

# POWERFUL

Strongest  $\Sigma$ -V line-up ever! Newest  $\Sigma$ -V servo drives increase speeds & improve performance with cleaner, lighter, & more compact equipment. Easy to use & easy to set up with  $\Sigma$ -V high standard of excellence!

# SMART

Separated converter

Compatible with a wide variety of reference interfaces\*  
\* : Will be released in succession.

Supports newest  $\Sigma$ -V functions and optional modules

20-bit serial encoder

30% smaller than  $\Sigma$ -II amplifiers

AC Servo Drives

# Large-Capacity $\Sigma$ -V

NEW

400 V  
(22 to 55 kW)

Servomotor: SGMVV  
SERVOPACK: SGDV/Converter: SGDV-COA



- Solar battery manufacturing equipment
- Metal processing machines (presses, bending machines, spring manufacturing machines, rotary cutters)
- Textile machines ● Machine tools ● Testing equipment ● Printing machines
- Engine testing equipment ● Assembly equipment ● Injection molding machines ● Hydraulic equipment

## Specifications

- Servomotors**
  - Time Rating: Continuous
  - Vibration Class: V15
  - Ambient Temperature: 0 to 40°C
- Excitation:** Permanent magnet
- Mounting:** Flange-mounted (standard)  
Foot-mounted (semi-standard)
- Thermal Class:** F
- Enclosure:** Totally enclosed, cooled separately, IP44
- Ambient Humidity:** 20% to 80% (no condensation)

▶ 1500 min<sup>-1</sup>

▶ 800 min<sup>-1</sup>

Model	SGMVV-	2BD	3ZD	3GD	4ED	5ED	Model	SGMVV-	2BD	3ZD	3GD	4ED	
Rated Output	kW	22	30	37	45	55	Rated Output	kW	22	30	37	45	
Rated Torque	N · m	140	191	236	286	350	Rated Torque	N · m	262	358	442	537	
Stall Torque	N · m	140	191	236	286	350	Stall Torque	N · m	262	358	442	537	
Instantaneous Peak Torque	N · m	350	478	589	715	875	Instantaneous Peak Torque	N · m	526	752	930	1182	
Rated Speed	min <sup>-1</sup>	1500					Rated Speed	min <sup>-1</sup>	800				
Max. Speed	min <sup>-1</sup>	2000					Max. Speed	min <sup>-1</sup>	1300				

### SERVOPACKS

Model	SGDV-	750J	101J	131J
Applicable Servomotor				
Max. Capacity	kW	30	37	55
Power Supply	Main Circuit	520 to 650 VDC		
	Control Circuit	24 VDC±15%		
Mounting Method		Base-mounted		
Feedback		20-bit serial encoder (incremental/absolute)		
Interface		Analog voltage/pulse train reference, MECHATROLINK-II / III * communications reference, command option attachable type*		
DB (Dynamic Brake)		External DB contactor and DB resistor are required.		

### Converters

Model	SGDV-COA	3ZD	5ED
Applicable SERVOPACK			
Max. Capacity	kW	30	55
Power Supply	Main Circuit	Three-phase 380 to 480 VAC, 50/60 Hz	
	Control Circuit	24 VDC±15%	
Mounting Method		Base-mounted	
Regeneration		Built-in regeneration circuit. External regenerative resistor is required.	

### Combinations

Servomotors SGMVV-	2BD	3ZD	3GD	4ED	5ED
	22 kW	30 kW	37 kW	45 kW	55 kW
SERVOPACKs SGDV-	750J		101J		131J
Converters SGDV-COA	3ZD		5ED		

\* : Will be released in succession.

## External Dimensions Units: mm

Note: Contact Yaskawa for dimensional drawings of foot-mounted models.

### Servomotors

Fig. 1

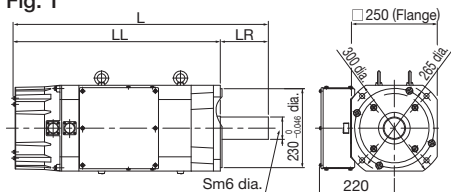
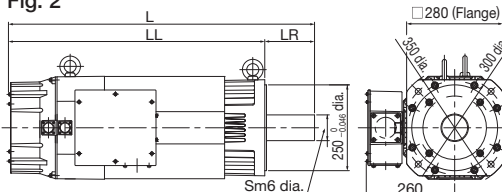


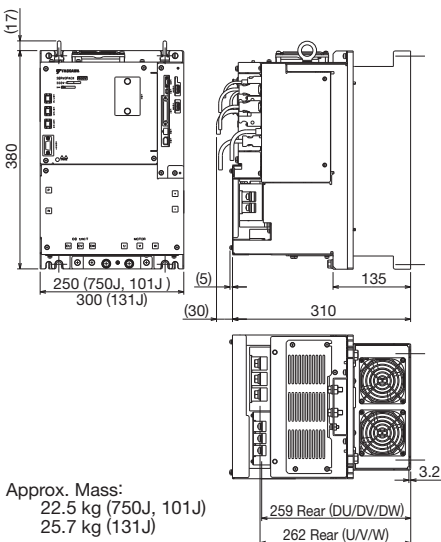
Fig. 2



Model SGMVV-	Fig.	L	LL	LR	S	Approx. Mass kg
2BD	1	658	518	140	60	95
3ZD	1	704	564	140	60	110
3GD	1	744	604	140	65	120
2BD	1	794	654	140	65	135
4ED	2	797	652	145	75	165
5ED	2	842	697	145	75	185
3ZD	2	842	697	145	75	185
3GD	2	892	747	145	75	205
4ED	2	973	798	175	85	225

### SERVOPACKs

SGDV-750J, 101J, 131J

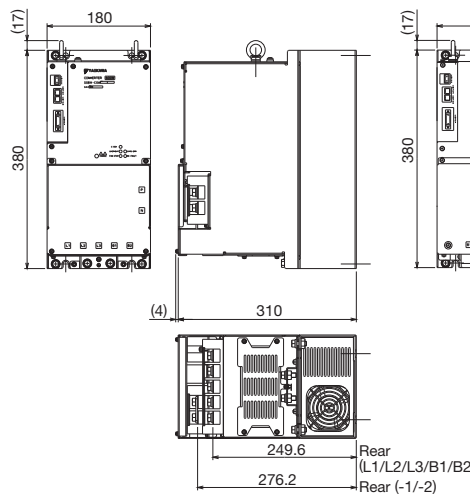


Approx. Mass:  
22.5 kg (750J, 101J)  
25.7 kg (131J)

Note: SGDV-131J SERVOPACK appearance differs from these dimensional drawings. Contact Yaskawa for more details.

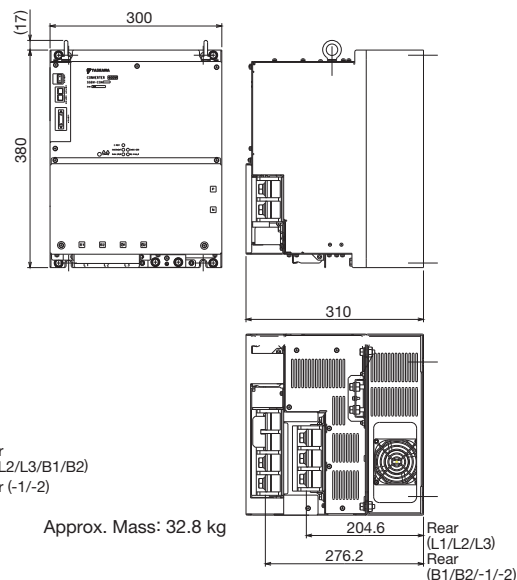
### Converters

SGDV-COA3ZD



Approx. Mass: 20.5 kg

SGDV-COA5ED



Approx. Mass: 32.8 kg



YASKAWA ELECTRIC CORPORATION

<http://www.yaskawa.co.jp/en/>

In the event that the end user of this product is to be the military and said product is to be employed in any weapons systems or the manufacture thereof, the export will fall under the relevant regulations as stipulated in the Foreign Exchange and Foreign Trade Regulations. Therefore, be sure to follow all procedures and submit all relevant documentation according to any and all rules, regulations and laws that may apply.

Specifications are subject to change without notice for ongoing product modifications and improvements.

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