

Selection Guide


DIGITAL MULTI PANEL METER

Ordering information

MT	4	N	-	DV	-	E	N
Item	Digit	Size	Measuring input	Power supply	Output		
						N	Indicator(No output function)
						0	Relay contact output
						1	NPN open collector output
						2	PNP open collector output
						3	Relay contact output+Current(DC4~20mA) output
						4	Relay contact output+RS485 communication output
						※Output(0~4) : Sold separately	
						E	12~24VDC/AC
						DV	DC Volt
						DA	DC Ampere
						AV	AC Volt
						AA	AC Ampere
						N	DIN W48×H24mm
						4	4digit
						MT	Multi Meter

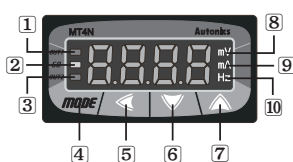
※To measure the current over 5ADC, please select DV type because the shunt should be used.

Specifications

Model	MT4N-DV-E	MT4N-DA-E	MT4N-AV-E	MT4N-AA-E
Appearances & Dimensions	NEW			
				
	[W48×H24×L83mm]			
Measurement function	VDC, ADC		VAC, AAC, Frequency	
Power supply	12~24VDC/AC(90 to 110% of rated voltage)			
Power consumption	DC:3W, AC:5VA			
Display method	7Segment LCD Display, Character height:9mm			
Display accuracy	• 23℃ ±5℃, 35~85%RH ⇨ DC Type : ±0.1% F.S ±2Digit AC Type : ±0.3% F.S ±3Digit • -10℃~50℃ ⇨ DC/AC Type : ±0.5% F.S ±3Digit			
Max. allowable input	110% for input spec.			
A/D conversion method	Over sampling type using SAT type of ADC			
Sampling cycle	50ms(DC), 16.6ms(AC) (1/12,000)			
Max. display range	-1999~9999(4Digit)			
Preset output	• Relay output ⇨ Contact capacity:125VAC 0.3A, 30VDC 1A/Contact composition:N.O(1a) • NPN/PNP Open Collector output ⇨ 12~24VDC ±2V 50mA Max.(Load resistance)			
Sub output (Transmission output)	• RS485 communication output ⇨ Baud rate:1200/2400/4800/9600, Transmission method :2 wires half duplex, Tuning method:Sub-synchronization, Protocol:Modbus type • 4~20mAADC output ⇨ Resolution: 12,000 division(Load resistance max. 600Ω)			
AC measuring function	———	Selectable RMS or AVG	———	Selectable RMS or AVG
Frequency measuring function	Measurement range:0.100~9999Hz(Fixed decimal point type)			
Hold function	★ Includes(Outer hold function)			

※"★" Indication type does not have Outer hold function.

Front panel identification



- 1 OUT1:Preset output of OUT1
- 2 GO:Preset Go output of OUT1/OUT2
- 3 OUT2:Preset output of OUT2
- 4 [MD] Key:Mode Key
- 5 [⇐] :Shift key
- 6 [▼] :Down key
- 7 [▲] :Up key
- 8 mV, V Unit
- 9 mA, A Unit
- 10 Hz Unit

※There is no 1, 2, 3 on a display panel of MT4N-□□-EN.

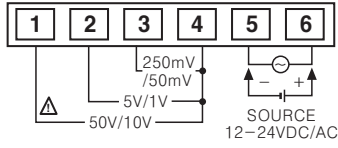
※MT4N-□□-E3, E4 model has output display part of OUT1 only.

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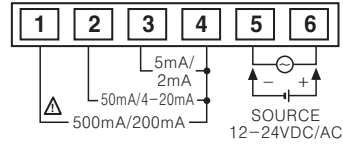
Connections

Measuring input terminal connection

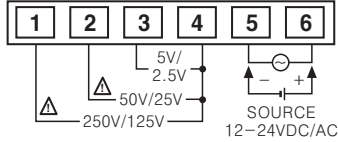
MT4N-DV-E□



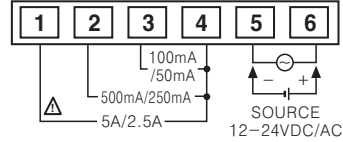
MT4N-DA-E□



MT4N-AV-E□

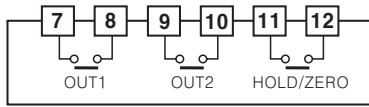


MT4N-AA-E□

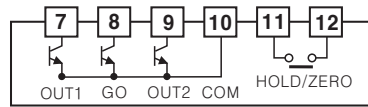


Option

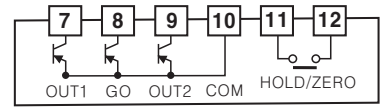
Relay output [MT4N-□□-E0]



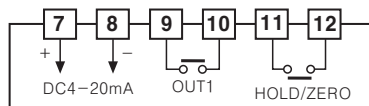
NPN open collector output [MT4N-□□-E1]



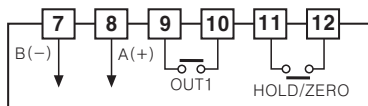
PNP open collector output [MT4N-□□-E2]



Relay+Current(DC4-20mA) output [MT4N-□□-E3]

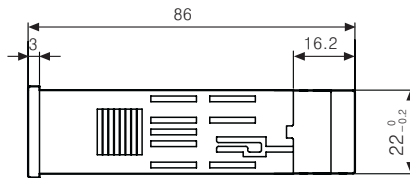
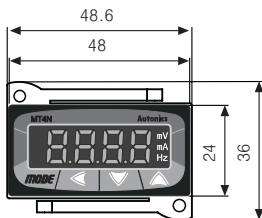


Relay+RS485 communication output [MT4N-□□-E4]

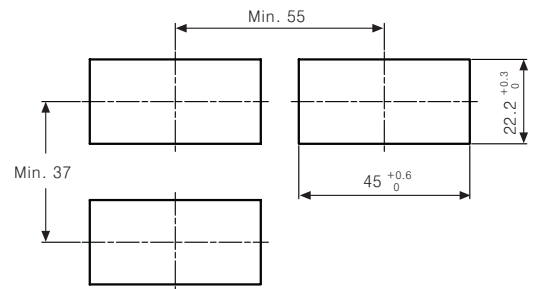


Dimensions

MT4N-□□-EN



Panel cut-out



MT4N-□□-E0



MT4N-□□-E1, E2



MT4N-□□-E3, E4



*Process the unit after consider the above recommended cut-out fully.

(Unit:mm)

Selection Guide

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Ordering information

MT 4 W - DV - 4 N

Output

(*) Y Type

W Type

Power supply

Measuring input

Size

Digit

Item

N	Indicator(No output)
0	Relay contact output
1	NPN open collector output
2	PNP open collector output
3	Relay contact output + Current(DC4-20mA) output
4	Relay contact output + RS485 output
5	BCD Dynamic output
6	Low speed serial output



*Output(0-6) : Sold separately

N	Indicator(No output)
0	Relay contact output+Current(DC4-20mA) output
1	Relay contact output
2	NPN open collector output+BCD output
3	PNP open collector output+BCD output
4	NPN open collector output+Current(DC4-20mA) output
5	PNP open collector output+Current(DC4-20mA) output
6	NPN open collector output+Low speed serial output
7	PNP open collector output+Low speed serial output
8	NPN open collector output+RS485 output
9	PNP open collector output+RS485 output

*Output(0-9) : Sold separately

4	100-240VAC
DV	DC Volt
DA	DC Ampere
AV	AC Volt
AA	AC Ampere
Y	DIN W72×H36mm
W	DIN W96×H48mm
4	4digits
MT	Multi Meter

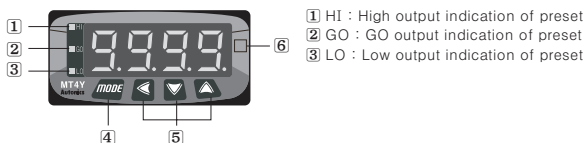
Specifications

Series	MT4Y-DV	MT4Y-DA	MT4Y-AV	MT4Y-AA	MT4W-DV	MT4W-DA	MT4W-AV	MT4W-AA
Appearances & Dimensions	 [W72×H36×L77mm]				 [W96×H48×L100mm]			
Power supply	100-240VAC 50/60Hz(90~110% of power supply)							
Max. input specification	500VDC	5ADC	500VAC	5AAC	500VDC	5ADC	500VAC	5AAC
Max. display range	-1999 to 9999(4digit)							
Display method	7Segment LED Display							
Various display unit	$\frac{V}{mV}$ $\frac{V}{kV}$ $\frac{V}{\mu V}$ $\frac{mV}{\mu V}$ $\frac{A}{\mu A}$ $\frac{A}{mA}$ $\frac{A}{kA}$ $\frac{VA}{mVA}$ $\frac{KVA}{mKVA}$ $\frac{W}{mW}$ $\frac{mm}{cm}$ $\frac{m}{km}$ $\frac{m^2}{km^2}$ $\frac{m^3}{km^3}$ $\frac{Mm}{km}$ $\frac{kg}{t}$ $\frac{g}{kg}$ $\frac{C}{F}$ $\frac{\mu A}{mA}$ $\frac{\Omega}{k\Omega}$ $\frac{rpm}{\%}$ $\frac{\%RH}{mmHg}$ $\frac{var}{kvar}$ $\frac{dB}{N}$ $\frac{J}{\mu bar}$ $\frac{HP}{KWh}$ $\frac{cal}{\%}$ $\frac{Hz}{\%}$ $\frac{I}{\%}$ $\frac{lx}{\%}$							
Prescale function	Input value×Scale value(0.100 to 5.000)=Display value(But, scale vale is depends on dot position)							
Error correction	Correct the error of high/low-limit							
Preset output	<ul style="list-style-type: none"> NPN open collector output (12-24VDC Max. 50mA) PNP open collector output (12-24VDC Max. 50mA) } Selectable				<ul style="list-style-type: none"> Relay output (3output 3A 250VAC, 3A 30VDC) NPN open collector output (12-24VDC Max. 50mA) PNP open collector output (12-24VDC Max. 50mA) } Selectable			
Optional	• RS485 communication output • Low-speed serial output • BCD output • DC4-20mA Analog output							
Monitoring function	Check Max/Min value and display (Monitoring delay time setting function 0~30sec)							
Display cycle delay function	Display cycle delay setting function (Selectable 0.1~5.0sec.)							
AC measuring method	Selectable RMS or AVG							
Frequency measuring function	Measurement range:0.100-9999Hz(Fixed decimal point type)							
Display accuracy	(Note1) DC type: F · S ±0.1% Rdg ±2digit } 23°C ±5°C 35-85%Rh AC type: F · S ±0.3% Rdg ±3digit }							
A/D conversion method	Over sampling method							
Sampling cycle	DC INPUT:500ms, AC INPUT:16.6ms (Resolution 1/12000)							
Main output	Relay output NPN open collector output PNP open collector output				250VAC 3A resistive load 1a 12-24VDC ±2V 50mA Max. (Resistive load)			
Sub output (Transmission output)	RS485 communication output Serial output BCD output DC4-20mA output				<ul style="list-style-type: none"> Transmission : 1200/2400/4800/9600bps Transmission code : ASCII Code(7Bit) Transmission method : 2wires half duplex Synchronization method : Start-stop synchronization NPN open collector output, 12-24VDC Max. 50mA (Resistive load)			
Hold function					Including (Outer hold function)			

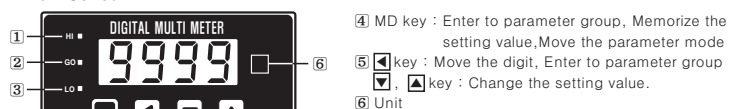
* (Note1) DC/AC type F · S ±0.5% Rdg ±3digit(-10 to 50°C)
 * When measuring over 5ADC, please select DV type because shunt should be used.

Front panel identification

MT4Y Series



MT4W Series

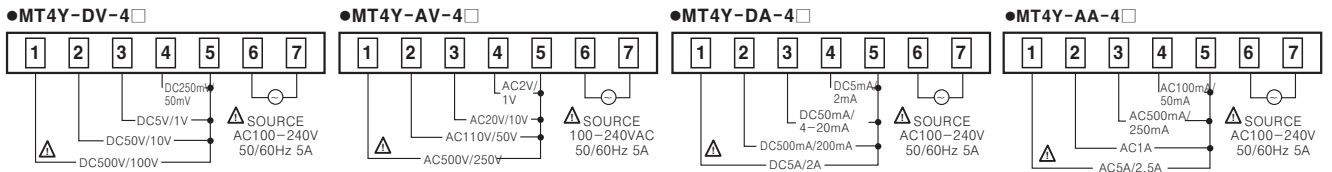


* There is no ①, ②, ③ on a display panel of MT4Y-□□-4N, 45, 46 and MT4W-□□-4N.
 * In MT4Y-□□-43, 44, OUT is used for Go output display and there is no ①, ③ in display panel.

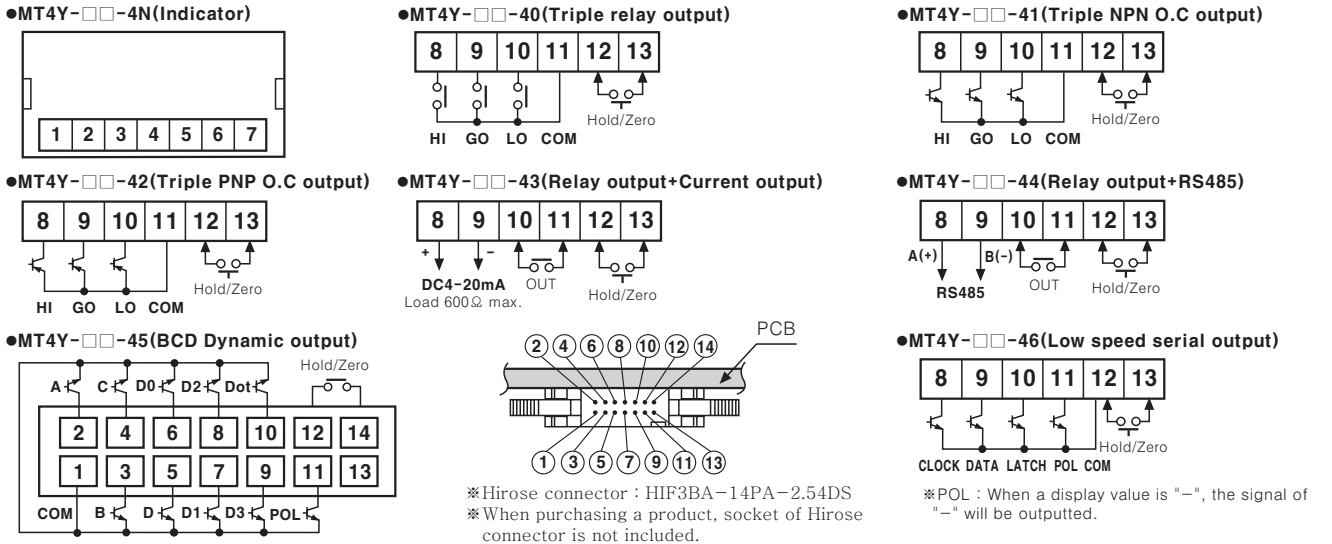
MULTI PANEL METER

■Connections

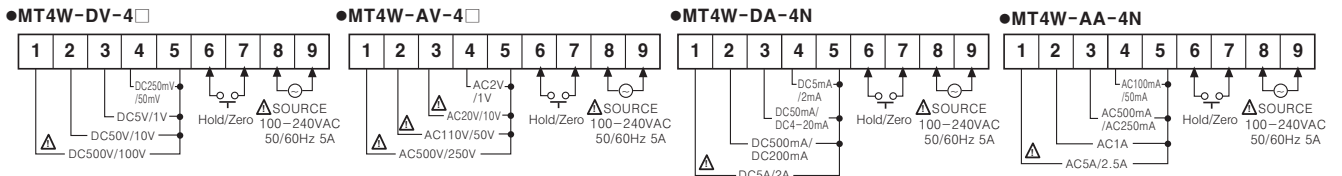
○Measuring input connection of MT4Y series



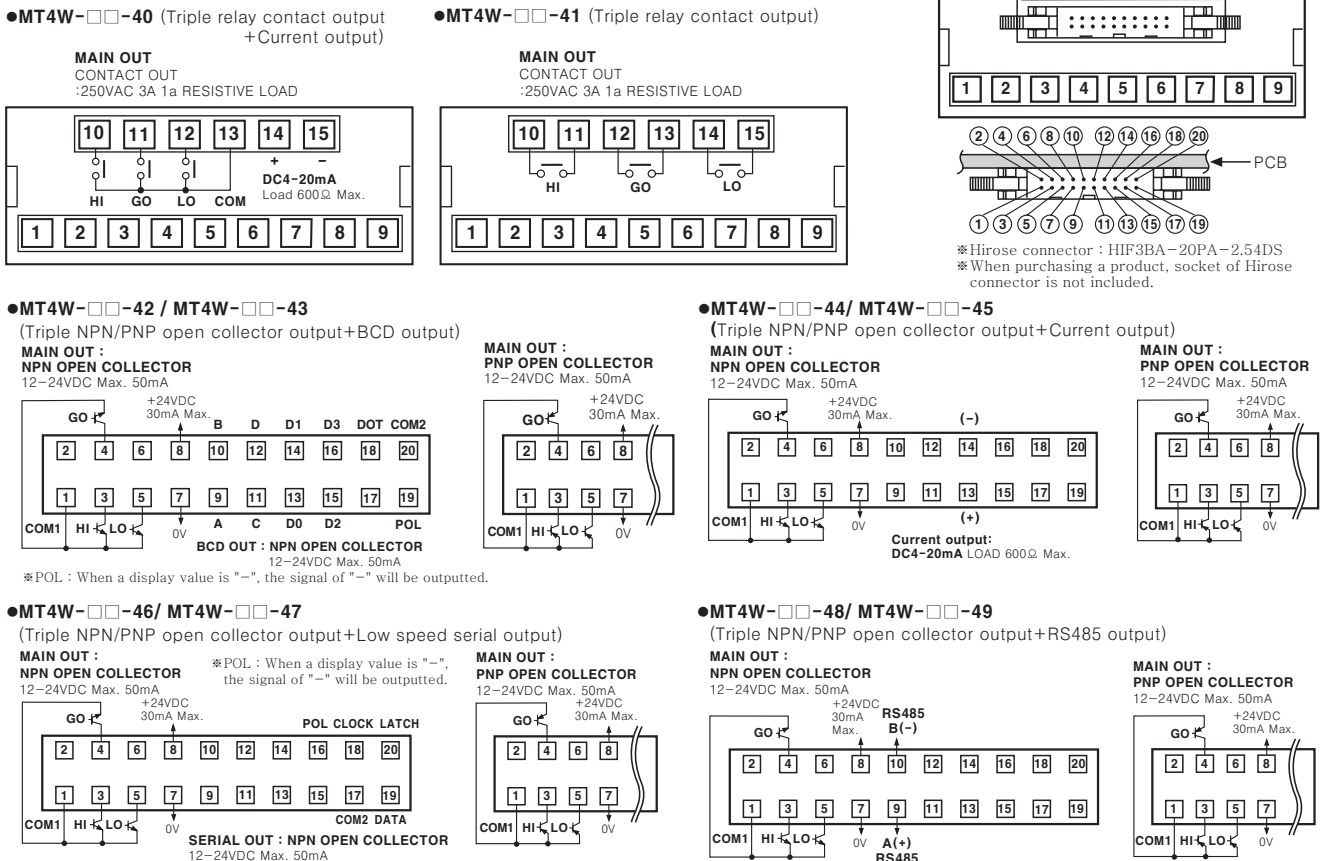
○Output terminal of connection of MT4Y Series



○Measuring input connection of MT4W Series



○Output terminal connection of MT4W Series



DIGITAL PANEL METER

Ordering information

1) Volt meter

M	4	W	□	-	A	V	-	□	1																																																										
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Note1) Measuring input</p> <p>Note2)</p> <p>Note3)</p> <p>Note4)</p> </div> <div style="width: 50%;"> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th rowspan="2">NO</th> <th colspan="2">M4Y / M4W / M4M</th> <th colspan="2">M5W</th> </tr> <tr> <th>DC INPUT (F · S)</th> <th>AC INPUT (F · S)</th> <th>DC INPUT (F · S)</th> <th>AC INPUT (F · S)</th> </tr> </thead> <tbody> <tr><td>1</td><td>199.9mV</td><td>199.9mV</td><td>199.99mV</td><td>199.99mV</td></tr> <tr><td>2</td><td>1.999V</td><td>1.999V</td><td>1.9999V</td><td>1.9999V</td></tr> <tr><td>3</td><td>19.99V</td><td>19.99V</td><td>19.999V</td><td>19.999V</td></tr> <tr><td>4</td><td>199.9V</td><td>199.9V</td><td>199.99V</td><td>199.99V</td></tr> <tr><td>5</td><td>300V</td><td>—</td><td>300.0V</td><td>—</td></tr> <tr><td>6</td><td>—</td><td>400V</td><td>—</td><td>400.0V</td></tr> <tr><td>XX</td><td colspan="4">Option</td></tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td>AVG value</td></tr> <tr><td>RMS value</td></tr> <tr><td>Volt Meter</td></tr> <tr><td>DC type</td></tr> <tr><td>AC type</td></tr> <tr><td>Indicator(No output)</td></tr> <tr><td>1P Single setting</td></tr> <tr><td>2P Dual setting</td></tr> <tr><td>DIN W72×H36mm</td></tr> <tr><td>DIN W96×H48mm</td></tr> <tr><td>DIN W72×H72mm</td></tr> <tr><td>3½digit</td></tr> <tr><td>4½digit</td></tr> <tr><td>Meter</td></tr> </table> </div> </div>										NO	M4Y / M4W / M4M		M5W		DC INPUT (F · S)	AC INPUT (F · S)	DC INPUT (F · S)	AC INPUT (F · S)	1	199.9mV	199.9mV	199.99mV	199.99mV	2	1.999V	1.999V	1.9999V	1.9999V	3	19.99V	19.99V	19.999V	19.999V	4	199.9V	199.9V	199.99V	199.99V	5	300V	—	300.0V	—	6	—	400V	—	400.0V	XX	Option				AVG value	RMS value	Volt Meter	DC type	AC type	Indicator(No output)	1P Single setting	2P Dual setting	DIN W72×H36mm	DIN W96×H48mm	DIN W72×H72mm	3½digit	4½digit	Meter
NO	M4Y / M4W / M4M		M5W																																																																
	DC INPUT (F · S)	AC INPUT (F · S)	DC INPUT (F · S)	AC INPUT (F · S)																																																															
1	199.9mV	199.9mV	199.99mV	199.99mV																																																															
2	1.999V	1.999V	1.9999V	1.9999V																																																															
3	19.99V	19.99V	19.999V	19.999V																																																															
4	199.9V	199.9V	199.99V	199.99V																																																															
5	300V	—	300.0V	—																																																															
6	—	400V	—	400.0V																																																															
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Item																																																																			

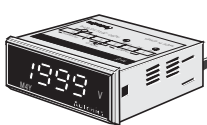
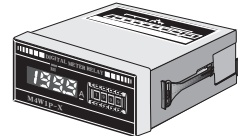
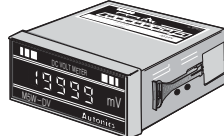
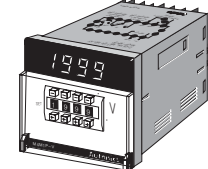
Note1) Measuring input and display are 1:1.

Note2) Available input can be direct connection if under 300VDC, 400VAC.

Note3) RMS only applies to AC measuring type. Do not enter "R" with DC model.

Note4) M4Y, M5W are indicators.

Specifications

Series	M4Y	M4W / M4W1P / M4W2P	M5W	M4M / M4M1P / M4M2P
Appearances & Dimensions	 [W72×H36×L93mm]	 [W96×H48×L104mm]	 [W96×H48×L104mm]	 [W72×H72×L113mm]
Indicator	●	●	●	●
Single preset	—	●	—	●
Dual preset	—	●	—	●
Max. measuring input	Max. 300VDC, Max. 400VAC			
	• 2ADC (SHUNT for 50mVDC output type only is used to the measuring input value of over 2ADC) • 5AAC (C.T for 5AAC output type only is used to the measuring input value of over 5AAC)			
	Max. 10VDC (Output specification of power converter)			
	0-10VDC, 0-10VAC (Tachogenerator output)			
	DC4-20mA, 1-5VDC (Sold separately)			
Max. display range	1999 (Fixed decimal point)		19999 (Fixed decimal point)	1999 (Fixed decimal point)
Power supply	100-240VAC 50/60Hz ±10% (Sold separately: 5VDC ±10%, 24-70VDC ±10%)	110/220VAC 50/60Hz ±10% (Sold separately: 100-240VAC 50/60Hz ±10%, 24-70VDC ±10%)		
Max. allowable input	150% per each input specification (At 400VAC : 120%)			
Contact capacity	• Single preset : 250VAC 3A 1c • Dual preset : 250VAC 3A 1c×2			

Selection Guide

DIGITAL PANEL METER

2) Ampere meter

M	4	W	□	-	A	A	□	-	1
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Measuring input

Note1)

Note2)

Note3)

Size

Digit

Item

NO	M4Y / M4W / M4M		M5W	
	DC INPUT (F · S)	AC INPUT (F · S)	DC INPUT (F · S)	AC INPUT (F · S)
1	199.9 μA	19.99mA	199.99 μA	19.999mA
2	1.999mA	199.9mA	1.9999mA	199.99mA
3	19.99mA	1.999A	19.999mA	1.9999A
4	199.9mA	19.99A	199.99mA	19.999A
5	1.999A	199.9A	1.9999A	199.99A
6	19.99A	1999A	19.999A	1999.9A
7	199.9A	—	199.99A	—
8	1999A	—	1999.9A	—
XX	Sold separately		Sold separately	
	AVG value			
R	RMS value			
A	Ampere Meter			
D	DC type			
A	AC type			
	Indicator(No output)			
1P	Single setting			
2P	Dual setting			
Y	DIN W72 × H36mm			
W	DIN W96 × H48mm			
M	DIN W72 × H72mm			
4	3½digit			
5	4½digit			
M	Meter			

Note1) Measuring input and display are 1:1 for DC INPUT No. 1 to 5 and AC INPUT No.1 to 3.
DC INPUT No.6 to 8 is used with DC50mV Shunt, AC INPUT No. 4 to 6 are used with C.T(Current transducer).

Note2) RMS only applies to AC measuring type. Do not enter "R" with DC model.

Note3) M4Y, M5W are indicators.

3) Watt meter

M	4	W	□	-	W	-	1
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Display

Note1)

Note2)

NO	M4Y / M4W / M4M		M5W	
	DISPLAY(F.S)		DISPLAY(F.S)	
1	199.9W		199.99W	
2	1.999kW		1.9999kW	
3	19.99kW		19.999kW	
4	199.9kW		199.99kW	
5	1999kW		1999.9kW	
XX	Sold separately		Sold separately	
W	Watt Meter			
	Indicator(No output)			
1P	Single setting			
2P	Dual setting			
Y	DIN W72 × H36mm			
W	DIN W96 × H48mm			
M	DIN W72 × H72mm			
4	3½digit			
5	4½digit			
M	Meter			

Note1) When output specification of power converter is 0-10VDC, display value is maximum.

Note2) M4Y, M5W are indicators.

*If output specification of Converter or power converter is DC4-20mA or 1-5VDC, please use Scaling Meter.

4) Scaling meter

M	4	W	□	-	D	I	-	X
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Measuring input

Note1)

Note2)

X	Display range(Sold separately)			
I	DC4-20mA(1-5VDC : Sold separately)			
D	DC type			
	Indicator(No output)			
1P	Single setting			
2P	Dual setting			
Y	DIN W72 × H36mm			
W	DIN W96 × H48mm			
M	DIN W72 × H72mm			
4	3½digit			
5	4½digit			
M	Meter			

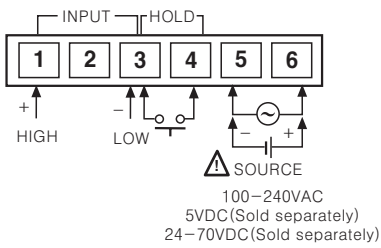
Note1) 1-5VDC of measuring input specification is sold separately.

Note2) M4Y, M5W are indicators.

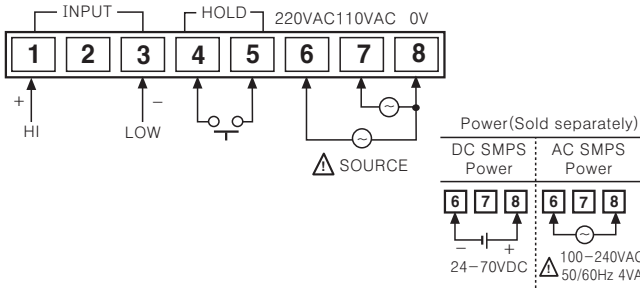
DIGITAL PANEL METER

Connections

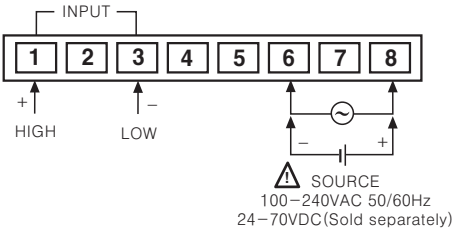
●M4Y



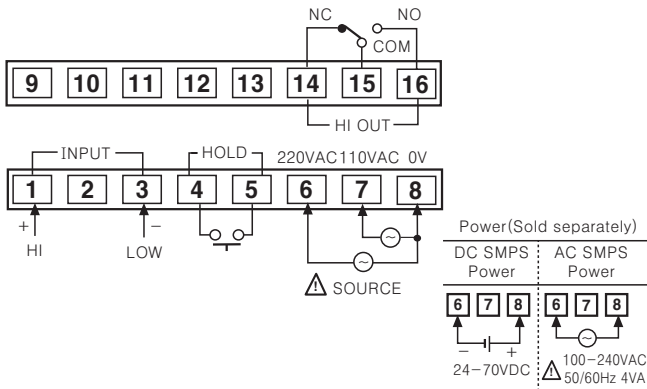
●M4W



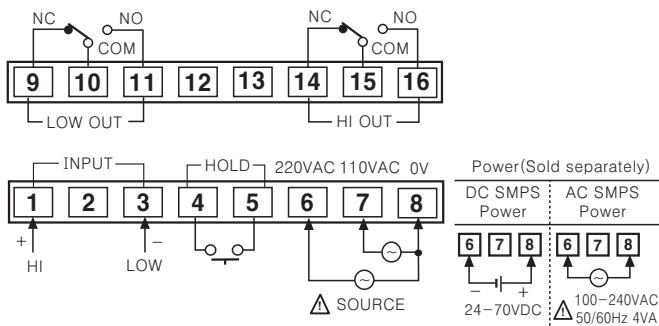
●M5W



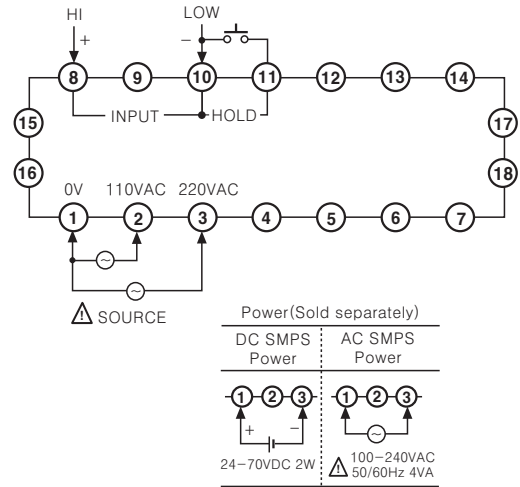
●M4W1P



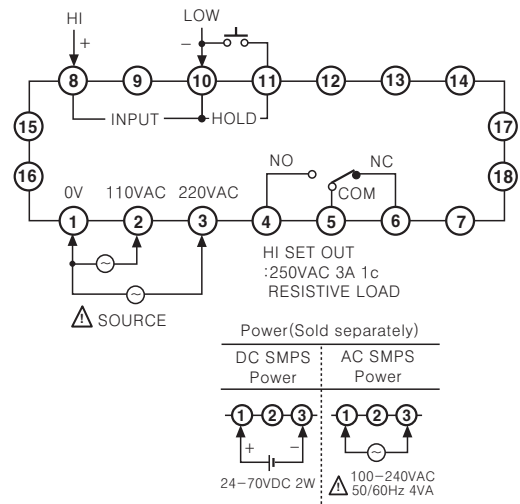
●M4W2P



●M4M



●M4M1P



●M4M2P

