

A DRIVES COMPANY



**EP66**

**ENGLISH**

**EURa Drives GmbH**



Mühlenweg 143, 22844 Norderstedt

Telefon: +49 40 589 7950 0

Fax: +49 40 589 7950 29

info@euradrives.eu

**ENGLISH**

[www.euradrives.eu](http://www.euradrives.eu)

**EP66**

FREQUENCY INVERTER

0.4 kW - 90 kW



# EP66

0.4 kW - 90 kW  
FREQUENCY INVERTER

## HIGHLIGHTS

DSP based high-tech motor control concept, suitable for V/Hz, SENSORLESS VECTOR, PMM synchronous motor control, SPEED/TORQUE control mode.

Intelligent AUTOTUNING functions for quick and easy set-up

Rugged construction, IP66/NEMA 4

Flexible configurable 4 line character display - ready for any common field bus

Removable cable conduit plate, including vent with humidity barrier

Space inside the drive, for customer options, like main/emergency switch, start/stop selectors, potentiometer and brake resistor

Optional BYPASS switch build in

C3 class filter standard - optional C1 EMC filter build in for 1. Environment (residential area)

All standard inverter functions build in, to make it suitable for various applications in industrial and civil area, 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



## FRAMESIZE

Model	Motor power (KW)	Framesize	Dimensions (WxHxD-mm)	Brake resistor Min. value
EP66-0004 S2	0,4 kW - 2,5 A	11	200x412x198	80 Ohm
EP66-0007 S2	0,75 kW - 4,5 A	11	200x412x198	80 Ohm
EP66-0015 S2	1,5 kW - 7 A	11	200x412x198	80 Ohm
EP66-0022 S2	2,2 kW - 10 A	11	200x412x198	80 Ohm
EP66-0004 T2	0,4 kW - 2,5A	11	200x412x198	80 Ohm
EP66-0007 T2	0,75 kW - 4,5 A	11	200x412x198	80 Ohm
EP66-0015 T2	1,5 kW - 7 A	11	200x412x198	80 Ohm
EP66-0022 T2	2,2 kW - 10 A	11	200x412x198	80 Ohm
EP66-0007 T3	0,75kW - 2A	11	200x412x198	150 Ohm/150W
EP66-0015 T3	1,5kW - 4A	11	200x412x198	150 Ohm/150W
EP66-0022 T3	2,2kW - 6,5A	11	200x412x198	150 Ohm/150W
EP66-0030 T3	3,0 kW - 7 A	11	200x412x198	150 Ohm/150W
EP66-0040 T3	4,0 kW - 9 A	11	200x412x198	150 Ohm/150W
EP66-0055 T3	5,5 kW - 12 A	12	242x418x198	75 Ohm/500W
EP66-0075 T3	7,5 kW - 17 A	12	242x418x198	75 Ohm/500W
EP66-0110 T3	11 kW - 23 A	13	242x471x228	75 Ohm/1.0kW
EP66-0150 T3	15 kW - 32 A	13	242x471x228	75 Ohm/1.0kW
EP66-0185 T3	18,5kW - 38A	14	242x650x324	30 Ohm/1.5kW
EP66-0220 T3	22kW - 44A	14	242x650x324	30 Ohm/1.5kW
EP66-0300 T3	30kW - 60A	14	242x650x324	30 Ohm/1.5kW
EP66-0370 T3	37kW - 75A	15	308x680x379	20 Ohm/2.0kW
EP66-0450 T3	45kW - 90A	15	308x680x379	20 Ohm/2.0kW
EP66-0550 T3	55kW - 110A	15	308x680x379	20 Ohm/2.0kW
EP66-0750 T3	75kW - 150A	16	370x770x404	15 Ohm/3.0kW
EP66-0900 T3	90kW - 180A	16	370x770x404	15 Ohm/3.0kW

MAIN SWITCH C1 EMC FILTER



LCD REMOTE KEYPAD IP66

PARAMETER COPY STICK



IP66 accesories



OPTIONAL:  
MAIN-/EMERGENCY-  
SERVICE SWITCH  
INVERTER CONTROL  
SELECTOR SWITCHES  
POTENTIOMETER

ROOM FOR BUILD-IN  
OPTIONALS

## TECHNICAL DATA

Power input	Rated input voltage	3-Phase 380V-460V (+/-15%) 3-phase 220V-240V(+/-15%) 1-Phase 220V ~ 240V (+/-15%)	
	Input frequency	44...67 Hz	
	EMC filter	Integrated C3 class filter as standard (2. environment - industrial area) (optional internal C1 class filter kit available)	
Motor output	Output voltage	0.....V-input	
	Output frequency	0.....650 Hz (1500HZ OPITION)	
	Frequency resolution	0,01 Hz	
	Overload capability	150% - 60 sec. / 10 min	
Control Mode	Motor control algorithm	V/Hz-SpaceVector, SLV-SENSORLESS Vector control, Torque/Speed control mode. CLV-Closed loop vector, PMSM Permanent Magnet Synchronous Motor SENSORLESS control	
	Chopper frequency	0.8...1.6 kHz (fixed / random)	
	V/Hz curve	Linear, exponential, and user-programmable curve	
	Starting torque	150% rated torque at 0,5 Hz (in SLV Mode)	
	Torque compensation	Automatic / Manual	
	Motor data input	Manual, from nameplate / AUTOTUNING	
	Control range	1:100 in SLV mode, 1:1000 in CLV mode, 1:20 in PMSM mode	
	Speed precision	+/- 0,5% (SLV), +/- 0,02% (CLV)	
	Torque precision	+/- 5% (SLV)	
	DC-Brake	Programmable in duration and intensity	
	Brake chopper	Chopper transistor integrated	
Display	4 Line character display	To display configuration parameters, Inverter status and various operating parameters - all programmable, easy and flexible	
	Inverter control	Via terminals / Keypad / Serial link (or combination of all)	
I/O Channels, control functions	Digital inputs	6 (8) Dig. inputs (NPN-PNP selectable) pulstrain-input	
	Speed reference input	Potentiometer, analogue signal (terminals), keypad (INC/DEC), pulstrain, via serial link	
	Analogue channels	2 analogue inputs - 12 BIT: 0...10V, 0...5V, -10V...0...10V, 0...(4)20 mA, all free scalable in gain and offset, and mathematically concatenable	
	Analogue outputs	1 (2) analogue outputs, programmable in gain and function (0...10V, 0(4).20 mA)	
	Digital outputs	1 (2) digital OC outputs (free mapping to different functions)	
	Relais output	1 switchover contact 5 A 230 V (programmable function assignment)	
	Data link	Serial link RS 485 (MODBUS ASCII/RTU)	
	Special functions	24V / 50 mA auxiliary power supply on terminals, 10V potentiometer power supply, 5V/100 mA power supply on modbus connector Simple PTC / KLIXON motor protection	
	Electronic protections with fault history	Electrical	Over-voltage, under-voltage over-current overload
		Thermal	Inverter overtemperature, I*xt motorprotection PTC/LIXON read in
Options	Display	IP66 Remote display / keypad unit	
	Dynamic brake	Braking resistors for different load characteristics	
	Power control options	Main switch, emergency switch, BYPASS switch	
	Inverter control options	Potentiometer, inverter control selector switches	
	PC-software / Parameter Stick	Configuration-, control- an diagnosis-tool, Parameter copy/duplicating stick	
Environmental and operating conditions	Protection class	IP66 / NEMA4	
	Operating temperature	-10.....+40 °C (-40 with optional antifreeze control)	
	Humidity	0 to 98% non-corrosive	
	Altitude	1000 m, above 1% derating / 100m	
Vibration	Max. 1,0 g		
Power range	0,4.....90 kW		
Standards	Electromagnetic compatibility	EN61800-3(2004)	
	Safety	EN61800-5-1 2003	