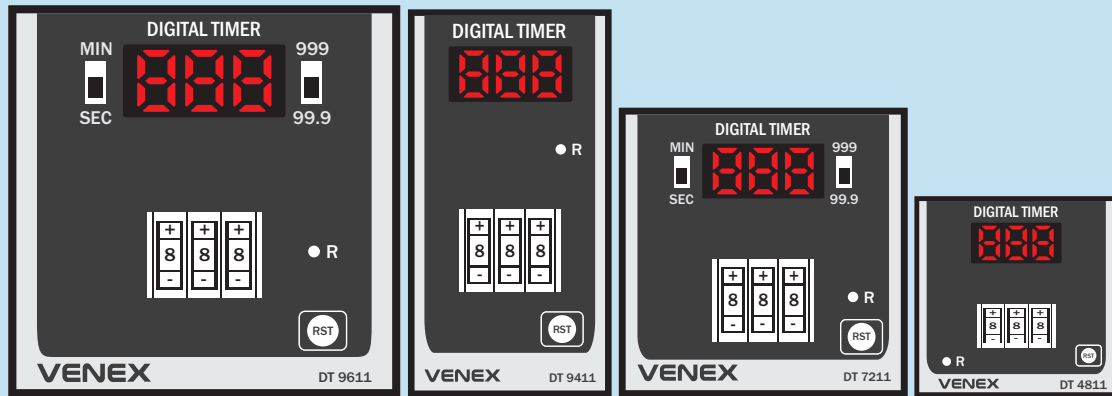


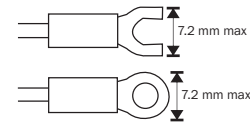
This section gives you all the information necessary to help you monitor and operate your controller including an Operator Interface overview, an explanation of the Displays, keys, LEDs, Mode access, and Operation Modes.



<b>INPUT</b>	Time Setting Counting Direction Range Setting	Setting by THUMBWHEEL Switch Up / Down (Factory Set) 0 - 99.9 / 999 Sec./Min.
<b>OUTPUT</b>	Control Output Relay Rating SSR / Buzzer	RELAY + RELAY + SSR 1CO + 1CO, 7 Amp, 230 Volt AC 12 V DC Approximately
<b>SPECIFICATIONS</b>	Supply Voltage Reset Facility Start Counting Time Operating Mode Enclosure Material Operating Temp. Relative Humidity	230v AC, ±10%, 50Hz By Frount Keypad Starts ON with Power Supply Delayed ON / Instant ON (Factory Set) Polycarbonate + ABS Plastic 0°C 55°C Upto 95% RH Non Condensing

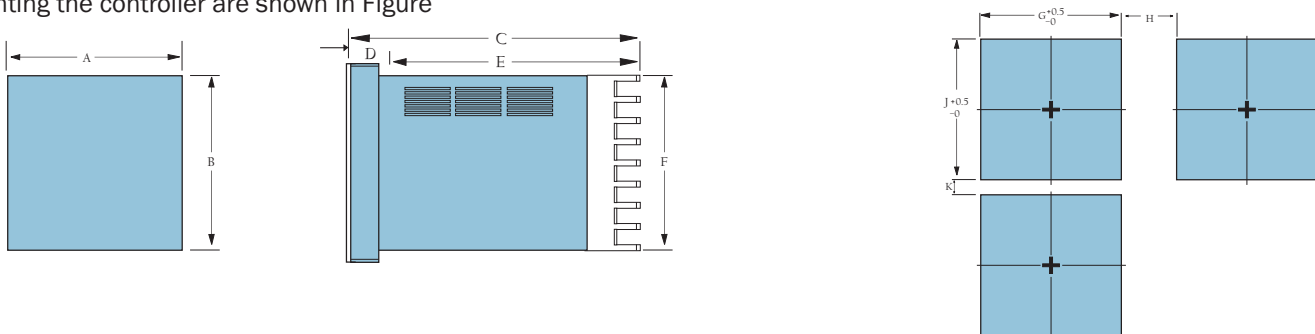
## PRECAUTIONS WHEN WIRING

- Separate input leads and power lines in order to prevent external noise.
- Use specified size (M3.5, width 7.2 mm or less) crimped terminals for wiring. To connect bare wires to the terminal block, use copper braided or solid wires with a rated temperature of over 70 °C and a gauge of AWG24 to AWG14 (equal to a cross-sectional area of 0.205 to 2.081 mm<sup>2</sup>). (The stripping length is 5 to 6 mm.) Up to two wires of same size and type, or two crimped terminals can be inserted into a single terminal.
- Use crimp terminals when wiring the terminals.
- Use the suitable wiring material and crimp tools for crimp terminals.
- Tighten the terminal screws to between 0.74 and 0.90 N-m.
- Use the following types of crimp terminals for M3.5 screws.



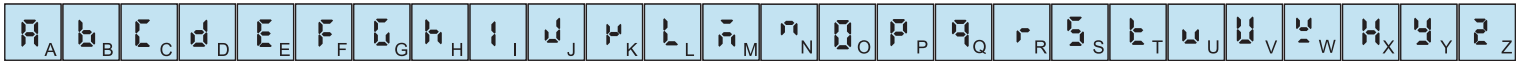
## MOUNTING

The controller can be mounted on either a vertical or tilted panel using the mounting bracket supplied. Adequate access space must be available at the back of the panel for installation and servicing activities. Overall dimensions and panel cutout requirements for mounting the controller are shown in Figure



Size	A	B	C	D	E	F	G	H(Min)	J	K(Min)
(96*96)	100	100	45	3	42	90	92	25	92	25
(96*48)	50	96	73	3	70	86	44	25	88	25
(72*72)	72	72	62	3	59	65	66	25	66	25
(48*48)	50	50	100	3	97	43	44	25	44	25

## Display Alphabet Characters



## PARAMETER SETTING

**Left First Thumbwheel**      **ⓇST Key + Power ON**

⇓

**Back terminal : (trigger & reset )**

⇓

**Relay Function (On Delay / Off Delay )**  
(Press reset key to change parameter value)

⇓

**Counting Direction (UP & DOWN )**

⇓

**Memory ( YES Or NO )** (Press reset key to change parameter value)

⇓

**Out**

⇓

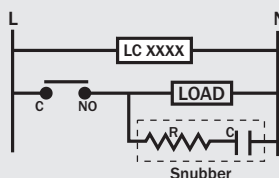
**Press reset key to Save & Exit**

## DISPLAY MESSAGES

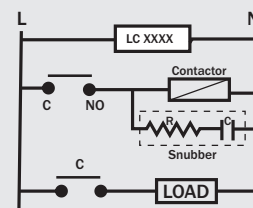


## Load connection

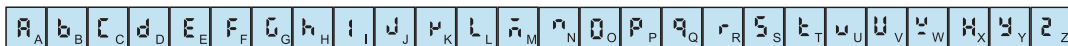
For Load Current Less Than 0.5A



For Bigger Loads, use Interposing relay / Contactor



Display Alphabet Characters



PARAMETER SETTING

**Left First Thumbwheel**    **Key + Power ON**

Back terminal : (trigger **tr 1** & reset **rst**)

Relay Function (On Delay **don** / Off Delay **dof**)  
(Press reset key to change parameter value)

Counting Direction (UP **up** & DOWN **dn**)

Memory ( YES **yes** Or NO **no** ) (Press reset key to change parameter value)

Out **out**

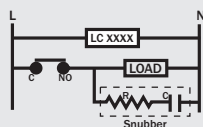
**Press reset key to Save & Exit**

DISPLAY MESSAGES

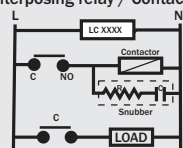


Load connection

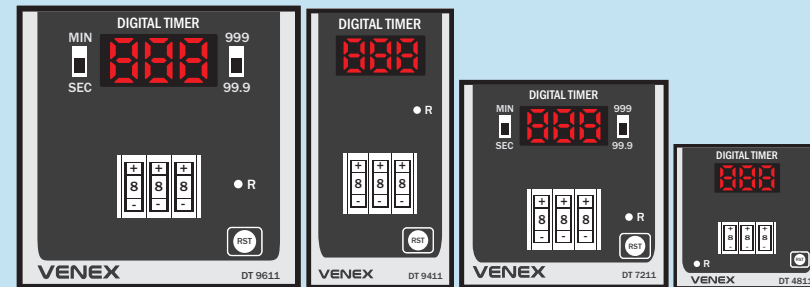
For Load Current Less Than 0.5A



For Bigger Loads, use Interposing relay / Contactor



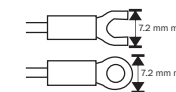
This section gives you all the information necessary to help you monitor and operate your controller including an Operator Interface overview, an explanation of the Displays, keys, LEDs, Mode access, and Operation Modes.



INPUT	Time Setting	Setting by THUMBWHEEL Switch
	Counting Direction	Up / Down (Factory Set)
	Range Setting	0 - 99.9 / 999 Sec./Min.
OUTPUT	Control Output	RELAY + RELAY + SSR
	Relay Rating	1CO + 1CO, 7 Amp, 230 Volt AC
	SSR / Buzzer	12 V DC Approximately
SPECIFICATIONS	Supply Voltage	230v AC, ±10%, 50Hz
	Reset Facility	By Front Keypad
	Start Counting Time	Starts ON with Power Supply
	Operating Mode	Delayed ON / Instant ON (Factory Set)
	Enclosure Material	Polycarbonate + ABS Plastic
	Operating Temp. / Relative Humidity	0°C 55°C / Upto 95% RH Non Condensing

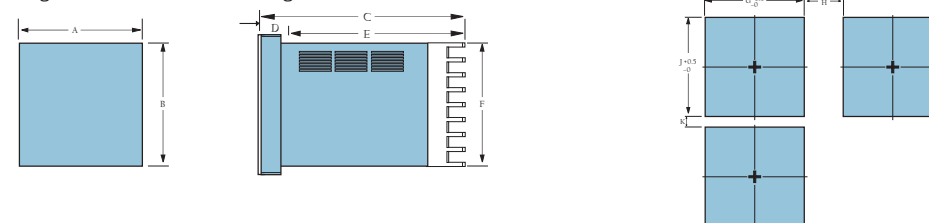
PRECAUTIONS WHEN WIRING

- Separate input leads and power lines in order to prevent external noise.
- Use specified size (M3.5, width 7.2 mm or less) crimped terminals for wiring. To connect bare wires to the terminal block, use copper braided or solid wires with a rated temperature of over 70 °C and a gauge of AWG24 to AWG14 (equal to a cross-sectional area of 0.205 to 2.081 mm<sup>2</sup>). (The stripping length is 5 to 6 mm.) Up to two wires of same size and type, or two crimped terminals can be inserted into a single terminal.
- Use crimp terminals when wiring the terminals.
- Use the suitable wiring material and crimp tools for crimp terminals.
- Tighten the terminal screws to between 0.74 and 0.90 N-m.
- Use the following types of crimp terminals for M3.5 screws.



MOUNTING

The controller can be mounted on either a vertical or tilted panel using the mounting bracket supplied. Adequate access space must be available at the back of the panel for installation and servicing activities. Overall dimensions and panel cutout requirements for mounting the controller are shown in Figure



Size	A	B	C	D	E	F	G	H(Min)	J	K(Min)
(96*96)	100	100	45	3	42	90	92	25	92	25
(96*48)	50	96	73	3	70	86	44	25	88	25
(72*72)	72	72	62	3	59	65	66	25	66	25
(48*48)	50	50	100	3	97	43	44	25	44	25