



# AD10

## System Automation Drive

1/2 - 500 HP, 460 Volts, 3-Phase, 50/60 Hz  
1/4 - 100 HP, 230 Volts, 3-Phase, 50/60 Hz  
IP20 (Open Chassis)

Flexibility is the key component of the AD10 drive in a variety of industrial applications. Whether in stand-alone or integrated drive systems, these powerful units provide ready and accessible performance. The DFG card option puts interactive development, system control, and high level drive functionality at the user's fingertips. The standard SAFLink AD10 System Software provides a virtual keypad, remote programming, an on-line trending and diagnostics for easy operation and analysis.

Open architecture allows AD10 the ability to connect to popular communications protocols like DeviceNet, Genius, ProfiBus-DP, and InterBus-S, and easily integrate with popular PLCs and Operator Interfaces. The AD10 SAFLink graphical program editor includes a library of building blocks and pre-configured function blocks to allow point-and-click configuration capability for solving nearly any application requirement. Pre-developed application function blocks, such as winder control, electronic line shaft and master control logic, allow fast and easy system configuration.

The AD10 comes with UL, cUL and CE approvals, allowing for worldwide acceptance. Its compact design allows bookshelf mounting up to 20HP, with no side-by-side clearance required for ventilation.

### DESIGN

- Multiple control modes:
  - Volts / frequency
  - Sensorless vector
  - Field oriented vector
  - Open loop torque control
  - Closed loop torque control
- Motor auto-tuning for optimum performance
  - Speed and vector auto-tune
- Keypad: backlit 2 x 16 character LCD display
- Built-in encoder feedback input standard
- Built-in dynamic braking module up to 60 HP
- Last 10 faults history
- RS485 ModBus serial communications standard; Device Net, ProfiBus-DP, InterBus-S and Genius optional
- Fully programmable I/O
- Multiple I/O option cards and accessories
- Software application playground area
  - Function block programming
  - Fully configurable open architecture
- Saflink programming & maintenance software compatible

### ENCLOSURE

- IP20 chassis through 500 HP
- "Side-by-Side" mounting with zero clearance to optimize panel space (1/2 HP through 20 HP)
- Optional configurations available

### ADJUSTMENTS

- Multi-use digital input and output terminals
- Voltage, current, terminal and serial reference signal control
- Standard PID algorithm for process control
- Field oriented flux vector control
- MOP digital reference command
- Zero speed command
- Multiple accel and decel settings
- Independent forward and reverse jog functions
- Application playground area allows configuration for unlimited applications
- Adjustable carrier frequency
- 150% FLA overload for 1 minute  
200% FLA short term (0.5 seconds)

### PERFORMANCE

- Operating temperature -10°C to 50°C (14°F to 122°F)
- Maximum altitude without derating 3,300 ft.
- Output frequency accuracy (Stability):
  - Analog setting:  $\pm 0.02\%$  or less of max freq
  - Digital setting:  $\pm 0.01\%$  or less of max freq
- Overload rating up to 150% of rated current for 60 seconds

### APPROVALS

- UL, cUL and CE listed

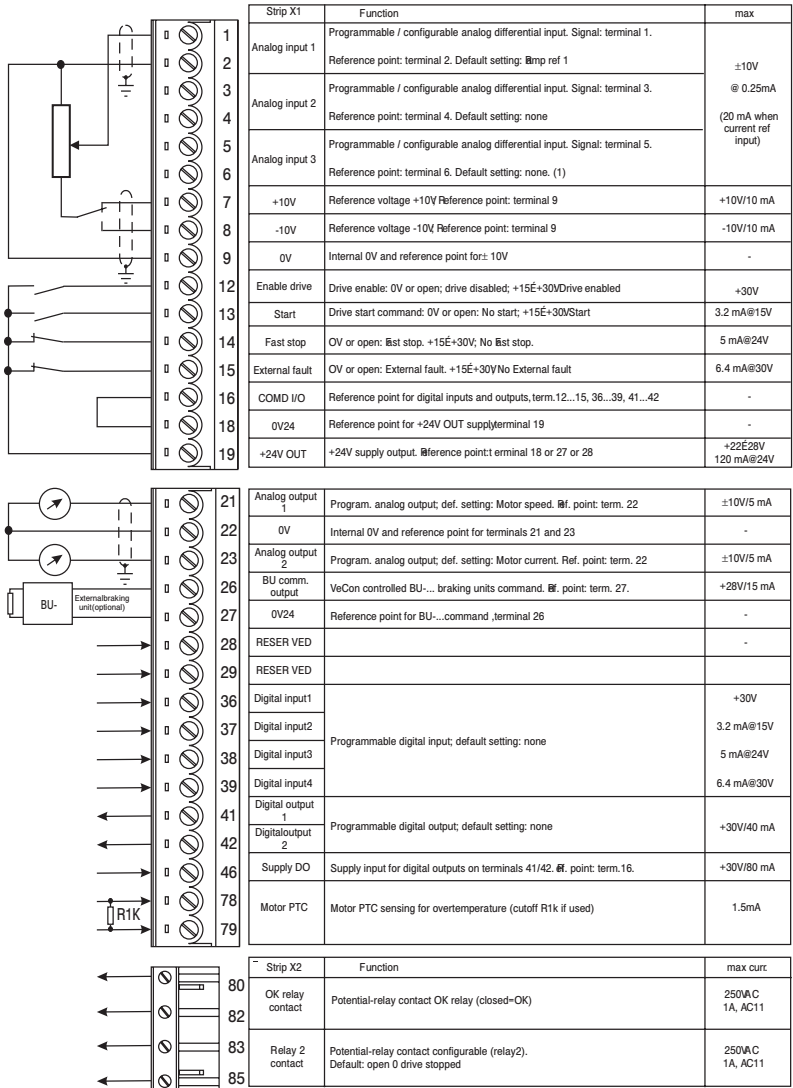


# AD10

## System Automation Drive

1/2 - 500 HP, 460 Volts, 3-Phase, 50/60 Hz  
 1/4 - 100 HP, 230 Volts, 3-Phase, 50/60 Hz  
 IP20 (Open Chassis)

AD10 OPTION CARD DESCRIPTION	PART NUMBER
DeviceNet Communication Option	S6KCV301DVNET
Interbus-S Communication Option	S6KCV301INTER
Profibus DP Communication Option	S6KCV301PDP33
I/O Expansion Card (8 DI / 4 Relay Outputs)	S6KCV301D8R4
I/O Expansion Card (8 DI, 6DO, 2AI, 2AO, Encoder Input)	S6KCV301D14A4
I/O Expansion Card (12 DI, 8DO, 2AI, 4AO (V/I))	S6KCV301D20A6
I/O Expansion Card (Encoder Input, Encoder Output)	S6KCV301ENC
DGF Application Card	S6KCV301DGF



HP 230V	HP 460V	AMPS	PART NUMBER	STYLE	DIMENSIONS (in inches)		
					W	H	D
0.75	1	3.2	AD104001-1	IP20	4.1	12	7.8
1	2	4.4	AD104002-1	IP20	4.1	12	7.8
1.5	3	5.9	AD104003-1	IP20	4.1	12	7.8
2	5	7.6	AD104005-1	IP20	5.9	12	7.8
3	7.5	11	AD104007-1	IP20	5.9	12	7.8
5	10	14	AD104010-1	IP20	5.9	12	7.8
7.5	15	21	AD104015-1	IP20	8.2	12	9.5
10	20	27	AD104020-1	IP20	8.2	12	9.5
-	25	36	AD104025-1	IP20	12.1	12	10.5
15	30	50	AD104030-1	IP20	12.1	12	12.1
20	40	62	AD104040-1	IP20	12.1	12	12.1
25	50	74	AD104050-1	IP20	14.7	12	12.1
30	60	90	AD104060-1	IP20	14.7	12	12.1
40	75	112	AD104075-1	IP20	20	12	11.7
50	100	146	AD104100-1	IP20	20	12	11.7
60	125	166	AD104125-1	IP20	20	12	11.7
75	150	198	AD104150-1	IP20	20	12	11.7
100	200	256	AD104200-1	IP20	20	12	17.4