QMS JIS Q 9001 JSAQ097

JAB CM001

DIGITAL CONTROLLER

HAYABUSA

TTM-204-Z65(Temperature Input)
TTM-204-Z74(Analogue Input)

■Features:

* Sampling Cycle: 10ms
  10, 20, 50, 100, 200, and 500 mS can be selected.
* PV Color:
  Green, Red, Orange, Blue, Light Blue, Purple, White, Custom
* PV display color can be set to an arbitrary color depending on the temperature band and at the time of PV event and PV / CT / loop abnormality.
* Inheritance of TTM-204 specification

■Input Specifications

Input Type	Z65	Thermocouple : K, J, T, E, R, S, B, N, U, L, WRe5-26, PR40-20, PLⅡ RTD: Pt100, JPt100	
	Z74	Analogue: DC0～5V, DC1～5V, DC4～20mA	
Sampling Cycle		10, 20, 50, 100, 200, 500ms	
Settings and Indication Accuracy (Ambient Temperature 23℃±10℃)	Thermocouple	Thermocouple K, J, T, E, R, S, B, N	± (0.3% ±1digit) or ±2℃ of indicated value, whichever is greater. Provided that -100～0℃ is ±3℃ and -200～-100℃ is ±4℃. B thermocouple with less than 400℃ has no regulation.
		U, L	± (0.3% ±1digit) or ±4℃ of indicated value, whichever is greater. Less than 0℃ is ±6℃.
		WRe5-26	± (0.6% ±1digit) or ±4℃ of indicated value, whichever is greater.
		PR40-20	± 9.4℃ ±1digit No regulation on less than 800℃.
		PLⅡ	± (0.3% ±1digit) or ±2℃ of indicated value, whichever is greater.
	RTD	Pt100, JPt100	± (0.3% ±1digit) or ±0.9℃ of indicated value, whichever is greater.
	Current	DC4～20mA	±0.3% ±1 digit of FS
	Voltage	DC0～5V, 1～5V	±0.3% ±1 digit of FS

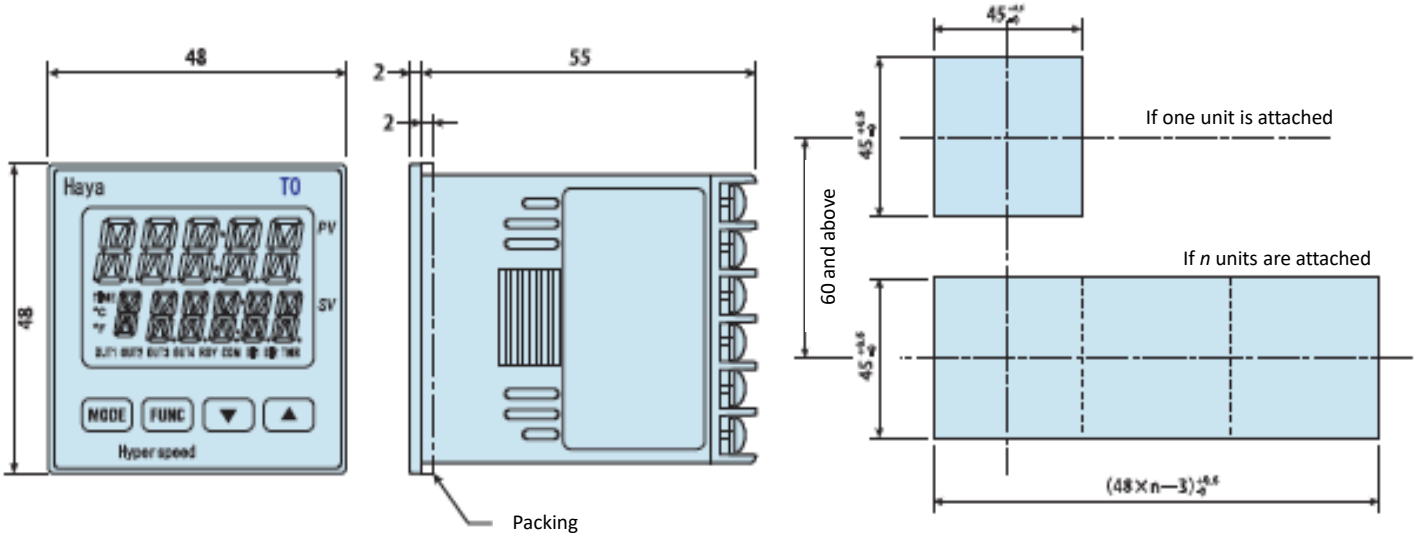
■Output Specifications

Relay Contact	Control output: AC250V 3A (Resistance load) 1a contact point Minimum Load DC5V 100mA Auxiliary output: AC250V 1A (Resistance load) 1a contact point Minimum Load DC5V 100mA
Voltage Output for SSR Drive	DC12V (Load resistance 600Ωand higher)
Open Collector	DC24V 100mA
Current	DC4～20mA (Load resistance 600Ωand below)

■Option Specifications

CT Input Specifications	CT 1 and 2	Measuring Current Range	0～50.0A	Setting Current Range	0.0～30.0A
		Setting Accuracy	±5% of FS (1.0A or less is not subjected to accuracy)		
		Disconnection Detection	Time duration of ON in the Control Output is more than 300ms		
		Adhesion Detection	Time duration of OFF in the Control Output is more than 300ms		
DI Input Specifications	DI 1 and 2	Input Specifications	Non voltage contact point input. Active can be switched per input.		
		Minimum Input Time	200ms		
		Current during ON	MAX DC10mA	Voltage during OFF	MAX DC6V
		Allowable Resistance Between Terminals	ON: MAX 333Ω OFF: MIN 500kΩ		
Communication	Communication Standard	RS-485 (1:31)			
	Protocol	TOHO /MODBUS(RTU)/MODBUS (ASCII)			
	Communication specifications are the same as TTM-200 series. Please refer to the catalog of TTM-200 series.				

■Dimensions and Terminal Connection



■Terminal Connection Diagram

Power			①	⑬	A	Communication (RS-485)		⑦	NO	+	Output 3 Output 4						
			②	⑭	B			⑧	NO	+							
Output 1	C	-	③	⑮	CT1	DI1		⑨	C	-							
	NO	+	④	⑯	CT1	DI1(COM)		⑩	A		RTD		TC / I	+	V	INPUT	
Output 2	C	-	⑤	⑰	CT2	DI2		⑪	B			-		-			
	NO	+	⑥	⑱	CT2	DI(COM)		⑫	b			+					

「C」, 「NO」: Relay contact output model
「+」, 「-」: Other than relay contact output model

■ List of Models for Selection

TTM-204 - ① - ② ③ - ④ ⑤ ⑥ - ⑦ - Z65(Temperature Input) Z74(Analogue Input)

Symbol	Item	Description			Symbol	Item	Description		
①	Case Color	Q	Black		⑤	Option	ST	CT 1, 2 Input	*1
		X	Grey				SV	CT Input 1, DI Input 2	*1
② ③	Output1 Output2	N	No				UV	DI Input 1, 2	
		R	Relay Contact		⑥		M	Communication(RS-485)	
		P	SSR Drive		⑦	Power Source		Free Power Source	
		A	Open Collector				L	AC/DC24V	
		I	Current 4～20mA						
④	Output3・4	A	Open Collector	Common					
		R	Relay Contact	Common					

*1 CT is unselectable if the output is analog output only.
Model will be omitted if options from ④ onward are not included.
Example) TTM-204-Q-RN-M-Z65

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