

# PACMotion™ VFD

## Flexible AC Drive Solution

### Key Benefits

- Standard PROFINET integration and built-in auto-tuning feature make setup and commissioning new drives quick and easy
- High-performance drives support up to 200% overcurrent and 200% starting torque allowing smaller drives to be utilized reliably for applications with variable loads
- Conformally coated electronics and available IP55 and IP66 enclosures allow drives to be mounted without a control cabinet
- Built-in safe torque off (STO) support saves development and commissioning time by allowing integrated safety and standard applications

### Flexibility to Meet Your Needs

Emerson's PACMotion VFDs are integrated, rugged and modular AC variable frequency drives designed for a range of industries, including water/wastewater, metro, automotive, mining, food and beverage, packaging, oil and gas, discrete manufacturing and modular machine designs.

PACMotion VFDs seamlessly integrate with Emerson's PAC, PLC and Edge Controllers. Leveraging the total system architecture provides continuous feedback that can improve your process and profitability.

The flexible design offers power ranges from 0.75 to 250kW (1 to 350HP) for input voltages from 200 to 600 volts. Options, such as braking resistors, external keypads, encoder option cards, as well as multiple communications protocols, let you customize PACMotion VFDs to your specific application requirements.



### Fully Integrated for System Simplicity

PACMotion VFDs easily and seamlessly integrate with PACSystems RX3i applications for quick and cost-effective installation. With drive configuration tools incorporated directly within PAC Machine Edition and a built-in auto-tuning feature for automatically adjusting the drive based on attached motors and loads, PACMotion VFDs offer plug-and-play startup and simplified programming.

### Rugged Design for Demanding Applications

PACMotion VFDs are built to perform in harsh environments. Conformally coated circuit boards can withstand the most demanding environmental conditions. For applications with variable loading, PACMotion VFDs also provide a high current overload capacity: rated up to 150% for up to 60 seconds at a time and 200% for short durations. With operating temperatures up to 40°C for IP55 and IP66 enclosures and up to 50°C for IP20, PACMotion VFDs can meet your toughest challenges. Built-in support for Safe Torque Off (STO) allows PACMotion VFDs to integrate seamlessly into applications requiring safety as well.

3 Phase 600V

Catalog Number	Motor Power (kW/HP)	Design	Current (A)
IC866-0008-603-XX	0.75/1	2 = IP20 6 = IP66	2.2
IC866-0015-603-XX	1.5/2		3.1
IC866-0022-603-XX	2.2 / 3		4.1
IC866-0040-603-XX	4 / 5		6.5
IC866-0055-603-XX	5.5 / 7.5		9
IC866-0075-603-XX	7.5 / 10		12
IC866-0110-603-XX	11 / 15		17
IC866-0150-603-XX	15 / 20	2 = IP20 5 = IP55	22
IC866-0185-603-XX	18.5 / 25		28
IC866-0220-603-XX	22 / 30		34
IC866-0300-603-XX	30 / 40		41
IC866-0370-603-XX	37 / 50		54
IC866-0450-603-XX	45 / 60		65
IC866-0550-603-XX	55 / 75		78
IC866-0750-603-XX	75 / 100	5 = IP55	105
IC866-0900-603-XX	90 / 120		130
IC866-1100-603-XX	110 / 150		150

Braking Resistors

Catalog Number	Description
IC866-BR-100-020-21	Braking Resistor, Size 2, 100R, 200W
IC866-BR-050-020-51	Braking Resistor, IP55, Size 2, 50R, 200W
IC866-BR-033-040-21	Braking Resistor, Size 4 33R, 500W

Accessories

Catalog Number	Description
IC866-CABL-B-5	RS485 Connect Multiple VFDs RJ45, .5m
IC866-CABL-B-10	RS485 Connect Multiple VFDs RJ45, 1m
IC866-CABL-B-30	RS485 Connect Multiple VFDs RJ45, 3m
IC866-CABL-SPLIT	RJ45 Cable Splitter/Expansion Module
IC866-CABL-TR	RJ45 Terminating Resistor
IC866-EKPD	External TFT display for VFD w/RJ45 cable
IC866-BLUE	Bluetooth Parameter Module for VFD
IC866-OC-TTL	Encoder Feedback Plug In (5 VDC)
IC866-OC-HTL	Encoder Feedback Plug In (12-30 VDC)
IC866-OC-IO	Digital I/O Option Card for VFD
IC866-CABL-USB485	Connect VFD to PC USB

Fieldbus Communications Cards

Catalog Number	Description
IC866-OC-P	PROFINET I/O Option Card
IC866-OC-M	Modbus TCP Option Card

Input Chokes

Catalog Number	Description
IC866-ICH-016-201-20	Input Choke IP20, 230V, PH1, 16A
IC866-ICH-016-201-60	Input Choke IP66, 230V, PH1, 16A
IC866-ICH-025-201-20	Input Choke IP20, 230V, PH1, 25A
IC866-ICH-025-201-60	Input Choke IP66, 230V, PH1, 25A
IC866-ICH-006-603-20	Input Choke IP20, 500V, PH3, 6A
IC866-ICH-006-603-60	Input Choke IP66, 500V, PH3, 6A,
IC866-ICH-010-603-20	Input Choke IP20, 500V, PH3, 10A
IC866-ICH-010-603-60	Input Choke IP66, 500V, PH3, 10A
IC866-ICH-036-603-20	Input Choke IP20, 500V, PH3, 36A
IC866-ICH-018-603-60	Input Choke IP66, 500V, PH3, 18A
IC866-ICH-050-603-20	Input Choke IP20, 500V, PH3, 50A
IC866-ICH-090-603-20	Input Choke IP20, 500V, PH3, 90A
IC866-ICH-200-603-00	Input Choke IP00, 500V, PH3, 200A
IC866-ICH-300-603-00	Input Choke IP00, 500V, PH3, 300A

**Output Chokes**

Catalog Number	Description
IC866-OCH-008-603-20	Output Choke IP20, 500V, PH3, 8A
IC866-OCH-008-603-60	Output Choke IP66, 500V, PH3, 8A
IC866-OCH-012-603-20	Output Choke IP20, 500V, PH3, 12A
IC866-OCH-012-603-60	Output Choke IP66, 500V, PH3, 12A
IC866-OCH-030-603-20	Output Choke IP20, 500V, PH3, 30A
IC866-OCH-018-603-60	Output Choke IP66, 500V, PH3, 18A
IC866-OCH-075-603-20	Output Choke IP20, 500V, PH3, 75A
IC866-OCH-180-603-00	Output Choke IP00, 500V, PH3, 180A
IC866-OCH-300-603-00	Output Choke IP00, 500V, PH3, 300A

**External EMC Filters**

Catalog Number	Description
IC866-EEF-010-201-20	External Filter 1-ph 240V - 10A - IP20
IC866-EEF-010-201-60	External Filter 1-ph 240V - 10A - IP66
IC866-EEF-025-201-20	External Filter 1-ph 240V - 25A - IP20
IC866-EEF-025-201-60	External Filter 1-ph 240V - 25A - IP66
IC866-EEF-016-403-20	External Filter 3-ph 480V - 16A - IP20
IC866-EEF-016-403-60	External Filter 3-ph 480V - 16A - IP66
IC866-EEF-180-403-20	External Filter 3-ph 480V - 180A - IP20
IC866-EEF-025-403-20	External Filter 3-ph 480V - 25A - IP20
IC866-EEF-025-403-60	External Filter 3-ph 480V - 25A - IP66
IC866-EEF-300-403-00	External Filter 3-ph 480V - 300A - IP00
IC866-EEF-050-403-20	External Filter 3-ph 480V - 50A - IP20
IC866-EEF-006-403-20	External Filter 3-ph 480V - 6A - IP20
IC866-EEF-006-403-60	External Filter 3-ph 480V - 6A - IP66
IC866-EEF-080-403-20	External Filter 3-ph 480V - 80A - IP20