

■ FREQUENCY INVERTER

EP 66

0.4 kW - 90 kW

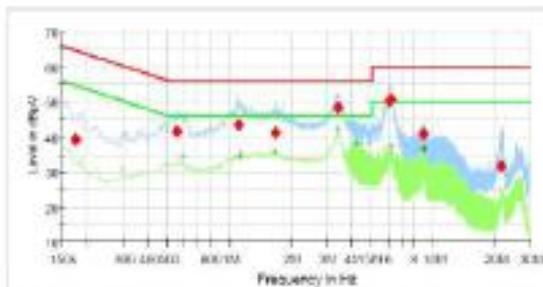


- ▶ DSP based high-tech motor control concept, suitable for V/f, SENSORLESS VECTOR, PMM synchronous motor control. SPEED / TORQUE control mode, Intelligent AUTOTUNING functions for easy set-up.
- ▶ Rugged construction, IP66 / NEMA4
- ▶ Flexible configurable character display – fieldbus capability
- ▶ Removable cable conduit plate, including vent with humidity barrier
- ▶ Room inside the drive, for customer options, like main- / emergency switch, start/stop selectors, potentiometer and brake resistor.
- ▶ Optional BYPASS switch build in
- ▶ EMC filter build in for 1. environment, for residential area EMC compatibility

- ▶ All standard inverter functions build in, to make it suitable for various applications, and for retrofit as well.
- ▶ Smart PC-tools, for inverter control, -parametrization and -troubleshooting. Parameter-duplication stick.
- ▶ Ready for the worldwide market, due to approved international standards.

EP 66 - Technical product data

Power Input	Rated input voltage	3-Phase 380...400V +/- 10% 1-Phase 230/400V +/- 10%
	Input frequency	45...67 Hz
Motor output	EMC Filter	Integrated for 2. environment - industrial area (optional for residential area - add-on box)
	Output voltage	0...V <input type="text"/>
	Output frequency	0...600 Hz (500Hz OPTION)
	Frequency resolution	0.01 Hz
Control Mode	Overload capability	100% - 10 sec. / 100 min
	Motor control algorithm	V/Fz-SpaceVector; SIN-GEN-Sensorless Vector control, Torque/Speed control mode, CLV-Closed loop vector; Permanent Magnet Synchronous Motor PMIM Sensorless control
	Chopper frequency	0.0...10 kHz (fixed / random pattern)
	VMz curves	Linear, exponential, and user-programmable curve
	Starting torque	100% rated torque at 0.0 Hz (in SV Mode)
	Torque compensation	Automatic / Manual
	Motor data input	Manual, from menu/plate / AUTOTUNING
	Control range	>100 in SV mode, >1000 in CLV mode, >10 in PMSM mode
	Speed precision	+/- 0.01% (SLM), +/- 0.001% (CLV)
	Torque precision	+/- 0.0% (SLM)
Display	DC-Gearbox	User programmable functions
	Breaker chopper	Chopper transistor integrated (up to 40 kW)
Display	7 segment, 4 characters LCD	To display configuration parameters and, programmable to show various operating parameters



C1 EMC Filter Test Result by German independent test body



I/O Channels, control functions	Inverter control	Via terminals / Keypad / Serial link (or combination of all)
	Digital inputs	8 (8) Dig. inputs (NPN-PNP selectable) pulse train input
	Speed reference input	Potentiometer (on keypad unit, external), analogue signal (terminal), keypad, internal programmable value, pulse train, serial link
	Analogue channels	2 analogue channels -10V...0...+10V...0...+10V 0...1000 mA, all fully scalable in gain and offset, and mathematically concatenable
	Analogue outputs	2 analogue outputs, programmable in gain and function (0...+10V 0...0...20 mA)
	Digital outputs	2 digital outputs (can be assigned to different functions)
	Relay output	1 switch-over contact 5 A 250 V (programmable assignment)
	Data link	Serial link RS-485 (MODBUS)
	Special functions	+10V / 50 mA auxiliary power supply on terminals, +10V potentiometer power supply, 500 mA power supply on modbus connector Simple PTG / K. DASH motor protection
Electronic protections with fault history	Electrical	Overvoltage, undervoltage Input phase loss, motor phase unbalance
	Thermal	Heatsink overtemperature, hot motoprotection
Optionals	Display	Removable display / keypad units
	Delta chopper	Breaking resistors for different applications and load characteristics
	Power control options	Main switch, emergency switch, STYRASS switch,
	Inverter control options	Potentiometer, inverter control selector switches
	PC-software: Parameter Stick	Configuration-, control- and diagnosis-tool, parameter setting and duplicating For parameter duplicating
Environmental and operating conditions	Protection class	IP20 / NEMA
	Operating temperature	-10...+40 °C (-40 with optional antifreeze control)
	Humidity	0 to 95% RH, non-condensing, non-corrosive
	Altitude	1000 m; above 10% climbing / 100m
	Vibration	Max. 1,0 g
Power range	0.4...60 kW	
Standards	Electromagnetic compatibility	EN61800-3(2004)
	Safety	EN61800-5-1 2003

EP 66 - Products and Framesizes

Model	Motor power Rated current	Framesize	Dimension (W x H x D-mm)	Brake resistor Min. value
EP66-0004S2	0.4kW - 2,5 A	I1	206x412x198	80 Ohm
EP66-0007S2	0.75kW - 4,5 A			
EP66-0015S2	1.5 kW - 7 A			
EP66-0022S2	2.2kW - 10A			
EP66-0004T2	0.4kW- 2,5A			
EP66-0007T2	0.75kW - 4,5A			
EP66-0015T2	1.5kW - 7A			
EP66-0022T2	2.2kW - 10A			
EP66-0004T3	0.4kW - 1.2A			
EP66-0007T3	0.75kW - 2A			
EP66-0015T3	1.5kW - 4A	I2	246x420x198	100 Ohm
EP66-0022T3	2.2kW - 6,5A			
EP66-0030T3	3.0kW - 7A			
EP66-0040T3	4.0kW - 9A	I3	246x470x230	50 Ohm
EP66-0055T3	5,5kW - 12A			
EP66-0075T3	7,5kW - 17A			
EP66-0110T3	11kW - 23A	I4	246x650x326	20 Ohm
EP66-0150T3	15kW - 32A			
EP66-0185T3	18,5kW - 38A			
EP66-0220T3	22kW - 44A	I5	308x680x376	15 Ohm
EP66-0300T3	30kW - 60A			
EP66-0375T3	37,5kW - 75A			
EP66-0450T3	45kW - 90A	I6	370x770x401	10 Ohm
EP66-0550T3	55kW - 110A			
EP66-0750T3	75kW - 150A	I6	370x770x401	15 Ohm
EP66-0900T3	90kW - 180A			



OPTIONAL MAIN- /
EMERGENCY SWITCH -
INVERTER CONTROL



OPTIONAL BYPASS
SWITCH



ROOM FOR BUILD-IN
OPTIONALS