



*This is a unique products, a temperature+SCR 2 in 1 item offers a turn-key solution for electric panel builders, it saves a lot of efforts, a perfect solution for any resistive loads, load can be attached to this unit directly, with load capacity up to 80 amps*

## General Features:

- Combo 2 in1 temperature controller+SCR
- Resistive load can be attached to this unit directly
- Load capacity, 48A,60A,80A
- 24VDC power supply for maximum safety
- C/F display selectable
- Maximum 15 units can be daisy chained together
- Wiring on the power supply and RS-485 can be done at once
- True universal input, TC/RTD/Analog/potentiometer
- Heating or cooling control configurable
- RS-485 modbus RTU communication as standard feature
- PID control mode or ON/OFF control mode selectable
- 0.2%FS measuring accuracy, decimal points for TC/RTD and analog
- Auto/manual control bumpless transfer
- Soft-start for analog output
- Run/Stop function
- Output high/low limits configurable
- With dual line 4 digits LED display in front of the panel
- Four rubber keys for setting purpose, programming is possible even without the master device

## Ordering Information

KDF100-662      
 1 2 3 4

### 1:Main function

- PID** This device will be used as a PID controller+SCR  
**SCR** This device will be used as a SCR

This is a 2 in 1 unit, temperature controller+SCR, in field application, this unit can be used as a temperature controller+SCR which works just like every other temperature controller on the market, or in some of cases, the PID controller function can be switched off and the unit will be used as a pure SCR only, you can switch back and forth between this two functions, the ordering code is just a factory default option on the unit, you can configure it via respective parameters later on

### 2:Input type and range

Ordering code	Input type and range
<b>K</b>	K type thermocouple -30 to 1300 °C / -20 to 2360 °F
<b>E</b>	E type thermocouple -30 to 600 °C / -20 to 1100 °F
<b>J</b>	J type thermocouple -30 to 800 °C / -20 to 1460 °F
<b>N</b>	N type thermocouple -30 to 1300 °C / -20 to 2360 °F
<b>W</b>	Wu3_Re25 thermocouple 600 to 2000 °C / 1000 to 3632 °F
<b>S</b>	S type thermocouple 0 to 1600 °C / 0 to 2900 °F
<b>T</b>	T type thermocouple -30 to 400 °C / -20 to 740 °F
<b>R</b>	R type thermocouple 0 to 1700 °C / 0 to 3080 °F
<b>B</b>	B type thermocouple 200 to 1800 °C / 400 to 3260 °F
<b>D</b>	Pt100 -199 to 800 °C / -199 to 1400 °F
<b>V03</b>	0-5VDC -1999 to 9999 Potentiometer input
<b>V04</b>	0-10DC -1999 to 9999
<b>V08</b>	1-5VDC -1999 to 9999
<b>V09</b>	2-10VDC -1999 to 9999
<b>A02</b>	0-20mA -1999 to 9999
<b>A03</b>	4-20mA -1999 to 9999

### 3:Current ratings(Actual load should be no more than 80% of ratings)

- 48A** Resistive load 48A  
**60A** Resistive load 60A  
**80A** Resistive load 80A

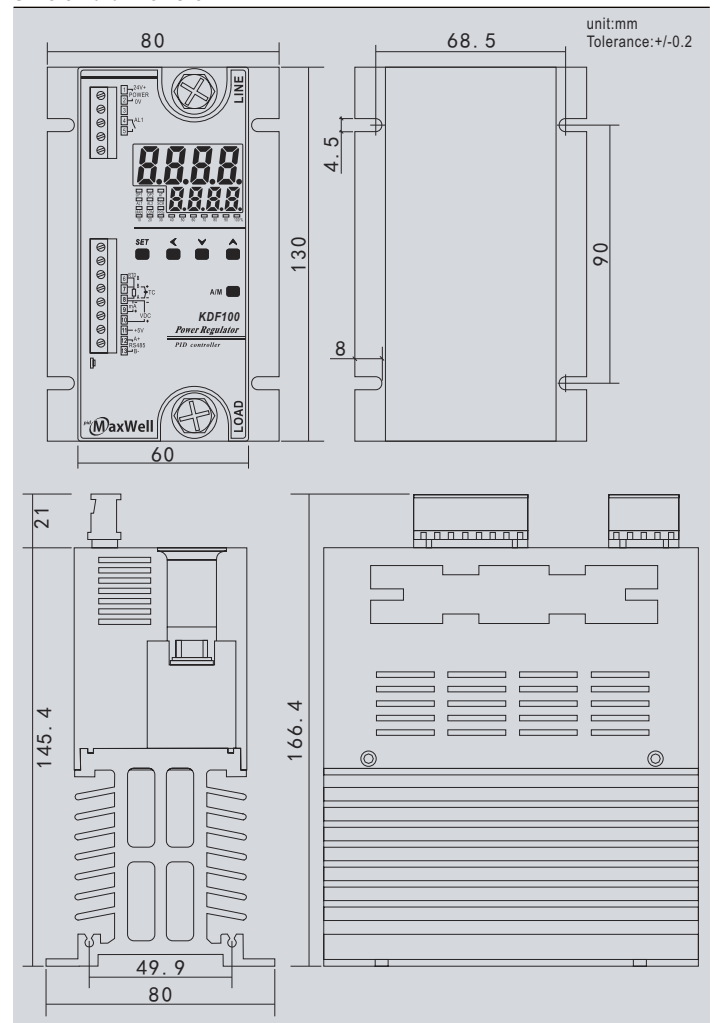
### 4:Cooling fans

- N** Without fans  
**F** With fans(24VDC/150mA)

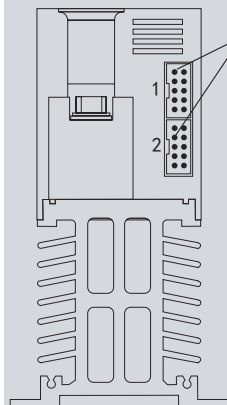
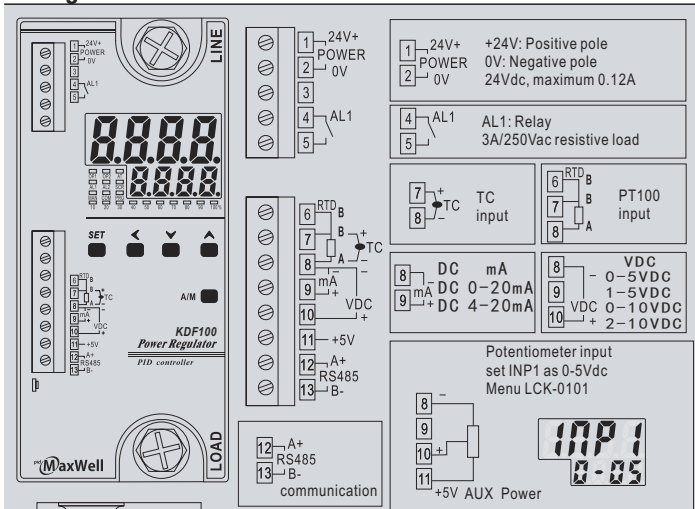
KDF100-662-PID-A03-80A-F

- 1:PID controller+SCR 3:80A load  
 2:4-20mA input 4:with cooling fans

## Size and dimension



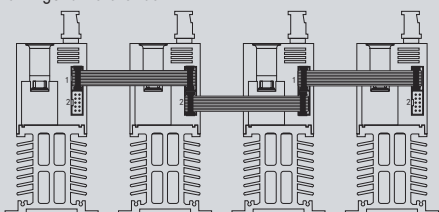
## Wiring



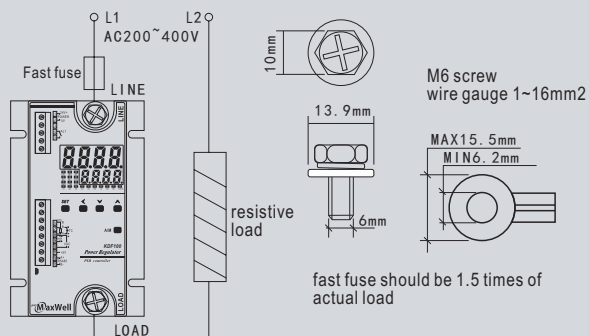
Quick connector, FC-2.54-10P  
needs to be purchased separately

Remark: Independent source must be provided for cooling fans  
can not use the same source for fans and SCR

Maximum 15 pcs of SCR can be daisy chained , refer to below  
drawings for reference

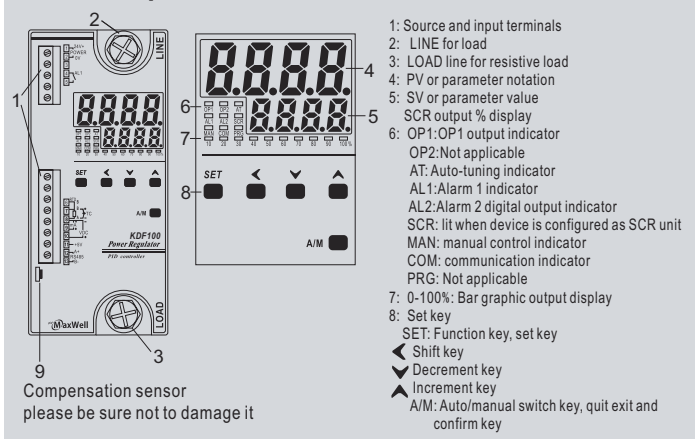


Maximum 15 PCS of SCR can be daisy chained  
must be divided into different groups if the total number of  
SCR more than 15 pcs



- High frequency device should be placed far away from this device
- Please make sure that there is no unattached metal parts left in the cabinet
- Please make sure input is correctly wired to the SCR otherwise the units might be damaged

## Panel Description



## Overall images

