

General:

ERX-20 time relay is specifically designed for controlling the time and incoming data and can be used in industry, residential, factory facilities.

Device's Adjusting Buttons:

Function Button (Fn): This button determines the functions. Please choose the desired function from the table.

Max Time Button (tm): This button determines the maximum time demand. It has a maximum of 10 time value.

Time Multiply Button(Xn): It allows you to reach at intermediate values by multiplying maximum values. It has 10 step multiplying value between 0.1-1.0.

Usage of Device and Working Principle:

Please connect the device according to the diagram.

Please define the function and time settings before energising the device.

Time=Maximum time(tm) x Time Scale Factor (Xn)

Example: Lets say If the device is energized, it is desired that the relay becomes activated for 15 mins. and then should not be deactivated until de-energised.

Adjust the fn button to 2. Then adjust the MAX button [tm] to 30 min [g] and the time scale factor button to 30m.[15 min= [30 min] x0.5] After the desired function and time is adjusted, the device can be energised accordingly.

Technical Specifications:

Operating Voltage(Un): 12-260VAC/DC

Operating Frequency: 50/60 Hz

Operating Power: <4VA

Operating Temperature: -20°C...+55°C

Time(t): 0.1sec. - 30hours

Display: Relay, T switch(S), status(M) and power(On) leds

Connection Type: Terminal connection

Weight: Max. <100gr.

Contact: 5A/250V AC (resistive load)

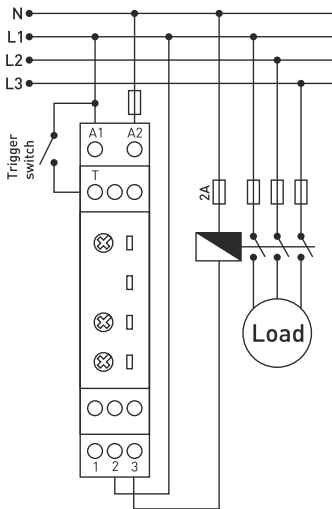
Mounting: Assembled on the din rail.

Protection Class: IP20

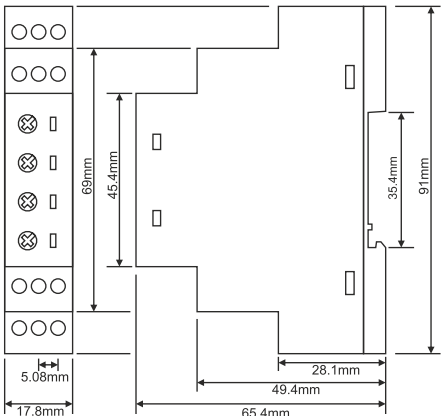
Operating Altitude: <2000meter

Cable Diameter: 0.22mm² - 1.5mm²

Connection diagram:



Dimensions:



FUNCTION	CHARACTERISTIC FUNCTION	DESCRIPTION
-1- ON Delay		After the device is powered on, the delay starts, the M Led flashes during timing, and the relay is output after the delay ends, relay Led is on and the M Led is on. Re-execution requires power-off reset.
-2- OFF Delay		After the device is powered on, Relay immediately output, relay Led on, delay starts, the M Led flashes during timing, and the relay is stop output after the delay ends, relay Led off and the M Led is on. Re-execution requires power-off reset.
-3- Control ON Delay		After the device is powered on, when the T signal is turned on, the delay starts, the M Led flashes, and the relay outputs after the end, relay Led on and the M Led is on. If the T signal is turned off during the delay process, the delay will be stopped and the delayed will be cleared.
-4- Control OFF Delay		After the device is powered on, when the T signal is turned on, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. If the T signal is turned off during the delay process, the delay will be stopped and the delayed will be cleared.
-5- Single Shot Leading Edge with Control Input		After the device is powered on, when the T signal is turned on, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. If the T signal is turned off during the delay, it will not interruption of timing.
-6- Single Shot Trailing Edge with Control Input		After the device is powered on, when the T signal is turned on, continue waiting. When the T signal is detected to be turned off relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. If the T signal is turned off during the delay, it will not interruption of timing.
-7- ON delay and OFF Delay with Control		After the device is powered on, when the T signal is turned on, the delay starts, the M Led flashes, and the relay outputs after the end, relay Led on and the M Led is on. When the T signal is detected to be turned off, the M Led flashes, and the relay stop outputs after the end, relay Led off and the M Led is on. If the T signal is turned off during the delay process, the delay will be stopped and the delayed will be cleared.
-8- Pulse out-put with Control		After the device is powered on, when the T signal is turned on, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. When the T signal is turned on again, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. If the T signal is turned off during the delay, it will not interruption of timing.
-9- Equivalent timed flasher (t=ton=toff)		After the device is powered on, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. Re-delay, the M Led flashes, and the relay outputs after the end, relay Led is on and the M Led is on. (Infinite loop) If the T signal is turned off during the delay, it will not interruption of timing.
-10- Equivalent timed flasher with control (t=ton=toff)		After the device is powered on, relay immediately output, relay Led on, the delay starts, the M Led flashes, and the relay stop outputs after the end, relay Led is off and the M Led is on. Re-delay, the M Led flashes, and the relay outputs after the end, relay Led is on and the M Led is on. (Infinite loop) If the T signal is turned off during the delay process, the delay will be stopped and the delayed will be cleared and the stop relay output.

Not_1:

Function changes must be made when the device is in a de-energised state or wait at least 0.3 sec. before function changes in an energised state. Turn the energy of the device off and then turn it on again and apply. Otherwise the function change will not be recognized.

Not_2:

S led: The led will appear when the T switch is on and disappear when it is off.

Relay energised: 1 and 2 no contact ends open circuit, 2 and 3 no contact ends short-circuit. Relay led appears.

Relay de-energised: 1 and 2 no contact ends short circuit, 2 and 3 no contact ends open-circuit. Relay led disappears.

Maintenance:

Switch off the device and release from connections. Clean the trunk of device with a swab. Don't use any conductor or chemical might damage the device. make sure device works after cleaning.

Warnings:

Please use the device according to the manual.

Don't use the device in wet.

Include a switch and circuit breaker in the assembly.

Put the switch and circuit breaker nearby the device, operator can reach easily.

Mark the switch and circuit breaker as releasing connection for device.

(tm)	Description
1sec.	0.1sec. - 1sec.(1sec.)
5sec.	0.5sec. - 5sec.(5sec.)
10sec.	1sec. - 10sec.(10sec.)
30sec.	3sec. - 30sec.(30sec.)
60sec.	6sec. - 60sec.(60sec.)
10min.	1min. - 10min.(10min.)
30min.	3min. - 30min.(30min.)
60min.	6min. - 60min.(60min.)
10h.	1h. - 10h.(10hours)
30h.	3h. - 30h.(30hours)