

AC DRIVES

5831 0.37 to 1.5kW



Housed in a rugged IP54 protected enclosure, the 5831 is ideal for direct wall or machine mounting in most industrial environments. Designed for use on 220 - 240V supplies, it enables speed control of standard three phase motors from either on board or remote operator controls.

TECHNICAL SPECIFICATION

Power Supply - 220 - 240V ± 10% single or three phase
50 - 60 Hz ± 5%
Ambient - 0 - 40°C up to 1000m ASL without derating
Overload - 150% for 30 seconds
Output Frequency - 0 - 100/120 Hz

FEATURES

Adjustments

Maximum speed (0 - 100%)
Minimum speed (0 - 100%)
Acceleration ramp (0.1 - 100 seconds)
Deceleration ramp (0.1 - 100 seconds)
Current limit (50 - 150%)
Voltage boost

Selectable Features

Torque characteristic (linear/fan law/linear weak field)
Stopping mode (coast/ramp/ramp + injection/injection only)
Base frequency (50/60 Hz)

Diagnostics

Power on
Drive running
dc link overvoltage
Motor stalled
Drive healthy
Instantaneous overcurrent
I x t overcurrent

User Facilities

Inverter healthy (relay output)
10V dc (10mA) speed reference supply
24V dc (20mA) logic supply
Speed ramp output
Trim speed input
Direction selection
Alternative mounting arrangements

- IP54 Protection
- Industrially robust diecast housing
- With or without operator controls
- Ultra quiet operation
- 150% overload capability
- Simple set up

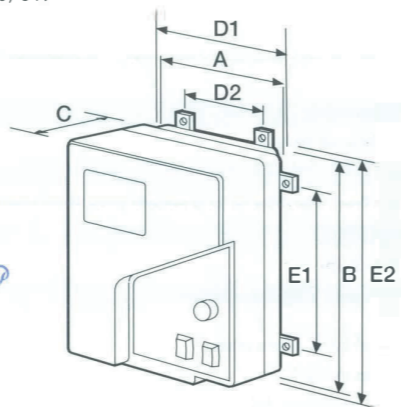
Type	Nominal Power (kW)	Output Current (A)	Weight (kg)
5831/0750	0.37	2.2	5.5
	0.55	3.0	
	0.75	4.0	
5831/1500	1.1	5.5	5.5
	1.5	7.0	

	Prices (£)
5831/0750/1 (no operator controls)	318
5831/0750/2 (with operator controls)	348
5831/1500/1 (no operator controls)	377
5831/1500/2 (with operator controls)	407

Options

4-20mA setpoint + Zero speed relay board	38
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Full range of optional EMC filter and line chokes available - see pages 60/61.



Dimensions

A	B	C	D	E
188	261	149	108 or 214	177 or 283

STANDARDS

CE marked
EN50081-1 (1992) (EMC emissions, light industrial with external filter fitted)
pr EN50082-2 (1992) (EMC immunity, heavy industrial)
VDE 0160 (1994)/pr EN50178 (1995) (safety, low voltage directive)



AC DRIVES

584SV 0.75 to 355kW



The unique Function Block Programming of the 584SV inverter makes it ideal for the simplest to the most complex applications. Each function block can be simply interlinked to any other to provide the exact control strategy required. The 584SV also provides sensorless vector high torque performance with the convenience of rapid auto-tuning.

TECHNICAL SPECIFICATION

Specification - Package Size 4-7
Power Supply - 380 - 460V ± 10% 50 - 60Hz (three phase) or 208 - 240V ± 10% 50 - 60Hz (three phase)
Ambient - 0 - 50°C (0 - 40°C with top cover fitted) up to 1000m ASL without derating
Overload - 150% for 60 seconds (constant torque)
110% for 10 seconds (quadratic torque)
Output Frequency - 0 - 120/240/480Hz (Programmable)
Switching Frequency - 3/6/9 kHz (Package Size 4) 3/6 kHz (Package Size 5,6,7) (All with audibly silent switching pattern)

Inputs/Outputs

Analogue Inputs:
3 configurable (0-10V, 0-20mA, 4-20mA, 20-0mA or 20-4mA)
Analogue Outputs:
2 configurable (0-10V, 0+10V, 0-20mA, 4-20mA, 20-0mA or 20-4mA)
Digital Inputs:
8 configurable (24V)
Digital Outputs:
3 configurable (relay contact)

Protection

Short circuit phase-phase
Short circuit phase-earth
Current limit 50 - 150% (programmable)
Shock load limit 180%
Overcurrent >220%
I x t overload 50 - 150% (programmable)
Heatsink overtemperature
Motor thermistor overtemperature
Overvoltage
Undervoltage

FEATURES

5841 Programming/Control Module

Detachable for 584SV or front control panel mounting
32 character multi-lingual display
Wide viewing angle back lit display
Easy to use menu structure programming
Local control of speed, forward/reverse, run/stop and jog

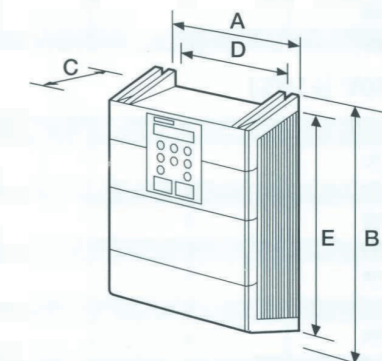
Selectable first-up meter reading
LED status indication
Password and function lock-out security
Parameter cloning

Function Block Programming

For full details of this unique programming concept and the ConfigEd Lite software, refer to page 15.

User Facilities

Programmable control block diagram
Sensorless vector with auto-tune control
5 application Macros
Constant or quadratic 'fan law' torque rating
Up to 16 motor stored configurations
Panel or direct wall mounting
Linear, parabolic or 'S' ramp
Spinning load 'flycatching' controlled start
Selectable auto restart after trip
Trip history
Multiple programmable stopping modes
On board process PID control
On board raise/lower ramp (digital MOP)
Low or high voltage supplies
4 skip frequencies
Slip compensation
8 preset speeds
Hoist/lift automatic brake control



Dimensions

Package Size	A	B	C	D	E	Weight (kg)
4	228	318	157	200	300	7.5
5	228	468	157	200	450	11
6	234	672	298	200	650	24
7	398	838	336	370	800	96

AC DRIVES



Options

Type	Price (£)	
5841 Programming/control module	54	
5842 Remote mounting bezel and 3m lead	28	
Wall Mount Cable Gland Box	Package Size 4	22
	Package Size 5	22
	Package Size 6	42
	Package Size 7	180
Wall Mount Top Cover	Package Size 4	14
	Package Size 5	14
	Package Size 6	42
	Package Size 7	150
Integral Dynamic Brake Controller	Package Size 4	inc
	Package Size 5	inc
	Package Size 6	180
	Package Size 7	261
Encoder feedback board fitted	135	
Serial communications board fitted	135	
Profibus communications board fitted	275	
ConfigEd Lite 'Windows' graphical configuration software	68	

Full range of space saving EMC compliant RFI filters and line chokes available, see pages 60/61.

380 - 460V(±10%)

Type	Package	Constant Torque Rating with 150% Overload for 60s		Quadratic 'Fan Law' Torque Ratings with 110% Overload for 10s		Price (£)
		Nominal Power (kW)	Output Current (A)	Nominal Power (kW)	Output Current (A)	
584SV/0007/400	4	0.75	2.3	1.1	3.2	536
584SV/0015/400	4	1.5	4.5	2.2	5.4	576
584SV/0022/400	4	2.2	6.3	3.0	7.1	645
584SV/0040/400	4	4.0	9.4	5.5	13	695
584SV/0055/400	4	5.5	13	7.5	16	915
584SV/0075/400	4	7.5	16	11	22	1180
584SV/0110/400	5	11	24	15	29	1740
584SV/0150/400	5	15	30	18	36	2150
584SV/0180/400	6	18	39	22	45	3096
584SV/0220/400	6	22	46	30	59	3396
584SV/0300/400	6	30	61	37	72	3926
584SV/0370/400	6	37	72	45	86	4941
584SV/0450/400	7	45	91	55	107	6026
584SV/0550/400	7	55	110	75	145	6456
584SV/0750/400	7	75	150	90	176	7096

208 - 240V (±10%)

Type	Package	Constant Torque Rating with 150% Overload for 60s		Quadratic 'Fan Law' Torque Ratings with 110% Overload for 10s		Price (£)
		Nominal Power (kW)	Output Current (A)	Nominal Power (kW)	Output Current (A)	
584SV/0007/230	4	0.75	4.3	1.1	6.0	576
584SV/0015/230	4	1.5	8.0	2.2	11	695
584SV/0022/230	4	2.2	10.5	3.0	13	695
584SV/0040/230	4	4.0	17	5.5	22	1180
584SV/0055/230	5	5.5	24	7.5	30	1740
584SV/0075/230	5	7.5	30	9.0	36	2150
584SV/0110/230	6	11	46	15	59	3396
584SV/0150/230	6	15	61	18	72	3926
584SV/0180/230	6	18	72	22	86	4941
584SV/0220/230	7	22	86	30	107	6026
584SV/0300/230	7	30	120	37	145	6456
584SV/0370/230	7	37	145	45	176	7096



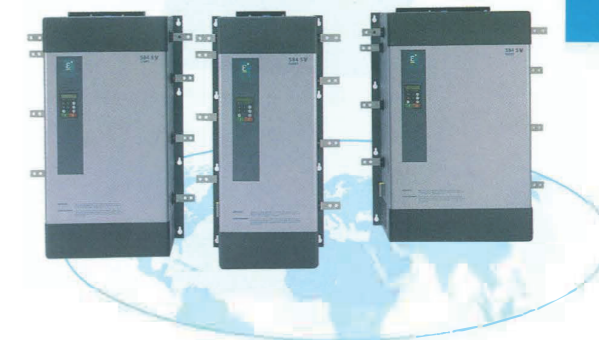
- Modular power phase assembly
- Common control interface 0.75 to 355kW
- Detachable programming/operator control module
- 'Two in one' power rating - constant or quadratic 'fan law' torque
- Common dc bus configurations
- Optional integral brake units

The 584SV range of high specification ac motor controllers now covers ratings up to 355kW. Incorporating the latest intelligent IGBT devices, these high power inverters have been designed for minimum down time modular maintenance.

TECHNICAL SPECIFICATION

Specification - Package 8, 9 and 10
 Power Supply - 380 - 460 V ±10%, 50-60Hz
 Ambient - 0 - 40°C, up to 1000m ASL without derating
 Overload - 150% for 60 seconds (constant torque); 110% for 10 seconds (quadratic torque)
 Output Frequency - 0 - 120Hz
 Switching Frequency - 3kHz (with audibly silent switching pattern)

584SV 90 to 355kW



Dimensions

Package Size	A	B	C	D	E1	E2
Size 8	456	1042	465	420	300	16
Size 9	572	1177	465	536	300	16
Size 10	677	1288	465	641	300	16

Please refer to sales office for full installation details.

Type	Package Size	Constant Torque Rating with 150% Overload for 60s		Output Current (A)	Quadratic 'Fan Law' Torque Rating with 110% Overload for 10s		Price (£)	
		Nominal Power (kW)			Nominal Power (kW)			
		380V	415/460V		380V	415/460V		
584SV/0900/400	8	90	90	180	110	110	216	8995
584SV/1100/400	8	110	110	216	132	150	260	9350
584SV/1320/400	8	132	150	250	150	150	302	10,260
584SV/1600/400	9	160	185	316	200	225	377	12,600
584SV/1800/400	9	180	200	361	220	250	420	12,950
584SV/2000/400	9	200	220	375	250	280	480	13,200
584SV/2200/400	9	220	250	420	250	280	480	13,500
584SV/2500/400	10	250	280	480	300	315	545	15,750
584SV/2800/400	10	280	315	520	315	355	595	16,650
584SV/3150/400	10	315	315	550	315	355	595	17,850

Options

	Price (£)
Note: Each 584SV size 7-10 includes an in built programming/control module	
Additional remote programming/control module	54
Remote mounting bezel and 3m lead	28
Integral dynamic brake controller	
Package size 8	1238
Package size 9	1445
Package size 10	1750
Encoder feedback board fitted	135
ConfigEd Lite 'Windows' graphical configuration software	68
Profibus communication board fitted	275
ConfigEd Lite 'Windows' graphical configuration software	68

Full range of EMC compliant RFI filters and line chokes available - see pages 60/61.

STANDARDS

CE marked
 EN50081-1 (1992) (EMC emissions, light industrial with external filter fitted and drive mounted in suitable metal enclosure) - sizes 4-7
 EN50081-2 (1992) (EMC emissions, industrial with external filter fitted) - sizes 8-10
 pr EN50082-2 (1992) (EMC immunity, heavy industrial)
 VDE 0160 (1994)/pr EN50178 (1995) (safety, low voltage)
 North American standards pending