

Motor Speed Controller

UX Series

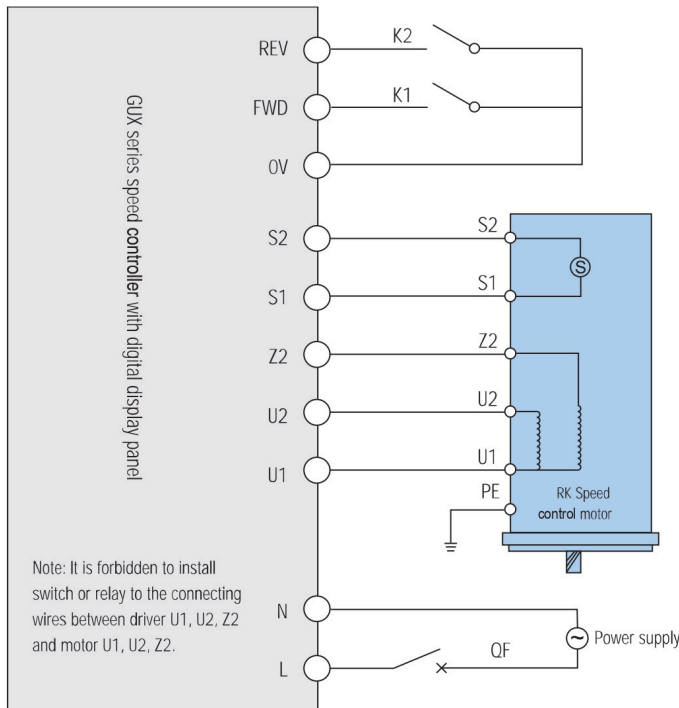
UX Series Speed Controller With Digital Display Panel

Features

- MCU digital control technology that features great variety of functions and excellent performance.
- Digital display menu that is easy to change settings.
- Set magnification and automatic conversion into target value to meet with customer needs.
- Achieve slow acceleration and slow deceleration adjustment.
- Panel operation or external switch control.
- The panel knob will automatically match the highest speed to achieve easy and safe control.
- Stalling protection to protect the motor and speed controller from being damaged due to the stalling.
(This function can protect stalling-related overload, but cannot protect non-stalling-related overload)
- This speed controller is suitable for 50-60Hz.



Wiring Diagram



- Buttons on the operation panel to control the motor operation.
- 1) K1 or K2 switches are not required.
 - 2) Menu settings: Operation control option F-01, select "1" or "4" for button control on the operation panel.

The power of RK variable-speed motor must match the applicable motor power of the speed regulator.

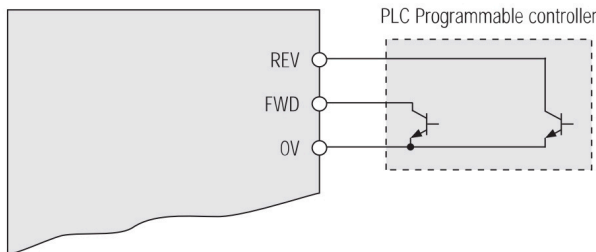
The power supply voltage must be consistent with the power supply voltage of the driver. QF circuit breaker can protect the driver and variable-speed motor in case of short circuit.

- External switches K1 and K2 to control the motor operations.
- 1) K1 and K2 switches are required.
 - 2) Menu settings: Operation control option F-01, select "2" or "3" for external switch control.

Please check if the power label of the speed regulator is consistent with the power of the motor.

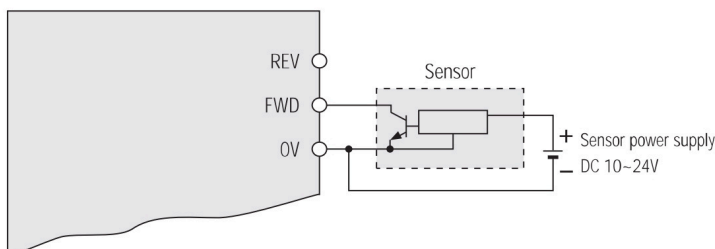
- Current specifications of QF circuit breaker

Supply voltage	Motor power	QF Current specifications
220V	6~200W	2A
220V	200W	3A
110V	6~200W	4A
110V	200W	6A



- FWD and REV use PLC programmable controller to achieve control.
- PLC output:
NPN or drain transistor output.

- Menu settings: Operation control option F-03, select "2" or "3" for external switch control.



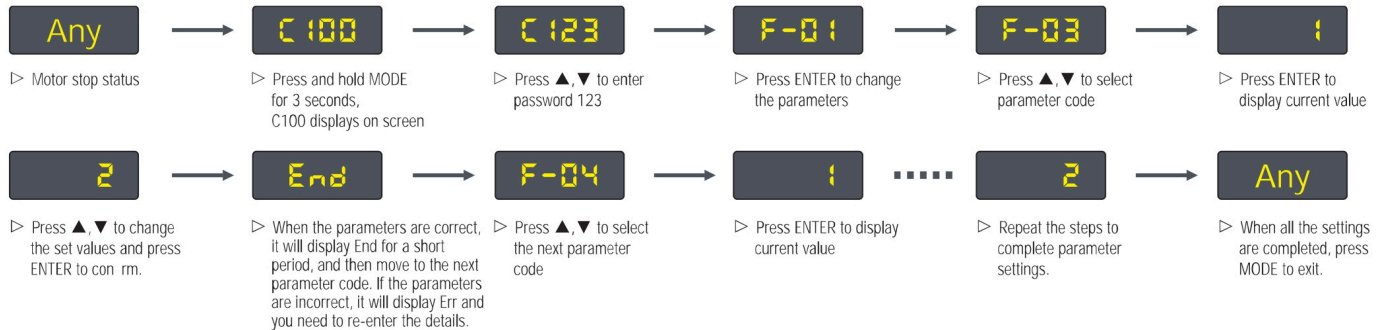
- FWD and REV are controlled by sensors such as proximity switch and photoelectric switch.
- Switch output:
three-wire NPN transistor output

- Menu settings: Operation control option F-03, select "2" or "3" for external switch control.

Menu of GUX Series Speed Controller With Digital Display Panel

• Menu modifications:

Note: To ensure safety, modifications to F-05 and F-29 parameters must be performed when the motor is stopped, otherwise the settings can't be completed and the screen will display Err.



Parameter code	Functions of the parameters	Setting range	Description of the functions	Factory default settings	User settings
F-01	Display content	1. Motor speed settings 2. Magnification speed settings 3. Displays speed feedback value	Magnification speed settings = motor speed value ÷ magnification	1	
F-02	Magnification settings	1.0-999.9	Settings are done according to the display requirements to display the target values.	1.0	
F-03	Operation control methods	1. Button control on the operation panel, memory not available. 2. Control with external switches, STOP key is inactive. 3. Control with external buttons, STOP key is active. 4. Button control on the operation panel, memory available.	Select "1" to control the motor with buttons on the panel; turn off power supply of the speed regulator and power it back on, the speed regulator will memorize the operation conditions prior to the power off, and the motor will be stopped when the power is back on. Select "4" and the speed regulator will memorize the operation conditions prior to the power off, and the motor will keep the status prior to the power off when the power is back on. Make sure safety is ensured when this function is selected. Note: the operating state is not saved under recirculation state.	1	
F-04	Rotation mode	1. Forward and reversal are available. 2. Forward rotation is available, reversal is prohibited. 3. Reversal is available, forward rotation is prohibited.	Motor rotation direction may be restricted to prevent failure of the equipment or accident.	1	
F-05	Rotation direction	1. Negation is not available. 2. Negation is available.	It is easy to change the direction of the motor without changing the motor wiring to match your habit or requirements.	1	
F-06	Speed adjustment method	1. Panel ▲▼ buttons 2. Panel knobs	Press the ▲▼ button to adjust between the lowest and highest speed range, and the speed panel button of the variable-speed motor will match the lowest and highest speed automatically.	1	
F-07	Highest speed	500-3000	The highest speed of the motor may be restricted to prevent speeding, damage or accidents.	1400	
F-08	Lowest speed	90-1000	The lowest speed of the motor may be restricted to prevent inconsistent speed, overheating or overloading caused by low speed.	90	
F-09	Forward starting acceleration time	0.1-10.0 seconds	The longer the time, the slower the motor starts and more time is required. The shorter the time, the faster the motor starts and less time is required.	1.0	
F-10	Stop way of forward	1. Stop by arbitrary deceleration 2. Stop by slow deceleration	If you choose to STOP by arbitrary deceleration, and the motor stops too quickly, you can select STOP by slow deceleration and change the F-11 settings to change the deceleration speed.	1	
F-11	Slow deceleration time of the forward stop	0.1-10.0 seconds	The menu is valid when option 2 is selected from F-10.	1.0	
F-12	Reversal starting acceleration time	0.1-10.0 seconds	The longer the time, the slower the motor starts and more time is required. The shorter the time, the faster the motor starts and less time is required.	1.0	
F-13	Stop way of reversal	1. Stop by arbitrary deceleration 2. Stop by slow deceleration	If you choose to STOP by arbitrary deceleration, and the motor stops too quickly, you can select STOP by slow deceleration and change the F-14 settings to change the deceleration speed.	1	
F-14	Slow deceleration time of the reversal stop	0.1-10.0 seconds	The menu is valid when option 2 is selected from F-13.	1.0	
F-15	Warning	1. Warning is active. 2. Warning is inactive.	Check if the control of stalling warning is active.	1	
F-29	Factory reset	1. Factory reset not required. 2. Factory reset required.		1	
F-30	Program version	Code+version		01.18	
Fault warning Err: 1) overload-related stalling 2) Incorrect wiring connection between the speed regulator and the motor			Troubleshooting method: 1) Fault inspection and troubleshooting 2) Power on again to cancel the warning		