



A DRIVES COMPANY

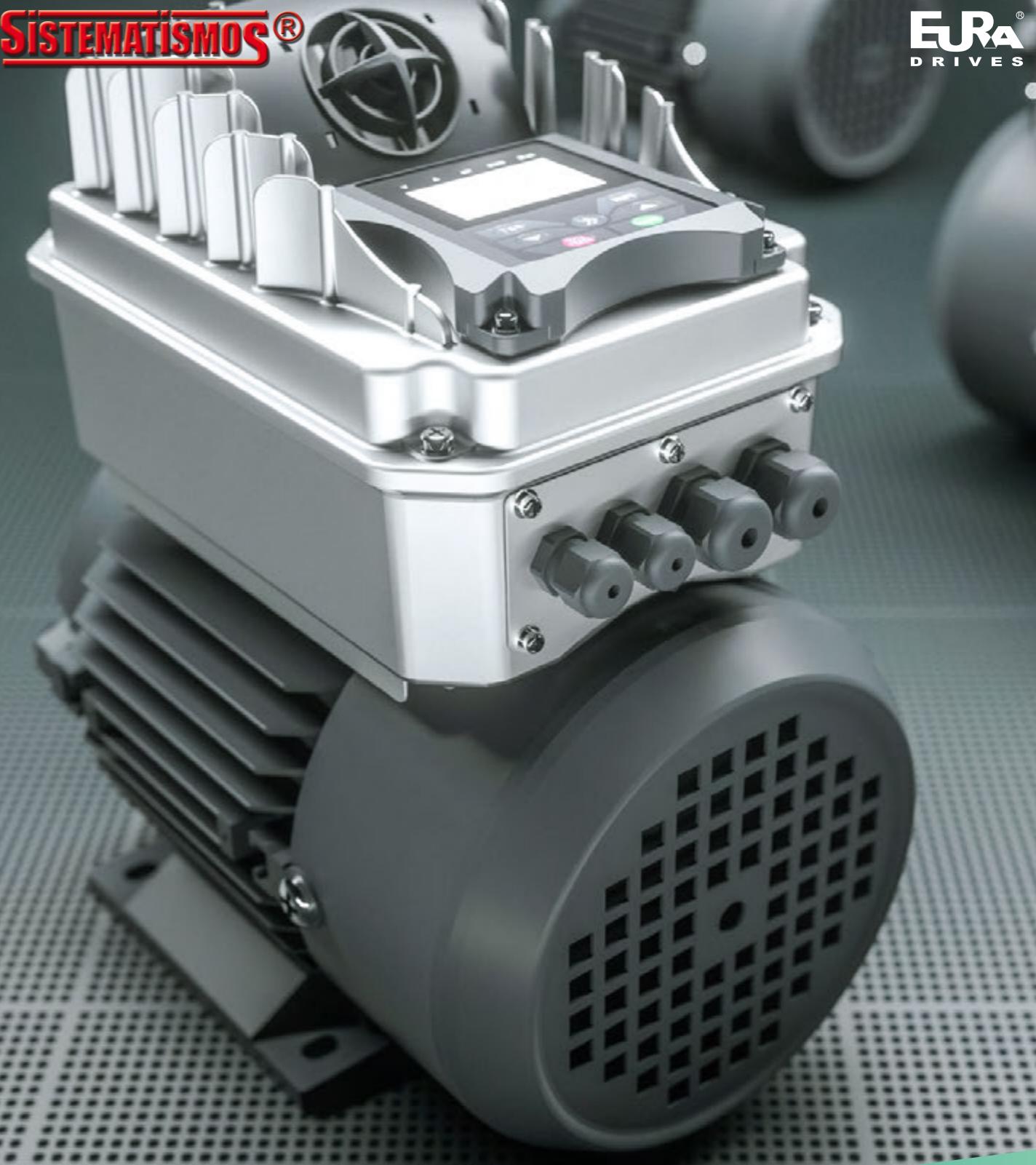
**SISTEMATISMOS®**

**SISTEMATISMOS, S.L.**  
Calle Monte Auseva, 14 Entresuelo  
33012 Oviedo  
Tno.: 98 529 6329 Fax.: 98 528 2154  
[www.sistematismos.com](http://www.sistematismos.com)  
[sistematismos@sistematismos.com](mailto:sistematismos@sistematismos.com)

EURA Drives GmbH



Mühlenweg 143, 22844 Norderstedt  
Telefon: +49 40 589 7950 0  
Fax: +49 40 589 7950 29  
[info@euradrives.eu](mailto:info@euradrives.eu)



**ENGLISH**

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

**EM30**

FREQUENCY INVERTER

0.4 kW - 7,5 kW

**EURa**  
DRIVES



# EM30

0.4 kW - 7,5 kW  
FREQUENCY INVERTER

**SISTEMATISMOS®**

## HIGHLIGHTS

High-tech motor control concept, based on advanced DSP-technology V/Hz, SENSORLESS VECTOR with SPEED/TORQUE control, sensorless PMM synchronous motor control.

Intelligent AUTOTUNING functions for easy set-up

Rugged construction, all metal enclosure, thermally decoupled from motor, IP67/NEMA 4, shock proof(4G) - for motor- and wall mounting

Flexible configurable 4 line character LCD display

ready for all common field bus systems

Numerous standard inverter functions, to make it suitable for all kind of industrial and civil applications, and for retrofit as well- integrated PID controller

C3 class EMC filter build in, optional kit for internal C1 class filter available

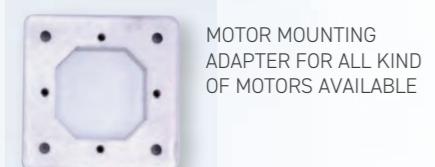
Smart PC-tools, for inverter control, parametrization and troubleshooting, parameter-COPY- stick

Approved for worldwide standards by independent bodies

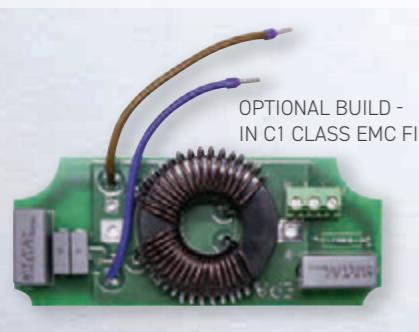
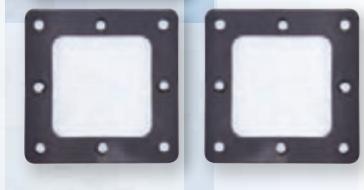


## FRAMESIZE

Model	Motor power (kW)	Frame-size	Dimensions (WxHxD-mm)	Remarks
EM30-0004 S2	0,4 kW - 2,5 A			
EM30-0007 S2	0,75 kW - 4,5 A			
EM30-0015 S2	1,5 kW - 7 A			
EM30-0022 S2	2,2 kW - 10 A			
EM30-0004 T2	0,4 kW - 2,5 A			
EM30-0007 T2	0,75 kW - 4,5 A			
EM30-0015 T2	1,5 kW - 7 A	J1	186x266x180	1-phase 220V
EM30-0022 T2	2,2 kW - 10 A			
EM30-0007 T3	0,75 kW - 2 A			
EM30-0015 T3	1,5 kW - 4 A			
EM30-0022 T3	2,2 kW - 6,5 A			
EM30-0030 T3	3,0 kW - 7 A			
EM30-0040 T3	4,0 kW - 9 A			
EM30-0055 T3	5,5 kW - 12 A	J2	215x325x190	3-phase 380V
EM30-0075 T3	7,5 kW - 17 A			
* EM30-0110 T3	11 kW - 23 A	J3	280x380x220	
* EM30-0150 T3	15 kW - 32 A			
* under development				



MOTOR MOUNTING  
ADAPTER FOR ALL KIND  
OF MOTORS AVAILABLE



OPTIONAL BUILD -  
IN C1 CLASS EMC FILTER



THERMALLY DECOUPLED  
FROM MOTOR - all heat  
generating power  
components located in  
the easy removable cover



4 line LCD  
character KEYPAD  
to rotate in 90° steps



IP66 LCD REMOTE KEYPAD



PARAMETER  
COPY STICK



IP66 ACCESSORIES

**SISTEMATISMOS®**

## TECHNICAL DATA

<b>Power input</b>	Rated input voltage 1-Phase 220V ~ 240V ( ±15% ) 3-Phase 220V ~ 240V ( ±15% )
<b>Motor output</b>	Output voltage 0.....V-input Output frequency 0.....650 Hz Frequency resolution 0,01 Hz Overload capability 150% - 60 sec. / 10 min
<b>Control Mode</b>	Motor control algorithm V/Hz-SpaceVector, SLV-SENSORLESS VECTOR with torque/speed control mode, CLV-Closed loop vector, Permanent Magnet Synchronous Motor PMSM SENSORLESS control Chopper frequency 0.8...16 kHz (fixed / random pattern) 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 User programmable functions Brake chopper Chopper transistor integrated
<b>Display</b>	4 Line LCD Character Programmable to display parameters and parameter values, inverter status and operating parameters
<b>I/O Hardware</b>	Analogue inputs 2 analogue inputs - 12 BIT: 0..10V, 0..5V, 0..(4)20 mA, all free scalable in gain and offset, and mathematically concatenable Analogue outputs 2 analogue outputs, programmable in gain and function (0...10V, 0(4)..20 mA) Digital outputs 2 relays with switchover contacts 5A 230V capability 1 OC digital output (24V 100 mA) Data link Serial link RS 485 (MODBUS ASCII/RTU)
<b>Special functions</b>	Special functions 24V / 200 mA auxiliary power supply on terminals, 10V potentiometer power supply, 5V/100 mA power supply on modbus connector PTC / KLIXON motor protection
<b>Electronic protections with fault history</b>	Electrical Over-voltage, under-voltage Over-current, overload, motor-overload, output short-circuit Input phaseloss, motor phase unbalance Thermal Heatsink overtemperature, I <sup>2</sup> t motorprotection Motor PTC
<b>Options</b>	Display IP66 Removable display / keypad units Brake chopper Braking resistors for different load characteristics PC-software Parameter copy stick Configuration-, control- an diagnosis-tool, parameter copy/duplicating stick
<b>Environmental and operating conditions</b>	Protection class IP66 / NEMA4 - motor- /wall mounting Operating temperature -10.....+40 °C - -40°C with automatic antifreeze control function (option) Humidity 0 to 98%, non-corrosive Altitude 1000 m, above 1% derating / 100m
<b>Standards</b>	EMC EN61800-3(2004) Safety EN61800-5-1 2003