

FEATURES

- 4Digit(48x96) panel mounting
- Single phase 2wire system
- RS485/modbus-RTU
- 3point Alarm (selectable W,V,A)
- Transfer output from 4.00 to 20.00mA (selectable W,V,A)
- Input up to 500V AC, 5A



SPECIFICATIONS

▶ Voltage Input

Rated voltage : 0~480V AC
 Line-to-line (delta voltage) : 480V(single-phase/2wire)
 Consumption VA : $\leq U_{LN}^2 / 270k\Omega$ / phase
 Overload capacity : 200% of rating for 10sec.
 120% continuous.

▶ Current Input

Rated current : 0 ~ 5A AC
 Consumption VA : $\leq I^2 \cdot 0.01$ / phase
 Overload capacity : 4000% of rating for 1sec.
 2000% for 4sec.
 120% continuous
 Selectable primary current range : 1~99.9A

▶ Operational range

Voltage, current, apparent power : $\leq 120\%$ of the rating
 Reactive power : 120% of the rating
 Frequency: 45~65Hz
 Power factor : 0.000~1.000

▶ Temperature

Input : RTD(PT100 Ω at 0 $^{\circ}$ C)
 Scale : -10 $^{\circ}$ C~140 $^{\circ}$ C
 Alarm : H/L selectable

▶ Power Supply

AC : Operational voltage range 85~264V, AC 50~60Hz;<6VA
 DC : Operational voltage range 99~264V,
 ripple 10% p-p max.;<3W
 Operating temperature : -10 to+55 $^{\circ}$ C
 Operating humidity : 30 to 90%RH (non-considering)
 Mounting : panel mounting
 Weight : 320g

▶ Communication Interface

Transmission : Half-duplex, asynchronous, no procedure
 Interface : conforms to EIA RS-485
 Max. transmission distance : 1.2K meters
 Baud rate : 4800~38.4 kbps
 MAX.number of nodes : 30(except the master)
 Protocol: Modbus RTU
 Media: Shielded twisted-pair cable (CPEV-S 0.9 dia)

▶ DC Current: 4~20mA DC

Load resistance: $\leq 600\Omega$
 Measurands converted into analog output :
 Voltage, Current, Active apparent power
 Measurands applicable to alarm :
 Voltage, current, power, temp

▶ Accuracy (at 23 $^{\circ}$ C \pm 10 $^{\circ}$ C or 45~65Hz)

▶ Voltage : $\pm 0.5\%$ ($\pm 0.2\%$ for option/H)

▶ Current : $\pm 0.5\%$ ($\pm 0.2\%$ for option/H)

▶ Power : $\pm 0.5\%$

▶ Harmonic contents : $\pm 1\%$

▶ Analog output : Accuracy of assigned measurand or $\pm 0.2\%$, whichever is greater.

In percentage of the spans: 480V for voltage, 5A or current, 4155W for active power.

▶ Response time : ≤ 2 sec.(0~99%)

≤ 3 sec. for frequency and harmonic contents

▶ Sampling time :

harmonic contents frequency: ≤ 1.1 sec.
 Other : ≤ 600 msec.

▶ Insulation resistance : $\geq 100M\Omega$ with 500V DC

Voltage input to current input to distance to network interface or configurator jack or analog output to power

▶ Dielectric strength :

4000V AC @ 1minute (voltage input or current discrete input or discrete output or network interface or configurator jack or analog output to power)

2500V AC @ 1minute (voltage input or current discrete input or discrete output or network interface or configurator jack or analog output)

▶ Alarm(3point)

Contact output type : normal open
 Max switching power : 60W, 125VA
 Max switching Voltage : AC 250V, DC 250V
 Max switching current : DC2A, AC
 Max carrying current : DC3A, AC

A

B

C

D

E

F

G

H

I

J

전원경보지시계

POWER ALARM INDICATOR

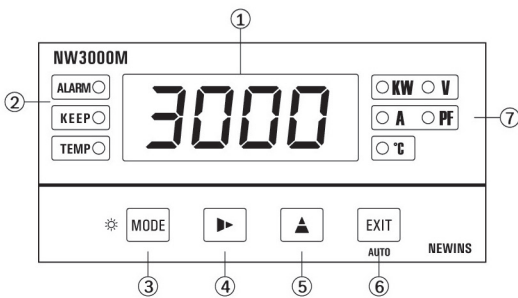
▶ CE Conformity

Pressure equipment directive : 2006 / 95 / EC
 EMC Directive : 2004 / 108 / EC EN61326-2-1:2006
 emission (group1, classB) and immunity
 (industrial locations)

INPUT TYPE

- ▶ Voltage : 0~500V AC
- ▶ Current : 0~5A AC
- ▶ Temp : RTD (Pt100Ω at 0°C)

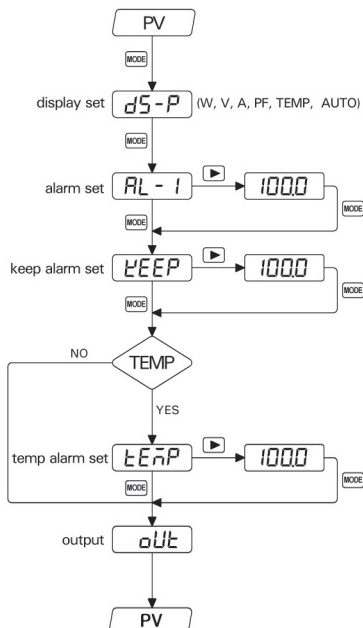
PARTS NAME



- ① Measured value display
- ② Alarm condition display
- ③ **MODE** Storage the set data and change the operation menu
- ④ **→** Enter into the data setting mode and modify the changed location
- ⑤ **↑** Change the data value
- ⑥ **EXIT** Out of mode
- ⑦ Unit

OPERATION MODE

Buy instrument and user is mode that play setup according to use purpose. data setup method refuse each part button menu.



MAJOR FUNCTIONS

▶ Display current function(CT-n)

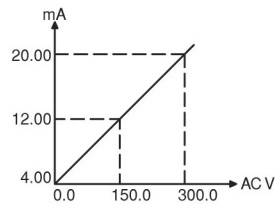
CT (Current Transformer)		CT-n (Number of revolutions)	Power Factor=1 ACV x I
Primary(A)	Secondary(B)		
5A	5(A)	1.0	220V x 5=1.10KW
⋮		⋮	⋮
25		5.0	220V x 25=5.50kw
50		10.0	220V x 50=11.00kw
75		15.0	220V x 75=16.50kw
100(A)		20.0	220V x 100=22.00kw

CT-n(Current Transformer) = B/A
 (A:Primary Current, B:Secondary current)

▶ Output scaling function (V,A,W)

This function can change the AC0.0~300V value as the output scale

ex) In case of display value AC 0.0 to 300.0V
 output 4.00~20.00mA



▶ Alarm function

Alarm Type : Alarm(H/L), Keep, Temp
 the alarm consist of 3relay and it can output relay contact output individually

Alarm type : V, A, W (H/L selection)

Keep : V, A, W

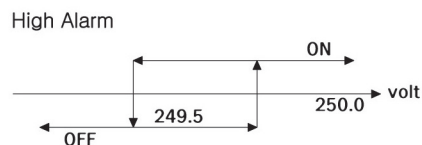
Temp : Temperature of individual (H/L selection)

ex1) Alarm (V-volt setting)

High Alarm value ; 250.0V

Alarm dead band setting :0.5

The high alarm is ON when the present value(volt) is 250.0 or more, and OFF when 249.5 or less.

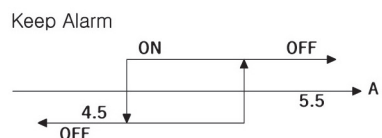


ex2) KEEP Alarm(A-current setting)

keep alarm value : 5.0A

Alarm dead band setting : 0.5A

Alarm setting range(dead band) only

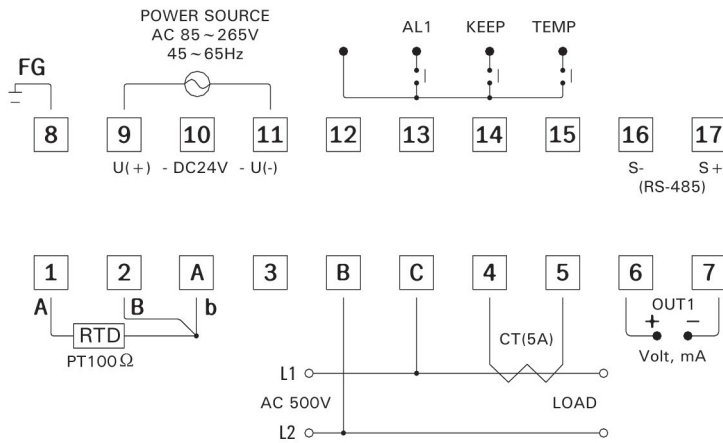


ORDERING CODE

NW 30		M	Description
Output	0 1 2		2Alarm (Alarm, Keep) DC4.0~20.0mA + 2Alarm (Alarm, Keep) DC4.0~20.0mA + 3Alarm (Alarm, Keep, temp)
Power	0 1		AC 85~265V DC 24V
Communication		0 1 2	None RS485 Modbus-RTU

* Separate temperature alarm using sensor

TERMINAL DIAGRAM



DIMENSION & PANEL CUT

