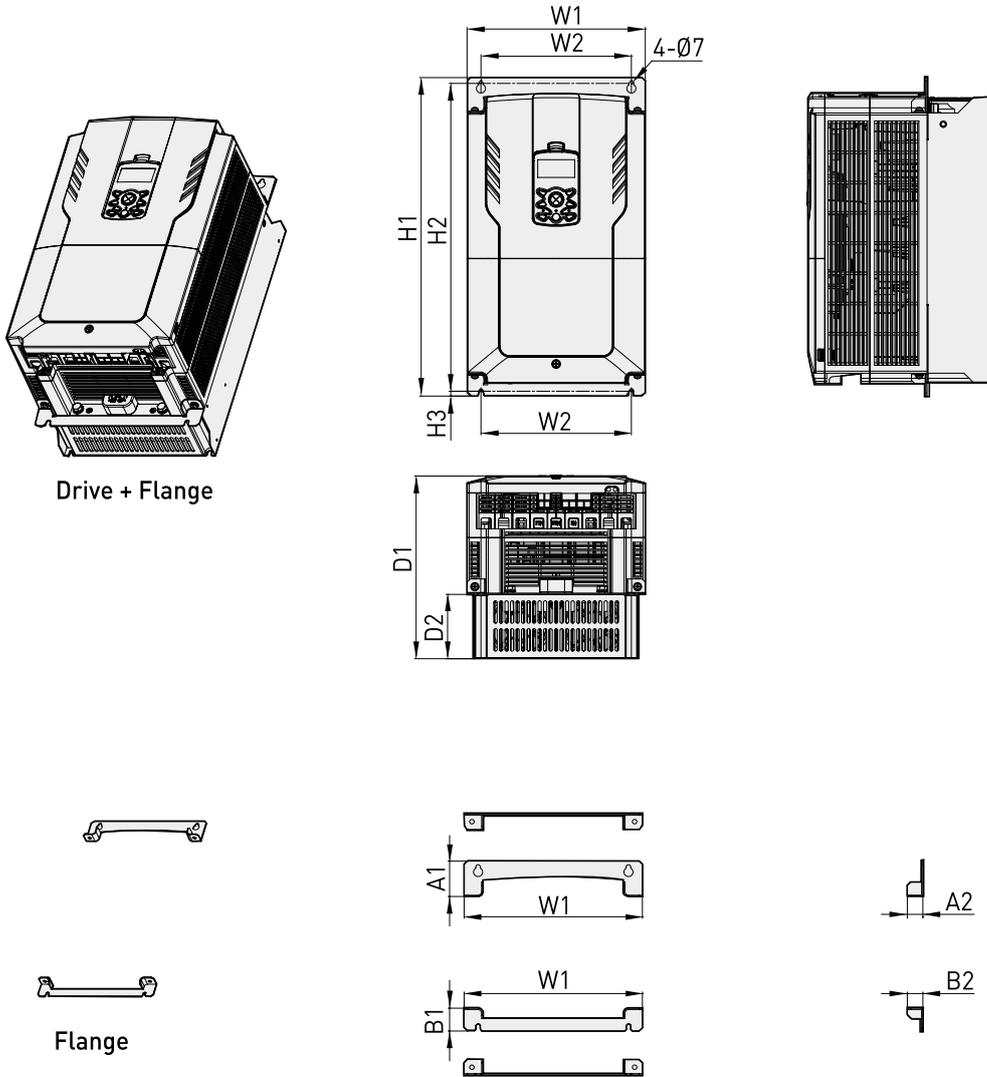


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Unit:mm(inches)

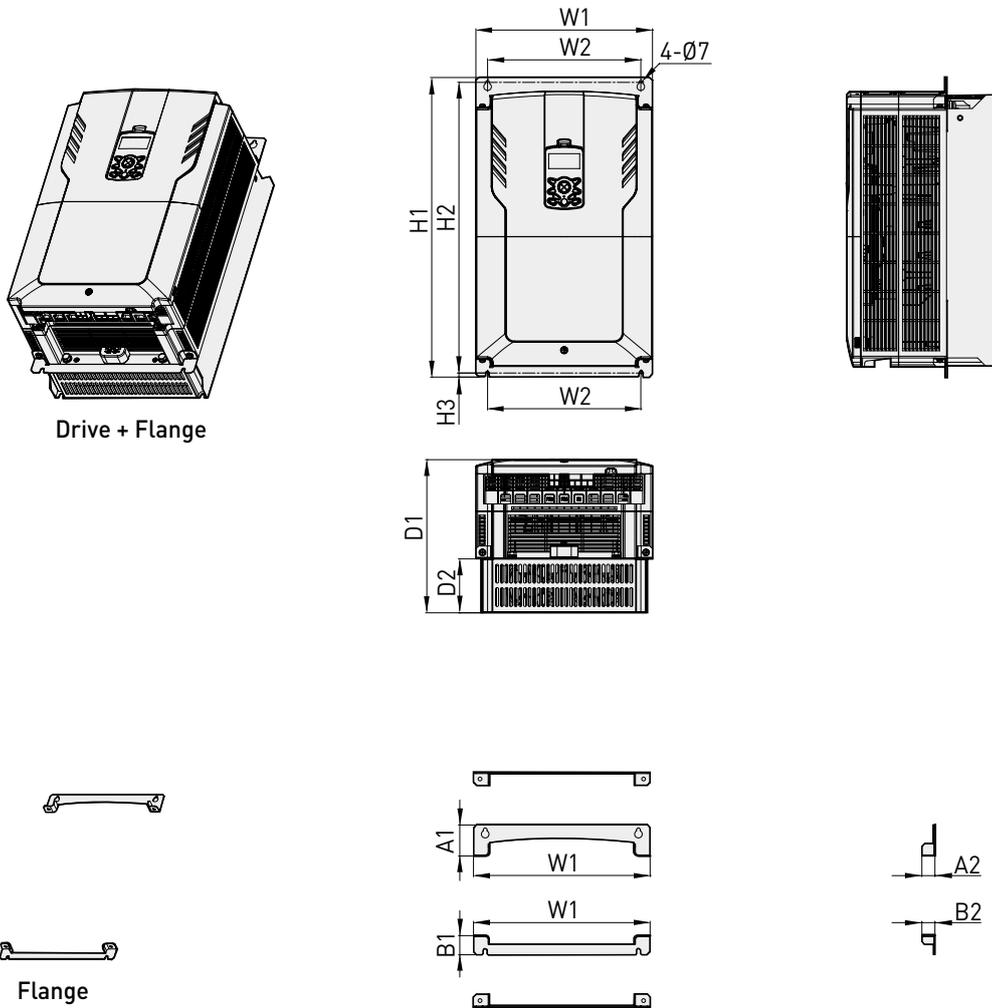
| Product (Model) | | W | H | D1 | D2 | A1 | A2 | B1 | B2 | B3 | kg |
|-----------------|----------------|------------|--------------|-------------|------------|-----------|-----------|--------------|------------|-----------|-----|
| 3-Phase 200V | LSLV0185H100-2 | 267(10.51) | 384.5(15.14) | 223.2(8.79) | 93.6(3.69) | 247(9.72) | 239(9.41) | 371.5(14.63) | 352(13.86) | 9.5(0.37) | 8.3 |
| | LSLV0220H100-4 | 267(10.51) | 384.5(15.14) | 223.2(8.79) | 93.6(3.69) | 247(9.72) | 239(9.41) | 371.5(14.63) | 352(13.86) | 9.5(0.37) | 8.3 |
| 3-Phase 400V | LSLV0300H100-4 | 267(10.51) | 384.5(15.14) | 223.2(8.79) | 93.6(3.69) | 247(9.72) | 239(9.41) | 371.5(14.63) | 352(13.86) | 9.5(0.37) | 8.3 |

Flange



Unit: mm(inches)

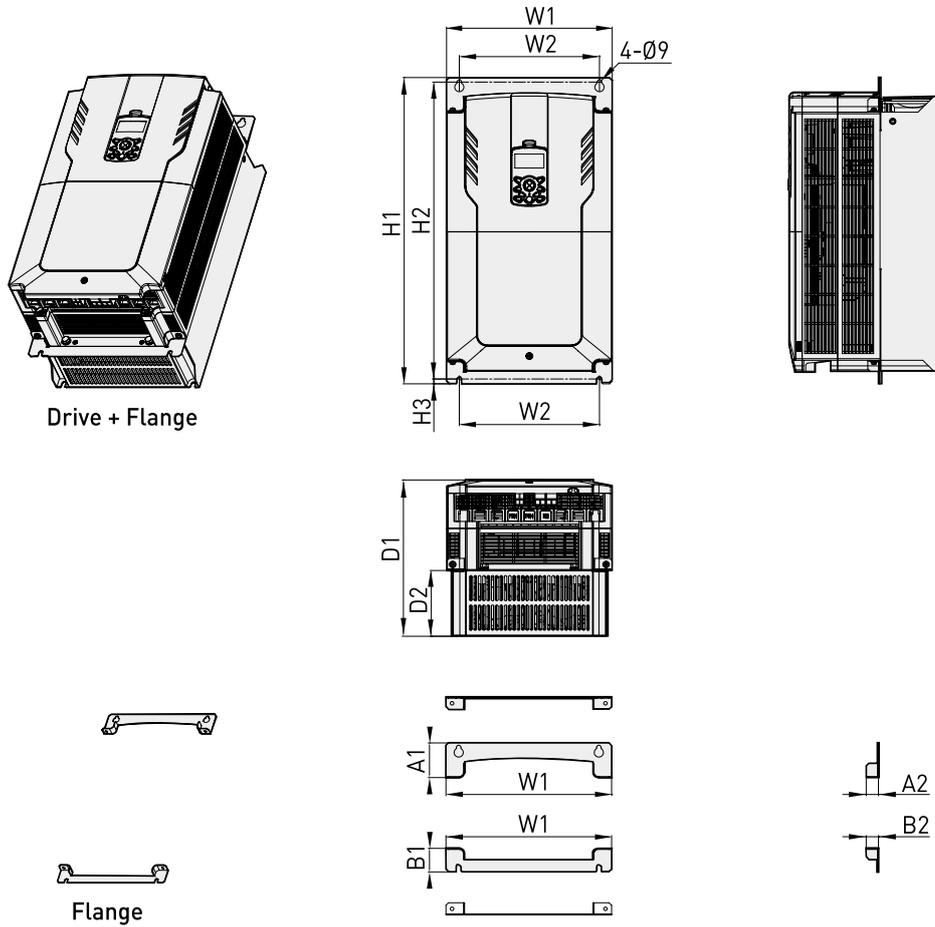
| Product (Model) | W1 | W2 | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | kg | |
|-----------------|----------------|----------------|---------------|----------------|------------------|---------------|----------------|---------------|--------------|--------------|----------------|--------------|------|
| 3-Phase 400V | LSLV0370H100-4 | 275 (10.83) | 232 (9.13) | 495 (19.49) | 478.5 (18.84) | 7.5 (0.30) | 284 (11.18) | 100 (3.94) | 55 (2.17) | 24 (0.98) | 35.5 (1.40) | 24 (0.98) | 26.4 |



Unit:mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | kg |
|-----------------|----------------|----------------|----------------|------------------|----------------|---------------|----------------|---------------|----------------|--------------|----------------|--------------|------|
| 3-Phase 400V | LSLV0450H100-4 | 325 (12.80) | 282 (11.10) | 555.5 (21.87) | 539 (21.22) | 7.5 (0.30) | 284 (11.18) | 100 (3.94) | 57.5 (2.26) | 24 (0.94) | 35.5 (1.40) | 24 (0.94) | 35.4 |
| | LSLV0550H100-4 | 325 (12.80) | 282 (11.10) | 555.5 (21.87) | 539 (21.22) | 7.5 (0.30) | 284 (11.18) | 100 (3.94) | 57.5 (2.26) | 24 (0.94) | 35.5 (1.40) | 24 (0.94) | 35.4 |

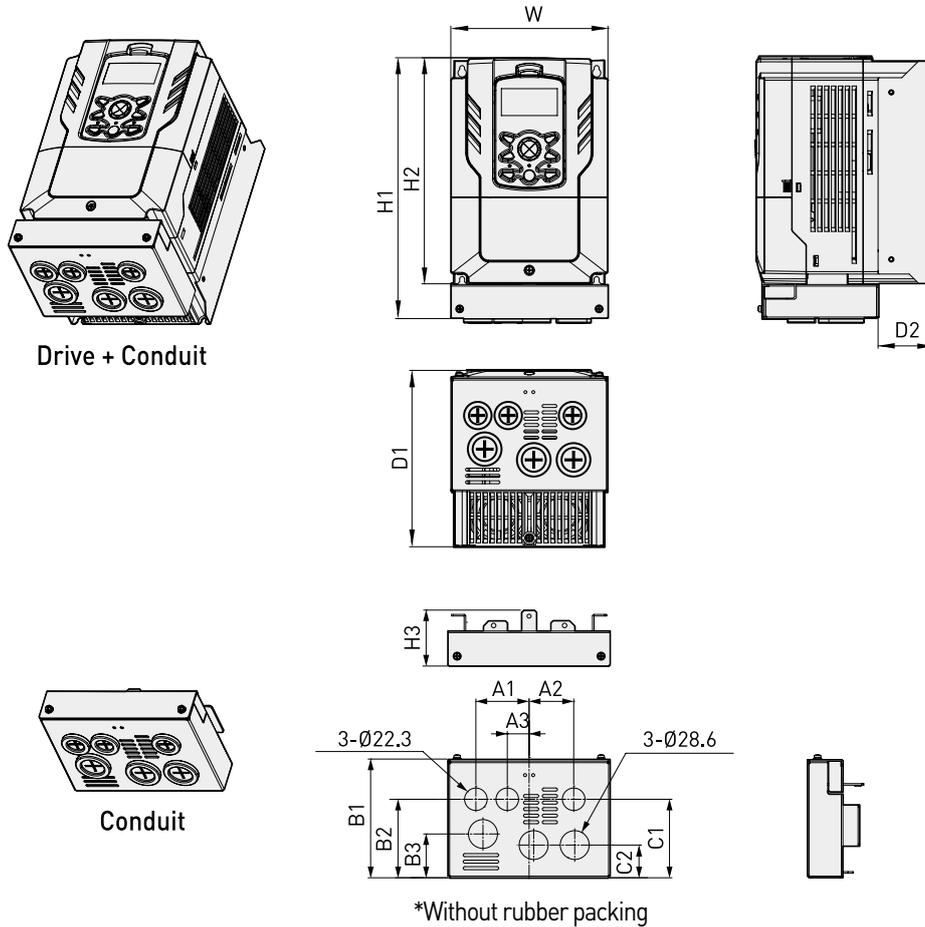
Flange



Unit:mm(inches)

| Product (Model) | | W1 | W2 | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | kg |
|-----------------|----------------|----------------|----------------|------------------|----------------|---------------|----------------|---------------|----------------|--------------|----------------|--------------|------|
| 3-Phase 400V | LSLV0750H100-4 | 325 (12.80) | 275 (10.83) | 605.5 (23.84) | 587 (23.11) | 9.5 (0.37) | 309 (12.17) | 130 (5.12) | 68.5 (2.69) | 24 (0.94) | 46.5 (1.83) | 24 (0.94) | 43.5 |
| | LSLV0900H100-4 | 325 (12.80) | 275 (10.83) | 605.5 (23.84) | 587 (23.11) | 9.5 (0.37) | 309 (12.17) | 130 (5.12) | 68.5 (2.69) | 24 (0.94) | 46.5 (1.83) | 24 (0.94) | 43.5 |

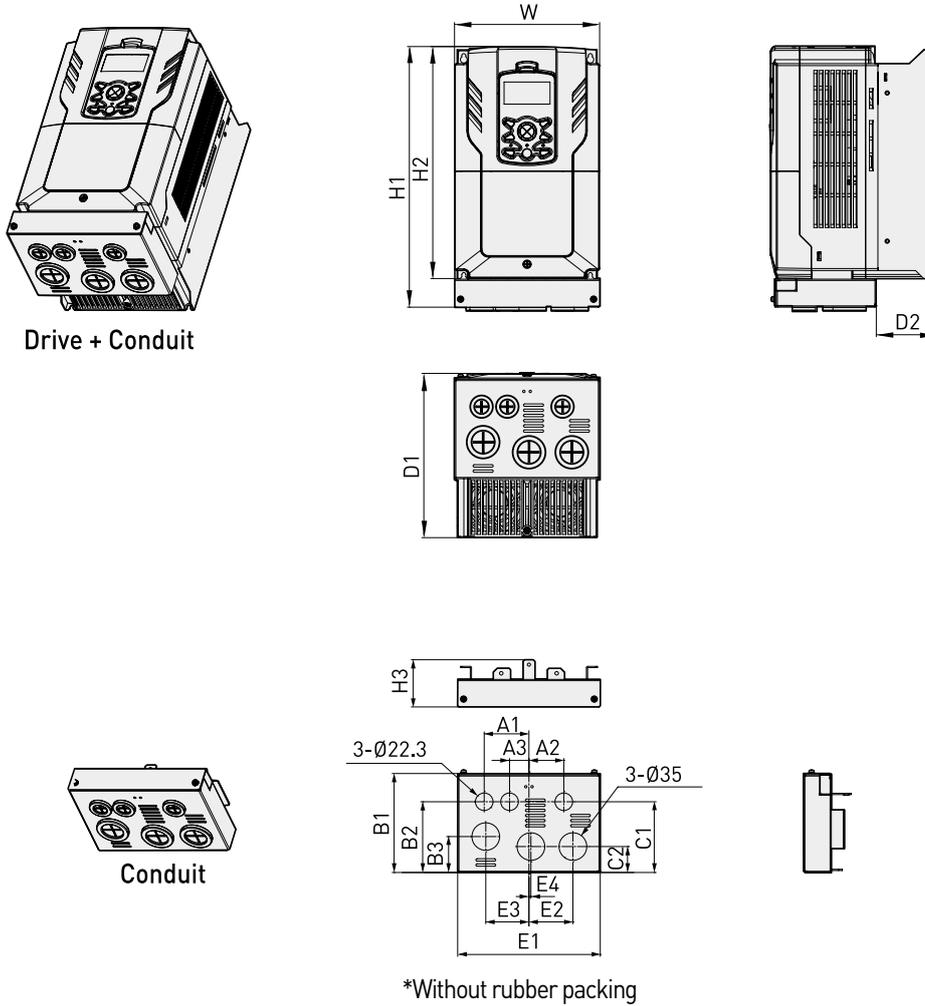
Conduit



Unit: mm(inches)

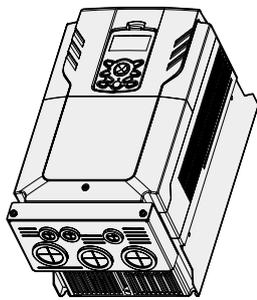
| Product (Model) | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | kg | |
|-----------------|----------------|-----------|--------------|-----------|------------|-----------|------------|------------|----------|------------|-------------|----------|------------|----------|------------|-----|
| 3-Phase 200V | LSLV0008H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0015H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0022H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0037H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0055H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0075H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0110H100-2 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| 3-Phase 400V | LSLV0008H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0015H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0022H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0037H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0055H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0075H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 3.9 |
| | LSLV0110H100-4 | 160(6.30) | 267.8(10.54) | 232(9.13) | 55.6(2.19) | 181(7.13) | 56.7(2.23) | 52.5(2.07) | 44(1.73) | 21.5(0.85) | 117.6(4.63) | 78(3.07) | 43.5(1.71) | 78(3.07) | 32.5(1.28) | 4.0 |

Conduit

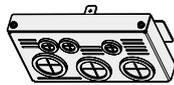
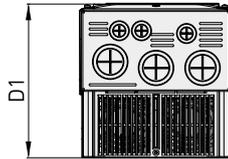
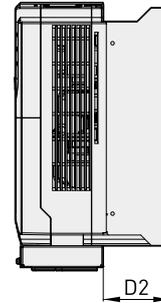
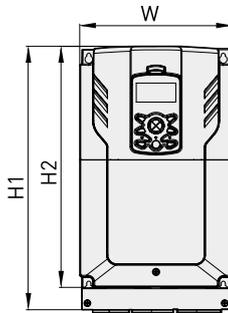


Unit:mm(inches)

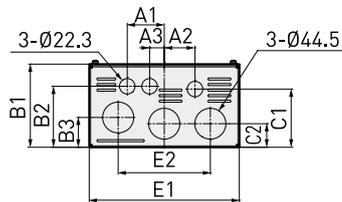
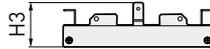
| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | E1 | E2 | E3 | E4 | kg |
|-----------------|----------------|---------------|------------------|----------------|--------------|-----------------|----------------|----------------|--------------|----------------|-----------------|--------------|----------------|--------------|--------------|---------------|----------------|----------------|---------------|-----|
| 3-Phase 200V | LSLV0150H100-2 | 180 (7.09) | 325.8 (12.83) | 290 (11.42) | 60 (2.36) | 205.3 (8.08) | 73.7 (2.90) | 56.5 (2.22) | 44 (1.73) | 24.5 (0.96) | 125.9 (4.96) | 90 (3.54) | 45.7 (1.80) | 90 (3.54) | 33 (1.30) | 180 (7.09) | 55.5 (2.19) | 54.5 (2.15) | 2.5 (0.10) | 5.2 |
| | LSLV0150H100-4 | 180 (7.09) | 325.8 (12.83) | 290 (11.42) | 60 (2.36) | 205.3 (8.08) | 73.7 (2.90) | 56.5 (2.22) | 44 (1.73) | 24.5 (0.96) | 125.9 (4.96) | 90 (3.54) | 45.7 (1.80) | 90 (3.54) | 33 (1.30) | 180 (7.09) | 55.5 (2.19) | 54.5 (2.15) | 2.5 (0.10) | 5.2 |
| 3-Phase 400V | LSLV0185H100-4 | 180 (7.09) | 325.8 (12.83) | 290 (11.42) | 60 (2.36) | 205.3 (8.08) | 73.7 (2.90) | 56.5 (2.22) | 44 (1.73) | 24.5 (0.96) | 125.9 (4.96) | 90 (3.54) | 45.7 (1.80) | 90 (3.54) | 33 (1.30) | 180 (7.09) | 55.5 (2.19) | 54.5 (2.15) | 2.5 (0.10) | 5.4 |



Drive + Conduit



Conduit

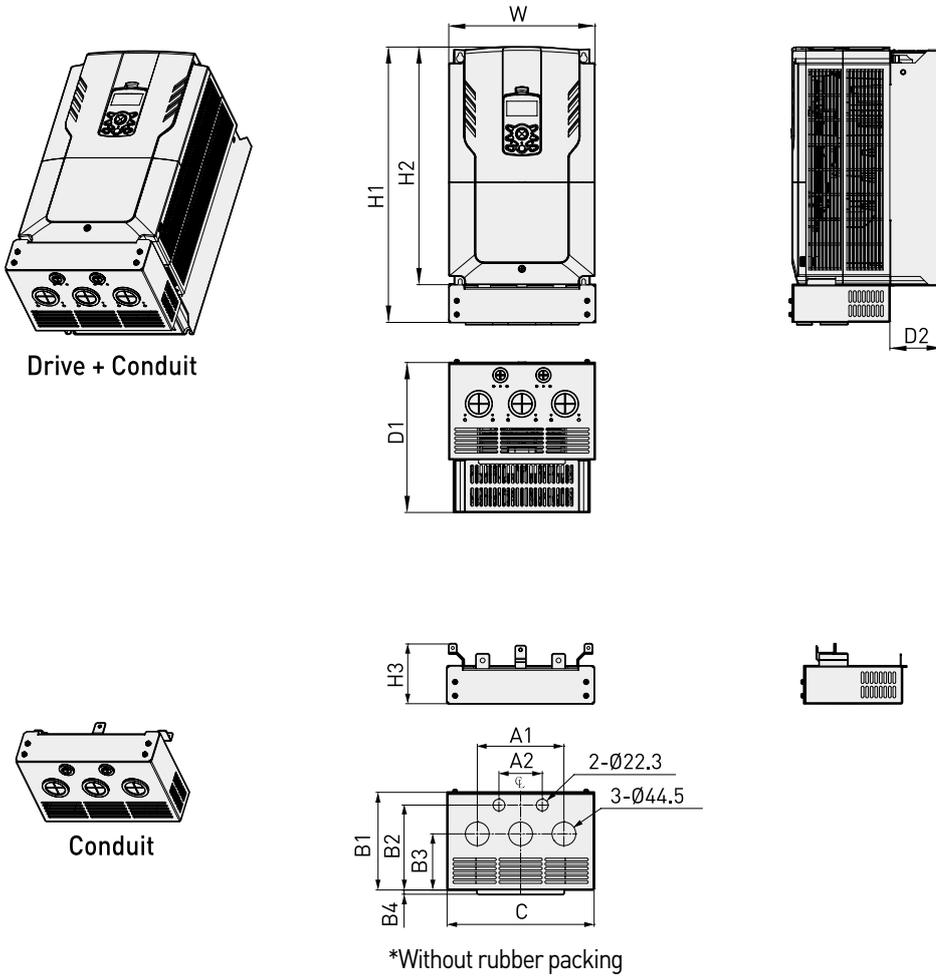


*Without rubber packing

Unit: mm(inches)

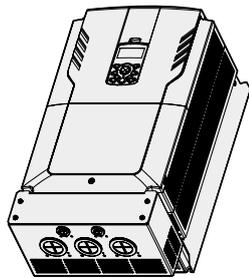
| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | E1 | E2 | kg |
|-----------------|----------------|---------------|------------------|----------------|--------------|-----------------|----------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|---------------|---------------|-----|
| 3-Phase 200V | LSLV0185H100-2 | 220 (8.66) | 382.5 (15.06) | 350 (13.78) | 64 (2.52) | 223.2 (8.79) | 96.4 (3.80) | 53 (2.09) | 44 (1.73) | 21 (0.83) | 120 (4.72) | 88 (3.46) | 43 (1.69) | 84 (3.31) | 34 (1.34) | 215 (8.46) | 132 (5.20) | 5.2 |
| 3-Phase 400V | LSLV0220H100-4 | 220 (8.66) | 382.5 (15.06) | 350 (13.78) | 64 (2.52) | 223.2 (8.79) | 96.4 (3.80) | 53 (2.09) | 44 (1.73) | 21 (0.83) | 120 (4.72) | 88 (3.46) | 43 (1.69) | 84 (3.31) | 34 (1.34) | 215 (8.46) | 132 (5.20) | 5.2 |
| | LSLV0300H100-4 | 220 (8.66) | 382.5 (15.06) | 350 (13.78) | 64 (2.52) | 223.2 (8.79) | 96.4 (3.80) | 53 (2.09) | 44 (1.73) | 21 (0.83) | 120 (4.72) | 88 (3.46) | 43 (1.69) | 84 (3.31) | 34 (1.34) | 215 (8.46) | 132 (5.20) | 5.4 |

Conduit

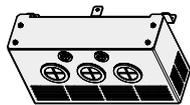
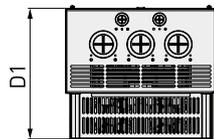
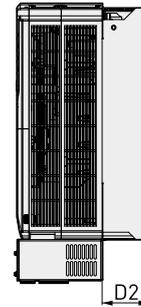
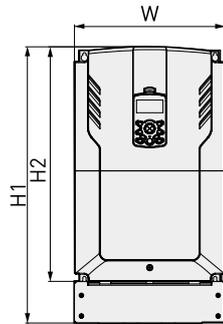


Unit: mm(inches)

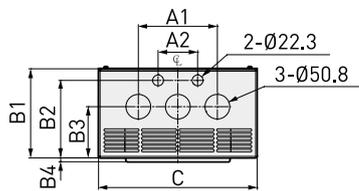
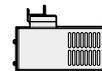
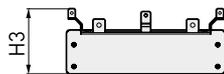
| Product (Model) | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | B3 | B4 | C | kg |
|-----------------------------------|----------------|------------------|----------------|-----------------|----------------|---------------|---------------|--------------|---------------|---------------|-----------------|-------------|----------------|------|
| 3-Phase 400V LSLV0370H100-4 | 275 (10.83) | 521.5 (20.53) | 450 (17.72) | 112.5 (4.43) | 284 (11.18) | 100 (3.94) | 162 (6.38) | 81 (3.19) | 184 (7.24) | 160 (6.30) | 105.8 (4.17) | 8 (0.31) | 275 (10.83) | 28.7 |



Drive + Conduit



Conduit

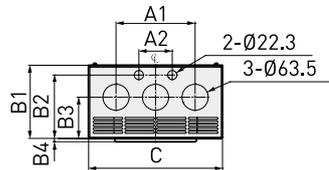
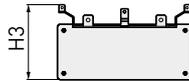
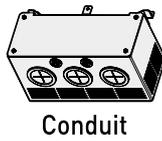
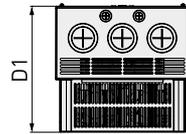
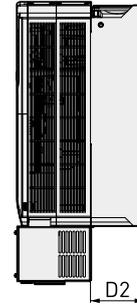
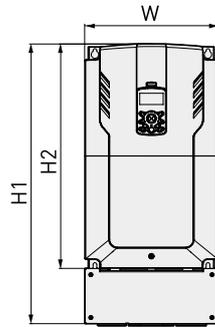
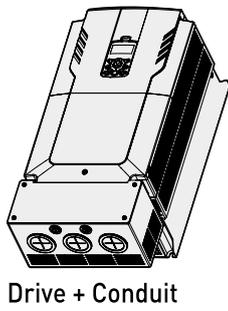


*Without rubber packing

Unit:mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | B3 | B4 | C | kg |
|-----------------|----------------|----------------|------------------|----------------|---------------|----------------|---------------|---------------|--------------|---------------|---------------|-----------------|-------------|----------------|------|
| 3-Phase 400V | LSLV0450H100-4 | 325 (12.80) | 600.5 (23.64) | 510 (20.08) | 134 (5.28) | 284 (11.18) | 100 (3.94) | 162 (6.38) | 81 (3.19) | 184 (7.24) | 160 (6.30) | 105.8 (4.17) | 8 (0.31) | 325 (12.80) | 38.4 |
| | LSLV0550H100-4 | 325 (12.80) | 600.5 (23.64) | 510 (20.08) | 134 (5.28) | 284 (11.18) | 100 (3.94) | 162 (6.38) | 81 (3.19) | 184 (7.24) | 160 (6.30) | 105.8 (4.17) | 8 (0.31) | 325 (12.80) | 38.4 |

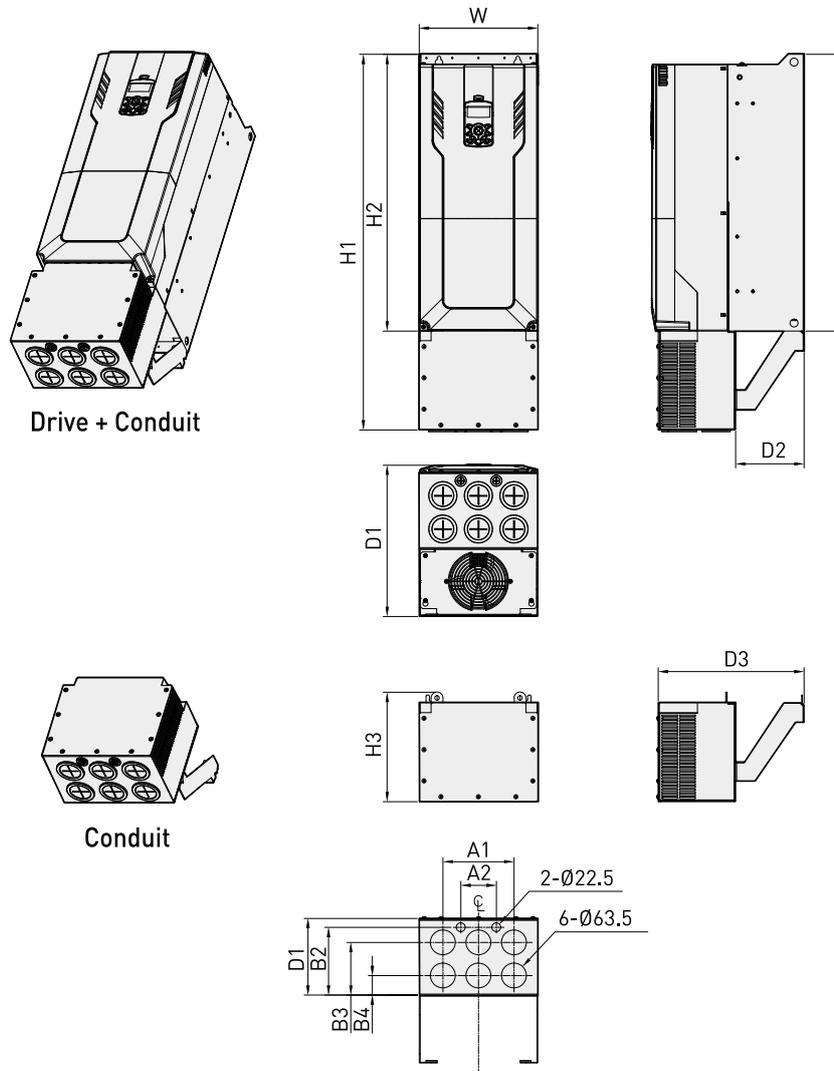
Conduit



*Without rubber packing

Unit:mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | A1 | A2 | B1 | B2 | B3 | B4 | C | kg |
|-----------------|----------------|----------------|------------------|----------------|---------------|----------------|---------------|---------------|--------------|---------------|---------------|------------------|-------------|----------------|------|
| 3-Phase 400V | LSLV0750H100-4 | 325 (12.80) | 685.5 (26.99) | 550 (21.65) | 183 (7.20) | 309 (12.17) | 130 (5.12) | 192 (7.56) | 81 (3.19) | 179 (7.05) | 155 (6.10) | 100.75 (3.97) | 8 (0.31) | 325 (12.80) | 47.2 |
| | LSLV0900H100-4 | 325 (12.80) | 685.5 (26.99) | 550 (21.65) | 183 (7.20) | 309 (12.17) | 130 (5.12) | 192 (7.56) | 81 (3.19) | 179 (7.05) | 155 (6.10) | 100.75 (3.97) | 8 (0.31) | 325 (12.80) | 47.2 |

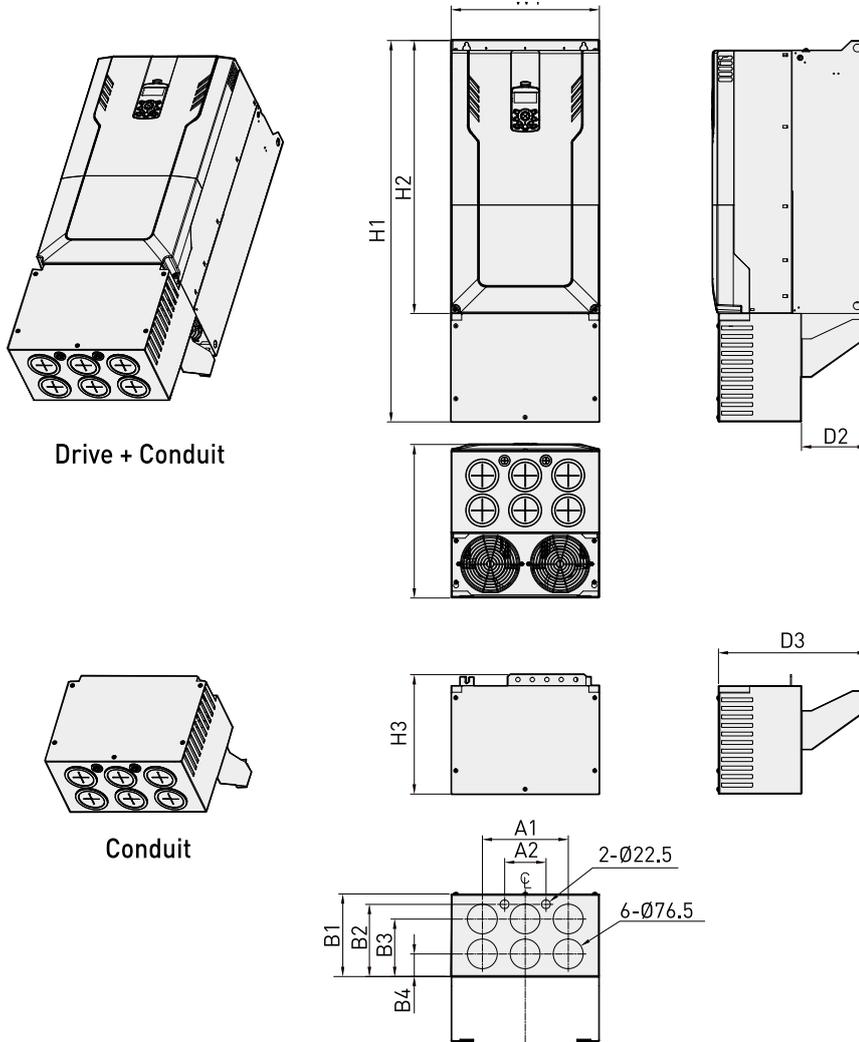


*Without rubber packing

Unit:mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | D3 | A1 | A2 | B1 | B2 | B3 | B4 | kg |
|-----------------|----------------|----------------|------------------|----------------|------------------|----------------|---------------|----------------|---------------|--------------|---------------|------------------|------------------|-----------------|-------|
| 3-Phase 400V | LSLV1100H100-4 | 300 (11.81) | 958.5 (37.74) | 706 (27.80) | 279.5 (11.00) | 386 (15.20) | 173 (6.81) | 369 (14.53) | 180 (7.09) | 90 (3.54) | 196 (7.72) | 172.25 (6.78) | 134.75 (5.31) | 49.75 (1.96) | 62.31 |
| | LSLV1320H100-4 | 300 (11.81) | 958.5 (37.74) | 706 (27.80) | 279.5 (11.00) | 386 (15.20) | 173 (6.81) | 369 (14.53) | 180 (7.09) | 90 (3.54) | 196 (7.72) | 172.25 (6.78) | 134.75 (5.31) | 49.75 (1.96) | 62.31 |

Conduit



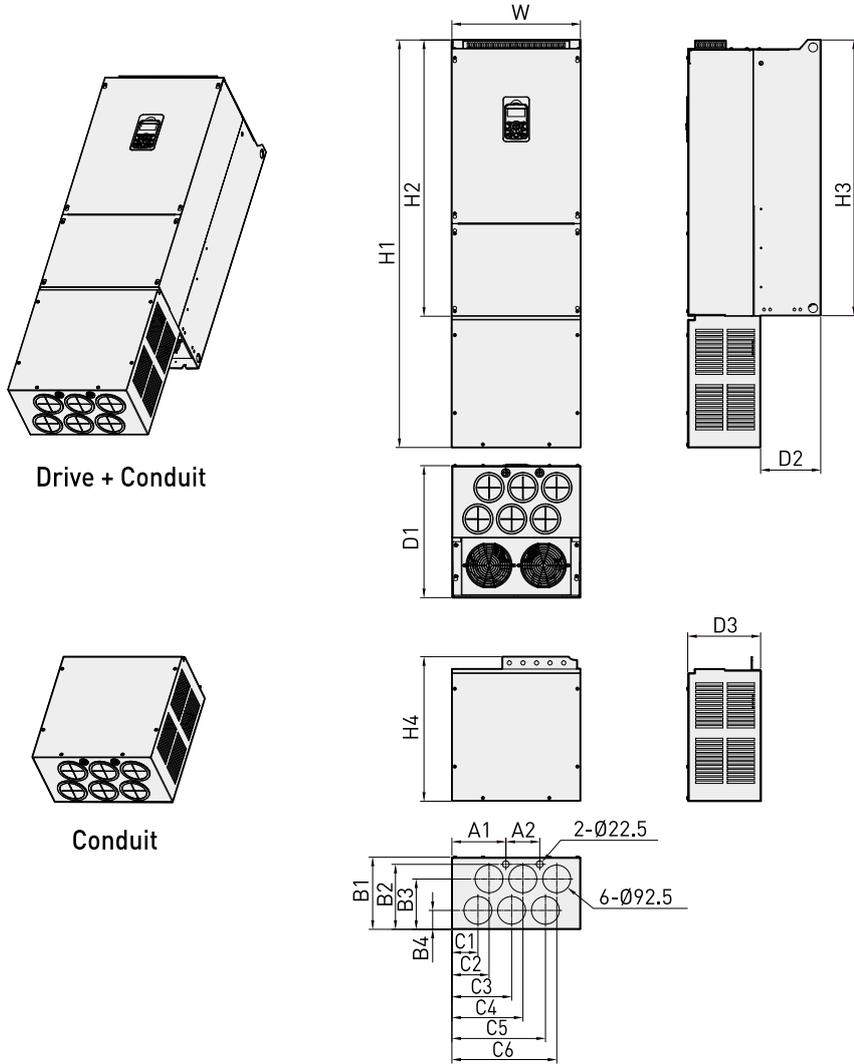
Drive + Conduit

Conduit

*Without rubber packing

Unit:mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | D1 | D2 | D3 | A1 | A2 | B1 | B2 | B3 | B4 | kg |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------|-------|
| 3-Phase 400V | LSLV1600H100-4 | 380 (14.96) | 985 (38.78) | 705 (27.76) | 308 (12.13) | 396 (15.59) | 168 (6.61) | 381 (15.00) | 220 (8.66) | 106 (4.17) | 213 (8.39) | 186 (7.32) | 148 (5.83) | 58 (2.28) | 81.24 |
| | LSLV1850H100-4 | 380 (14.96) | 985 (38.78) | 705 (27.76) | 308 (12.13) | 396 (15.59) | 168 (6.61) | 381 (15.00) | 220 (8.66) | 106 (4.17) | 213 (8.39) | 186 (7.32) | 148 (5.83) | 58 (2.28) | 81.24 |

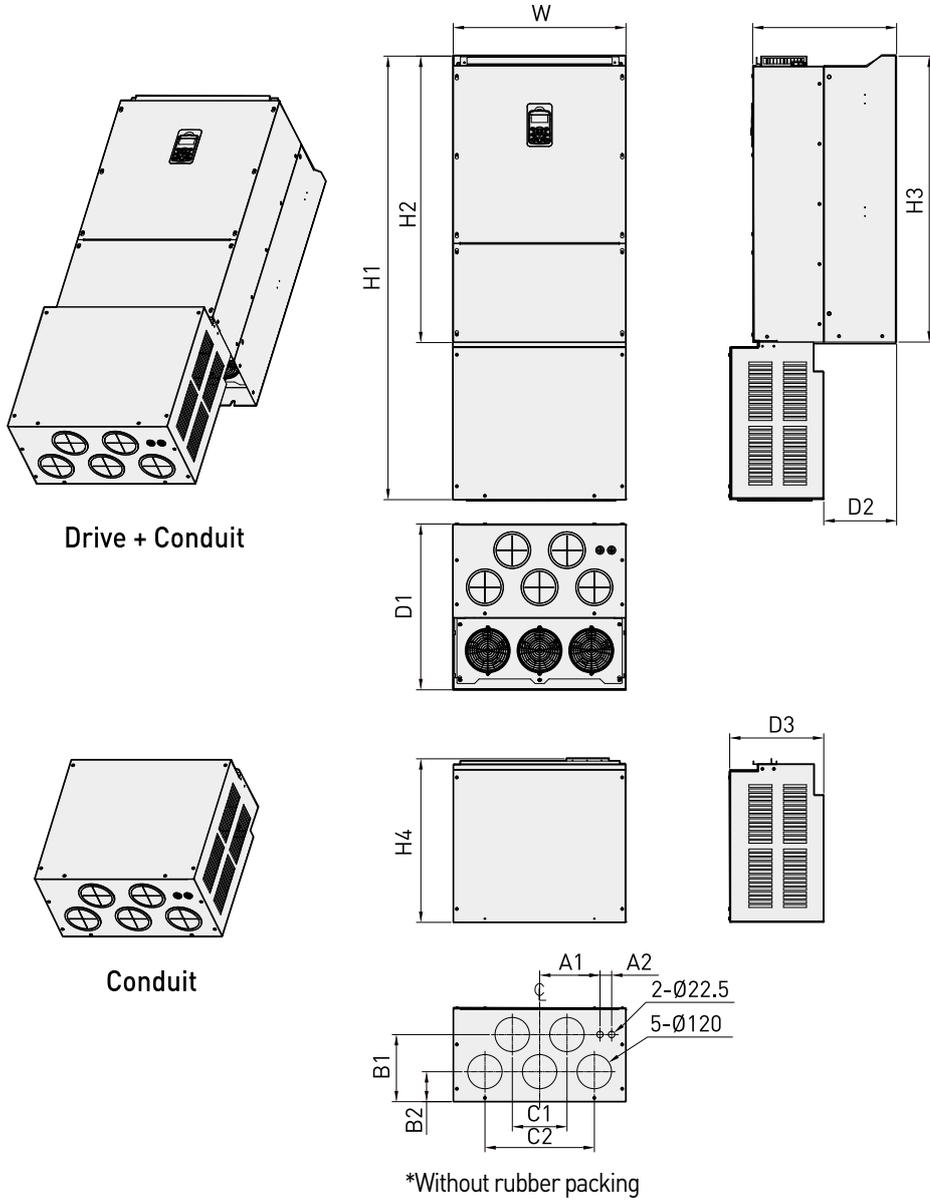


*Without rubber packing

Unit:mm(inches)

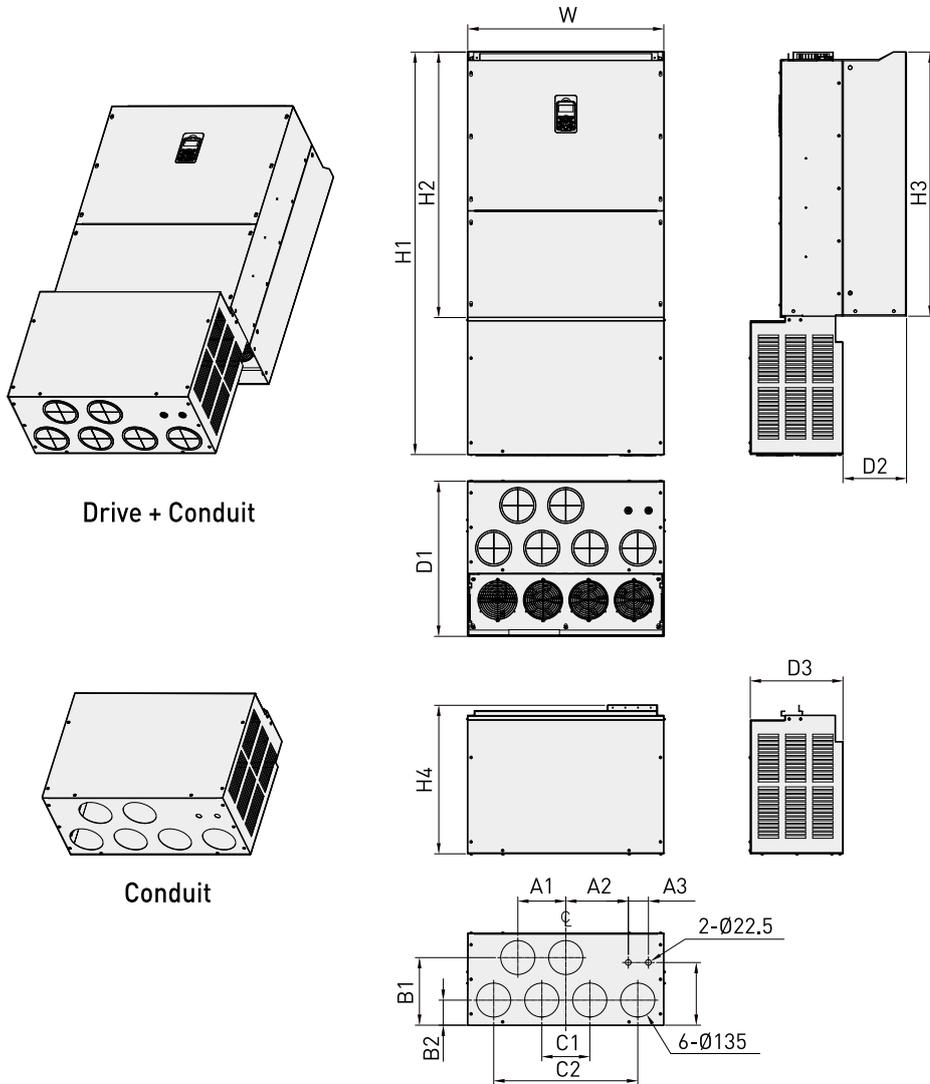
| Product (Model) | | W | H1 | H2 | H3 | H4 | D1 | D2 | D3 | A1 | A2 | |
|-----------------|----------------|----------------|-------------------|------------------|----------------|----------------|----------------|---------------|---------------|----------------|----------------|--------|
| 3-Phase 400V | LSLV2200H100-4 | 426 (16.77) | 1360.3 (53.56) | 922.3 (36.31) | 920 (36.22) | 482 (18.98) | 440 (17.32) | 199 (7.83) | 241 (9.49) | 179 (7.05) | 112 (4.41) | |
| | LSLV2500H100-4 | 426 (16.77) | 1360.3 (53.56) | 922.3 (36.31) | 920 (36.22) | 482 (18.98) | 440 (17.32) | 199 (7.83) | 241 (9.49) | 179 (7.05) | 112 (4.41) | |
| Product (Model) | | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | C5 | C6 | kg |
| 3-Phase 400V | LSLV2200H100-4 | 241 (9.49) | 217 (8.54) | 168 (6.61) | 63 (2.48) | 86 (3.39) | 123 (4.84) | 198 (7.80) | 235 (9.25) | 310 (12.20) | 347 (13.66) | 130.54 |
| | LSLV2500H100-4 | 241 (9.49) | 217 (8.54) | 168 (6.61) | 63 (2.48) | 86 (3.39) | 123 (4.84) | 198 (7.80) | 235 (9.25) | 310 (12.20) | 347 (13.66) | 130.54 |

Conduit



Unit:mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | H4 | D1 | D2 | D3 | A1 | A2 | B1 | B2 | C1 | C2 | kg |
|-----------------|----------------|----------------|-----------------|-----------------|-----------------|------------------|----------------|---------------|----------------|---------------|--------------|---------------|---------------|---------------|----------------|--------|
| 3-Phase 400V | LSLV3150H100-4 | 600 (23.62) | 1552 (61.10) | 1002 (39.45) | 1000 (39.37) | 572.5 (22.54) | 580 (22.83) | 253 (9.96) | 327 (12.87) | 210 (8.27) | 40 (1.57) | 235 (9.25) | 105 (4.13) | 190 (7.48) | 380 (14.96) | 205.72 |
| | LSLV3550H100-4 | 600 (23.62) | 1552 (61.10) | 1002 (39.45) | 1000 (39.37) | 572.5 (22.54) | 580 (22.83) | 253 (9.96) | 327 (12.87) | 210 (8.27) | 40 (1.57) | 235 (9.25) | 105 (4.13) | 190 (7.48) | 380 (14.96) | 205.72 |
| | LSLV4000H100-4 | 600 (23.62) | 1552 (61.10) | 1002 (39.45) | 1000 (39.37) | 572.5 (22.54) | 580 (22.83) | 253 (9.96) | 327 (12.87) | 210 (8.27) | 40 (1.57) | 235 (9.25) | 105 (4.13) | 190 (7.48) | 380 (14.96) | 205.72 |



*Without rubber packing

Unit: mm(inches)

| Product (Model) | | W | H1 | H2 | H3 | H4 | D1 | D2 | D3 | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | kg |
|-----------------|----------------|----------------|-----------------|-------------------|-----------------|------------------|------------------|-----------------|----------------|---------------|-----------------|--------------|----------------|---------------|---------------|---------------|----------------|--------|
| 3-Phase 400V | LSLV5000H100-4 | 776 (30.55) | 1606 (63.23) | 1059.5 (41.71) | 1054 (41.50) | 592.4 (23.32) | 618.5 (24.35) | 251.5 (9.90) | 367 (14.45) | 190 (7.48) | 247.5 (9.74) | 80 (3.15) | 270 (10.63) | 100 (3.94) | 250 (9.84) | 190 (7.48) | 570 (22.44) | 290.91 |

Fuse/Reactor Specifications

| Producto (kW) | | AC Input Fuse | | AC Reactor | | DC Reactor | |
|---------------|------|---------------|-------------|-----------------|-------------|-----------------|-------------|
| | | Current (A) | Voltage (V) | Inductance (mH) | Current (A) | Inductance (mH) | Current (A) |
| 3-Phase 200V | 0.75 | 10 | 600 | 2.02 | 5 | 4.04 | 5 |
| | 1.5 | 10 | | 1.26 | 8 | 2.53 | 8 |
| | 2.2 | 15 | | 0.78 | 12 | 1.68 | 12 |
| | 3.7 | 20 | | 0.59 | 16 | 1.26 | 16 |
| | 5.5 | 50 | | 0.43 | 24 | 0.93 | 25 |
| | 7.5 | 63 | | 0.31 | 33 | 0.73 | 32 |
| | 11 | 80 | | 0.22 | 46 | 0.53 | 50 |
| | 15 | 100 | | 0.16 | 62 | 0.32 | 62 |
| | 18.5 | 125 | | 0.13 | 77 | 0.29 | 80 |
| 3-Phase 400V | 0.75 | 10 | 600 | 8.09 | 2.5 | 16.17 | 3 |
| | 1.5 | 10 | | 5.05 | 4 | 10.11 | 4 |
| | 2.2 | 15 | | 3.37 | 6 | 6.74 | 6 |
| | 3.7 | 20 | | 2.25 | 9 | 5.05 | 8 |
| | 5.5 | 32 | | 1.56 | 13 | 3.56 | 13 |
| | 7.5 | 35 | | 1.16 | 17 | 2.53 | 18 |
| | 11 | 50 | | 0.76 | 27 | 1.64 | 26 |
| | 15 | 63 | | 0.61 | 33 | 1.42 | 33 |
| | 18.5 | 70 | | 0.48 | 43 | 0.98 | 42 |
| | 22 | 100 | | 0.40 | 51 | 0.88 | 50 |
| | 30 | 125 | | 0.29 | 69 | 0.59 | 68 |
| | 37 | | | 0.29 | 69 | Built In | |
| | 45 | 160 | | 0.24 | 85 | | |
| | 55 | 200 | | 0.20 | 100 | | |
| | 75 | 250 | | 0.15 | 134 | | |
| | 90 | 350 | | 0.13 | 160 | | |
| | 110 | 350 | | 0.1 | 217 | | |
| | 132 | 400 | | 0.08 | 257 | | |
| | 160 | 450 | | 0.07 | 318 | | |
| | 185 | 550 | | 0.06 | 362 | | |
| | 220 | 630 | | 0.05 | 423 | | |
| | 250 | 700 | | 0.05 | 474 | | |
| | 315 | 800 | | 0.04 | 604 | | |
| 355 | 1000 | 0.03 | 673 | | | | |
| 400 | 1100 | 0.03 | 759 | | | | |
| 500 | 1250 | 0.03 | 948 | | | | |

Peripheral Devices

| Voltage | Capacity (kW) | Circuit Breaker(MCCB) | | | | Leakage Breaker(ELCB) | | Magnetic Contactor(MC) | |
|--------------|---------------|-----------------------|------------------|---------|------------------|-----------------------|------------------|------------------------|------------------|
| | | Model | Rated Current(A) | Model | Rated Current(A) | Model | Rated Current(A) | Model | Rated Current(A) |
| 3-Phase 200V | 0.75 | ABS33c | 15 | UTE100 | 15 | EBS33c | 15 | MC-9a | 11 |
| | 1.5 | | 15 | | 15 | | 15 | MC-18a | 18 |
| | 2.2 | | 30 | | 15 | | 30 | MC-32a | 32 |
| | 3.7 | | 30 | | 15 | | 30 | MC-32a | 32 |
| | 5.5 | ABS53c | 50 | UTE100 | 50 | EBS53c | 50 | MC-50a | 55 |
| | 7.5 | ABS63c | 60 | UTE100 | 60 | EBS63c | 60 | MC-65a | 65 |
| | 11 | ABS103c | 100 | UTE100 | 100 | EBS103c | 100 | MC-85a | 85 |
| | 15 | | 100 | UTE100 | 100 | | 100 | MC-130a | 130 |
| | 18.5 | ABS203c | 150 | UTE150 | 150 | EBS203c | 200 | MC-150a | 150 |
| 3-Phase 400V | 0.75 | ABS33c | 10 | UTE100 | 15 | EBS33c | 10 | MC-6a | 9 |
| | 1.5 | | 10 | | 15 | | 10 | MC-6a | 9 |
| | 2.2 | | 15 | | 15 | | 15 | MC-9a | 11 |
| | 3.7 | | 15 | | 15 | | 15 | MC-12a | 13 |
| | 5.5 | ABS53c | 50 | UTE100 | 50 | EBS33c | 30 | MC-22b | 22 |
| | 7.5 | | 50 | UTE100 | 50 | | 30 | MC-32a | 32 |
| | 11 | ABS63c | 60 | UTE100 | 60 | EBS53c | 50 | MC-50a | 50 |
| | 15 | ABS63c | 80 | UTE100 | 80 | EBS63c | 60 | MC-65a | 65 |
| | 18.5 | ABS103c | 100 | UTE100 | 100 | EBS103c | 100 | MC-85a | 85 |
| | 22 | ABS103c | 125 | UTE150 | 125 | | 125 | MC-100a | 105 |
| | 30 | ABS103c | 125 | UTE150 | 125 | | 125 | MC-130a | 130 |
| | 37 | ABS203c | 175 | UTE250 | 175 | EBS203c | 200 | MC-150a | 150 |
| | 45 | ABS203c | 225 | UTE250 | 225 | | 225 | MC-185a | 185 |
| | 55 | ABS203c | 250 | UTE250 | 250 | | 250 | MC-185a | 185 |
| 75 | ABS403c | 300 | UTE400 | 300 | EBS403c | 300 | MC-225a | 225 | |
| 90 | ABS403c | 350 | UTE400 | 350 | | 350 | MC-330a | 330 | |
| 3-Phase 400V | 110 | ABS603c | 500 | UTS600 | 500 | EBS603c | 500 | MC-400a | 400 |
| | 132 | ABS603c | 600 | | 600 | | 630 | | |
| | 160 | ABS603c | 630 | | 600 | | 630 | | |
| | 185 | ABS803c | 800 | UTS800 | 800 | EBS803c | 800 | MC-630a | 630 |
| | 220 | ABS803c | 800 | | 800 | | 800 | | |
| | 250 | ABS1003c | 1000 | | 1000 | | 1000 | | |
| | 315 | ABS1203b | 1200 | UTS1200 | 1200 | EBS1003b | 1200 | MC-800a | 800 |
| | 355 | ABS1203b | 1200 | | 1200 | | 1200 | | |
| | 400 | - | 1600 | | - | | 1600 | | |
| 500 | - | 1600 | - | 1600 | - | - | - | - | |
| 3-Phase 500V | 110 | ABS603c | 500 | UTS600 | 500 | EBS603c | 500 | MC-400a | 400 |
| | 132 | ABS603c | 600 | | 600 | EBS603c | 630 | MC-400a | 400 |
| | 160 | ABS603c | 630 | | 600 | EBS603c | 630 | MC-630a | 630 |
| | 185 | ABS803c | 800 | UTS800 | 800 | EBS803c | 800 | MC-630a | 630 |
| | 220 | ABS803c | 800 | | 800 | EBS803c | 800 | MC-800a | 800 |
| | 250 | ABS803c | 800 | | 800 | EBS803c | 800 | MC-800a | 800 |
| | 315 | ABS1203b | 1200 | UTS1200 | 1200 | EBS1203c | 1200 | MC-1200a | 1200 |
| | 355 | ABS1203b | 1200 | | 1200 | EBS1203c | 1200 | MC-1200a | 1200 |
| | 400 | - | 1600 | | - | 1600 | - | - | - |
| 500 | - | 1600 | - | 1600 | - | - | - | | |

In accordance with the IEC 60439-1 regulation, symmetrical high current at the maximum rated voltage of the product.

Fuse/Reactor Specifications short-circuit current of the code applicable to the power input part is 100kA. H100 Drive is designed to endure rated 100kA

Dynamic Braking Unit

| UL form | Type | Voltage | Capacity of Applied motor | Braking Unit | Terminal Arrangement & Dimensions | |
|-------------|---|---------|---------------------------|-----------------------|-------------------------------------|-------------------------------------|
| UL Type | Type A (Resistance of DB Resistor refer to the table of "11.7.6 DB Resistors") | 200V | 30 ~ 37 kW | SV370DBU-2U | Refer to the appearance of Group 1. | |
| | | | 45 ~ 55 kW | SV550DBU-2U | | |
| | | | 75 kW | SV370DBU-2U, 2Set | | |
| | | 200V | 30 ~ 37 kW | SV370DBU-4U | | |
| | | | 45 ~ 55 kW | SV550DBU-4U | | |
| | | | 75 kW | SV750DBU-4U | | |
| | | | 90 kW | SV550DBU-4U, 2Set | | |
| | | | 110~132 kW | SV750DBU-4U, 2Set | | |
| | | 160 kW | SV750DBU-4U, 3Set | | | |
| Non UL Type | Type C (Resistance of DB Resistor refer to the manual of DB Unit) | 200V | 30 ~ 37 kW | LSLV0370DBU-2LN | Refer to the appearance of Group 5. | |
| | | | | | LSLV0370DBU-2HN | Refer to the appearance of Group 6. |
| | | | 45 ~ 55 kW, 75 kW | | LSLV0750DBU-2LN | Refer to the appearance of Group 5. |
| | | | | | LSLV0750DBU-2HN | Refer to the appearance of Group 6. |
| | | 400V | 30 ~ 37 kW | LSLV0370DBU-4LN | Refer to the appearance of Group 5. | |
| | | | | LSLV0370DBU-4HN | Refer to the appearance of Group 6. | |
| | | | 45 ~ 55 kW, 75 kW | LSLV0750DBU-4LN | Refer to the appearance of Group 5. | |
| | | | 90 kW | LSLV0900DBU-4HN | Refer to the appearance of Group 6. | |
| | | | 110~132 kW | LSLV1320DBU-4HN | | |
| | | | 160 kW | LSLV1600DBU-4HN | | |
| | | | 185~220 kW | LSLV2200DBU-4HN | | |
| | | | 250~355 kW | LSLV2200DBU-4HN, 2Set | | |
| | | | 400~500 kW | LSLV2200DBU-4HN, 3Set | | |

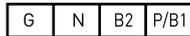
- It is not necessary to use option type dynamic braking unit for H100 0.75~18.5kW(200V) and 0.75~30kW(400V) because basically the dynamic braking unit is built in.
- You must refer to dynamic braking unit manual for usage recommended dynamic braking unit in the table above due to changeable table.
- Resistance/watt/braking torque/%ED of DB Resistor for Type A DBU nit refer to the table of "11.7.6 DB Resistors"

Terminal Arrangement

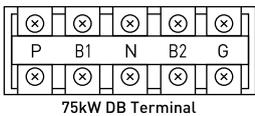
Group 1 :



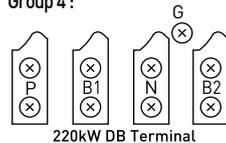
Group 2 :



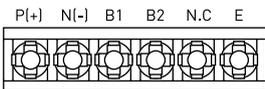
Group 3 :



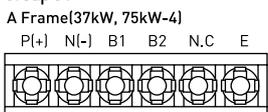
Group 4 :



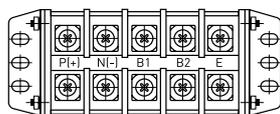
Group 5 :



Group 6 :



B/C Frame(75kW-2, 90~500kW)



| Terminal | Functions |
|----------|---|
| 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 Inverter |
| P | Terminal for connection with P1 of Inverter |

| Terminal | Functions |
|----------|--|
| 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 Inverter |
| P | Terminal for connection with P of Inverter |

| Terminal | Functions |
|----------|--|
| P(+) | Terminal for connection with P of Inverter |
| N(-) | Terminal for connection with N of Inverter |
| B1 | Terminal for connection with B1 of DBU |
| B2 | Terminal for connection with B2 of DBU |
| N.C | Unused |
| E | Ground Terminal |

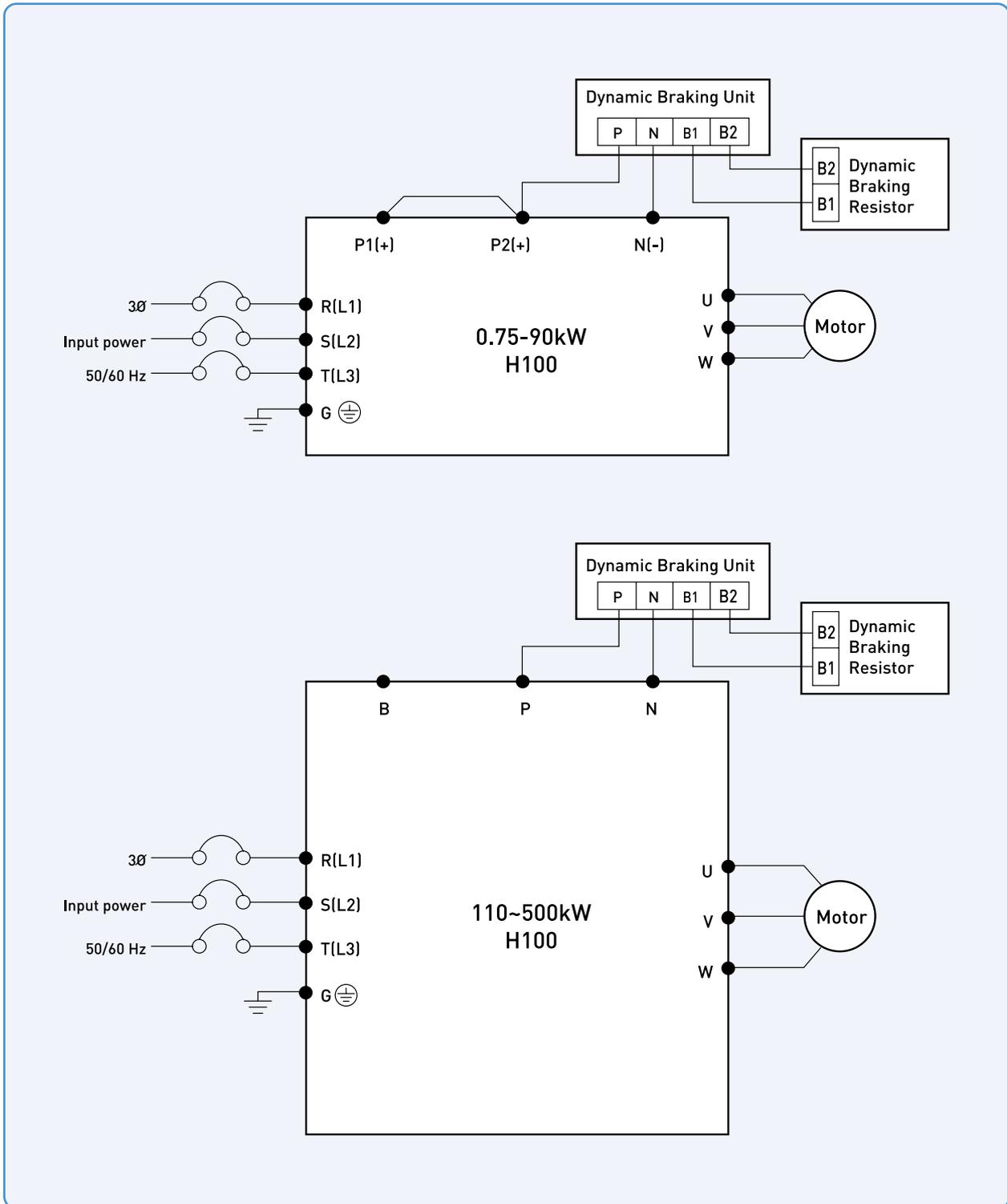
| Terminal | Functions |
|----------|--|
| P(+) | Terminal for connection with P of Inverter |
| N(-) | Terminal for connection with N of Inverter |
| B1 | Terminal for connection with B1 of DBU |
| B2 | Terminal for connection with B2 of DBU |
| E | Unused |

Dynamic Braking Resistors Specification

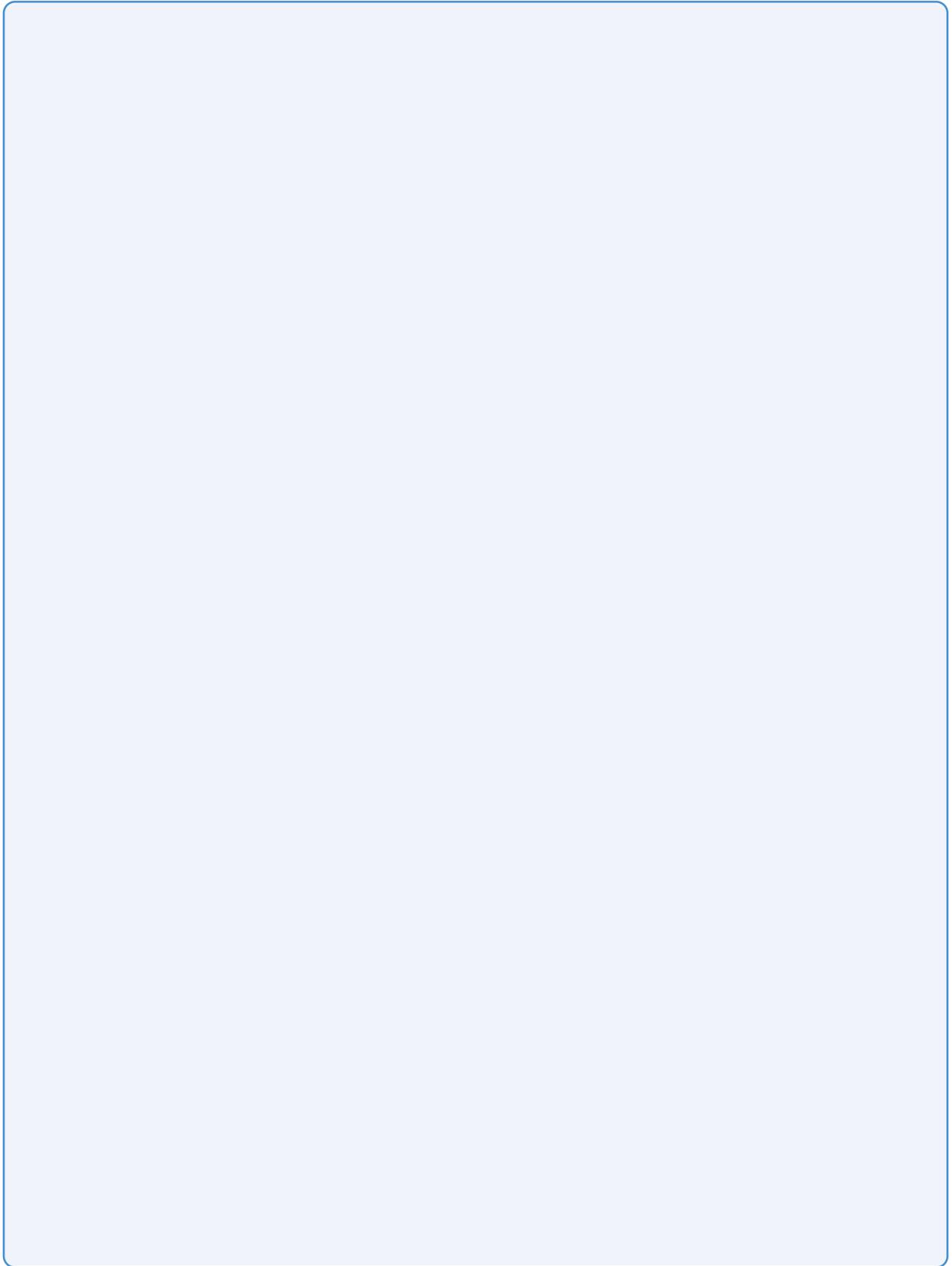
| Product (kW) | | Torque 100% | | | Torque 150% | | | |
|--------------|---|---|-------------------------|--------------------------|--------------|-------------------------|--------------------------|--|
| | | Resistor (Ω) | Wattage [W] (%ED=5%) | Wattage [W] (%ED=10%) | Resistor (Ω) | Wattage [W] (%ED=5%) | Wattage [W] (%ED=10%) | |
| 3-Phase 200V | 0.75 | 200 | 100 | 200 | 150 | 150 | 300 | |
| | 1.5 | 100 | 200 | 400 | 60 | 300 | 600 | |
| | 2.2 | 60 | 300 | 600 | 50 | 400 | 800 | |
| | 3.7 | 40 | 500 | 1000 | 33 | 600 | 1200 | |
| | 5.5 | 33 | 600 | 1200 | 20 | 800 | 1600 | |
| | 7.5 | 20 | 800 | 1600 | 15 | 1200 | 2400 | |
| | 11 | 15 | 1200 | 2400 | 10 | 2400 | 4800 | |
| | 15 | 10 | 2400 | 4800 | 8 | 2400 | 4800 | |
| 3-Phase 400V | 18.5 | 8 | 2400 | 4800 | 6 | 2600 | 5200 | |
| | 0.75 | 900 | 100 | 200 | 600 | 150 | 300 | |
| | 1.5 | 450 | 200 | 400 | 300 | 300 | 600 | |
| | 2.2 | 300 | 300 | 600 | 200 | 400 | 800 | |
| | 3.7 | 200 | 400 | 800 | 130 | 600 | 1200 | |
| | 5.5 | 120 | 700 | 1400 | 85 | 1000 | 2000 | |
| | 7.5 | 90 | 1000 | 2000 | 60 | 1200 | 2400 | |
| | 11 | 60 | 1200 | 2400 | 40 | 2000 | 4000 | |
| | 15 | 45 | 2000 | 4000 | 32 | 2400 | 4800 | |
| | 18.5 | 35 | 2400 | 4800 | 20 | 3600 | 7200 | |
| | 22 | 30 | 2400 | 4800 | 20 | 3600 | 7200 | |
| | 30 | 20 | 3600 | 7200 | 16 | 5000 | 10000 | |
| | 37 | 16.9 | 3200 | 6400 | 12 | 5000 | 10000 | |
| | 45 | 11.4 | 4800 | 9600 | 10 | 6400 | 12800 | |
| | 55 | 11.4 | 4800 | 9600 | 8.4 | 7200 | 14400 | |
| | 75 | 8.4 | 6400 | 12800 | 6 | 10000 | 20000 | |
| | 90 | 6 | 10000 | 20000 | 5 | 13000 | 26000 | |
| | 110 | 5 | 13000 | 26000 | 4 | 16000 | 32000 | |
| | 132 | 4 | 16000 | 32000 | 3.4 | 20000 | 40000 | |
| | 160 | 3.4 | 20000 | 40000 | 2.8 | 24000 | 48000 | |
| | 185 | 2.8 | 24000 | 48000 | 2.4 | 26000 | 52000 | |
| | 220 | 2.4 | 26000 | 52000 | 2 | 30000 | 60000 | |
| | 250 | 132kW DB Unit and Resistor * 2 Set (Parallel) | | | | | | |
| | 315 | 160kW DB Unit and Resistor * 2 Set (Parallel) | | | | | | |
| | 355 | 185kW DB Unit and Resistor * 2 Set (Parallel) | | | | | | |
| | 400 | 220kW DB Unit and Resistor * 2 Set (Parallel) | | | | | | |
| 500 | 185kW DB Unit and Resistor * 3 Set (Parallel) | | | | | | | |

It is not necessary to use option type dynamic braking unit for H100 0.75~18.5kW(200V) and 0.75~30kW(400V) because basically the dynamic braking unit is built in. If the values of ED (%) are doubled, the rated capacity of braking resistance should be doubled for calculation

Dynamic Braking (DB) Unit & DB Resistor Basic Wiring



| Bornes de la DBU | Description |
|------------------|--|
| B1, B2 | Wire correctly referring to wiring diagram. DB Resistors connect with B1, B2 of DB Unit. |





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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