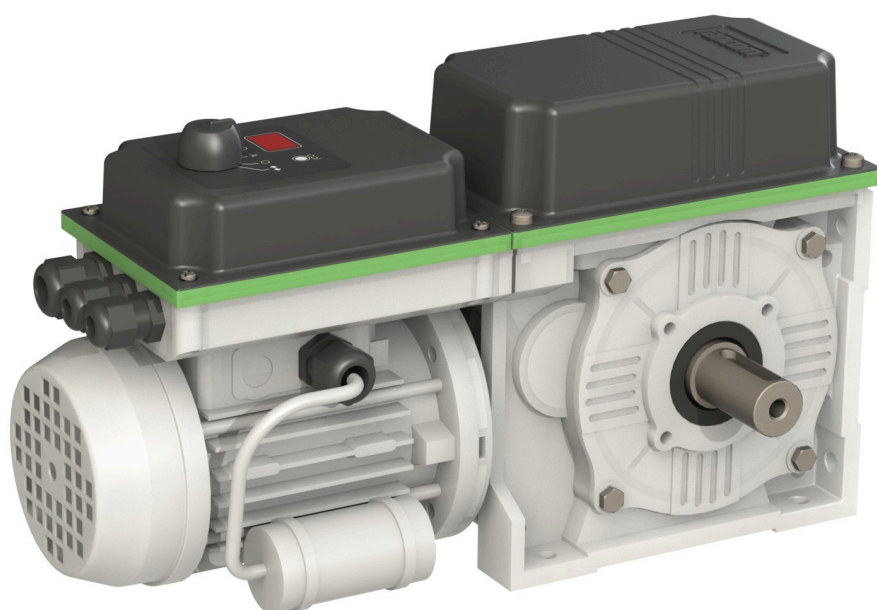


# IM.125 + CPS



PRODUCT APPLICATION MANUAL

GB220303

**Fancom**<sup>®</sup>  
forward thinking

## Introduction

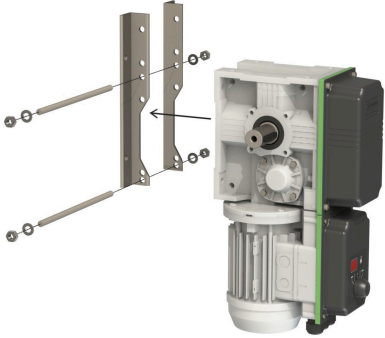
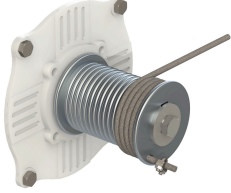

The Fancom iM.125 is used to control air inlet systems. In combination with a Fancom controller and the Fancom Fantura air inlets or Fancom Greenline inlets this actuator provides a perfect air intake system where you do not have to worry about. A rotary switch enables an easy selection of the type of the connected air inlets (Fantura air inlets or Fancom Greenline inlets).

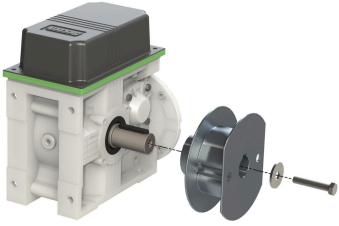

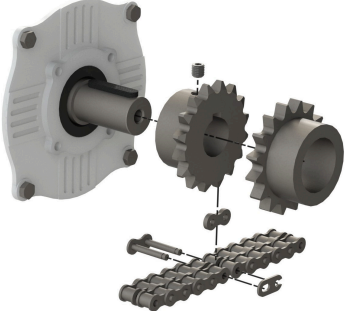


Article number	Description
34331015	iM.125 200-230V 50Hz
34331016	iM.125 200-230V 60Hz

## Features

- The iM.125 can be used for controlling the Fantura air intake system, traditional air intake system and curtains.
- Also, the motor can be used as a winch (for example water and feedlines).
- Two-driven shaft, to which a cable reel or pipe/chain connection can be mounted.
- For motors, installed within reach (lower than 2.5 m above subsurface) of humans or animals a CE cover is available.
- The iM.125 can be controlled via a 0-10V/10-0V voltage input for an analogue control OR via a digital control via the I/O-Network\*. No signal loss. Saves an analogue output on the controller.  
\* Maximum 31 network modules per I/O-Network
- Built-in digital feedback for position feedback. By the lack of a carbon track, used in a traditional feedback, the lifetime is far longer.
- The iM.125 has an auto/manual switch with 5 positions (open – 0 – auto – 0 – closed). The position of the switch determines the functioning of the actuator
- Alarm relay
- Extensive alarm via I/O-net and manual operations possibilities:
  - Via manual operation on the actuator.
  - Via external manual operation (with 10K potentiometer)
- Ability to calibrate the iM.125 without removing a cover by a push button.
- Built-in limit switches with easy adjustment of the end position without special tools.
- Open and robust set up for the different components. Easy access and wiring.
- A temperature measurement that can also be used by a Fancor climate controller is available. This option is only available if the iM.125 is controlled via I/O-net.
- 7-segment display that displays the status of the programme. This makes adjustment of the actuator a lot easier.
- The iM.125 is maintenance free.
- Self-recovering thermal protection (clixon) which switches off the actuator in the event of overheating. The actuator will automatically re-activate when it has cooled down.
- The actuator can be mounted in different positions. A quick, easy and cheap installation is possible by placing pins through the corners of the housing (see LM mounting set).

# Options

Article number	Description	Image
5859007	<p><b>Mounting bracket set LM.125/250</b></p> <p>With the optional mounting bracket the actuator is quickly and easy to install.</p>	
5450051 5450012 5450013	<p><b>Cable winch drum Ø50 + 2,5 meter cable</b></p> <p><b>Cable winch drum Ø80 + 2,5 meter cable</b></p> <p><b>Cable winch drum Ø106 + 2,5 meter cable</b></p> <p>The iM.125 has a two-driven shaft, to which a cable reel to wind can be mounted.</p>	
2459280 2459132 2459265	<p><b>CE protection cover for cable reel Ø50</b></p> <p><b>CE protection cover for cable reel Ø80</b></p> <p><b>CE protection cover for cable reel Ø106</b></p> <p>If the actuator is hung within reach of people or animals (less than 2.5 m / 8.2 ft above the floor) a CE protection cover must be mounted.</p>	

<p>5450108 5450105 5450106 5450107</p>	<p><b>LM.125 belt drum 55 mm + belt 1 m</b> <b>LM.125 belt drum 55 mm + belt 2 m</b> <b>LM.125 belt drum 80 mm + belt 3 m</b> <b>LM.125 belt drum 100 mm + belt 4 m</b></p> <p>The iM.125 has a two-driven shaft to which a belt drum can be mounted.</p>	
<p>5459050</p>	<p><b>CE protection cover for belt drum LM.125/250</b></p> <p>If the actuator is hung within reach of people or animals (less than 2.5 m / 8.2 ft above the floor) a CE protection cover must be mounted.</p>	
<p>5459022</p>	<p><b>Pipe/chain connection LM.125</b></p> <p>The iM.125 has a two-driven shaft to which a pipe/chain connection to drive a 1" pipe can be mounted.</p>	
<p>5045011.01</p>	<p><b>Temperature sensor SF.7</b></p> <p>As an I/O network module, the iM.60/iM.125 can measure the temperature itself. This value can be used the control computer or for independent regulation in case of emergency.</p>	
<p>5130150</p>	<p><b>Manual control box iM.60/iM.125</b></p> <p>With this manual override kit, it is possible to control a iM.60 or iM.125 on distance.</p>	

## Wiring

Cable	Description
3 x 2.5 mm <sup>2</sup>	Main voltage 230Vac
2 x 0.8 mm*	Manual potentiometer (option)
2 x 0.8 mm*	Maximum thermostat (option)
2 x 0.8 mm*	Power failure signal (option)
2 x 0.8 mm*	Temperature sensor (option) I/O-net module extra temperature
2 x 0.8 mm*	Voltage input 0-10V / 10-0V or temperature sensor (option) With I/O-net control (traditional analog control)
I/O-net Greenlink 2 x 0.8 mm twisted pair unshielded **	I/O-network communication

\* Fancom's Greenlink 2 x 0.8 mm twisted pair is recommended.

\*\* Maximum 31 I/O-net modules and 1 controller in 1 network.

## Technical specifications

Mains power supply		
	50Hz	60Hz
Mains voltage	230 V AC ( $\pm 10\%$ )	240 V AC ( $\pm 10\%$ )
Maximum current	1.0 A	1.2 A
Power consumption	230W	290W
Thermal Overload protection	YES	YES
Capacitor	10 $\mu$ F	10 $\mu$ F
Inputs		
Analog in	Voltage- or temperature measuring Voltage 0-10V, 10-0V, temperature sensor type S7 (-50°C to 110°C)	
I/O network	Digital	
PF (PowerFail)	Normally open contact	
Position feedback actuator	CPS (contactless position sensor)	
Limit switches	30Vac / 60Vdc , max 1A	
Outputs		
Alarm relay	30 V AC / 60 V DC, max. 2A	

Actuator		
Duty cycle	30%	
Speed	50 Hz	2 rpm
	60 Hz	2.4 rpm
Torque	125 Nm	
Yield strength	Cable winch drum $\varnothing$ 50 mm	450 kg
	Belt drum $\varnothing$ 55 mm	450 kg
	Cable winch drum $\varnothing$ 80 mm	300 kg
	Belt drum $\varnothing$ 80 mm	300 kg
	Cable winch drum $\varnothing$ 106 mm	225 kg
	Belt drum $\varnothing$ 100 mm	225 kg
Min.-max number of revolutions without worm wheel	3-12 rev	
Min.-max number of revolutions with worm wheel	1.5-3 rev	
Min.-max stroke	Cable winch drum $\varnothing$ 50 mm	23-49-195 cm
	Belt drum $\varnothing$ 55 mm	26-55-240 cm
	Cable winch drum $\varnothing$ 80 mm	35-75-300 cm
	Belt drum $\varnothing$ 80 mm	38-82-330 cm
	Cable winch drum $\varnothing$ 106 mm	50-100-400 cm
	Belt drum $\varnothing$ 100 mm	50-100-400 cm

Manual control	
Auto/manual switch	Closed – 0 – A – 0 - Open
Potentiometer input (for remote manual operation) and/or	8k $\Omega$ - closed, 0k $\Omega$ - open
Max. thermostat	$\infty$ - no manual operation

<b>Oil</b>	
Type	Shell Omala S4 WE 320 synthetic
Amount iM.125	0.4 l
<b>Output / input type</b>	
<b>Output type</b>	<b>iM.125 address sequence number</b>
Air inlet position	"iM.125 address".01
<b>Input type</b>	
Analogue measurement (temp.)	"iM.125 address".01
Air inlet position measurement	"iM.125 address".02
<b>Accessoires</b>	
Battery pack	-
Cable winch drum	ø50 mm ø80 mm ø106 mm
Belt drum	ø55 mm ø80 mm ø100 mm
CE protection cover for cable winch drum	ø50, ø80, ø106 mm
CE protection cover for belt drum	Universal cover for all belt drums

<b>Controllable number of inlets*</b>							
Type connection	Inlet 1500 wall	Inlet 3500 wall	Inlet 4000 wall sliding	Fantura inlet >-5°C	Fantura inlet >-35°C	Fantura sliding inlet >-35°C	Fantura ceiling inlet double
Cable winch drum ø50mm	110	75	100	75	75	100	65
Belt drum ø55mm	110	75	100	75	75	100	65

\* The number of intake valves is based on a system installed according to the manual using a 5mm main cable with one bend for the counter weight and no additional resistance. It's not recommended to use bigger drums or cable winch drums for the Fancom inlets, because the tensile force then decreases.

<b>Housing</b>	
Ingress protection	IP55
Cover material	ABS UL 94 V-0
Insulation class	F
Dimensions (lxwxh)	362 x 197 x 210 mm
Weight (unpacked)	9,6 kg

<b>Ambient climate</b>	
Operating temperature range	0°C to +40°C (+32°F to +104°F)
Storage temperature range	-10°C to +50°C (+14°F to +122°F)
Relative humidity	< 95%, uncondensed
Maximum altitude	< 1000m above sea level

<b>I/O network</b>
Possibility of communication via the I/O-network. One control computer and a maximum of 31 network modules may be connected to the I/O network. Each connected network module has a unique address. After an address has been changed, the network module should always be restarted (power off-on).

## Dimensions

