MICRO PROGRAMMABLE CONTROLLER
Fuji Easy Logic Controller

The TimeRy Power is provided with a weekly time-setting feature and the ability to configure various control logic with software. This timer relay can be widely used as a replacement for relays in such applications as listed below.

● Opening/closing control of doors, gates and shutters ● Pump control for supplying and draining water

● Garbage disposer control ● Illumination control of streetlights, show windows and signboards

● Temperature control in greenhouses and plant watering control ● Boiler control

● Parking area monitoring ● Air ventilation system control ● Escalator control

● Mixing and stirring control for various solvents ● Transfer conveyor and sorter control, etc.

4 power relays, 15 timers, 8 counters and 8 program timers are packed into a single TimeRy Power.

SPACE SAVING, COST SAVING, WIRE SAVING, ENERGY SAVING, TIME SAVING…

The TimeRy Power is helpful to increase all types of SAVINGS!

Drastically minaturized control panels!

TimeRy Power has an extremely compact size of 72 x 90 x 55 mm. This compact size contributes to the drastic reduction of control panel dimensions.

For example, if a control circuit including 3 timers and 4 power relays is replaced with TimeRy Power, the mounting space may be reduced by about 50%! (As compared with our existing models.)

SPACE SAVING

About 50%
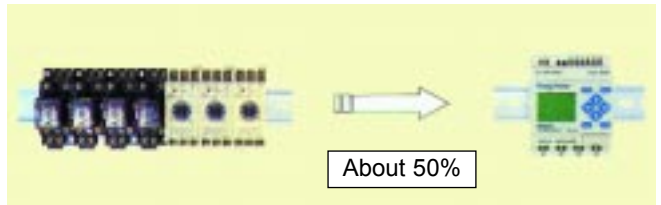
Reduced hardware cost!

TimeRy Power is priced to sell at a user-oriented lower price.
This will greatly lighten the burden of hardware costs.

For example,
if a control circuit including 3 timers and 4 power relays is replaced with TimeRy Power, the cost will be reduced by about 20%! (As compared with our existing models.)

COST SAVING

Less wiring manpower!

In the conventional method, the troublesome wiring of timers and counters and connection of discrete components is inevitable. TimeRy Power allows a wired logic function to be achieved with programmed software through operation of operation switches. Thus the more complicated the logic becomes, the more the wiring manpower will be reduced! In addition, minor modifications can be quickly implemented with the operation switches on the spot, and thus TimeRy Power will powerfully help the user promote standardized hardware specifications!
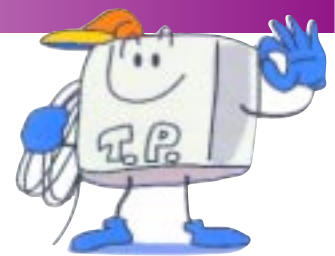
WIRE SAVING

Energy-saving operation with consideration to the environment!

TimeRy Power allows the user to promote environmentally friendly measures through plant operation with reduced consumption of electricity and fuel! This energy-saving operation is realised by such functions as automatic schedule management with daily and weekly timers, and temperature control with analog inputs.

ENERGY SAVING

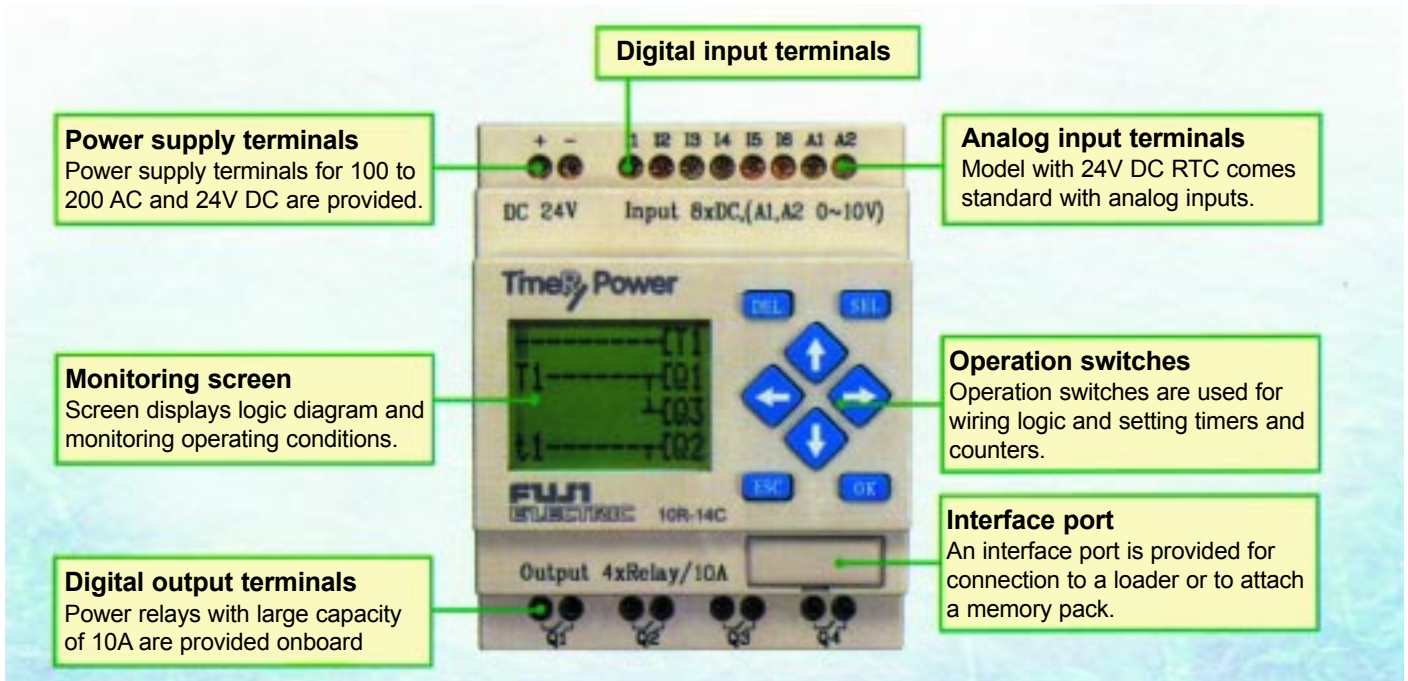## Promotion of highly efficient production!

TimeRy Power comes standard with logic schemes for control applications of routine plants and systems. TimeRy Power can easily copy logic schemes by use of the optional memory pack. The control logic connections take considerably less time to implement than traditional hard-wiring.

TIME SAVING

4 power relays, 15 timers, 8 counters and 8 program timers are packed into a single TimeRy Power.

SPACE SAVING, COST SAVING, WIRE SAVING, ENERGY SAVING, TIME SAVING…

The TimeRy Power is helpful to increase all types of SAVINGS!

Digital input terminals

Power supply terminals
Power supply terminals for 100 to 200 AC and 24V DC are provided.

Analog input terminals
Model with 24V DC RTC comes standard with analog inputs.

Monitoring screen
Screen displays logic diagram and monitoring operating conditions.

Operation switches
Operation switches are used for wiring logic and setting timers and counters.

Digital output terminals
Power relays with large capacity of 10A are provided onboard

Interface port
An interface port is provided for connection to a loader or to attach a memory pack.

Monitoring screen displays all operating conditions

The monitoring screen on the front of TimeRy Power indicates to the user the total status of TimeRy Power at a glance. This screen displays the status of I/Os, internal relays, timers, counters, the analog current values and the clock time, as well as a monitoring screen of the control logic operation.

Control logic is easily configured in ladder diagram format with software

Control logic wiring in TimeRy Power is implemented with software in a ladder diagram format that is developed from a traditional relay schematic diagram. The user has only to wire the TimeRy Power with software as is shown in an existing schematic diagram.

Large power output relays with switching capacity of IOA are provided

TimeRy Power includes large power output relays with a per point switching capacity of 10A at 250V AC, or 8A at 30V DC. These output relays can be directly connected to illumination lamps, valves and small motors for control.

Schedule management is achieved by using clock function

A model with a clock function is provided so that the user may simply and economically realize daily or weekly schedule management using just a single TimeRy Power without any expensive time switch required In addition, overseas use such as in Europe is also ensured since the clock function is equipped with a summer-time selection function.

2 channel analog inputs are standard (DC 24 V, with RTC)

TimeRy Power comes equipped with 2 channel analog inputs as a standard. Simple control of analog quantities, such as temperature, speed, and voltage can be achieved without any optional analog device.

Password feature is provided for security

TimeRy Power contains a password feature for preventing unexpected modification of software with switch operation.

Special mounting hardware is not required

TimeRy Power can be mounted with screws on sliding type fixing holes as well as DIN rails without using any special mounting clamps.

Maintenance-free EEPROM is used

Since software information is stored into an EEPROM that does not require battery backup, TimeRy Power can be handled without any consideration for the maintenance that would be necessary in the case of hardware logic.

## Complies with CE marking and UL/cUL standards

The TimeRy Power is widely applicable throughout the world, and the standard model complies with various global standards such as CE marking and UL.

Software data saving with loader and simulation via personal computer are available

Software data can be saved by using an optional loader program. The data will help the user to standardize wiring diagrams. Wiring of loader software is implemented in a similar manner as for TimeRy Power. Moreover' the configured logic can be simulated in a personal computer, and therefore performance of the logic scheme in TimeRy Power can be verified prior to installation.
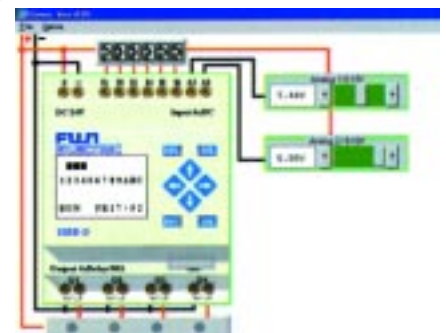
■ Specifications

● General specifications

	NQ2P10R-14 [1	NO2P10R-52
Power supply voltage	20.4 to 28.8V DC	85 to 264V AC
Power consumption	0.3W	0.8W
Output current	Max.10A	
Electrostatic discharge	IEC801-2 Severity3	
	Contact discharge ±4kV, aerial discharge ±8kV	
Radioelectromagnetic field	IEC801 -3 10V/m	
Operating ambient	IEC801-4 Severity3 2kV	
temperature	0 to 55°C	
Relative humidity	20 to 90%RH no condensation	
Vibration	IEC68-2-6 9.8m/s^2	
Shock	IEC68-2-27 147m/s^2	
Construction	IP20	
Dimensions	72 x 90 x 52mm (DIN rail)	

● Specifications

|	NQ2P10R-☐	Q2P10R- ☐C
Programming language	Ladder, function brock	
Program memory capacity	240steps (4elements x 60lines)	
Backup	Built-in EEPROM, memory pack option	
Input relay	12points (11 to C)	
Output relay	8points (Q1 to Q8)	
Auxiliary relay	15points (M1 to MF)	
RTC relay	8points (C1 to C8)	
Counter	15points (T1 to TF)	
Timer	4points (P1 to P4)	
Analog comparison	4points (G1 to G4)	
Analog input	X	2channel (A1 to A2) only for DC
RTC	X	O

● I/O specifications

		NQ2P10R-14☐	NQ2P10R-52☐
Input	No. of input points	6points	
	Rated voltage	0 to 28.8V DC	0 to 265V AC
	Rated current	3mA	0.5mA/110V 1mA/220V
	Operating voltage	ON:15 to 28.8V	ON:79 to 265V
		OFF:0 to 5V	OFF:0 to 40V
	Delay time	OFF ➤ ON:3ms	OFF ➤ ON:50ms
		ON ➤ OFF:5ms	ON ➤ OFF:50ms
	Analog voltage*	0 to 10V DC Resolution:8bits	–
Output	No. of output points	4points	
	Load current	10A/250V AC or 8A/30V DC	

*Analog input:only for NQ2P1 OR-14C

■ Dimensions (mm)
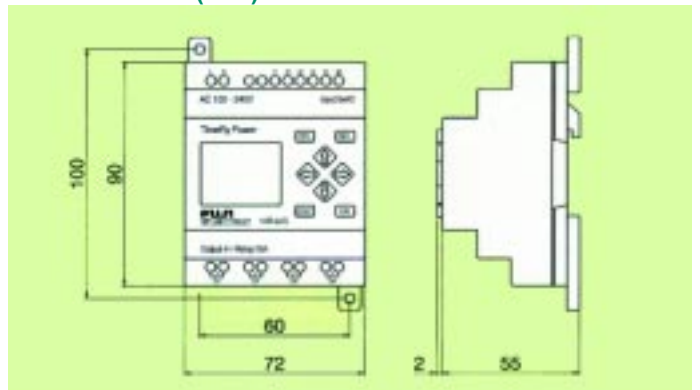
■ Products

Item	Ordering code (Product code)	Specification
TimeRy Power	NQ2P1 OR-14	24V DC power supply, input 6points, output 4points Ry10A, no clock function
	NQ2P1 OR-14C	24V DC power supply, input 6points, output 4points Ry10A, clock function, analog 2channel
	NQ2P1 OR-52	100 to 200V AC power supply, input 6points, output 4points Ry10A, no clock function
	NQ2P1 OR-52C	100 to 200V AC power supply, input 6points, output 4points Ry10A, clock function
Loader software	NQ4H-SE	Personal computer loader software (with connection cable)
Memory pack	NQ8P-MP	For program saving and transferring

⚠ Safety Considerations

● For safe operation, before using the product read the instruction manual or user manual that comes with the product carefully or consult the Fuji sales representative from which you purchased the product.

● Some of the products listed in this catalog may have limits on their use or location or may require periodic inspections. Call Fuji's sales representative for further information.

● For safe operation, wiring should be conducted only by qualified engineers who have sufficient technical knowledge about electrical work or wiring.

*Appearance and specifications are subject to change without prior notice for the purpose of product improvement.