



U FK M05 RS USER MANUAL 2024



VER.1/22.02.2023



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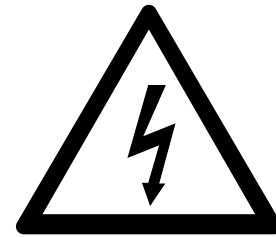
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SECURITY MEASURES

1-) A product suitable for a healthy and safe working environment should be selected and the device should be used in accordance with the instructions.



2-) The necessary checks, maintenance and cleaning of the device should be done before production. However, electrical repairs should not be made under voltage.



3-) No electrical device should be touched with wet hands and no repairs should be attempted.



4-) The operator should be informed about the operation of the device and only those who are responsible for the device should handle it.



SECURITY MEASURES

5-) Attention should be paid to the lighting of the environment according to the location of the device.



6-) Employees should be required to comply with the safety measures and signs in the environment.



7-) Electrical devices and machines should have a protection type appropriate to the environment in which they are operated. They should be isolated against factors such as moisture, steam, oil, dust, and heat.



8-) At the end of the day, the device should be turned off and made safe after use.



SAFE USE WARNINGS

- Before performing any operation on the device, disconnect all supply voltages.
- Do not disassemble the device while it is energized.
- Do not clean the device with solvents or similar substances. Use only a dry cloth to clean the device.
- Before operating the device, check that the connections are correct. Keep signal cables away from contactors, inductive loads, electrical noise emitting devices and energy-carrying lines.
- The device must be protected from adverse environmental conditions such as humidity, vibration, pollution and high/low temperature. Mount it away from electrical noise emitting devices such as contactors and energy-carrying lines.
- To be least affected by electrical noise; Use shielded cables and ground the shield.
- Contact your authorized dealer in case of any problem with your device.

The manufacturer cannot be held responsible in any way for any undesirable situations that may arise as a result of not implementing the above precautions.

OVERVIEW

Unity, UFK M05 RS brake controller is designed with an understandable interface and dynamic structure in mind for use in industrial automation applications. Thanks to advanced hardware and software, the device makes fast and accurate readings precisely thanks to the microprocessor on it. It provides PWM output in the range of 0-24 volts by reading with 0 - 10 volts applied externally. Input sensitivity is 12 bit, output sensitivity is 16 bit. Unlike other brake controls, a communication unit is used. It provides access to all variables, reading and writing opportunities with RS-485 communication type over Modbus RTU. In comparison with other screens, a 22x15 Oled screen is used in this device in terms of light emission (spreading), brightness, color contrast, and viewing angle.

GENERAL AND TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
SENSITIVITY	12 BIT
MINIMUM INPUT LEVEL	<20mV
SUPPLY	24 VDC
DIMENSIONS	46 X 10 X 32
PROTECTION CLASS	IP 20

COMMUNICATION UNIT	
COMMUNICATION TYPE	RS-485
COMMUNICATION PROTOCOL	Modbus RTU

ANALOG SIGNAL SPECIFICATIONS	
ANALOG CONVERTER	0-10V 12 BIT
BRAKE OUTPUT	0-24V 16 BIT
TEMPERATURE RANGE	0-50°

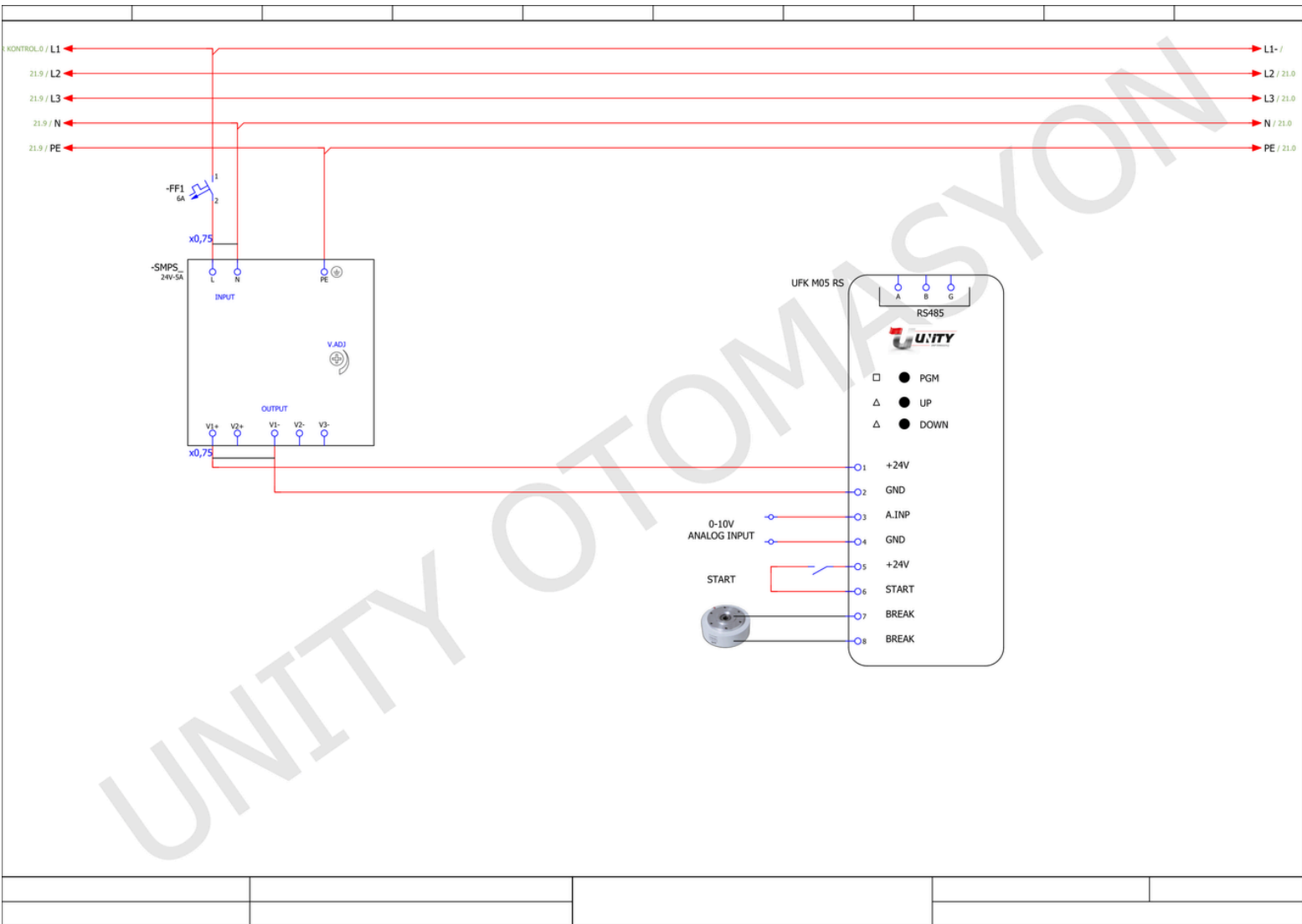
WHERE IS IT USED?

- The winder and unwinder are used to control the flow of material.
- PLC or similar industrial devices control.
- Product filling control in the hygiene sector.

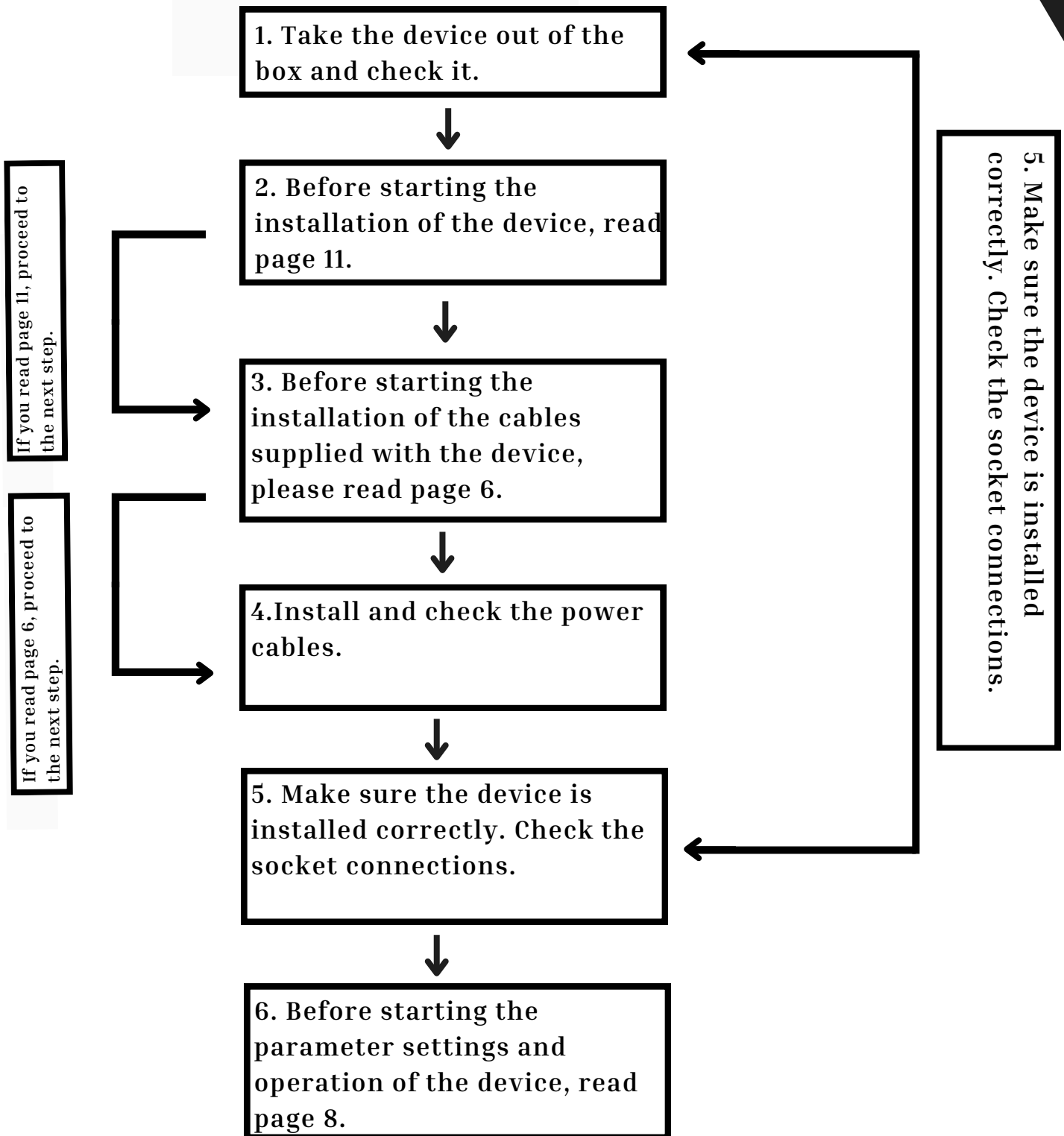
AREAS OF USE

- Process Automation.
- Winder - Unwinder.
- Printing.
- Plastic packaging and label industry.
- Production and technological lines.
- Tension control devices.

CONNECTION DIAGRAM



FLOW DIAGRAM



DEVICE PARAMETERS

1-) MODE LANGUAGE

→ Language Option parameter is entered. Here it is determined whether the language will be TURKISH or ENGLISH.

2-) MODE MODBUS

→ The device's modbus settings ADDRESS and BAUTRATE are selected from this parameter. Addressing is used to prevent faulty data flow when multiple devices communicate with each other. When doing this communication with ADDRESS, the speed of the transmission is set with baudrate.

3-) MODE MIN. VOLT

→ The MIN. VOLT option parameter is entered with the PGM key. The minimum voltage value is determined between 0% and 90%. It cannot fall below this determined minimum value.

4-) MAX. VOLT

→ The Maximum voltage parameter is selected with the PGM key. It is determined between 10% and 100%. It cannot exceed this determined maximum voltage value.

5-) MODE STOP

→ The STOPV parameter is entered with the PGM key. The selected value is determined between 0% and 100%. The output that the device will give when it is at stop is set from this parameter.

DEVICE PARAMETERS

6-) MODE BRAKE OUT

→ BRAKE OUT parameter is selected with PGM button. It is used to reverse brake voltage output. (0...24V / 24V...0V)

7-) MODE AINT. SET

→ AINT.SET parameter is selected with PGM button. It is used to set 0-10V analog voltage information coming from outside.

8-) MODE CURRENT SET

→ CURRENT SET parameter is selected with PGM button. When the device gives output above the set current value, it cuts off the output and protects itself.

9-) MODE FAB. SET.

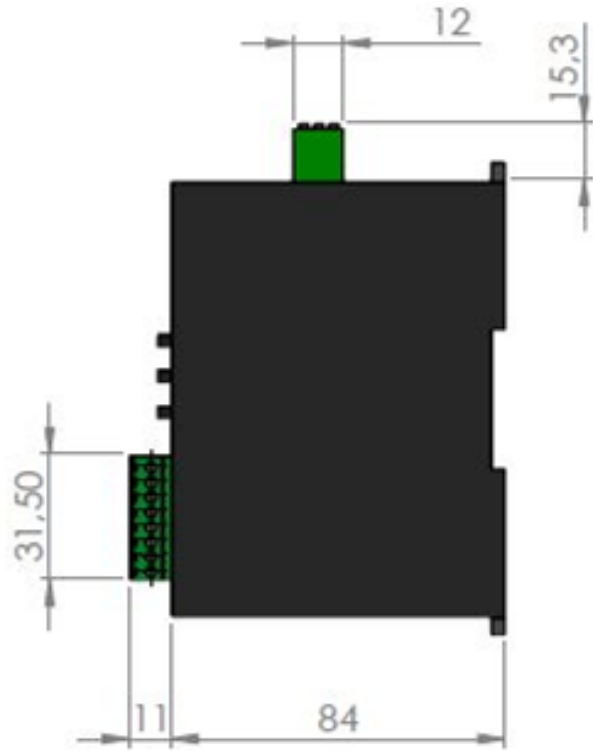
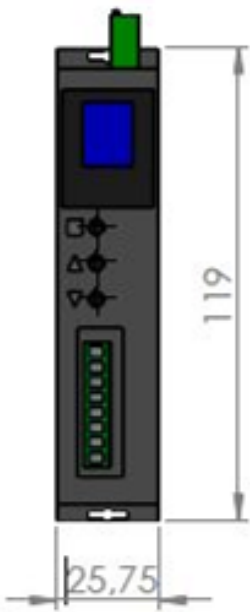
→ FAB. SET. parameter is selected with PGM button. Factory settings parameter is used to return the device to its previous settings.

MODBUS

NOT: Non-parity 8, databits 8, stopits 2

ADRES	EXPLANATION	PARAMETER NAME ON THE DEVICE	ACCESS STATUS	VARIABLE TYPE	Modbus Rtu Function	Variable Range
1	Analog output is sent. 0-24V		READ/WRITE	SIGNED	0x03- 0x04 read 0x06 write	0-24000
2	START STOP If the value 1 is sent, start information is received, if the value 0 is sent, stop information is received.		READ/WRITE	SIGNED INT16	0x03- 0x04 read 0x06 write	0-1
3	Baudrate Baudrate seçim: 1:2400 2:4800 3: 9600 4:19200 5: 38400	BAUD	READ/WRITE	UNSIGNED INT16	0x03- 0x04 read 0x06 write	1-5
4	Slave adres	ADR	READ/WRITE	UNSIGNED INT16	0x03- 0x04 read 0x06 write	1-247

TECHNICAL DRAWING



OUR CONTACT INFORMATION

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