Derwent Top 100 Global Innovator 2020

High Performance Standard AC Drive

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







User-Friendly Options

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



Contents

04 Features

- 12 Model & Type
- **13** Specifications
- 16 Wiring
- 18 Peripheral Device
- 23 Option
- 27 Dimensions



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

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

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





is Dependable Because it Has High Performance and Reliability.



Reliability

Powerful Electric Current Type Sensorless Vector Control Our iS7 technology includes a competitive and strong low-speed torque control and a speed-precision-driven vector algorithm.

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



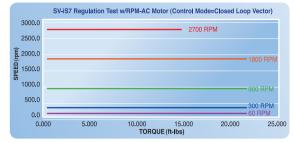
04 | LS ELECTRIC Co., Ltd. Performance

Hig

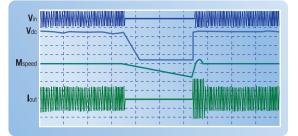
Sensored Vector Realizing Precise Speed/Torque Control

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

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



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

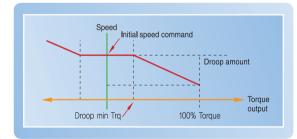


Powerful Performance

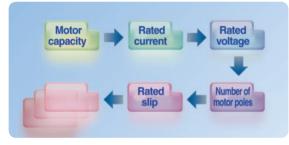
V/F Control, V/F PG, Slip Compensation, Sensorless Vector Control

Automatic Torque Balance Droop Control

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

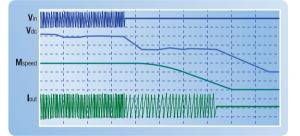


Easy Start Parameter Setting



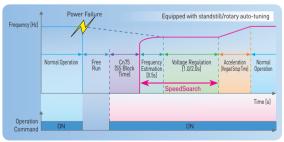
Power and Flux Braking for Maximum Deceleration

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



Flying Start Function

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



Safety Option

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

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

is Flexible Because it is Easily Expandable.

iS7 Feature | Flexibility & Expansion

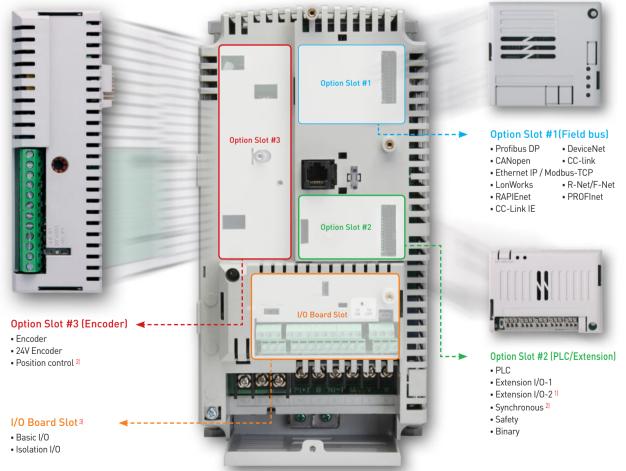
Flexibility Expansion

- * 1) Extension I/O-2 is only dedicated for WEB(Winder) customized models.
- * 2) In order to use position control and synchronous options, customer have to purchase that customized product or to install customized main software.
- * 3) Below 22kW : Default built-in basic I/O Above 30kW : Default built-in isolation I/O
- * More information about the options, refer to the 23Page.



User-Friendly Options

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



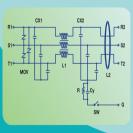
is Convenient Because it Has a User Friendly Interface.

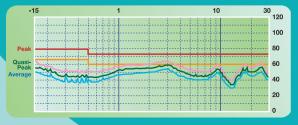


Conve

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







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



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



	THD power factor IP Level Insulation Class		18 ~ 37%
			94 ~ 96%
			IP21
			155°C(300°F)

