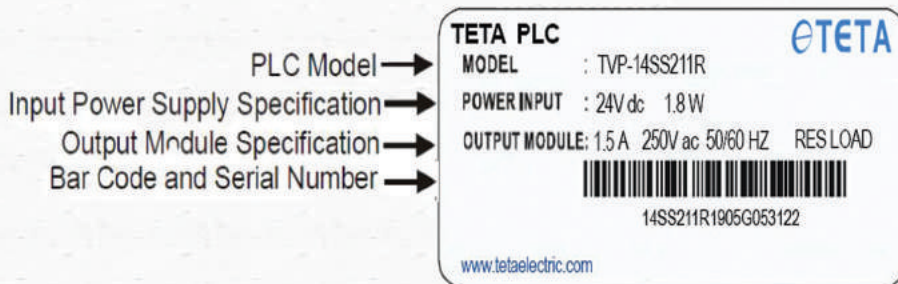


### Specifications

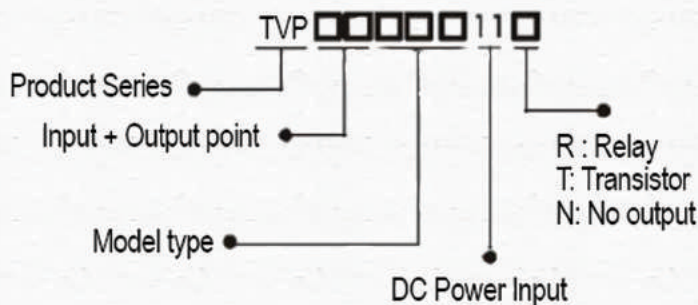
1. MPU point : 14 ( 8DI + 6DO )
2. Max. I / O point : 494 ( 14 + 480 )
3. Program capacity : 8 k steps
4. COM port : Built in RS-232 & RS-485 ports , compatible with Modbus ASCII / RTU protocol can be master or slave -
5. High - Speed pulse output : Support 4 point ( Y0 ~ Y3 ) of independent high - speed (max.10kHz ) pulse output
6. Supports PID Auto - tuning : TVP- SS2 saves parameters automatically after the PID auto temperature tuning is completed
7. Built-in High-Speed Counters

1-phase 1 input		1-phase 2 inputs		2-phase 2 inputs	
Sets	Bandwidth	Sets	Bandwidth	Sets	Bandwidth
4/4	20kHz/10kHz	2	20kHz	2/2	10kHz/5kHz

### Nameplate Explanation



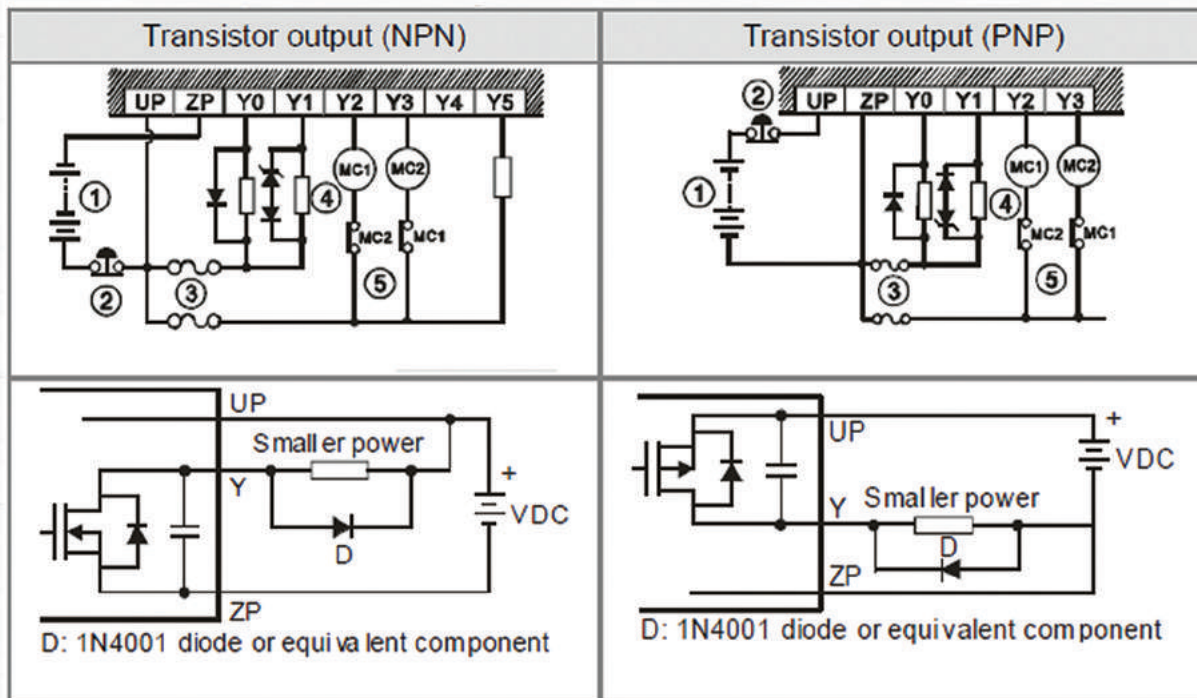
### Model Explanation



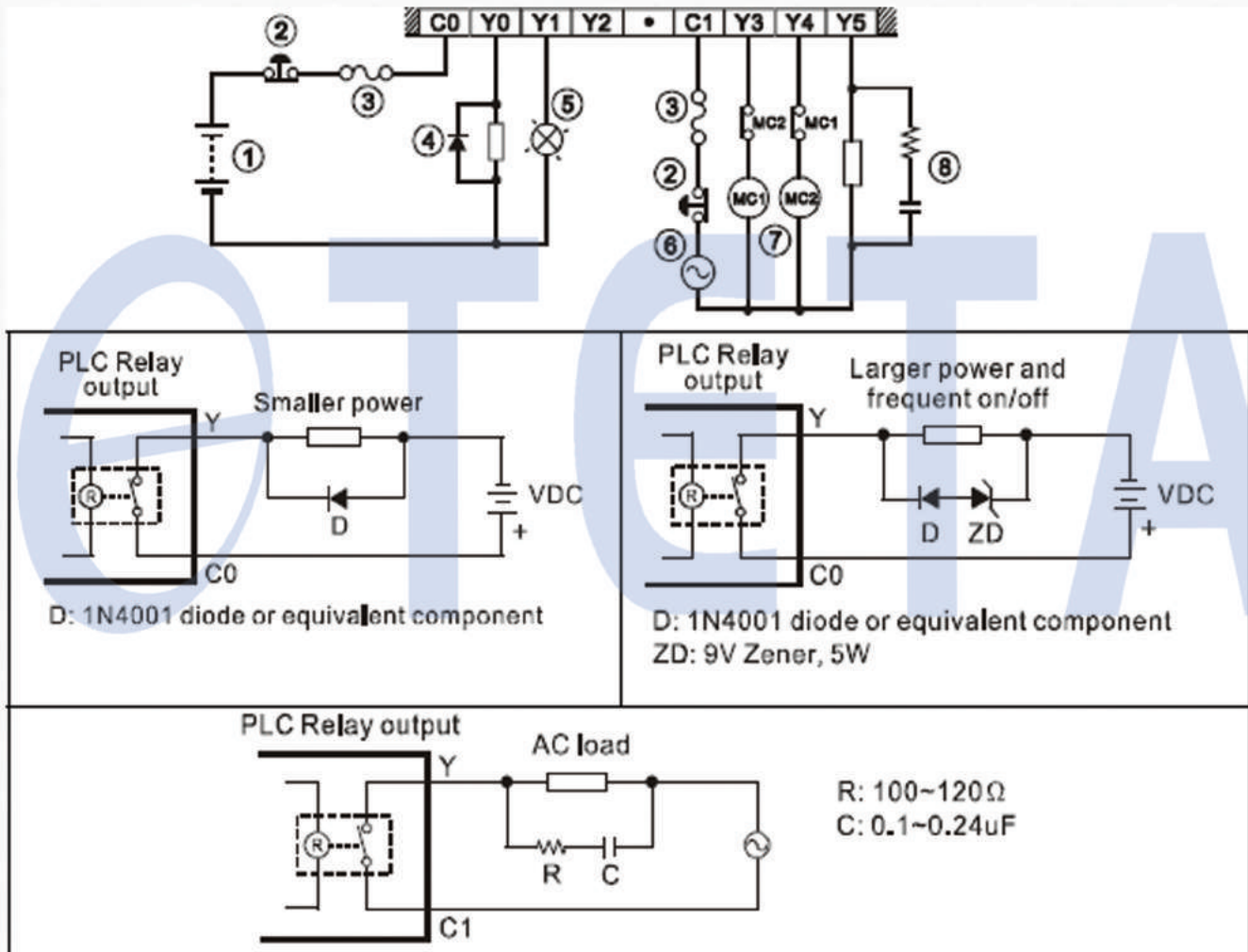
Spec.		Input Point	
Items		24VDC (-15% ~ 20%) single common port input	
Input No.		X0 ~ X3	X4 ~ X7
Input type		DC (SINK or SOURCE)	
Input Current ( $\pm 10\%$ )		24VDC, 5mA	
Input impedance		4.7k $\Omega$	
Max. frequency		20kHz	10kHz
Action level	Off→On	> 15VDC	
	On→Off	< 5VDC	
Response time	Off→On	< 10 $\mu$ s	< 20 $\mu$ s
	On→Off	< 20 $\mu$ s	< 50 $\mu$ s
Filter time		Adjustable within 0 ~ 20ms by D1020 (Default: 10ms)	

Spec.		Output Point		
Items		Relay	Transistor	
Output No.		Y0 ~ Y5	Y0 ~ Y3	Y4, Y5
Max. frequency		1Hz	10kHz	1kHz
Working voltage		250VAC, < 30VDC	5 ~ 30VDC <sup>#1</sup>	
Max. load	Resistive	1.5A/1 point (5A/COM)	0.5A/1 point (3A/COM)	
	Inductive	<sup>#2</sup>	15W (30VDC)	
	Lamp	20WDC/100WAC	2.5W (30VDC)	
Response time	Off→On	Approx. 10ms	20 $\mu$ s	100 $\mu$ s
	On→Off		30 $\mu$ s	100 $\mu$ s

### Transistor output circuit wiring



### Relay output circuit wiring



- ① DC power supply
- ② Emergency stop : Uses external switch
- ③ Fuse : Users 5~10A fuse at the shared terminal of output contacts to protect the output circuit
- ④ Transient voltage suppressor (SB 360 3A 60V): Extends the life span of contact
  - 1. Diode suppression of DC load : Used when in smaller power
  - 2. Diode + Zener suppression of DC load : Used when in larger power and frequent on/off
- ⑤ Incandescent light (resistive load)
- ⑥ AC power supply
- ⑦ Manually exclusive output : for example, Y3 and Y4 control the forward running and reverse running of the motor , forming an interlock for the external circuit , together with the PLC internal program, to ensure safe protection in case of any unexpected errors
- ⑧ Absorber : Reducers the interference on AC load