

AC30V Series AC Drive

For the Control of Pump, Fan and General Purpose Applications

0.75 - 18.5 kW



Engineered for Simplicity:

The AC30V industrial drive has been specifically designed to provide users with exceptional levels of control for pump, fan and general purpose applications. Its flexible and highly modular construction enables a wide range of communication and I/O modules to be easily added as required.

Offering effective and affordable control of either AC induction motors or Permanent Magnet (PMAC) servo motors, the AC30V allows users to optimise their motor performance and save energy.

Its simple to use integrated configuration wizard and application macros remove the complexity of creating specific motor control applications and set-up of the drive.

Conformal coatings and optional integrated EMC and harmonic filters allow the AC30V to be used in even the most arduous of environments.



Contact Information:

EMEA Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com/ssd/ac30v

Product Features:

- Conformally coated to 3C3 and 3C4 for (H₂S) as standard
- Complies with RoHS substance restrictions in accordance with EC Directive 2011/65/EU
- Safe Torque Off (STO) to ISO/EN13849 PLe/SIL3 as standard
- Easy to use, multi-language LCD graphical keypad
- Ethernet and Modbus TCP/IP communications as standard
- Worldwide certification
- SD card for backup and cloning
- Control of either AC induction or permanent magnet servo motors
- Optional Internal EMC filters to C2 1st environment
- Integrated DC choke reduces line harmonics to IEC/EN61000-3-12 limits above 2.2 kW
- Wide range of communication and I/O module options
- Free to download configuration software for advanced users



ENGINEERING YOUR SUCCESS.

Technical Specifications

Overloads

- Heavy Duty Ratings; 150 % for 30 s, 180 % for 0.5 s
- Normal Duty Ratings; 110 % for 30 s, 180 % of Heavy Duty FLC for 0,5 s

Output Frequency

- 0.5...1500 Hz dependant upon switching frequency

Operating Range

- Normal Duty Ratings; 0...45 °C
- Heavy Duty Ratings; 0...40 °C Derate from temperatures above to 50 °C max.
- Altitude up to 2000 m ASL Derate above 1000 m

Environment

- Conformally coated to 3C3 and 3C4 for Hydrogen Sulphide (H₂S) as standard
- Optional Internal EMC filter meets requirements of EN61800-3 C2 1st environment
- Integral DC choke above 2.2 kW reduces harmonics to within limits set by EN61000-3-12

Switching Frequency

- Output switching frequencies up to 12 kHz

Dynamic Braking

- Each drive is fitted with an internal dynamic brake switch 30 % continuously rated

Inputs/Outputs

- Analogue Inputs 2; (1 - ±10 V), (1 - ±10 V) or (0-20 mA)
- Analogue Outputs 2; (1 - 0-10 V or 0-20 mA), (1 - ±10 V)
- Digital Inputs 3; Nominal 24 VDC
- Digital Inputs/Outputs 4; Nominal 24 VDC
- Relay Outputs 2; Volt free relay contacts, 3 A at 230 VAC max.
- Reference Supplies +10 VDC (10 mA max) -10 VDC (10 mA max) +24 VDC (140 mA max)

Safe Torque Off (STO)

- STO connection in accordance with EN13849 PL/SIL3 (EN61800-5-2 Safety, Low Voltage Directive)

Optional Equipment

- Communications Modules
 - CANopen
 - DeviceNet
 - Modbus TCP/IP
 - ProfiNet
 - BACnet IP
 - DeviceNet
 - CC Link
 - Ethernet/IP
 - Profibus
 - EtherCAT
 - ControlNet
 - BACnet MSTP
- I/O Expansion Modules providing;
 - 6 Digital I/O; user configurable
 - 2 Relay outputs 3 A at 230 V
 - 3 Analogue inputs ±10 V
 - Real time clock
 - Thermistor Input

Standards

- The AC30 series meets the following standards when installed in accordance with the relevant product manual.
- CE Marked to EN61800-5-1 (Safety, Low Voltage Directive).
- CE Marked to EN61800-3 (EMC Directive).
- NTRL listed to US safety standard UL508C.
- NTRL listed to Canadian standard C22.2 #14.

Ratings 380-480 (±10 %) VAC Supplies Three Phase

Order Code	Normal Duty				Heavy Duty				Frame
	kW	hp	Output Current		kW	hp	Output Current		
			A _{rms}				A _{rms}		
400 V	480 V	400 V	480 V	400 V	480 V				
31V-4D0004-B●-■◆-0000	1.1	1.5	3.5	3.0	0.75	1	2.5	2.1	D
31V-4D0005-B●-■◆-0000	1.5	2	4.5	3.4	1.1	1.5	3.5	3.0	D
31V-4D0006-B●-■◆-0000	2.2	3	5.5	4.8	1.5	2	4.5	3.4	D
31V-4D0008-B●-■◆-0000	3	4	7.5	5.8	2.2	3	5.5	4.8	D
31V-4D0010-B●-■◆-0000	4	5	10	7.6	3	4	7.5	5.8	D
31V-4D0012-B●-■◆-0000	5.5	7.5	12	11	4	5	10	7.6	D
31V-4D0016-B●-■◆-0000	7.5	10	16	14	5.5	7.5	12	11	E
31V-4D0023-B●-■◆-0000	11	15	23	21	7.5	10	16	14	E
31V-4D0032-B●-■◆-0000	15	20	32	27	11	15	23	21	F
31V-4D0038-B●-■◆-0000	18	25	38	36	15	20	32	27	F

●	EMC Filter Options
N	No filter
F	C2 Filter
E	C3 Filter

■	Graphical Keypad Options
2	Graphical Keypad
1	Keypad Cover
0	No Keypad

◆	Environmental Protection Options
S	Standard Coating
E	Enhanced Coating

