

230 V																			
Frame Size			A					B			C			D		E			
Model VFD-□□□□CP23□-□□			007	015	022	037	055	075	110	150	185	220	300	370	450	550	750	900	
Output Rating	LIGHT DUTY	Rated Output Capacity (kVA)	2.0	3.0	4.0	6.0	8.4	12	18	24	30	36	42	58	72	86	110	128	
		Rated Output Current (A)	5	7.5	10	15	21	31	46	61	75	90	105	146	180	215	276	322	
		Applicable Motor Output (kW)	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	
		Applicable Motor Output (HP)	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	125	
		Overload Tolerance	120% of rated current for 1 minute during every 5 minutes																
		Max. Output Frequency (Hz)	599.00														400.00		
	NORMAL DUTY	Carrier Frequency (kHz)	2~15 (default setting 8)									2~10 (default setting 6)					2~9 (default setting 4)		
		Rated Output Capacity (kVA)	1.2	2.0	3.2	4.4	6.8	10	13	20	26	30	36	48	58	72	86	102	
		Rated Output Current (A)	3	5	8	11	17	25	33	49	65	75	90	120	146	180	215	255	
		Applicable Motor Output (kW)	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	19	22	30	37	45	55	75	
		Applicable Motor Output (HP)	0.5	1	2	3	5	7.5	10	15	20	25	30	40	50	60	75	100	
		Overload Tolerance	120% of rated current for 1 minute during every 5 minutes; 160% of rated current for 3 seconds during every 25 seconds																
Max. Output Frequency (Hz)	599.00														400.00				
Carrier Frequency (kHz)	2~15 (default setting 8)									2~10 (default setting 6)					2~9 (default setting 4)				
Input Rating	Input Current (A) Light Duty		6.4	9.6	15	22	25	35	50	65	83	100	116	146	180	215	276	322	
	Input Current (A) Normal Duty		3.9	6.4	12	16	20	28	36	52	72	83	99	124	143	171	206	245	
	Rated Voltage/Frequency		3-phase, 200~240 V _{AC} (-15%~+10%), 50/60 Hz																
	Operating Voltage Range		170~264 V _{AC}																
	Frequency Tolerance		47~63 Hz																
Efficiency (%)			97.8												98.2				
Power Factor			>0.98																
Weight (Kg)			2.6 ± 0.3					5.4 ± 1			9.8 ± 1.5			38.5 ± 1.5		64.8 ± 1.5			
Cooling Method			Natural Cooling		Fan Cooling														
Braking Chopper			Frame A, B, C, Built-in												Frame D and above: Optional				
DC Choke			Frame A, B, C, Optional												Frame D and above: Built-in 3%				
EMC Filter			Optional																
460 V																			
Frame Size			A					B			C			D0					
Models VFD-□□□□CP43□-□□ VFD-□□□□CP4E□-□□			007	015	022	037	040	055	075	110	150	185	220	300	370	450	550		
Output Rating	LIGHT DUTY	Rated Output Capacity (kVA)	2.4	3.3	4.4	6.8	8.4	10.4	14.3	19	25	30	36	48	58	73	88		
		Rated Output Current (A)	3	4.2*	5.5*	8.5*	10.5	13*	18*	24*	32*	38*	45	60*	73*	91	110		
		Applicable Motor Output (kW)	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11	15	18.5	22	30	37	45	55		
		Applicable Motor Output (HP)	1	2	3	5	5	7.5	10	15	20	25	30	40	50	60	75		
		Overload Tolerance	120% of rated current for 1 minute during every 5 minutes																
		Max. Output Frequency (Hz)	599.00																
	NORMAL DUTY	Carrier Frequency (kHz)	2~15 (default setting 8)										2~10 (default setting 6)						
		Rated Output Capacity (kVA)	2.2	2.4	3.2	4.8	7.2	8.4	10.4	14.3	19	25	30	36	48	58	73		
		Rated Output Current (A)	1.7	3.0	4.0	6.0	9.0	10.5	12	18	24	32	38	45	60	73	91		
		Applicable Motor Output (kW)	0.4	0.75	1.5	2.2	3.7	4.0	5.5	7.5	11	15	18.5	22	30	37	45		
		Applicable Motor Output (HP)	0.5	1	2	3	5	5	7.5	10	15	20	25	30	40	53	60		
		Overload Tolerance	120% of rated current for 1 minute during every 5 minutes; 160% of rated current for 3 seconds during every 25 seconds																
Max. Output Frequency (Hz)	599.00																		
Carrier Frequency (kHz)	2~15 (default setting 8)										2~10 (default setting 6)								
Input Rating	Input Current (A) Light Duty		4.3	6.0	8.1	12.4	16	20	22	26	35	42	50	66	80	91	110		
	Input Current (A) Normal Duty		3.5	4.3	5.9	8.7	14	15.5	17	20	26	35	40	47	63	74	101		
	Rated Voltage/Frequency		3-phase, 380~480 V _{AC} (-15%~+10%), 50/60 Hz																
	Operating Voltage Range		323~528 V _{AC}																
	Frequency Tolerance		47~63 Hz																
Efficiency (%)			97.8																
Power Factor			>0.98																
Weight (Kg)			2.6 ± 0.3					5.4 ± 1			9.8 ± 1.5			27 ± 1					
Cooling Method			Natural cooling		Fan cooling														
Braking Chopper			Frame A, B, C, Built-in; Frame D and above, Optional																
DC Choke			Frame A, B, C, Optional; Frame D and above, Built-in 3%																
EMC Filter			Frame A, B, C of VFD____CP4EA_-_; Built-in Frame A, B, C of VFD____CP43A_-_; no built-in Frame D above, Optional																

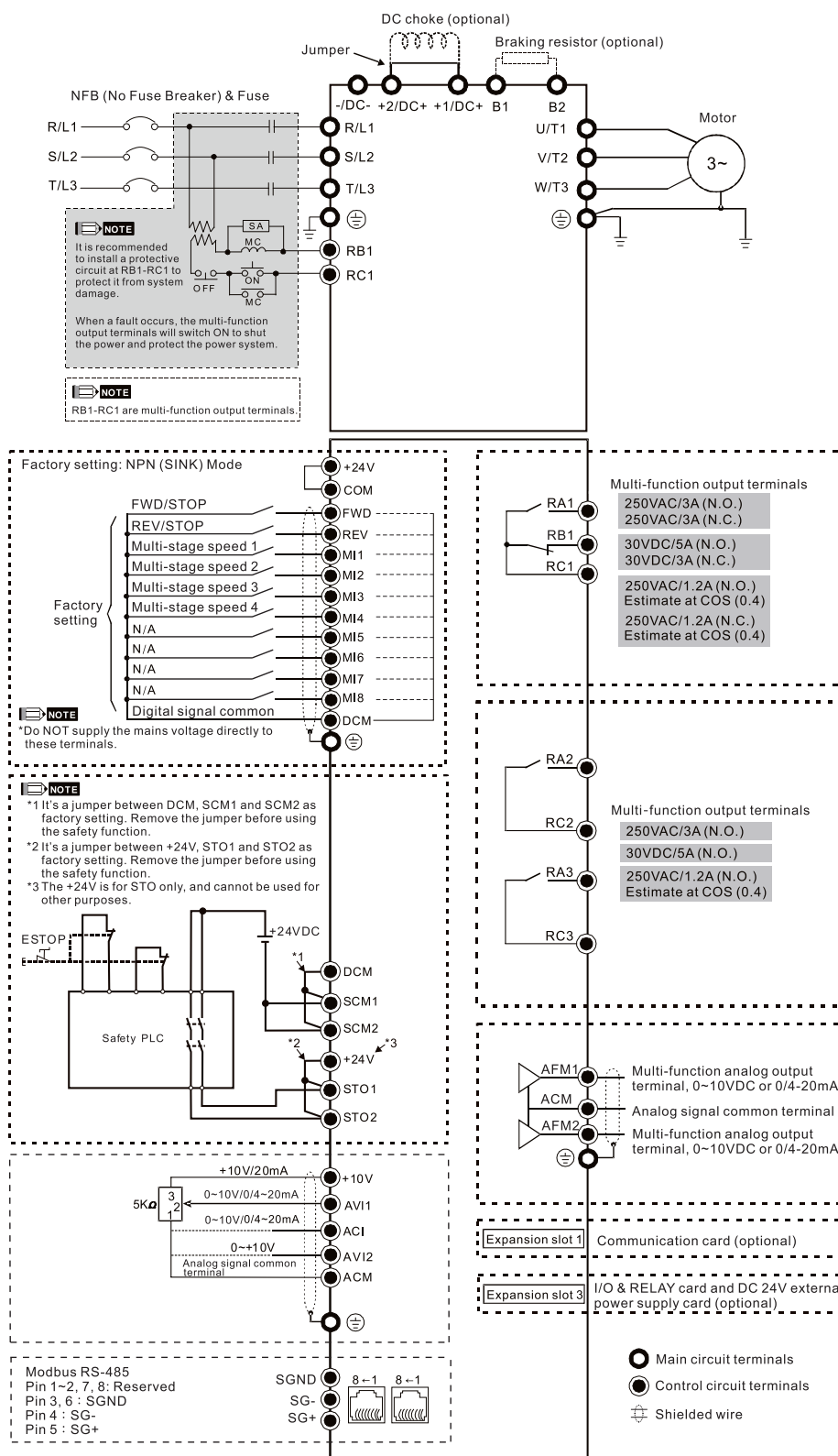
* It means the rated output current is for the models of version B. (e.g. VFD015CP43B-21)

Control Characteristics	Control Method	Pulse Width Modulated (PWM)				
	Control Mode	1: V/F (V/F control), 2: SVC (Sensorless Vector Control), 3: PM (Permanent Magnet Motor)				
	Starting Torque	Reach up to 150% or above at 0.5Hz				
	V/F Curve	4 point adjustable V/F curve and square curve				
	Speed Response Ability	5Hz				
	Torque Limit	Light Duty: Max. 130% torque current; Normal Duty: Max. 160% torque current				
	Torque Accuracy	±5%				
	Max. Output Frequency (Hz)	230 V model: 599.00 (55kW and above: 400.00) 460 V model: 599.00 (90kW and above: 400.00) 575 V/690 V model: 599.00				
	Frequency Output Accuracy	Digital command: ±0.01%, -10℃~+40℃, Analog command: ±0.1%, 25 ±10℃				
	Output Frequency Resolution	Digital command: 0.01 Hz; Analog command: Max. output frequency x0.03/60Hz (±11 bit)				
	Overload Tolerance	Light duty: 120% of rated current for 1 minute during every 5 minutes Normal duty: 120% of rated current for 1 minute during every 5 minutes; 160% of rated current for 3 seconds during every 25 seconds				
	Frequency Setting Signal	0~+10 V, 4~20 mA, 0~20 mA				
	Accel./decel. Time	0.00~600.00/0.0~6000.0 seconds				
Main Control Function	Fault restart	Torque limit	High-Slip braking	Dwell	3-wire sequence	
	Speed search	Parameter copy	JOG frequency	Slip compensation	Torque compensation	
	S-curve accel/decel	Energy saving control	Accel/Decel. Time switch	Frequency upper/lower limit settings	Momentary power loss ride thru	
	PID control (with sleep function)	Auto-Tuning (rotational, stationary)	DC injection braking at start/stop	BACnet Communication	17-step speed (max.)	
	Over-torque detection	Modbus communication (RS-485 RJ45, Max. 5.2Kbps)				
	Fan Control	230 V model: Model with spec higher than VFD185CP23 (included) are PWM control; Model with spec lower than VFD150CP23 (not included) are on/off switch control. 460 V model: Model with spec higher than VFD220CP43/4E (included) are PWM control; Model with spec lower than VFD185CP43/4E (not included) are on/off switch control. 575 V/690 V model: PWM control				
Protection Characteristics	Motor Protection	Electronic thermal relay protection				
	Over-Current Protection	230 V/460 V model: Light duty: Over-current protection for 185% rated current, Normal duty: Over-current protection for 240% rated current, Current clamp (Light duty: 130~135%) ; (Normal duty: 170~175%) 575 V/690 V model: Over-current protection for 225% rated current Current clamp (Light duty: around 128~141%) ; (Normal duty: around 170~175%)				
	Over-Voltage Protection	230 V model: drive will stop when DC bus voltage exceeds 410 V 460 V model: drive will stop when DC bus voltage exceeds 820 V 575 V model: drive will stop when DC bus voltage exceeds 1016 V 690 V model: drive will stop when DC bus voltage exceeds 1189 V				
	Over-Temperature Protection	Built-in temperature sensor				
	Stall Prevention	Stall prevention during acceleration, deceleration and running indepenently				
	Restart After Instantaneous Power Failure	Parameter setting up to 20 seconds				
	Grounding Leakage Current Protection	Leakage current is higher than 50% of rated current of the AC motor drive				
	Short-circuit Current Rating (SCCR)	Per UL508C, the drive is suitable for use on a circuit capable of delivering not more than 100kA symmetrical amperes (rms) when protected by fuses given in the fuse table				
	International Certifications*	CEULCE EACCCC CCC SEMI F47, GB/T12668.3				

Note : 1. EAC Certification is for 230 V and 460 V models only
2. No UL certification for models above 500 kW

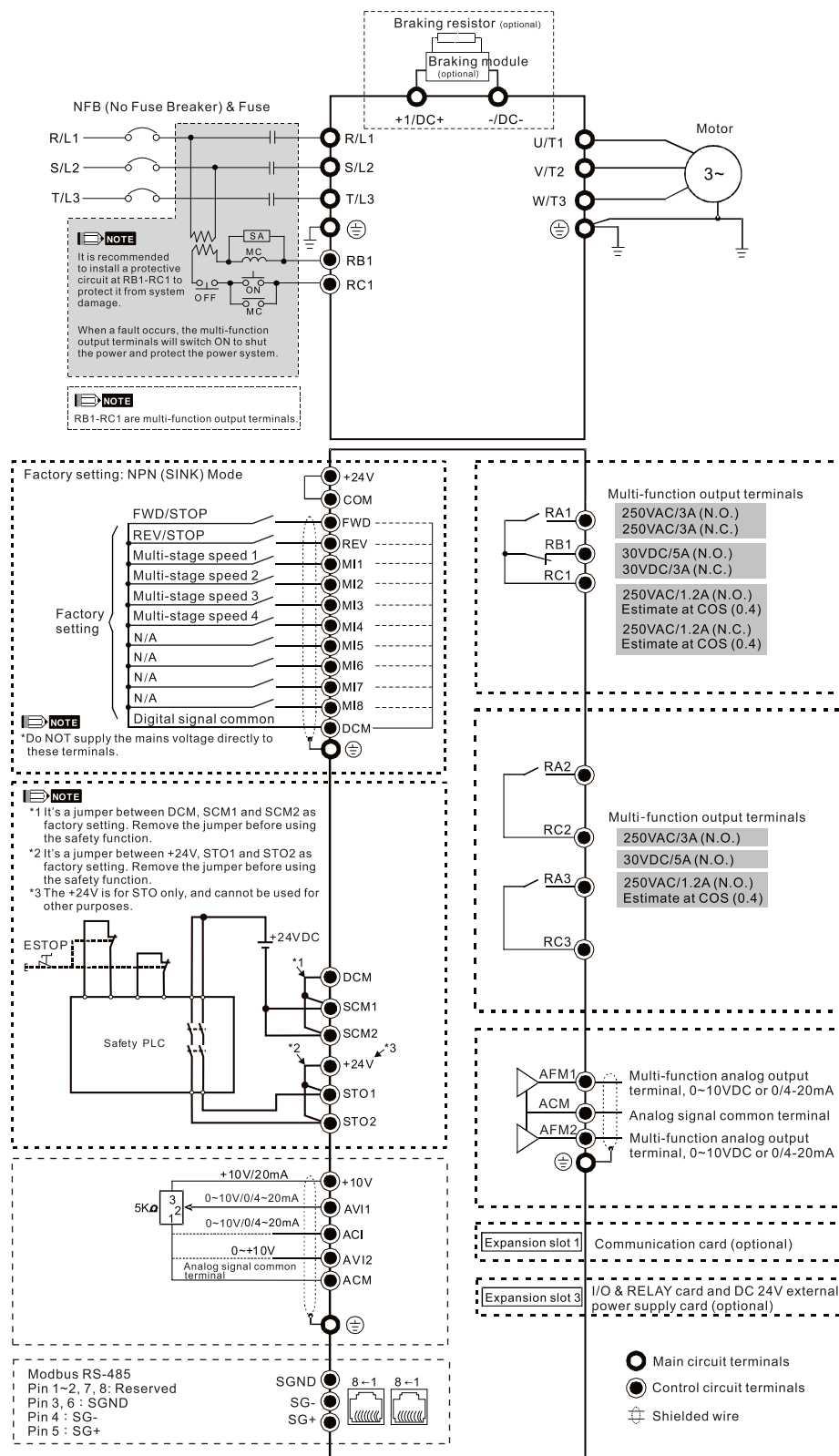
Wiring Diagram for Frame A ~ C

*Input: 3-phase power



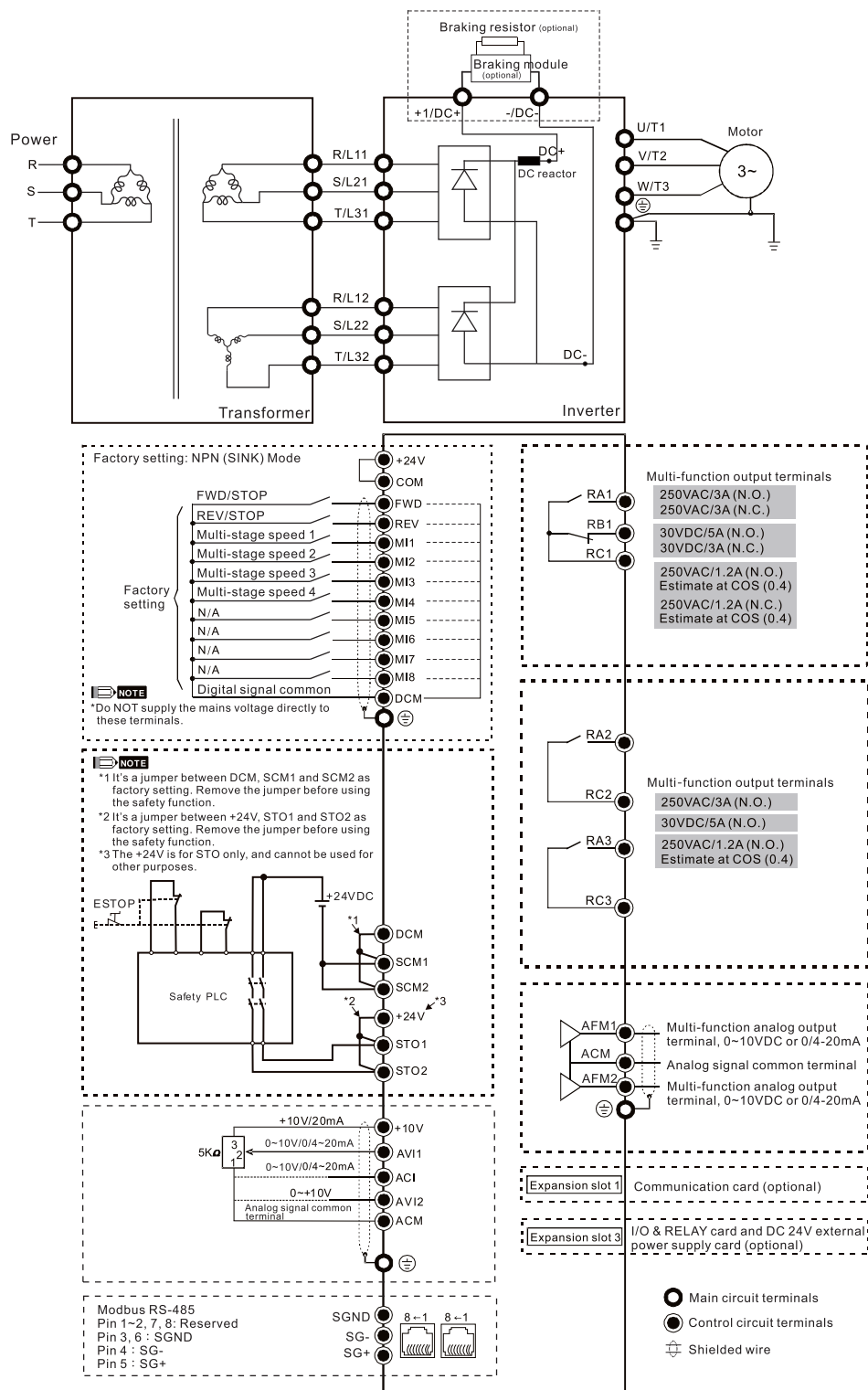
Wiring Diagram for Frame D ~ F

*Input: 3-phase power

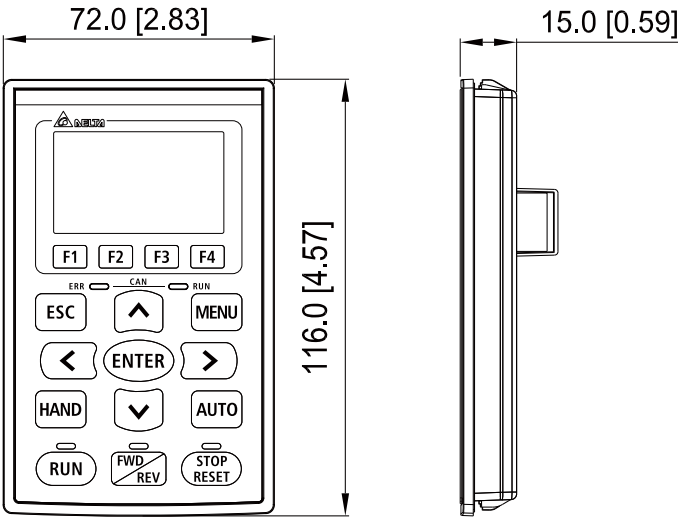


Wiring Diagram for Frame G ~ H

*Input: 3-phase power



Digital Keypad Unit: mm [inch]



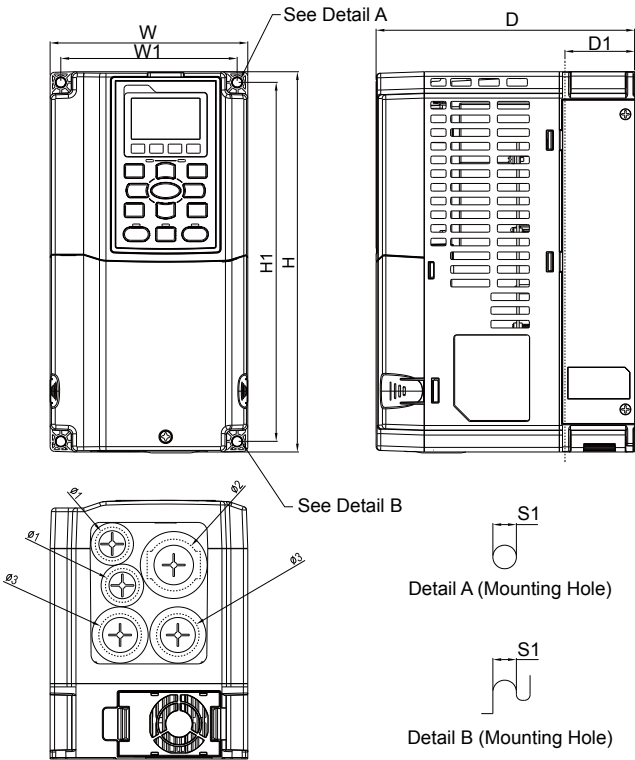
KPC-CC01

Standard LCD keypad

Frame A

MODEL

- | | |
|----------------|----------------|
| VFD007CP23A-21 | VFD007CP4EA-21 |
| VFD015CP23A-21 | VFD015CP4EB-21 |
| VFD022CP23A-21 | VFD022CP4EB-21 |
| VFD037CP23A-21 | VFD037CP4EB-21 |
| VFD055CP23A-21 | VFD040CP4EA-21 |
| VFD007CP43A-21 | VFD055CP4EB-21 |
| VFD015CP43B-21 | VFD075CP4EB-21 |
| VFD022CP43B-21 | VFD015CP53A-21 |
| VFD037CP43B-21 | VFD022CP53A-21 |
| VFD040CP43A-21 | VFD037CP53A-21 |
| VFD055CP43B-21 | |
| VFD075CP43B-21 | |



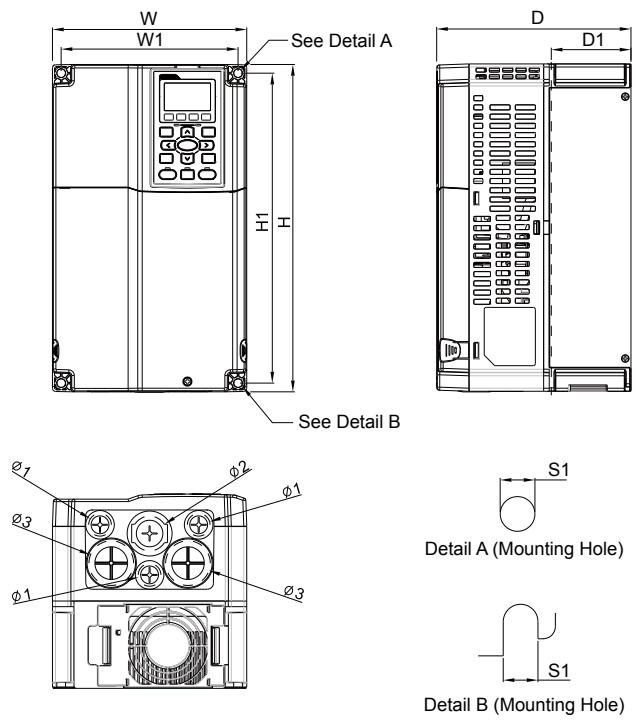
Frame		W	H	D	W1	H1	D1*	Ø	Ø1	Ø2	Ø3
A	mm	130.0	250.0	170.0	116.0	236.0	45.8	6.2	22.2	34.0	28.0
	inch	5.12	9.84	6.69	4.57	9.29	1.80	0.24	0.87	1.34	1.10

*D1: Flange mount.

Frame B

MODEL

- VFD075CP23A-21
- VFD110CP23A-21
- VFD150CP23A-21
- VFD110CP43B-21
- VFD150CP43B-21
- VFD185CP43B-21
- VFD110CP4EB-21
- VFD150CP4EB-21
- VFD185CP4EB-21
- VFD055CP53A-21
- VFD075CP53A-21
- VFD110CP53A-21
- VFD150CP53A-21



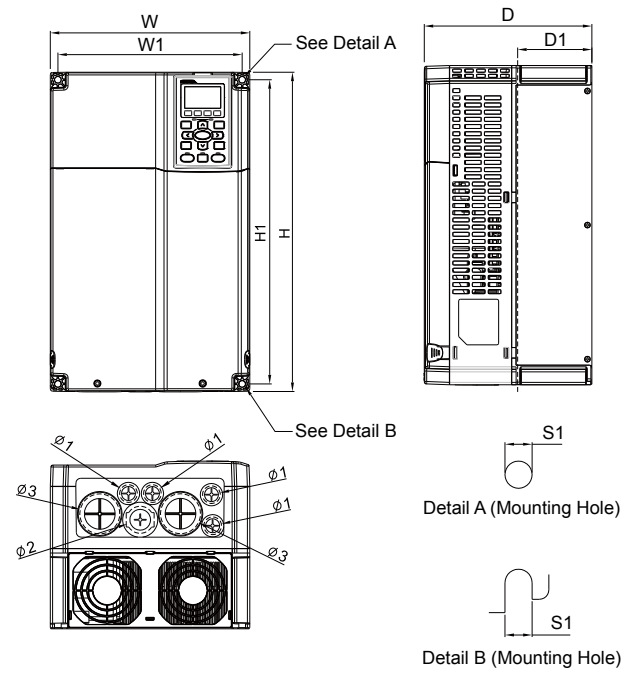
Frame		W	H	D	W1	H1	D1*	S1	Ø1	Ø2	Ø3
B1	mm	190.0	320.0	190.0	173.0	303.0	77.9	8.5	22.2	34.0	43.8
	inch	7.48	12.60	7.48	6.81	11.93	3.07	0.33	0.87	1.34	1.72

*D1: Flange mount.

Frame C

MODEL

- VFD185CP23A-21
- VFD220CP23A-21
- VFD300CP23A-21
- VFD220CP43A-21
- VFD300CP43B-21
- VFD370CP43B-21
- VFD220CP4EA-21
- VFD300CP4EB-21
- VFD370CP4EB-21
- VFD185CP63A-21
- VFD220CP63A-21
- VFD300CP63A-21
- VFD370CP63A-21



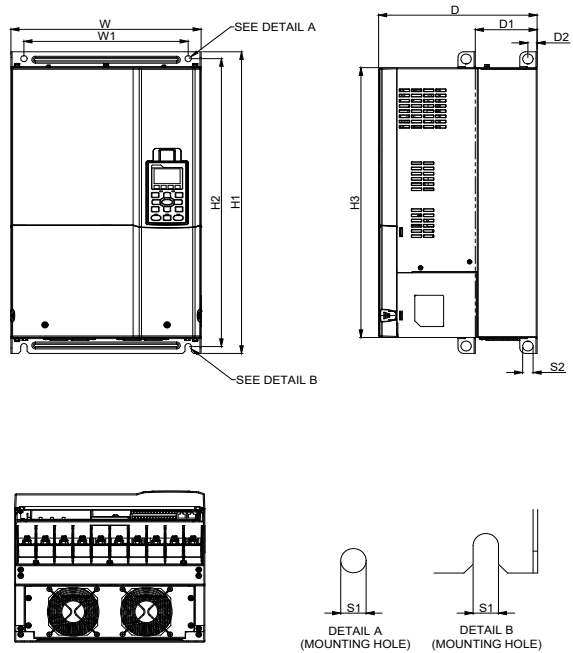
Frame		W	H	D	W1	H1	D1*	S1	Ø1	Ø2	Ø3
C1	mm	250.0	400.0	210.0	231.0	381.0	92.9	8.5	22.2	34.0	50.0
	inch	9.84	15.75	8.27	9.09	15.00	3.66	0.33	0.87	1.34	1.97

*D1: Flange mount.

Frame D1

MODEL
FRAME_D1

- VFD370CP23A-00
- VFD450CP23A-00
- VFD750CP43B-00
- VFD900CP43A-00
- VFD450CP63A-00
- VFD550CP63A-00



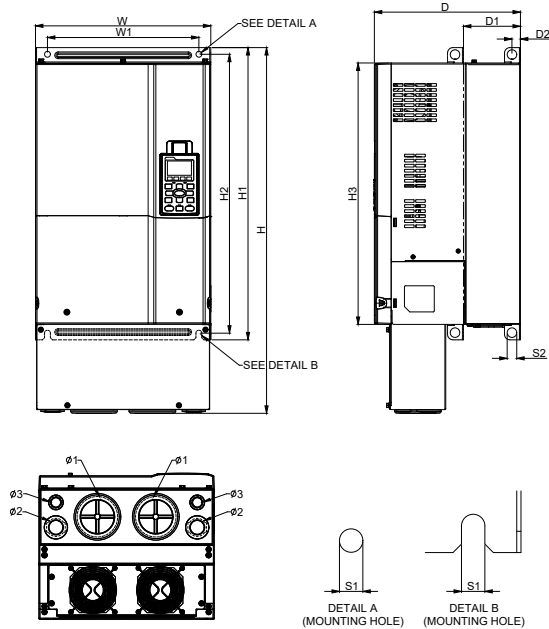
Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	Ø1	Ø2	Ø3
D1	mm	330.0	-	275.0	285.0	550.0	525.0	492.0	107.2	16.0	11.0	18.0	-	-	-
	inch	12.99	-	10.83	11.22	21.65	20.67	19.37	4.22	0.63	0.43	0.71	-	-	-

*D1: Flange mount.

Frame D2

MODEL
FRAME_D2

- VFD370CP23A-21
- VFD450CP23A-21
- VFD750CP43B-21
- VFD900CP43A-21
- VFD450CP63A-21
- VFD550CP63A-21



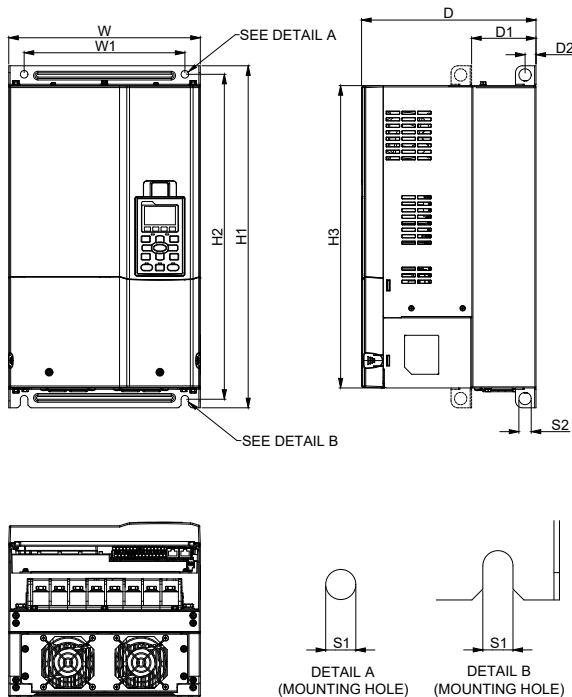
Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	Ø1	Ø2	Ø3
D2	mm	330.0	688.3	275.0	285.0	550.0	525.0	492.0	107.2	16.0	11.0	18.0	76.2	34.0	22.0
	inch	12.99	27.10	10.83	11.22	21.65	20.67	19.37	4.22	0.63	0.43	0.71	3.00	1.34	0.87

*D1: Flange mount.

Frame D0-1

MODEL
FRAME_D0-1

VFD450CP43S-00
VFD550CP43S-00



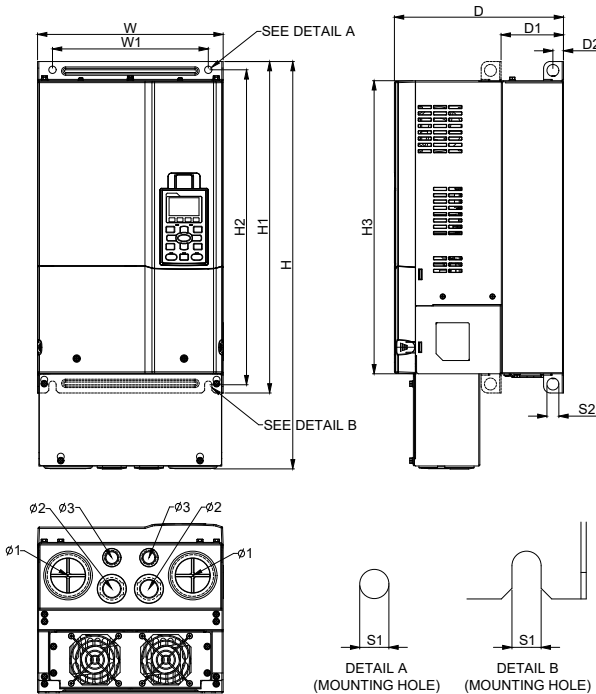
Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2
D0-1	mm	280.0	-	255.0	235.0	500.0	475.0	442.0	94.2	16.0	11.0	18.0
	inch	11.02	-	10.04	9.25	19.69	18.70	17.40	3.71	0.63	0.43	0.71

*D1: Flange mount.

Frame D0-2

MODEL
FRAME_D0-2

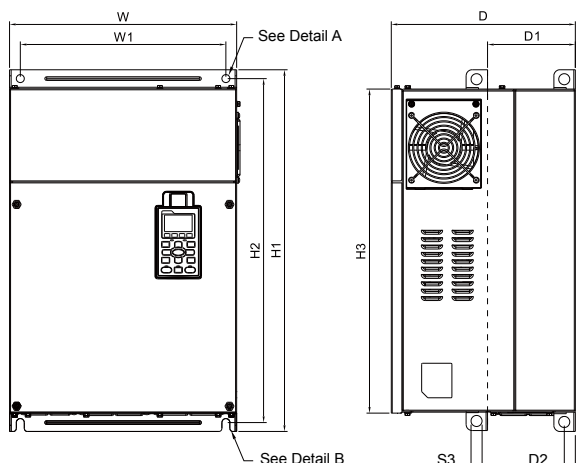
VFD450CP43S-21
VFD550CP43S-21



Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	Ø1	Ø2	Ø3
D0-2	mm	280.0	614.4	255.0	235.0	500.0	475.0	442.0	94.2	16.0	11.0	18.0	62.7	34.0	22.0
	inch	11.02	24.19	10.04	9.25	19.69	18.70	17.40	3.71	0.63	0.43	0.71	2.47	1.34	0.87

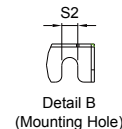
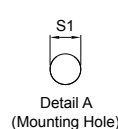
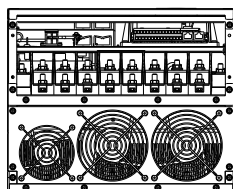
*D1: Flange mount.

Frame E1



MODEL

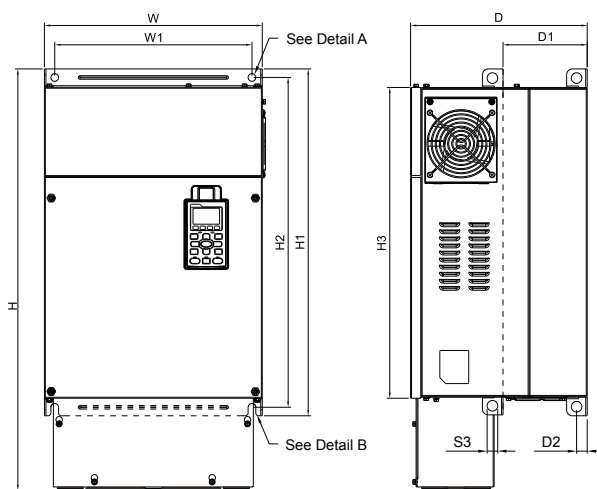
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VFD750CP23A-00	VFD900CP63A-00
VFD900CP23A-00	VFD1100CP63A-00
VFD1100CP43A-00	VFD1320CP63A-00
VFD1320CP43B-00	



Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	S3	Ø1	Ø2	Ø3
E1	mm	370.0	-	300.0	335.0	589.0	560.0	528.0	143.0	18.0	13.0	13.0	18.0	-	-	-
	inch	14.57	-	11.81	13.19	23.19	22.05	20.80	5.63	0.71	0.51	0.51	0.71	-	-	-

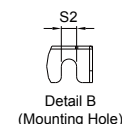
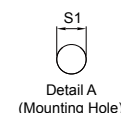
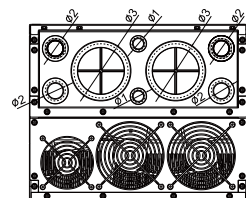
*D1: Flange mount.

Frame E2



MODEL

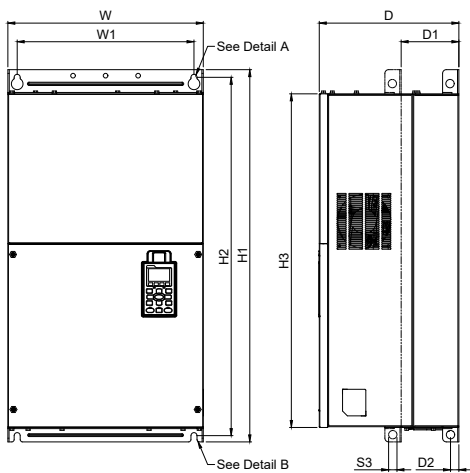
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VFD750CP23A-21	VFD900CP63A-21
VFD900CP23A-21	VFD1100CP63A-21
VFD1100CP43A-21	VFD1320CP63A-21
VFD1320CP43B-21	



Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	S3	Ø1	Ø2	Ø3
E2	mm	370.0	715.8	300.0	335.0	589.0	560.0	528.0	143.0	18.0	13.0	13.0	18.0	22.0	34.0	92.0
	inch	14.57	28.18	11.81	13.19	23.19	22.05	20.80	5.63	0.71	0.51	0.51	0.71	0.87	1.34	3.62

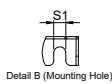
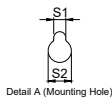
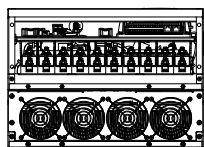
*D1: Flange mount.

Frame F1



MODEL

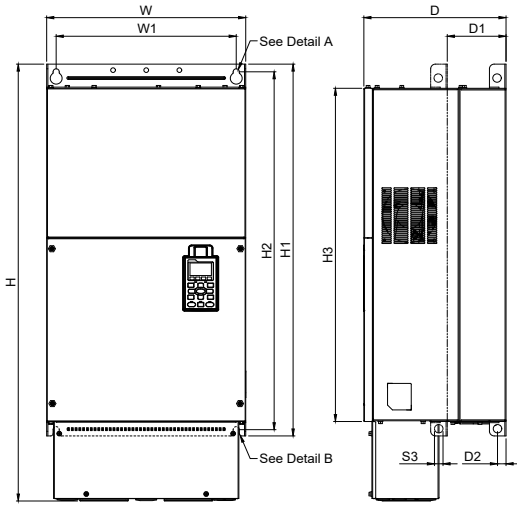
VFD1600CP43A-00
VFD1850CP43B-00
VFD1600CP63A-00
VFD2000CP63A-00



Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	S3	Ø1	Ø2	Ø3
F1	mm	420.0	-	300.0	380.0	800.0	770.0	717.0	124.0	18.0	13.0	25.0	18.0	-	-	-
	inch	16.54	-	11.81	14.96	31.50	30.32	28.23	4.88	0.71	0.51	0.98	0.71	-	-	-

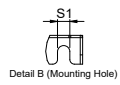
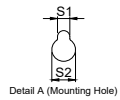
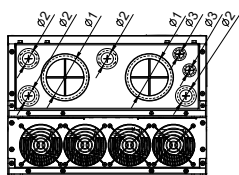
*D1: Flange mount.

Frame F2



MODEL

VFD1600CP43A-21
VFD1850CP43B-21
VFD1600CP63A-21
VFD2000CP63A-21



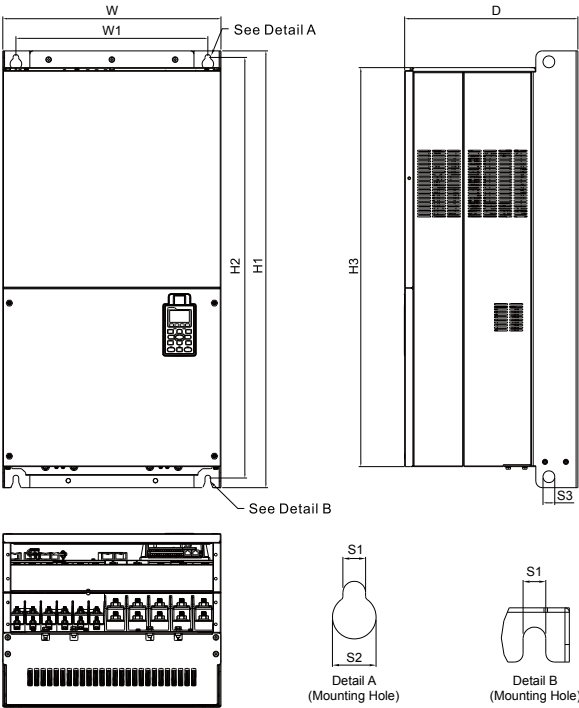
Frame		W	H	D	W1	H1	H2	H3	D1*	D2	S1	S2	S3	Ø1	Ø2	Ø3
F2	mm	420.0	940.0	300.0	380.0	800.0	770.0	717.0	124.0	18.0	13.0	25.0	18.0	92.0	35.0	22.0
	inch	16.54	37.00	11.81	14.96	31.50	30.32	28.23	4.88	0.71	0.51	0.98	0.71	3.62	1.38	0.87

*D1: Flange mount.

Frame G1

MODEL

VFD2000CP43A-00
VFD2200CP43A-00
VFD2500CP43A-00
VFD2800CP43A-00
VFD2500CP63A-00
VFD3150CP63A-00

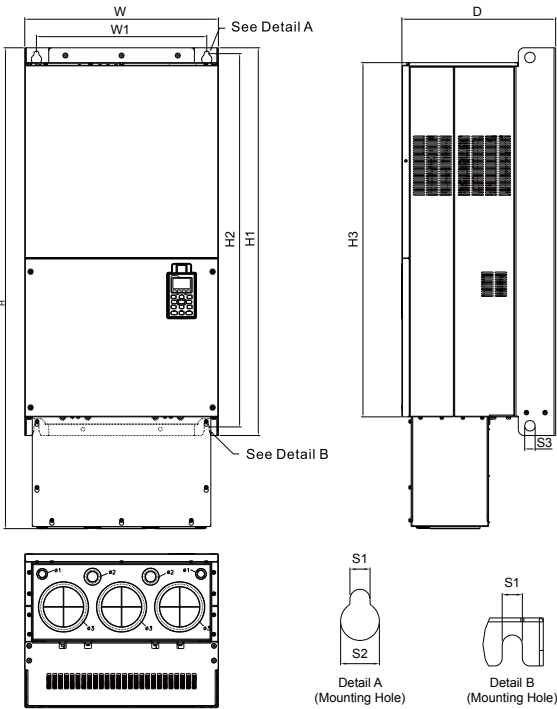


Frame		W	H	D	W1	H1	H2	H3	S1	S2	S3	Ø1	Ø2	Ø3
G1	mm	500.0	-	397.0	440.0	1000.0	963.0	913.6	13.0	26.5	27.0	-	-	-
	inch	19.69	-	15.63	217.32	39.37	37.91	35.97	0.51	1.04	1.06	-	-	-

Frame G2

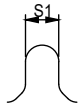
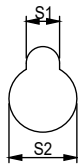
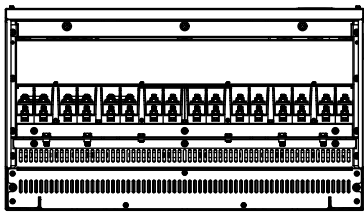
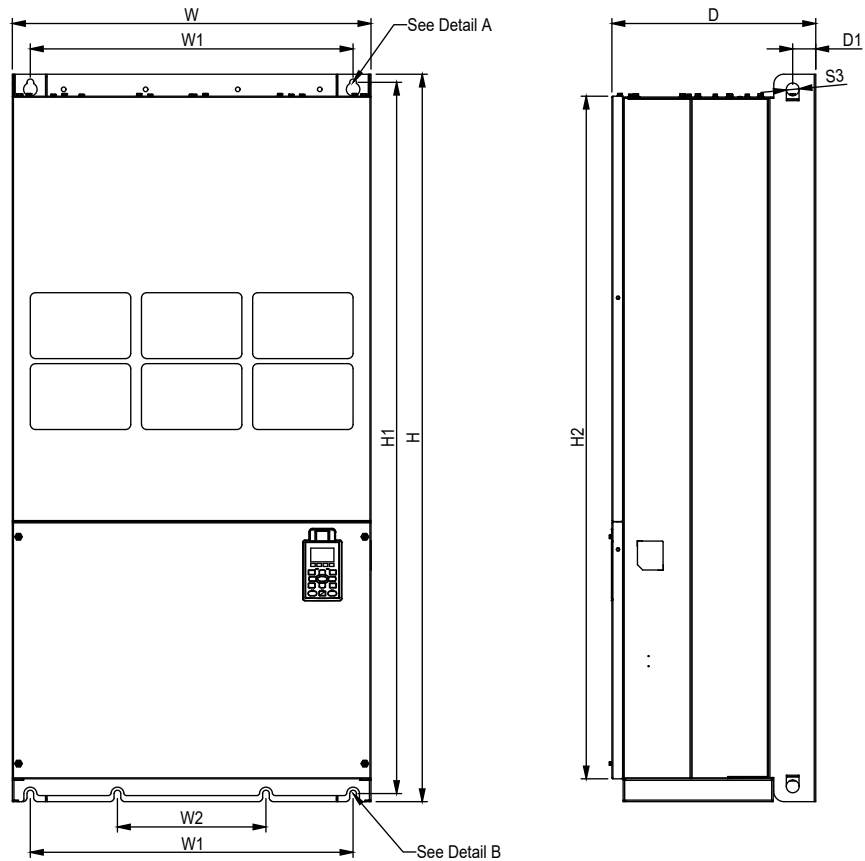
MODEL

VFD2000CP43A-21
VFD2200CP43A-21
VFD2500CP43A-21
VFD2800CP43A-21
VFD2500CP63A-21
VFD3150CP63A-21



Frame		W	H	D	W1	H1	H2	H3	S1	S2	S3	Ø1	Ø2	Ø3
G2	mm	500.0	1240.2	397.0	440.0	1000.0	963.0	913.6	13.0	26.5	27.0	22.0	34.0	117.5
	inch	19.69	48.83	15.63	217.32	39.37	37.91	35.97	0.51	1.04	1.06	0.87	1.34	4.63

Frame H1



See Detail A(Mounting Hole)

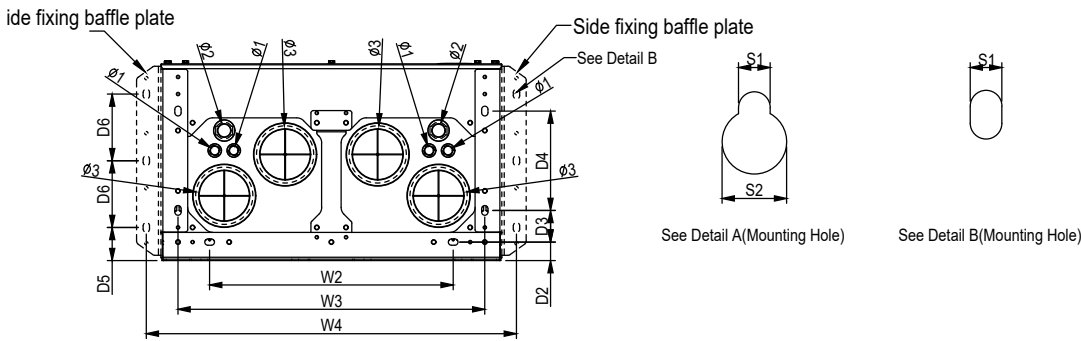
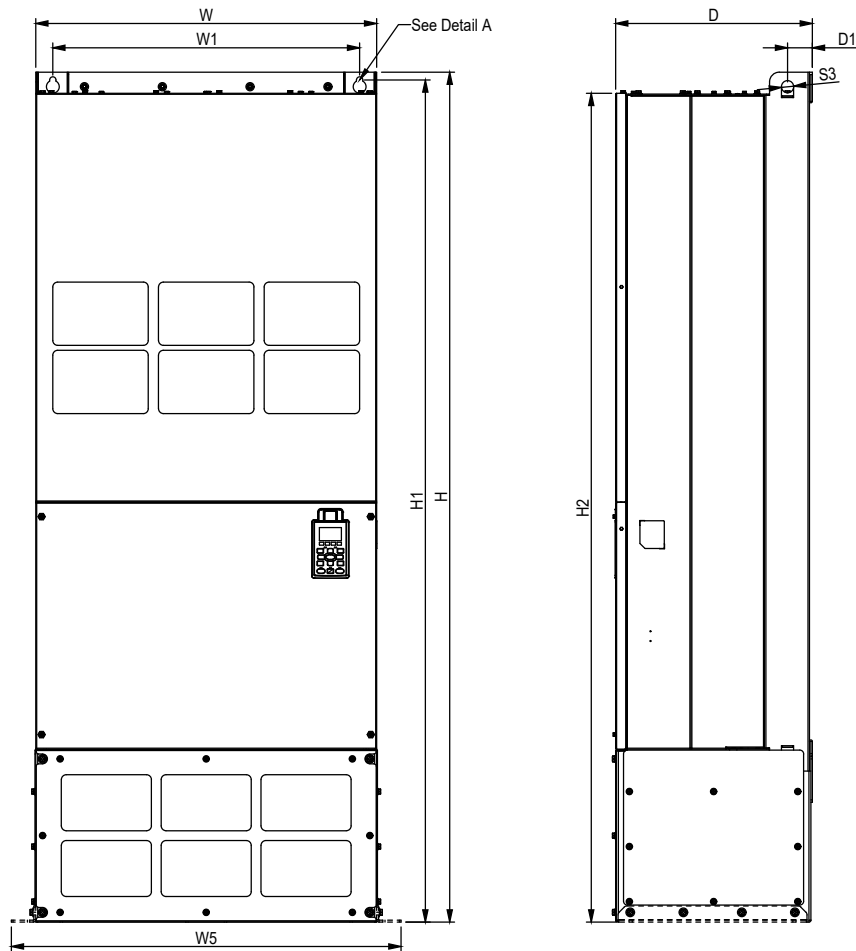
See Detail B(Mounting Hole)

MODEL

VFD3150CP43A-00
VFD3550CP43A-00
VFD4000CP43A-00
VFD5000CP43A-00
VFD5600CP43A-00
VFD6300CP43A-00

Frame		W	H	D	W1	W2	W3	W4	W5	W6	H1	H2	H3	H4
H1	mm	700.0	1435.0	398.0	630.0	290.0	-	-	-	-	1403.0	1346.6	-	-
	inch	27.56	56.5	15.67	24.80	11.42	-	-	-	-	55.24	53.02	-	-
Frame		H5	D1	D2	D3	D4	D5	D6	S1	S2	S3	Ø1	Ø2	Ø3
H1	mm	-	45.0	-	-	-	-	-	13.0	26.5	25.0	-	-	-
	inch	-	1.77	-	-	-	-	-	0.51	1.04	0.98	-	-	-

Frame H3

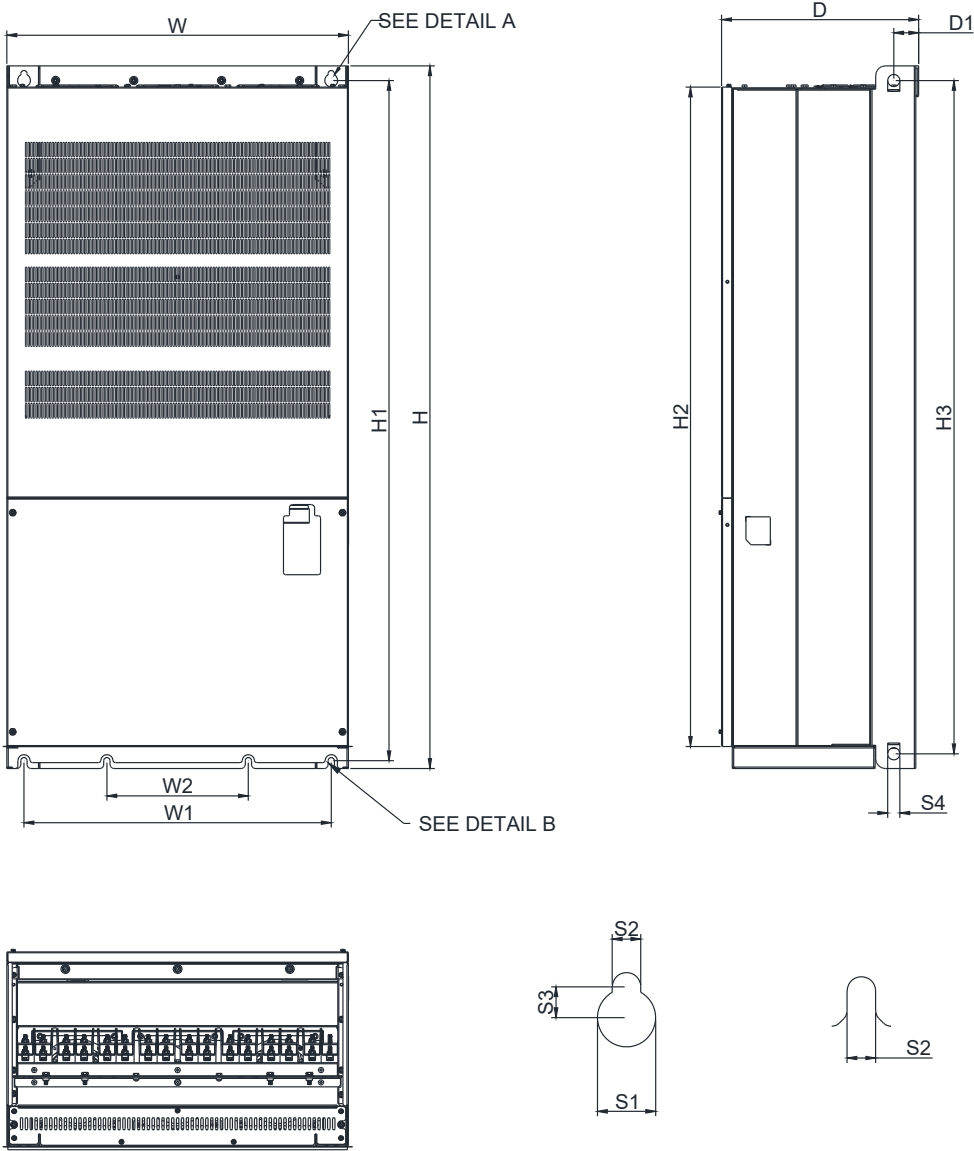


MODEL

VFD3150CP43C-21
VFD3550CP43C-21
VFD4000CP43C-21
VFD5000CP43C-21
VFD5600CP43C-21
VFD6300CP43C-21

Frame		W	H	D	W1	W2	W3	W4	W5	W6	H1	H2	H3	H4
H3	mm	700.0	1745.0	404.0	630.0	500.0	630.0	760.0	800.0	-	1729.0	1701.6	-	-
	inch	27.56	68.70	15.91	24.80	19.69	24.80	29.92	31.50	-	68.07	66.99	-	-
Frame		H5	D1	D2	D3	D4	D5	D6	S1	S2	S3	Ø1	Ø2	Ø3
H3	mm	-	51.0	38.0	65.0	204.0	68.0	137.0	13.0	26.5	25.0	22.0	34.0	117.5
	inch	-	2.0	1.50	2.56	8.03	2.68	5.4	0.51	1.04	0.98	0.87	1.34	4.63

690 V Frame H1

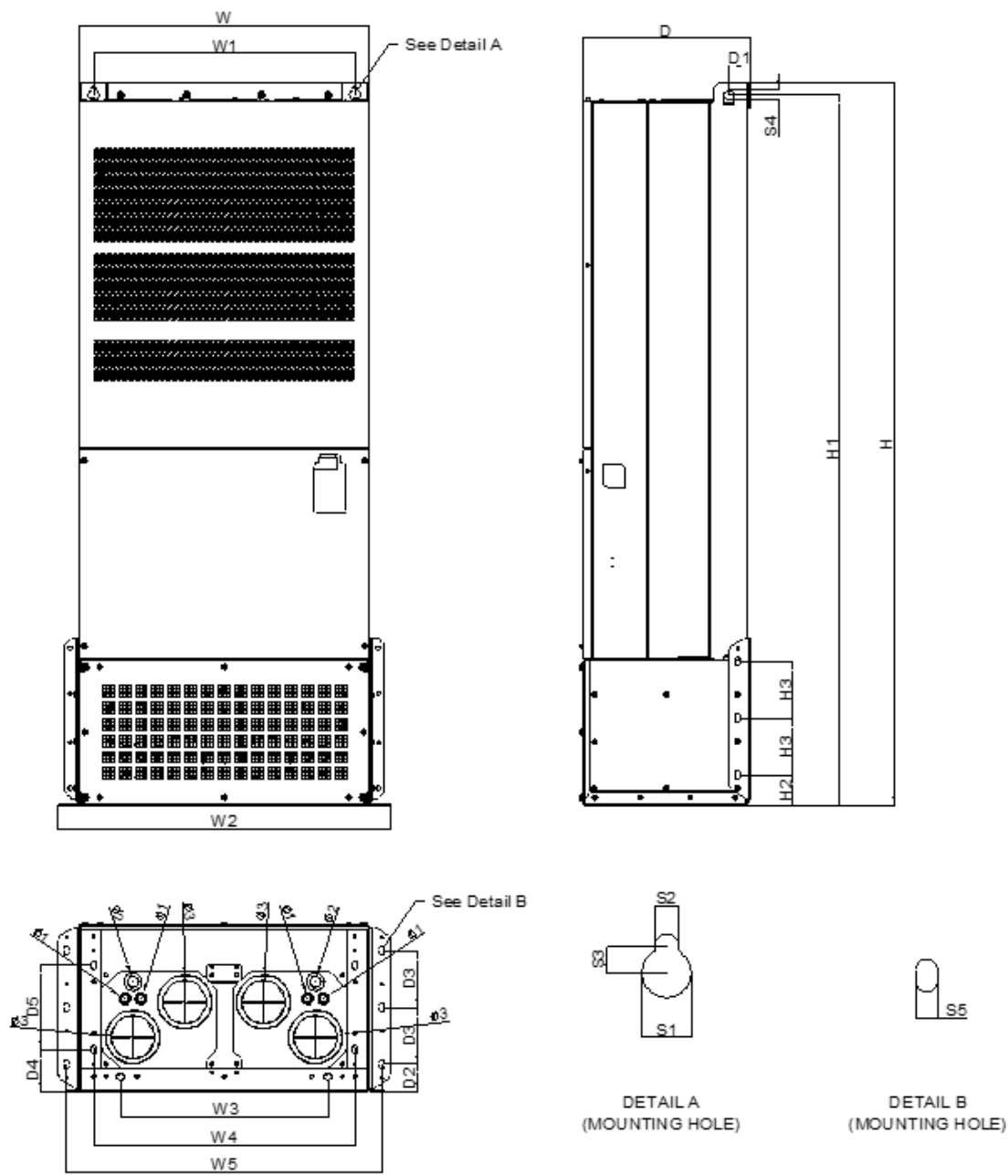


MODEL
690V FRAME_H1
VFD4000CP63A-00
VFD4500CP63A-00
VFD5600CP63A-00
VFD6300CP63A-00

DETAIL A (MOUNTING HOLE) DETAIL B (MOUNTING HOLE)

Frame		W	H	D	W1	W2	W3	W4	W5	W6	H1	H2	H3	H4
H1	mm	700.0	1435.0	398.0	630.0	290.0	-	-	-	-	1389.0	1346.6	1375.0	-
	inch	27.56	56.5	15.67	24.8	11.42	-	-	-	-	54.68	53.02	54.13	-
Frame		H5	D1	D2	D3	D4	D5	D6	S1	S2	S3	S4		
H1	mm	-	45.0	-	-	-	-	-	26.5	13.0	14.0	25.0		
	inch	-	1.77	-	-	-	-	-	1.04	0.51	0.55	0.98		

690 V Frame H2



MODEL
690V FRAME_H2
VFD4000CP63A-21
VFD4500CP63A-21
VFD5600CP63A-21
VFD6300CP63A-21

Frame		W	H	D	W1	W2	W3	W4	W5	W6	H1	H2	H3	H4	H5
H2	mm	700.0	1745.0	404.0	630.0	800.0	500.0	630.0	760.0	-	1715.0	74.5	137.0	-	-
	inch	27.56	68.70	15.91	24.8	31.5	19.69	24.8	29.92	-	67.52	2.93	5.39	-	-
Frame		D1	D2	D3	D4	D5	D6	S1	S2	S3	S4	S5	Ø1	Ø2	Ø3
H2	mm	51.0	68.0	137.0	103.0	204.0	-	26.5	13.0	14.0	25.0	13.0	22.0	34.0	117.5
	inch	2.01	2.68	5.39	4.06	8.03	-	1.04	0.51	0.55	0.98	0.51	0.87	1.34	4.63