


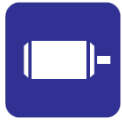


-  your idea...
-  our solutions...
-  your success...

**EASY**<sub>SA</sub>



## Frequency Converter MS-FC 3.X



**MS-FC 3.1 : 250 W / 500 W**

**MS-FC 3.2 : 600 W / 900 W**

For over 10 years, *EASYsa* develops and produces industrial Frequency Converters notably designated to drive high-speed micro-spindles. Featuring a sensorless and brushless technology unparalleled on the market, the MS-FC converters **improve machining quality and increase the lifetime of tools**.

The new MS-FC generation even better exploits these advantages by offering the possibility **to sequentially drive up to 2 synchronous high-speed motors** with only a single converter and to change the spindle on the fly.




It warrants also a **best efficiency** by avoiding time loss due to braking and acceleration and an **optimal reliability** by avoiding motor and converter heating.

Our unique and proprietary self-adaptive algorithms allow to:

- **Sensorless and brushless** AC or DC motors driving
- A rotational speed of between 5,000 and over 140,000 revolutions per minute
- Ensuring a precise speed and optimal torque through **real control of the angular position** over the entire speed range
- Startup and restart of the spindle **without initial positioning**, at any speed
- Optimal independence from the length of the spindle cables
- Use of a wide range of spindles without adjustment (tuning) parameters
- A three-phase supply trapezoidal PAM / PWM spindle, with galvanic isolation
- No external ventilation required














Different versions to meet the needs of your applications:

- Versions for 1 or 2 sequential spindles
- Different cases and power supply
- Up to **100 sets of parameters** for 100 different types of motors, we realize free of charge parameter settings for any new motor type
- User-friendly and efficient operator interface with graphic display and spindle load display
- Remote control connector
- Integrated power supply with universal input voltage

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### Available models

Type	Power	Spindles	Connection**	Case	Dimensions LxHxD	Order No.
MS-FC 3.1 BD1	250/500W	1	 DIN		130 x 105 x 224 mm	4 218
MS-FC 3.1 BD2		2*	 DIN			4 219
MS-FC 3.1 BI1		1	 Intercontec			4 220
MS-FC 3.1 BI2		2*	 Intercontec			4 221
MS-FC 3.1 FD1		1	 DIN		145 x 105 x 224 mm	4 222
MS-FC 3.1 FD2		2*	 DIN			4 223
MS-FC 3.1 FI1		1	 Intercontec			4 224
MS-FC 3.1 FI2		2*	 Intercontec			4 225
MS-FC 3.2 BI2	600/900W	1	 Intercontec		190 x 105 x 238 mm	4 680
MS-FC 3.2 TI2		2*	 Intercontec			4 681

\* 2 spindles non simultaneous

\*\* cables converter-motor not included

### Technical data

#### Speed and Power

MS-FC 3.1: 250W, 4.2A nominal ; 500W, 20A peak

MS-FC 3.2: 600W, 10A nominal, 900W, 20A peak

#### Output Frequency

2.5 kHz max

#### Motor voltage

63 V

#### Power supply

90-264VAC, 47-63 Hz

#### Security

Input protection : internal fuse

Output protection : current, voltage

Monitoring of the internal temperature of the converter

#### Commands and frontal informations

Rotation on/off, 1 and 2

Speed setpoint

Spindle type selection

Spindless setting

Display of the speed, the torque and other informations at choice

Graphic display, bar graph

Illuminated keys

#### Controls and remote information

Selection of controls internal/externals

Selection of setpoints internal/externals

Rotation on1/off1, on2/off2

Setpoint reached

Null speed

Converter OK

#### Converter configuration

Rotation direction

Type of slow-down<sup>1</sup>

#### Motor configuration

Connectors DIN :

100 selectable sets

Connectors Intercontec :

100 selectable sets with 16 sets for spindles coding

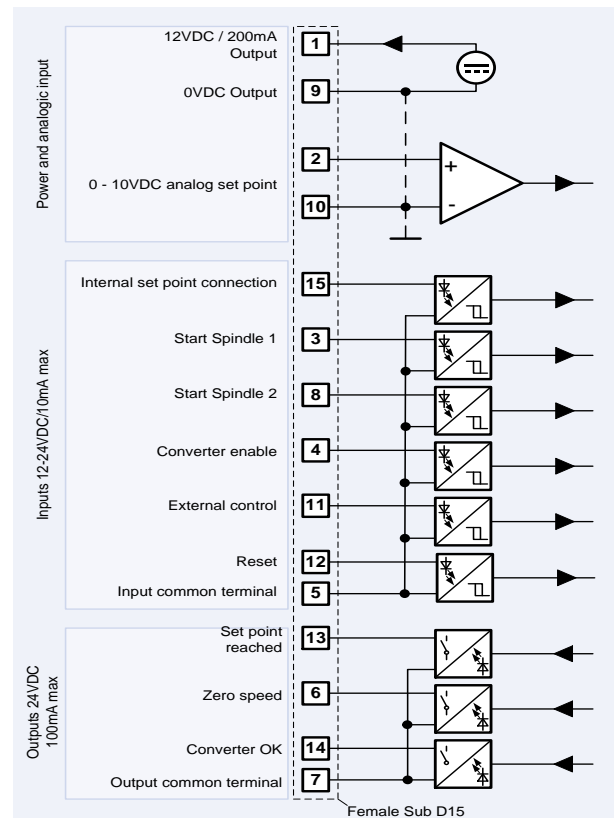
#### Motor connection

Connector DIN or Intercontec

Note

<sup>1</sup> No activ slow-down for the 2 spindles versions

### Control interface



Please tell us the desired models and quantities and we gladly make you an individual offer.  
 Personalized versions or different features on demand