

SD1 Series

General Purpose AC Variable Speed Inverter Drives

1 Phase 200/240V 50/60Hz **0.4~2.2kW** (0.5~3HP)
 3 Phase 200/240V 50/60Hz **0.4~7.5kW** (0.5~10HP)
 3 Phase 380/440V 50/60Hz **0.75~110kW** (1~150HP)

- IP20
- Torque Vector Control
- STO (safe torque off)
- Up to 150% Starting Torque
- Front Mounted RJ45 Socket (<2.2kW)
- Din Rail Mountable (<2.2kW)
- Fixed Keypad with Potentiometer (<2.2kW)
- Detachable Keypad (≥4kW)
- HDI Input (pulse)
- 2 Analogue Inputs
- 1/2 Analogue Outputs
- 2 Output Relays
- Transistor Output
- 4/5 Digital Inputs
- PNP/NPN Selectable
- In Built Modbus RTU / RS485
- PID Control as standard
- Internal DC Reactor (≥18.5kW)
- DC Injection Braking
- Internal Brake Chopper (≤37kW)
- Motor Auto-tune (static & dynamic)
- Internal C3 Filter (≥4kW),
C3 Filter Option (<2.2kW)
- C1 & C2 Filter Options (entire range)
- Safety Circuit (SIL2/SIL3 - model dependant)
- CE, RoHS & Reach Compliant
- TUV Approved
- UL / cUL Approval on selected models
- 2 Year Warranty



Ordering Information

SD1 - 2.5A - 43	
Series	SD1 Inverter Drive
Output Power kW (HP)	Input 380-400V Three Phase
0.75kW (1HP) 2.5A	11kW (15HP) 25A
1.5kW (2HP) 4.2A	15kW (20HP) 32A
2.2kW (3HP) 5.5A	18.5kW (25HP) 38A
4kW (5.5HP) 9.5A	22kW (30HP) 45A
5.5kW (7.5HP) 14A	30kW (40HP) 60A
7.5kW (10HP) 18.5A	37kW (50HP) 75A
	45kW (60HP) 92A
	55kW (75HP) 115A
	75kW (100HP) 150A
	90kW (125HP) 180A
	110kW (150HP) 215A

SD1 - 2.5A - 23	
Output Power kW (HP)	Input 200-240V Three Phase
0.4kW (0.5HP) 2.5A	
0.75kW (1HP) 4.2A	
1.5kW (2HP) 7.5A	
2.2kW (3HP) 10A	
4kW (5.5HP) 16A	
5.5kW (7.5HP) 20A	
7.5kW (10HP) 30A	

SD1 - 2.5A - 21	
Output Power kW (HP)	Input 200-240V Single Phase
0.4kW (0.5HP) 2.5A	
0.75kW (1HP) 4.2A	
1.5kW (2HP) 7.5A	
2.2kW (3HP) 10A	

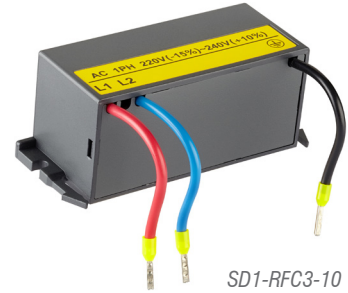
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Options & Ordering Codes - Filters & Accessories

	Model	C3 Filter	Current	C2 Filter	Current
Single Phase 220V	SD1-2.5A-21	SD1-RFC3-10	10A	SD1-RFC2-10	10A
	SD1-4.2A-21	SD1-RFC3-10	10A	SD1-RFC2-10	10A
	SD1-7.5A-21	SD1-RFC3-10	10A	SD1-RFC2-16	16A
	SD1-10A-21	SD1-RFC3-10	10A	SD1-RFC2-16	16A
Three Phase 220V	SD1-2.5A-23	SD1-RFC3-7	7A	SD1-RFC2-6	6A
	SD1-4.2A-23	SD1-RFC3-7	7A	SD1-RFC2-6	6A
	SD1-7.5A-23	Internal	-	SD1-RFC2-16	16A
	SD1-10A-23	Internal	-	SD1-RFC2-16	16A
	SD1-16A-23	Internal	-	SD1-RFC2-32	32A
	SD1-20A-23	Internal	-	SD1-RFC2-32	32A
	SD1-30A-23	Internal	-	SD1-RFC2-45	45A
Three Phase 380V	SD1-2.5A-43	SD1-RFC3-7	7A	SD1-RFC2-6	6A
	SD1-4.2A-43	SD1-RFC3-7	7A	SD1-RFC2-6	6A
	SD1-5.5A-43	SD1-RFC3-7	7A	SD1-RFC2-6	6A
	SD1-9.5A-43	Internal	-	SD1-RFC2-16	16A
	SD1-14A-43	Internal	-	SD1-RFC2-16	16A
	SD1-18.5A-43	Internal	-	SD1-RFC2-32	32A
	SD1-25A-43	Internal	-	SD1-RFC2-32	32A
	SD1-32A-43	Internal	-	SD1-RFC2-45	45A
	SD1-38A-43	Internal	-	SD1-RFC2-45	45A
	SD1-45A-43	Internal	-	SD1-RFC2-65	65A
	SD1-60A-43	Internal	-	SD1-RFC2-65	65A
	SD1-75A-43	Internal	-	SD1-RFC2-100	100A
	SD1-92A-43	Internal	-	SD1-RFC2-100	100A
	SD1-115A-43	Internal	-	SD1-RFC2-150	150A
	SD1-150A-43	Internal	-	SD1-RFC2-150	150A
	SD1-180A-43	Internal	-	SD1-RFC2-240	240A
SD1-215A-43	Internal	-	SD1-RFC2-240	240A	



Model	Description
SD1-KP	Remote Keypad
SD1-KP-CPY	Remote Keypad with Copy Function
SD1-KP-MB	Remote Keypad Mounting Bracket



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Technical Specifications

	Model	Output Power		Input Current (A)	Output Current (A)	MCCB (A)	Cables (mm ²)
Single Phase 220V	SD1-2.5A-21	0.4kW	0.5HP	6.5	2.5	10	1.5
	SD1-4.2A-21	0.75kW	1.0HP	9.3	4.2	16	1.5
	SD1-7.5A-21	1.5kW	2.0HP	15.7	7.5	25	2.5
	SD1-10A-21	2.2kW	3.0HP	24	10	40	2.5

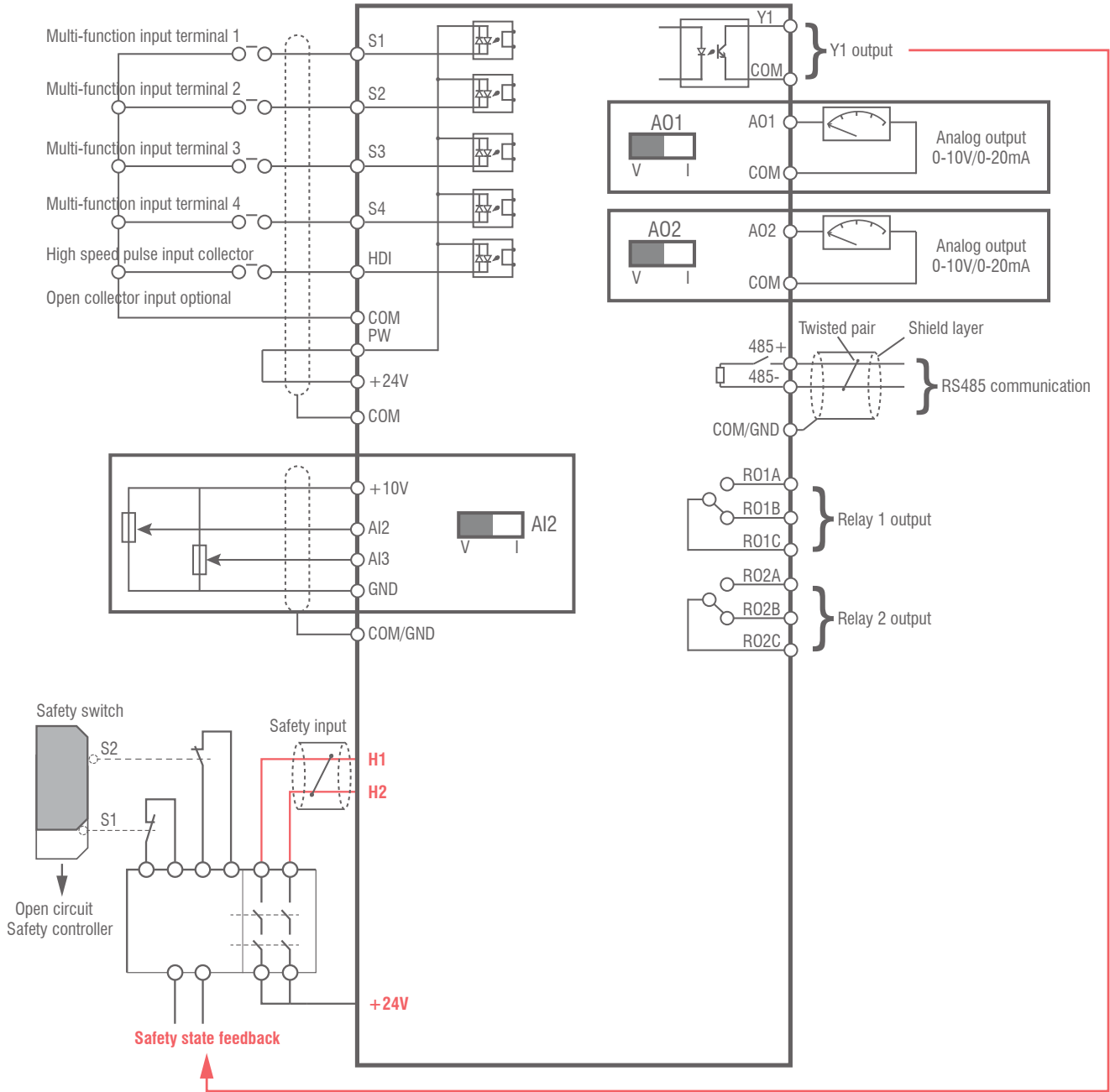
Three Phase 220V	SD1-2.5A-23	0.4kW	0.5HP	3.7	2.5	6	1.5
	SD1-4.2A-23	0.75kW	1.0HP	5	4.2	10	1.5
	SD1-7.5A-23	1.5kW	2.0HP	7.7	7.5	16	2.5
	SD1-10A-23	2.2kW	3.0HP	11	10	25	2.5
	SD1-16A-23	4kW	5.5HP	17	16	32	2.5
	SD1-20A-23	5.5kW	7.5HP	21	20	32	4
	SD1-30A-23	7.5kW	10HP	31	30	63	6

Three Phase 380V	SD1-2.5A-43	0.75kW	1.0HP	3.4	2.5	6	1.5
	SD1-4.2A-43	1.5kW	2.0HP	5	4.2	10	1.5
	SD1-5.5A-43	2.2kW	3.0HP	5.8	5.5	10	1.5
	SD1-9.5A-43	4kW	5.5HP	13.5	9.5	25	2.5
	SD1-14A-43	5.5kW	7.5HP	19.5	14	32	2.5
	SD1-18.5A-43	7.5kW	10HP	25	18.5	40	4
	SD1-25A-43	11kW	15HP	32	25	63	6
	SD1-32A-43	15kW	20HP	40	32	63	6
	SD1-38A-43	18.5kW	25HP	47	38	100	10
	SD1-45A-43	22kW	30HP	51	45	100	16
	SD1-60A-43	30kW	40HP	70	60	125	25
	SD1-75A-43	37kW	50HP	80	75	160	25
	SD1-92A-43	45kW	60HP	98	92	200	35
	SD1-115A-43	55kW	75HP	128	115	200	50
	SD1-150A-43	75kW	100HP	139	150	250	70
	SD1-180A-43	90kW	125HP	168	180	315	95
SD1-215A-43	110kW	150HP	201	215	350	120	

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Power & Control Connections



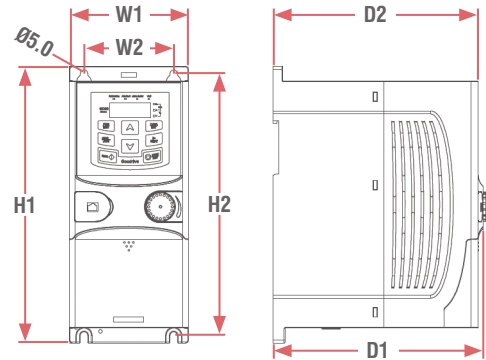
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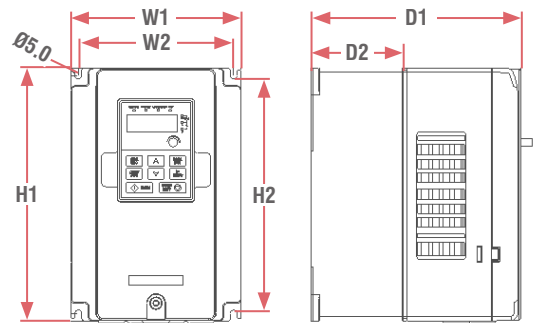


Dimensions (mm)

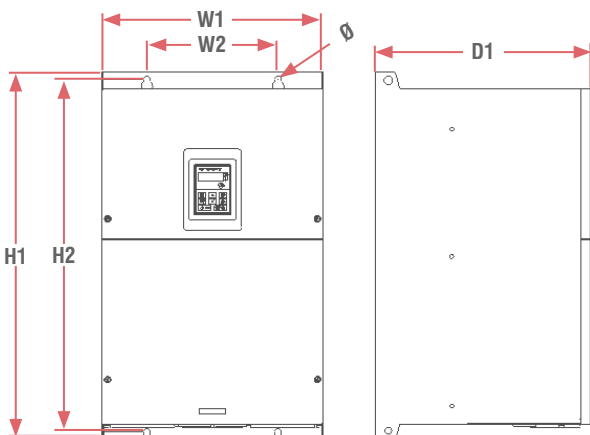
	Model	W1	W2	H1	H2	D1	D2
Single Phase 220V	SD1-2.5A-21	80	60	160	150	123.5	120.3
	SD1-4.2A-21	80	60	160	150	123.5	120.3
	SD1-7.5A-21	80	60	185	175	140.5	137.3
	SD1-10A-21	80	60	185	175	140.5	137.3
Three Phase 220V	SD1-2.5A-23	80	60	185	175	140.5	137.3
	SD1-4.2A-23	80	60	185	175	140.5	137.3
	SD1-7.5A-23	146	131	256	243.5	167	84.5
	SD1-10A-23	146	131	256	243.5	167	84.5
	SD1-16A-23	146	131	256	243.5	167	84.5
	SD1-20A-23	170	151	320	303.5	196.3	113
	SD1-30A-23	170	151	320	303.5	196.3	113
Three Phase 380V	SD1-2.5A-43	80	60	185	175	140.5	137.3
	SD1-4.2A-43	80	60	185	175	140.5	137.3
	SD1-5.5A-43	80	60	185	175	140.5	137.3
	SD1-9.5A-43	146	131	256	243.5	167	84.5
	SD1-14A-43	146	131	256	243.5	167	84.5
	SD1-18.5A-43	170	151	320	303.5	196.3	113
	SD1-25A-43	170	151	320	303.5	196.3	113
	SD1-32A-43	170	151	320	303.5	196.3	113
	SD1-38A-43	200	185	340.6	328.6	184.3	104.5
	SD1-45A-43	200	185	340.6	328.6	184.3	104.5
	SD1-60A-43	250	230	400	380	202	123.5
	SD1-75A-43	250	230	400	380	202	123.5
	SD1-92A-43	282	160	560	542	238	138
	SD1-115A-43	282	160	560	542	238	138
	SD1-150A-43	282	160	560	542	238	138
	SD1-180A-43	338	200	554	535	329.2	—
	SD1-215A-43	338	200	554	535	329.2	—



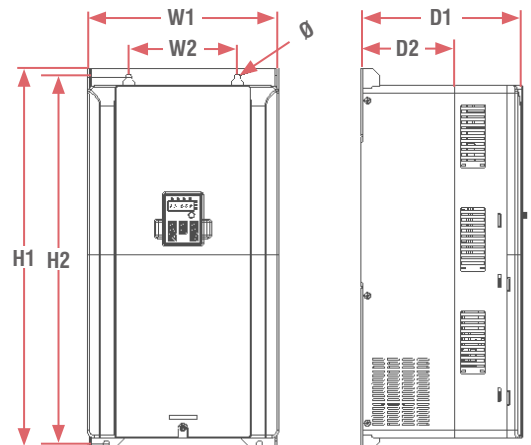
Wall mounting dimensions of 0.75 to 2.2kW SD1 Inverter (unit: mm)



Wall mounting dimensions of 3PH 380V 0.4 to 37kW & 3PH 220V 1.5 to 7.5kW SD1 Inverter (unit: mm)



Wall mounting dimensions of 3PH 380V 90 to 110kW SD1 Inverter (unit: mm)



Wall mounting dimensions of 3PH 45 to 75kW SD1 Inverter (unit: mm)