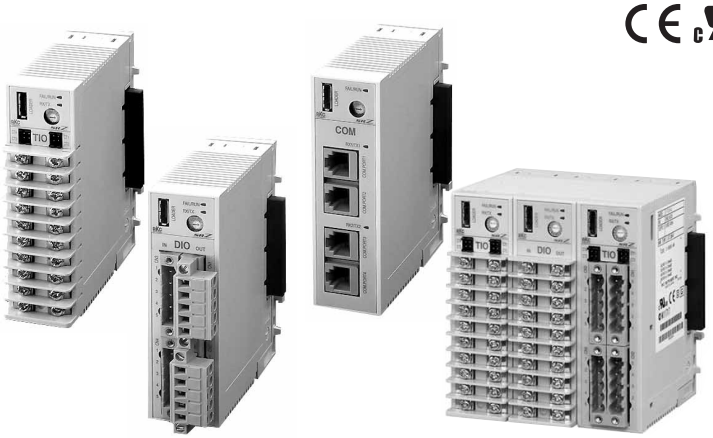
SRZ



General Description

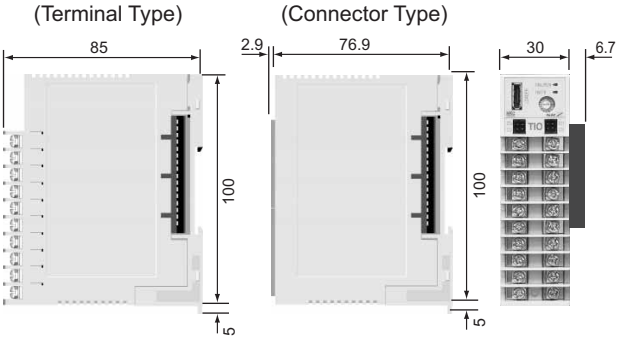
The SRZ is a DIN rail mounted module type temperature controller. 4 or 2 loop control can be performed with a single compact module. Module can have 4 CT (Current transformer) inputs. A maximum of 16 temperature control modules can be connected for 64-loop control. Power supply and communication lines are via a connector on the side, no wiring required.

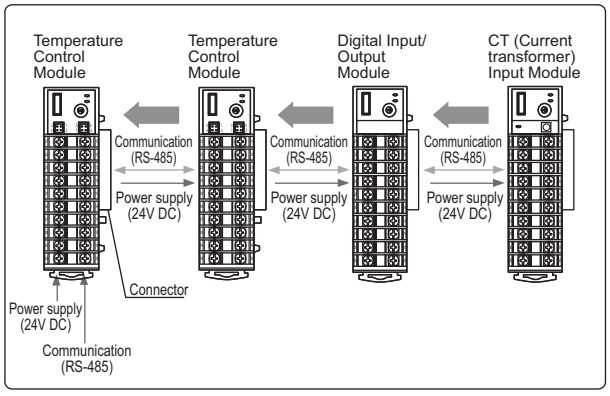
Features

- ☆ 4 loop controller packed in one compact module
- ☆ Multi-zone space-saving and less wiring
- ☆ Heat/Cool action
- ☆ Heater/Loop break alarms
- ☆ DIN rail mounting

Space-Saving and Less Wiring

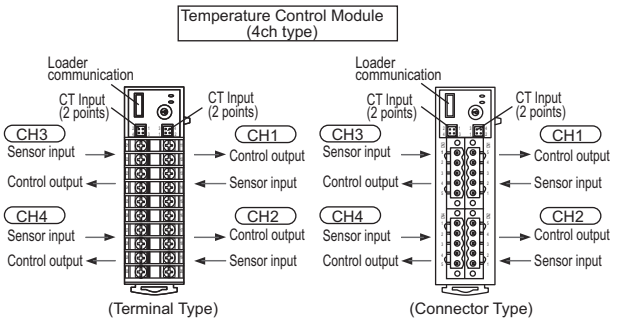
4CH temperature controller packed in one compact module. Separated installation by control zones is possible. Wiring to sensors and output devices is minimized.
Modules can be installed separately inside a control panel or a machine to reduce the physical size of the housing.

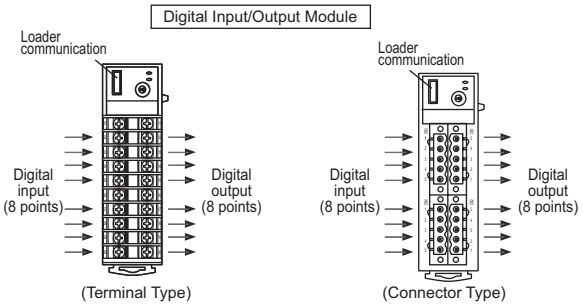


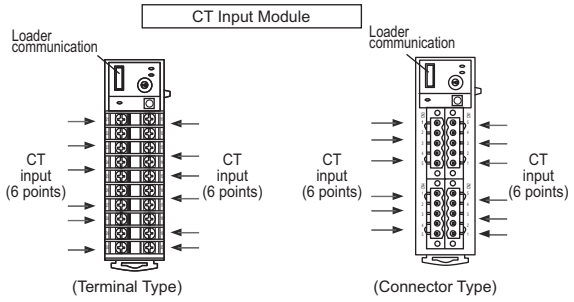


Module Configuration

Input/Output Configuration



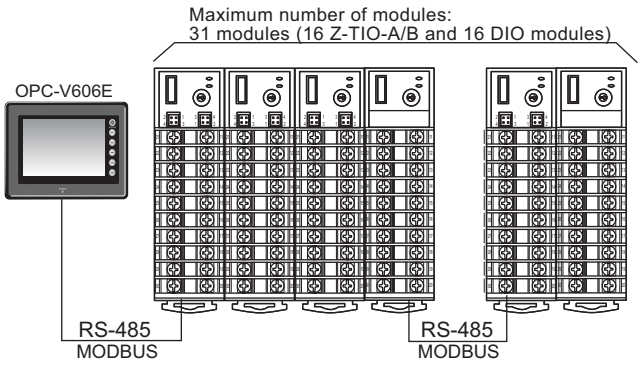




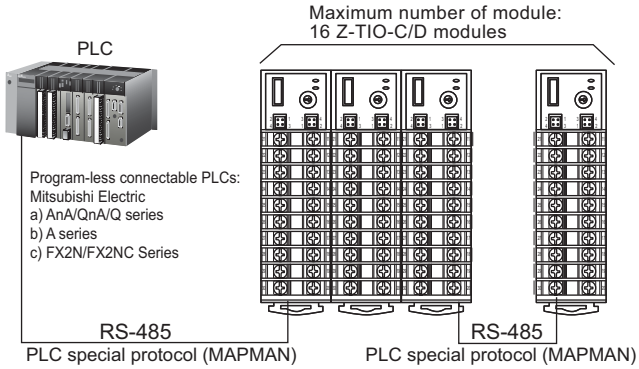
Features

Flexible temperature control system configuration

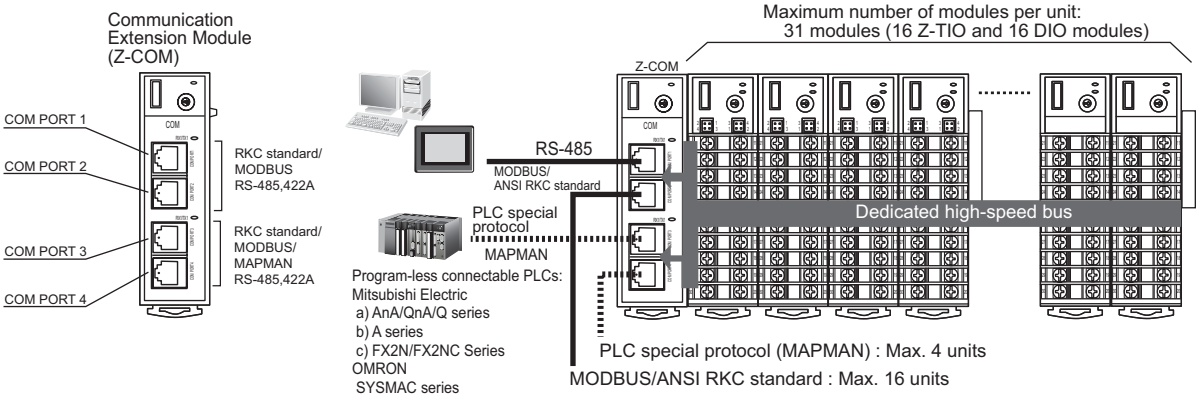
MODBUS/ANSI RKC standard protocol communication



PLC special protocol

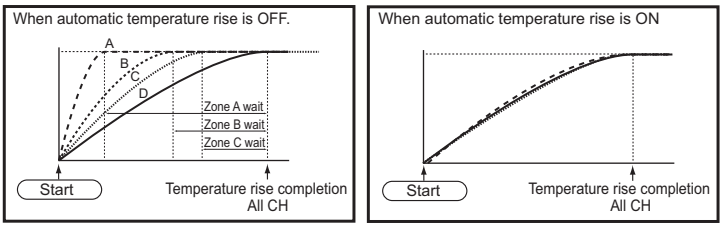


Z-COM module can manage data from connected control modules via high-speed bus connection. MAPMAN program-less connection to PLC is also available.



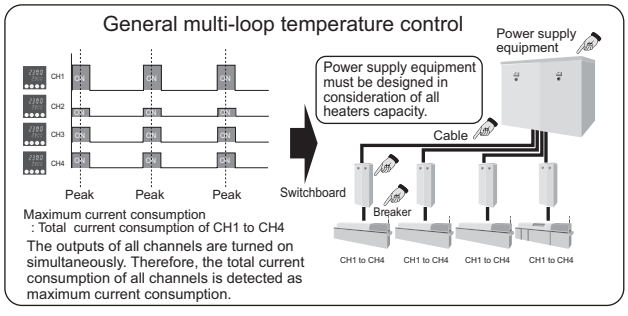
Temperature uniformity at ramp-up (Auto-temperature rise function)

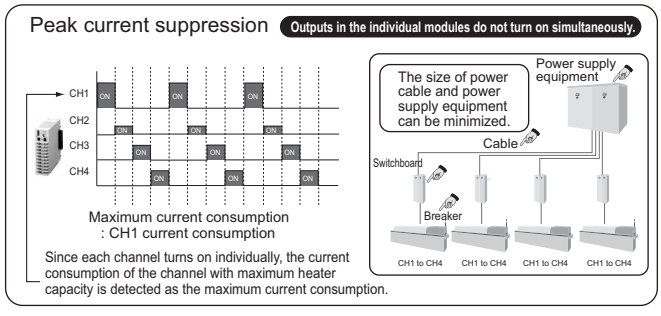
The Auto-temperature rise function controls the rate of temperature rise uniformly across all the channels in a specified group. The SRZ system has the ability to have multiple groups within each system. This uniform controlled temperature rise will suppress local overheating and mechanical distortion in the tools, contributing to higher product quality.



Peak current suppression

Peak current suppression minimizes the capacity of electrical materials such as power supply equipments, switchboards, power lines, and breakers since this function makes the timing of control output on each channel separate so that the current consumption of the channel with maximum heater capacity is detected as maximum current consumption.

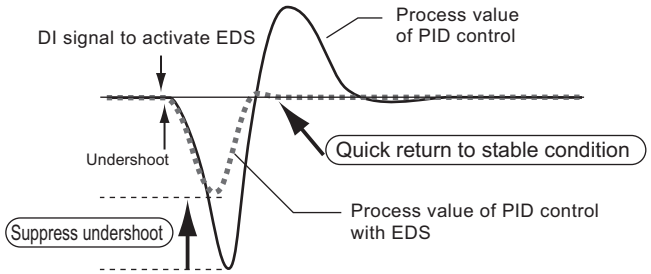




Features

External disturbance suppression with autotuning (EDS)

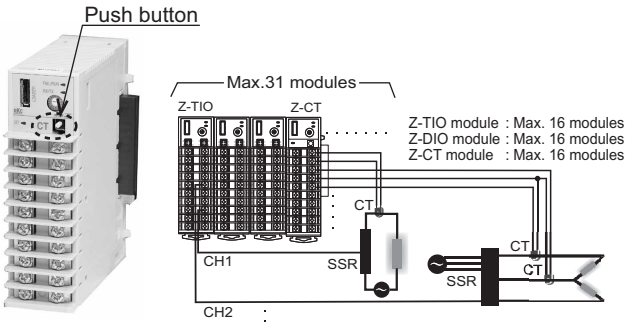
EDS with autotuning calculates optimum settings to suppress control disturbance caused by external factors. The function is activated by a DI signal to adjust control output (feed-forward) to compensate for the disturbance.
It is suitable for an application in which external disturbance can be predicted, such as wafer-in/out in semiconductor manufacturing equipment, and during injection in injection molding machine.



Automatic SV setting on heater break alarm and heater over current alarm

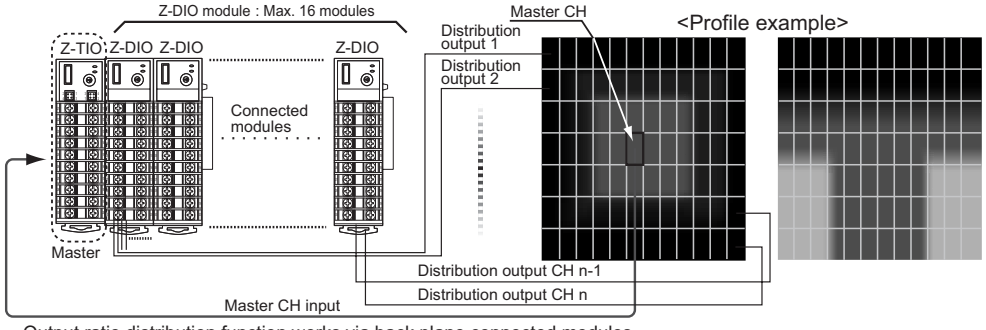
Set values of Heater break alarm (HBA) and heater over current alarm are automatically set by pressing a front-mounted push button when a heater is on.
This function is also available for three-phase heater break alarm.

- HBA function of Z-CT module is designed only for time proportional control (On/Off output). Phase control (continuous output) is not available.
- The CT input monitor value indicates the effective value when the heater break alarm function is enabled and output is 100% (heater ON) or 0% (heater OFF.)



Multi-loop profile control (Output ratio distribution function)

This function enables one master loop to distribute its output value to multiple outputs of Z-DIO modules. Bias and ratio can be set for each output independently.
A maximum of 187 distribution outputs from one control loop is possible when Z-DIOs and Z-TIOs are used for output ratio distribution.

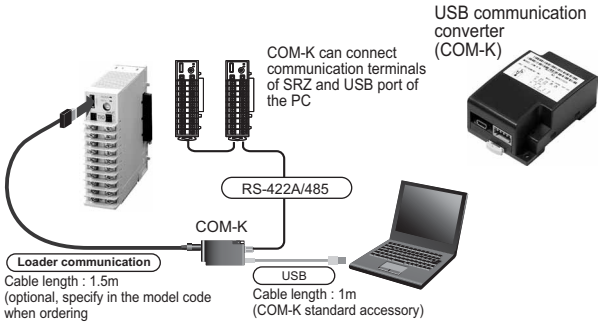


- Output ratio distribution function works via back plane connected modules.
- Distribution output from DIO module becomes open collector output or relay contact output.

Communication with a PC via USB port (Loader communication)

The SRZ module has a standard loader port on the front panel to connect to a PC USB port via COM-K (USB communication converter). Using Win-UCI software on the PC, parameter settings can be easily saved on the PC in CSV format, and the same parameter settings are easily copied to other SRZ modules.

- The Loader port is only for parameter setup



- The power to COM-K is supplied from the PC via the USB port so no power supply is necessary.

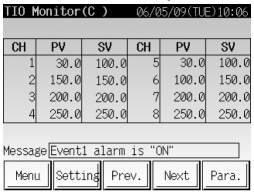
Model Code : USB communication converter (COM-K)

Specifications	Model and Suffix code	
	COM-K-	□
Loader communication cable	Without loader communication cable	N
	With loader communication cable	1

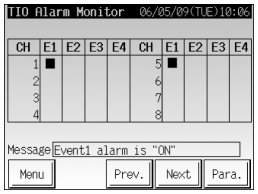
Display unit

Operation Panel : OPC-V606E

5.7 inches STN monochrome LCD operation panel

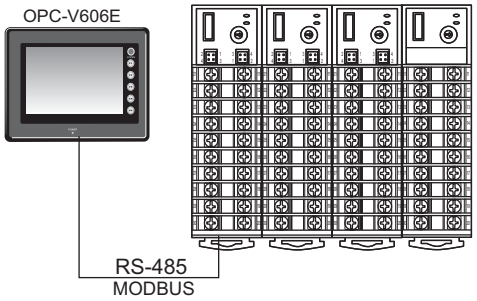


<PV/SV monitor>



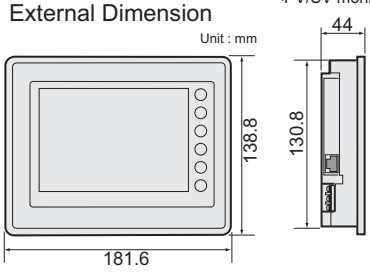
<Alarm monitor>

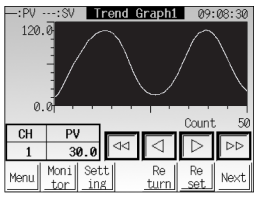
Maximum number of modules:
31 modules (16 Z-TIO-A/B and 16 DIO modules)



External Dimension

Unit : mm





<Trend Graph>

Model Code

Specifications	No	Model Code OPC-V606E-	①	②	③
Display method	①	STN monochrome LCD	3		
Available controller	②	Z-TIO/DIO (MODBUS protocol)		5	
Language	③	Japanese			J
		English			E

Specifications

Display : STN monochrome LCD
Power supply voltage : 24V DC
Power consumption : Less than 10W
Ambient temperature : 0 to 50°C
Ambient humidity : Less than 85% RH
Waterproof/Dustproof : IP65
Weight : IP65
Compliance : cUL, CE marking

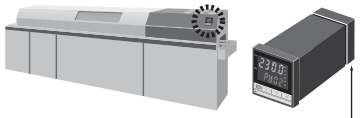
Accessories (Sold separately)

Specifications	Model
Cable : Between OPC-V606E and Z-TIO (Length 3m)	V6-MLT

Compact Setting Display : OP10

This DIN rail mounted compact display and setting unit is suitable for on-site operation change and monitoring.

A rear terminal socket allows the unit to be mounted on a panel.

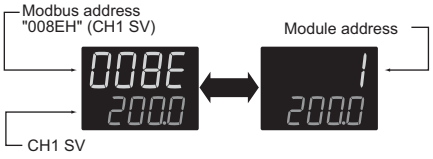


◆ Monitor item
- Measured value (PV)
- Set value (SV)
- Heat-side output value (MV)
- Cool-side output value (Mc)
- Event 1 status (A1)
- Event 2 status (A2)

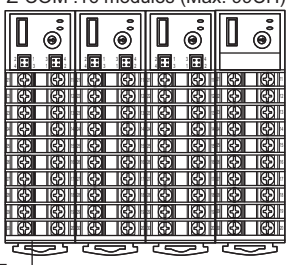
◆ Setting item
- Autotuning
- Event 1 (A1)
- Event 2 (A2)
- Heat-side proportional band (P)
- Heat-side integral time (I)
- Heat-side derivative time (D)
- Cool-side proportional band (Pc)
- PV bias (Pb)

◆ Setting by MODBUS register address

Any Modbus register address can be specified to set or display data. This is used to set or display data that is not included within the OP10 parameter.



Maximum number of modules:
Z-TIO : 16 modules (Max. 99CH)
Z-COM :16 modules (Max. 99CH)

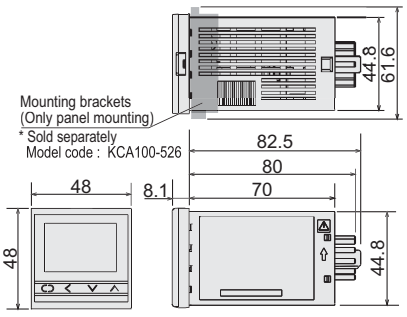


Specifications

Display: LCD display, 4-digitX2 (Green/Orange)
Power supply voltage :
a) 100 to 240V AC (Rating), 50/60Hz
b) 24V AC (Rating), 50/60HZ
c) 24V DC (Rating)
Power consumption
4VA max. (at 100V AC) 7VA max. (at 240V AC)
4VA max. (at 24V AC) 100mA max (at 24V DC)
Ambient temperature: 0 to 50°C
Ambient humidity: 45 to 85% RH
Waterproof/Dustproof: IP66 (Option)
Weight: Approx 120g
Compliance with standard: cUL, CE marking, C-Tick

External Dimension

Unit : mm



Model Code

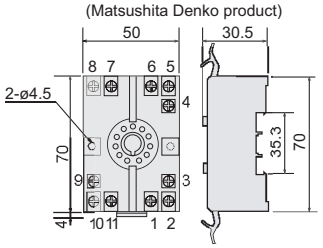
Specifications	No	Model Code OP10-	①	②	③
Power supply	①	24V AC/DC	3		
		100 to 240V AC	4		
Waterproof/ dustproof	②	No waterproof/dustproof		N	
		Waterproof/dustproof		1	
Available controller	③	Z-COM-A (Modbus protocol)			01
		Z-TIO (Modbus protocol)			02
		V-TIO-E/F (RS-422A,Modbus protocol)			03
		H-PCP-J (RS-422A,Modbus protocol)			04

Accessories (Sold separately)

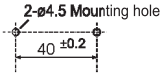
Specifications	Model
RS-485 cable : Between OP10 and Z-TIO (Length 1m)	W-BO-01-1000
RS-485 cable : Between OP10 and Z-COM / H-PCP-J (Length 1m)	W-BO-04-1000
RS-485 cable : Between OP10 and Z-COM / V-TIO/H-PCP-J (Length 1m)	W-BO-05-1000

● Socket (Sold separately) External Dimensions

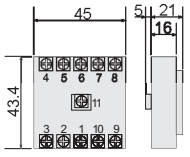
DIN rail mounting socket type
Model : ATC180041
(Matsushita Denko product)



Screw hole dimension
for wall mounting



Rear terminal socket type
Model : AT78051
(Matsushita Denko product)



Mounting brackets
(Only panel mounting)
* Sold separately
Model code : KCA100-526

Specifications

Temperature control module (Z-TIO)

Input

Number of inputs
4 points (Z-TIO-A), 2 points (Z-TIO-B)
• Isolated between each channel.

Input
Universal input
Temperature, Current, Low voltage input group
Thermocouple : K, J, R, S, B, E, T, N (JIS/IEC), PLII (NBS), W5Re/W26Re (ASTM)
• Influence of external resistance : Approx. 0.125μV/Ω
• Input break action : Up-scale / Down-scale (Selectable)
RTD : Pt100 (JIS/IEC), JPt100 (JIS)
• Influence of input lead resistance : Approx. 0.02[%/Ω] of reading
• Maximum 10Ω per wire
• Input break action : Up-scale
Low voltage : 0 to 1V DC, 0 to 100mV DC, 0 to 10mV DC,
• Input break action : Up-scale / Down-scale (Selectable)
Current : 4 to 20mA DC, 0 to 20mA DC
• Input break action : Uncertain (indicates a value around 0mA)
High voltage input group
High voltage : 0 to 5V DC, 1 to 5V DC, 0 to 10V DC
• Input break action : Uncertain (indicates a value around 0V)

Sampling Time
0.25 sec

Input Digital Filter
0.1 to 100.0 sec (OFF when 0 is set.)

PV Bias
-span to +span

PV Ratio
0.500 to 1.500

Square Root Extraction
Equation : PV = √ (Input value x PV ratio + PV bias)
Low level cut OFF : 0.00 to 25.00% of span

Performance

Measuring Accuracy
a) Thermocouple
Type : K, J, T, E, N, PLII
Less than -100°C (-148°F) : ±2.0°C (±3.6°F)
-100 to 500°C (-148 to 932°F) : ±1.0°C (±1.8°F)
More than 500°C (932°F) : ±(0.2% of Reading + 1 digit)
Type : N, S, R, W5Re/W26Re
Less than 1000°C (1832°F) : ±2.0°C (±3.6°F)
More than 1000°C (1832°F) : ±(0.2% of Reading + 1 digit)
Type : B
Less than 400°C (752°F) : ±70.0°C (±126°F)
400 to 1000°C (752 to 1832°F) : ±2.0°C (±3.6°F)
More than 1000°C (1832°F) : ±(0.2% of Reading + 1 digit)
Cold junction temperature compensation error when close horizontal mounting
Terminal type : ±1.0°C (1.8°F) [at 23±2°C (73±3.6°F)]
Less than -100°C (-148°F) input : ±2.0°C (±3.6°F)
Connector type : ±2.0°C (3.6°F) [at 23±2°C (73±3.6°F)]
Less than -100°C (-148°F) input : ±4.0°C (±7.2°F)
b) RTD
Less than 200°C (392°F) : ±0.4°C (±0.8°F)
More than 200°C (392°F) : ±(0.2% of Reading + 1 digit)
c) DC voltage and DC current
±(0.2% of span)

Insulation Resistance
More than 20MΩ (500V DC) between measured terminals and ground
More than 20MΩ (500V DC) between power terminals and ground
More than 20MΩ (500V DC) between measured terminals and power terminals

Dielectric Strength
750V AC for one minute between measured terminals and ground
750V AC for one minute between power terminals and ground
750V AC for one minute between measured terminals and power terminals

Control

Control Method
a) Brilliant II PID control
• Available for reverse and direct action.
b) Brilliant PID control (Heat/Cool type)
c) Position proportioning control without feedback resistance.
• a), b), c) is selectable.

Autotuning Method
a) For PID control (Direct action/Reverse action)
b) For Heat/Cool PID control (For extruder, air cooling type)
c) For Heat/Cool PID control (For extruder, water cooling type)
d) For Heat/Cool PID control
e) For Position proportioning control without feedback resistance

Startup tuning
The condition to activate Startup Tuning is selectable among a) to g)
a) At power-on, one-time tuning
b) At SV change, one-time tuning
c) At power-on and SV change, one-time tuning
d) At power-on, always on
e) At SV change, always on
f) At power-on and SV change, always on
g) Function off
(Not available for Position proportioning control without feedback resistance)

Major Setting Range

Set value :	Same as input range.
Proportional band :	0 to input span (°C, °F) (Temperature input) 0.0 to 1000.0% of span (Voltage, Current input) (ON/OFF control when P = 0)
Integral time :	0 to 3600sec. or 0.0 to 1999.9sec. (selectable)
Derivative time :	0 to 3600sec. or 0.0 to 1999.9sec. (selectable)
Cool-side proportional band :	1(0.1,0.01) to input span (°C, °F)(Temperature input) 0.1 to 1000.0% of span (Voltage, Current input)
Cool-side integral time :	0 to 3600sec. or 0.0 to 1999.9sec. (selectable)
Cool-side derivative time :	0 to 3600sec. or 0.0 to 1999.9sec. (selectable)
Deadband/Overlap :	-span to +span (Temperature input) -100.0 to +100.0% of span (Voltage, Current input)
Control response :	Slow, Medium, Fast
Ramp-to-setpoint :	0 to span per Time (Time is selectable between 1 and 3600 sec) (Up/Down individual setting)
Output limiter :	-5.0 to +105.0% (High/Low individual setting)
Cool-side output limiter :	-5.0 to +105.0% (High/Low individual setting)
Output change rate limiter :	0.0 to 100.0%/sec. (Up/Down individual setting)
Cool-side output change rate limiter :	0.0 to 100.0%/sec. (Up/Down individual setting)
Proportional cycle time :	0.1 to 100.0 sec.
Cool-side proportional cycle time :	0.1 to 100.0 sec.
Manual reset :	-100.0 to +100.0%
Manual output :	Output limiter low to output limiter high
Output at control stop mode :	-5.0 to 100.5% (Heat/Cool individual setting)

Motor Valve Control (position proportioning control type only)

Motor time :	5 to 1000 sec. (full open to full close)
Integral output limiter :	OFF, 100.0 to 200.0% of motor time
Neutral zone :	0.1 to 10.0%
Differential gap :	0.1 to 5.0%
Valve action at a stop mode :	a) CLOSE : OFF, OPEN : OFF b) CLOSE : ON, OPEN : OFF c) CLOSE : OFF, OPEN : ON • a), b), c) is selectable.

Memory area

Number of memory area :	8 memory areas
Setting item :	Set value (SV), Proportional band, Integral time, Derivative time, Cool-side proportional band, Cool-side integral time, Cool-side derivative time, Deadband/Overlap, Control response, Manual reset,Ramp-to-setpoint (Up/Down), Event set vale, LBA time, LBA deadband, Soak time : 0 min 0.00 sec to 199 min 59 sec or 0 hr 00 min to 9 hr 59 min (selectable) Linking area number : OFF, 1 to 8

Output Type

Relay output :	Form A contact, 250V AC 3A (resistive load)
Voltage pulse output :	0/12V DC (Load resistance : More than 600Ω) • Power supply and output are not isolated.
Current output :	4 to 20mA DC, 0 to 20mA DC (Load resistance : Less than 600Ω) • Power supply and output are not isolated.
Continuous voltage output :	0 to 1V DC, 0 to 5V DC, 1 to 5V DC, 0 to 10V DC (Load resistance : More than 1kΩ) • Power supply and output are not isolated.
SSR (Triac) output :	Rated current : 0.5A
Open collector output : (Sink type)	Load voltage : Less than 30V DC, Maximum load current : Less than 100mA ON voltage : Less than 2V DC (at 100mA)

Specifications

Temperature control module (Z-TIO)

Event (Alarm)

Number of Event Setting
Up to 4 points (Event 1 to 4)

Alarm Type
Process high, Process low, Deviation high, Deviation low, Deviation high/low, Band, Set value high, Set value low, MV value high, MV value low, Cool side MV value high, Cool side MV value low, FBR value high, FBR value low, LBA (Control loop break alarm), Deviation high between channel, Deviation low between channel, Deviation high/low between channel, Deviation band between channel, Temperature rise completion
• LBA is assignable to event 4.
• Temperature rise completion is assignable to event 3.

Setting range
Deviation, Deviation between channel, Temperature rise completion : - (Input span) to + (input span)
Differential gap : 0 to input span
Process, Set value : Same as input range
Differential gap : 0 to input span
MV value, FBR valued : -5.0 to +105.0%
Control loop break alarm (LBA)
: LBA time : 0 to 7200 sec. (OFF by setting zero)
LBA deadband : 0 to input span

Other Functions
a) Hold/Re-hold action (Valid for deviation/band/process alarm only)
• Hold action is activated at Power-up and STOP to RUN.
Re-hold action is activated at Power-up, STOP to RUN, and the control set value change.
b) Event action is configurable in case of input abnormality.
c) Energized/de-energized action is configurable.
d) Delay timer : 0 to 1800 sec
e) Interlock (latch) function is configurable.

Heater Break Alarm (Optional)

Number of CT Input : 4 points (4ch type), 2 points (2ch type)
CT Input type : CTL-6-P-N (30A), CTL-12-S56-10L-N(100A)
• Selectable
Accuracy : ± 5% of input value or ± 2A (whichever is larger)
Display range : 0.0 to 100.0A

Communications

Communication method : RS-485
Communication speed : 4800, 9600, 19200, 38400 BPS
Protocol : a) ANSI X3.28(1976) 2.5 B1 (RKC standard)
b) MODBUS- RTU
c) PLC special protocol (Mapman): Z-TIO-C/D Module
Correspond to MITSUBISHI MELSEC PLC series
1. A compatible, 1C Frame (type 4)
AnA/AnU common command (QR/QW)
(AnA, QnA series, Q series)
QnA compatible, 3C Frame (type 4) command (0401/1401)
(QnA/Q series) • Z Resistor only
2. A compatible, 1C Frame (type 4)
ACPU common command (WR/WW)
(A series, FX2N, FX2NC series)

Bit format : Start bit :1, Data bit : 7 or 8 • For MODBUS 8 bit only
Parity bit : Without, Odd or Even,
Stop bit : 1 or 2 • For MODBUS 1 bit
Maximum connection : Z-TIO-A/B ; 32 modules, Z-TIO-C/D : 16 modules

Other Functions

Remote se input
Temperature ratio setting
Cascade control mode
Output ratio distribution function
Function which distributes the control output value of the master channel to the Z-DIO/TIO module output.
EDS function
Function which suppresses overshoot and undershoot.
Auto-temperature-rise with learning function
Function which achieves temperature uniformity at ramp-up in the same control group while learning function calculates optimum parameter settings for this function.
Up to 16 groups can be configured within modules which are connected each other by connectors on the base.
Peak current suppression function
When the output type is time proportional output, the peak current suppression function changes the start timing of the proportional cycle so that the outputs of the channels do not turn ON simultaneously.
• The peak current suppression function is performed in one modules.
Master-slave Mode
With this function, when a mode of Mode-master channel is changed, the mode of all slave channels (preset) will be also automatically changed. Modes can be selected among various mode function such as memory area (recipe).

Digital input/output module (Z-DIO)

Digital Input

Number of inputs
8 points
• Isolated input (4 points/common)

Input method
Voltage contact input
Open : Less than 5.0V, Close : More than 17.5V
Contact current : Less than 3.0mA
Allowable input voltage : Less than 26.4V DC

Function
Interlock reset, RUN/STOP, Remote/Local, Auto/Manual, Memory area selection, External disturbance suppression

Function allocation
See digital input allocation table

Digital Output

Number of inputs
8 points
• 4 points/common

Output signal
a) Relay contact output, Form a contact
250V AC 1A , 30V DC 1A (Resistive load)
b) Open collector output (Sink type)
Allowable load current : Less than 100mA
Load voltage : Less than 30V
Minimum load : 0.5mA
ON voltage : Less than 2.0V (at maximum load current)
Leakage current at OFF : Less than 0.1mA

Function
Event 1 output (CH1 to CH4), Event 2 output (CH1 to CH4)
Event 3 output (CH1 to CH4), Event 4 output (CH1 to CH4)
HBA output, Burn-out status output, Temperature rise completion output, Manual output

Function allocation
See output allocation table

Communications

Communication method : RS-485
Communication speed : 4800, 9600, 19200, 38400 BPS
Protocol : ANSI X3.28(1976) 2.5 B1
MODBUS
Bit format : Start bit :1, Data bit : 7 or 8 • For MODBUS 8 bit only
Parity bit : Without, Odd or Even,
Stop bit : 1 or 2 • For MODBUS 1 bit
Maximum connection : 16 units

CT (Current transformer) input module (Z-CT)

Input

Number of CT Input : 12 points
CT Input type and range : CTL-6-P-Z 0.0 to 10.0A
CTL-6-P-N 0.0 to 30.0A
CTL-12-S56-10L-N 0.0 to 100.0A
• Selectable
Sampling cycle : 3 sec
Accuracy :
CTL-6-P-Z : ± 0.3A
CTL-6-P-N : ± 5% of input value or ± 2A (whichever is larger)
CTL-12-S56-10L-N : ± 5% of input value or ± 2A (whichever is larger)

Event (Alarm)

Alarm type : Heater break alarm (HBA) and Heater over current alarm
• Interlock (latch) function is configurable.
• Alarm delay time : 0 to 255 times
Setting method
Via communication or push-button switch
• Automatic alarm setting function is available.
CT allocation
Module address setting and channel setting

Communications

Communication method : RS-485
Communication speed : 4800, 9600, 19200, 38400 BPS
Protocol : ANSI X3.28(1976) 2.5 B1
MODBUS
Bit format : Start bit :1, Data bit : 7 or 8 • For MODBUS 8 bit only
Parity bit : Without, Odd or Even,
Stop bit : 1 or 2 • For MODBUS 1 bit
Maximum connection : 16 units

Specifications

Communication Extension module (Z-COM)

Communications

Communication method : RS-485/RS-422A
Communication speed : 4800, 9600, 19200, 38400 BPS
Protocol : a) ANSI X3.28(1976) 2.5 B1 (RKC standard)
b) MODBUS- RTU
c) PLC special protocol (Mapman)
Correspond to PLC
MITSUBISHI MELSEC series
AnA/AnU common command (QR/QW)
(AnA, QnA series, Q series)
OMRON SYSMAC series
C mode command (WD/RD/\WE/RE)
Bit format : Start bit :1, Data bit : 7 or 8 • For MODBUS 8 bit only
Parity bit : Without, Odd or Even,
Stop bit : 1 or 2 • For MODBUS 1 bit

Communication allocation
Communication 1 (COM PORT 1 to 2)
RKC standard or MODBUS protocol
Communication 2 (COM PORT 3 to 4)
RKC standard, MODBUS protocol or PLC special protocol (Mapman)

Maximum connection
RKC standard/MODBUS protocol : 16 units
PLC special protocol : 4 units

Maximum connection function module
Same function module : 16 modules/unit
Total function module : 31 modules/unit

Z-TIO/Z-DIO/Z-CT/Z-COM Common specifications

General Specifications

Supply Voltage
21.6 to 26.4V DC (Ripple rate 10% p-p or less) [Rating:24VDC]

Power Consumption
a) Z-TIO : Less than 140mA, Surge current : Less than 10A
b) Z-DIO : Less than 70mA, Surge current : Less than 10A
c) Z-CT : Less than 70mA, Surge current : Less than 10A
d) Z-COM : Less than 30mA, Surge current : Less than 10A

Power Failure Effect
A power failure of 4m sec or less will not affect the control action.
• If power failure of more than 20m sec occurs, controller will restart with the state of HOT or COLD start (Only Z-TIO)

Memory Backup : Backed up by non-volatile memory (FRAM)
• Data retaining period : Approx. 10 years
• Number of writing : Approx. 1,000,000,000,000,000 times. (Depending on storage and operating conditions.)

Operating Environments : -10 to 50°C [14 to 122°F]
5 to 95% RH.
Absolute humidity : MAX. W.C 29.3g/m3 dry air at 101.3kPa.

Net Weight
Z-TIO Terminal type : Approx 130g (2ch type), Approx 160g (4ch type)
Z-TIO Connector type : Approx 120g (2ch type), Approx 140g (4ch type)
Z-DIO Terminal type : Approx 150g (DI/DO 8ch type), Approx 120g (DI 8ch type), Approx 140g (DO 8ch type)
Z-DIO Connector type : Approx 130g (DI/DO 8ch type), Approx 100g (DI 8ch type), Approx 120g (DO 8ch type)
Z-CT Terminal type : Approx 160g
Z-CT Connector type : Approx 140g
Z-COM : Approx 110g

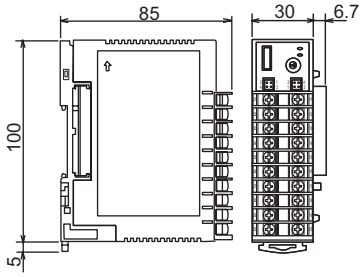
External Dimensions
See external dimensions

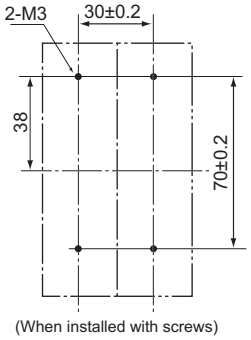
External Dimensions and Rear Terminals

Unit:mm

Temperature Control Module (Z-TIO)
Digital Input Output Module (Z-DIO)
CT Input Module (Z-CT)i

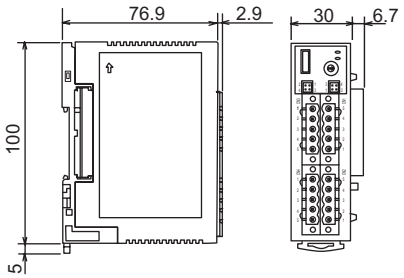
Terminal Type

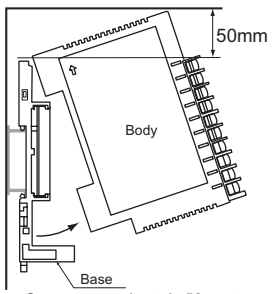




(When installed with screws)

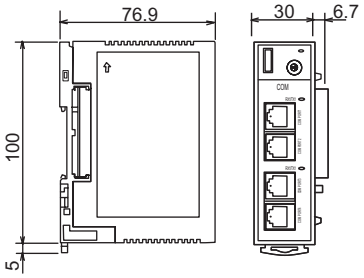
Connector type

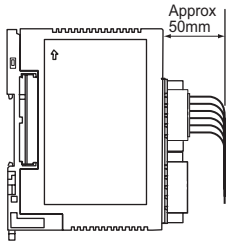




• Secure approximately 50mm to remove the body from the base.

Communication Extension Module (Z-COM)





• Secure approximately 50mm for the connectors and wiring, depending on the connector type.

Model and Suffix Code

● 4ch type Temperature Control Module (Z-TIO-A/C) • If used as a heat and cool module or position proportional controller then it is only 2 channels.

Specifications		Model and Suffix Code (Hardware coding only / Quick start code 1)	PID control	Heat/Cool PID control	Position proportional PID control without FBR
Model		Z-TIO-A (Standard type) Z-TIO-C (PLC special protocol : MAPMAN)			
Wiring method	①	Terminal type: T Connector type: C			
Output 1	②	See Output Code Table	CH1 output	CH1 Heat output	CH1 Open output
Output 2	③	See Output Code Table	CH2 output	CH1 Cool output	CH1 Close output
Output 3	④	See Output Code Table	CH3 output	CH2 Heat output	CH2 Open output
Output 4	⑤	See Output Code Table	CH4 output	CH2 Cool output	CH2 Close output
CT input	⑥	Not supplied: N CT input : 4 points: A			
Initial setting	⑦	No quick start code (Default setting): N Specify quick start code 1: 1 Specify quick start code 1 and 2 (See page 11): 2			
Quick start code 1 — Control Method	⑧	No quick start code: No code 4CH PID control with AT (Reverse action): F 4CH PID control with AT (Direct action): D 2CH Heat/Cool PID control with AT: G 2CH Heat/Cool PID control with AT for extruder (Air cooling type): A 2CH Heat/Cool PID control with AT for extruder (Water cooling type): W 2CH Position proportional PID control without FBR: Z			
Quick start code 1 — Input and range	⑨	No quick start code: No code See Input range Code Table: □□□			
Instrument version	⑩	Version symbol: Y			

● 2ch type Temperature Control Module (Z-TIO-B/D) • If used as a heat and cool module or position proportional controller then it is only 1 channel.

Specifications		Model and Suffix Code (Hardware coding only / Quick start code 1)	PID control	Heat/Cool PID control	Position proportional PID control without FBR
Model		Z-TIO-B (Standard type) Z-TIO-D (PLC special protocol : MAPMAN)			
Wiring method	①	Terminal type: T Connector type: C			
Output 1	②	See Output Code Table	CH1 output	CH1 Heat output	CH1 Open output
Output 2	③	See Output Code Table	CH2 output	CH1 Cool output	CH1 Close output
CT input	④	Not supplied: N CT input : 4 points: A			
Option	⑤	Not supplied: N			
Initial setting	⑥	No quick start code (Default setting): N Specify quick start code 1: 1 Specify quick start code 1 and 2 (See page 11): 2			
Quick start code 1 — Control Method	⑦	No quick start code: No code 4CH PID control with AT (Reverse action): F 4CH PID control with AT (Direct action): D 2CH Heat/Cool PID control with AT: G 2CH Heat/Cool PID control with AT for extruder (Air cooling type): A 2CH Heat/Cool PID control with AT for extruder (Water cooling type): W 2CH Position proportional PID control without FBR: Z			
Quick start code 1 — Input and range	⑧	No quick start code: No code See Input range Code Table: □□□			
Instrument version	⑨	Version symbol: Y			

Input range code table

Thermocouple

Input	Code	Range
K	35	-200.0 to +400.0℃
	40	-200.0 to +800.0℃
	09	0.0 to 400.0℃
	10	0.0 to 800.0℃
	42	-200.0 to +1372.0℃
	02	0 to 400℃
	04	0 to 800℃
	41	-200 to +1372℃
	C7	-328 to +2501℉
	A4	0.0 to 800.0℉
	A1	0 to 800℉
	A2	0 to 1600℉
J	27	-200.0 to +400.0℃
	32	-200.0 to +800.0℃
	08	0.0 to 400.0℃
	09	0.0 to 800.0℃
	29	-200.0 to +1200.0℃
	02	0 to 400℃
	04	0 to 800℃
	15	-200 to +1200℃

Input	Code	Range
J	B6	0.0 to 800.0℉
	B9	-328 to +2192℉
	A1	0 to 800℉
	A2	0 to 1600℉
T	19	-200.0 to +400.0℃
	C5	-328 to +752℉
	C6	0.0 to +752.0℉
S	06	-50 to +1768℃
	A7	-58 to +3214℉
R	07	-50 to +1768℃
	A7	-58 to +3214℉
E	20	-200.0 to +1000.0℃
	B2	0.0 to +800.0℉
	B1	-328 to +1832℉
B	03	0 to 1800℃
	B1	32 to 3272℉
N	02	0 to 1300℃
	A6	32 to 2372℉

Input	Code	Range
PLII (NBS)	A 02	0 to 1390℃
	A A2	0 to 2534℉
W5Re/W26Re (ASTM)	W 03	0 to 2300℃
	W B1	32 to 4208℉

RTD

Input	Code	Range
Pt100	D 35	-200.0 to +850.0℃
	D 21	-200.0 to +200.0℃
	D C6	-328.0 to +752.0℉
	D D2	-328 to +1562℉
JPt100	P 30	-200.0 to +640.0℃
	P C6	-328.0 to +752.0℉
	P D2	-328 to +1184℉

DC Current • voltage

Input	Code	Range
0 to 10mV	1 01	0.0 to 100.0%
0 to 100mV	2 01	
0 to 1V	3 01	
0 to 5V	4 01	

Input	Code	Range
0 to 10V	5 01	0.0 to 100.0%
1 to 5V	6 01	
0 to 20mA	7 01	
4 to 20mA	8 01	

Output signal code table

M	Relay contact output	V	Voltage pulse output (0/12V DC)			T	Triac output	D	Open collector output		
3	0 - 1V DC	4	0 - 5V DC	5	0 - 10V DC	6	1 - 5V DC	7	0 - 20mA DC	8	4 - 20mA DC

Model and Suffix Code

Temperature Control Nodule (Z-TIO) Quick Start Code 2

- Quick start code 2 tells the factory to ship with each parameter preset to the values detailed as specified by the customer. Quick start code is not necessarily specified when ordering, unless the preset is requested. These parameters are software selectable items and can be re-programmed in the field via the manual.

Specifications		Quick Start Code 2 ① ② ③ ④–⑤ ⑥
Event 1 type	①	See Event Type Code Table □
Event 2 type	②	See Event Type Code Table □
Event 3 type	③	See Event Type Code Table □
Event 4 type	④	See Event Type Code Table □
CT type	⑤	No CT input N
		CTL-6-P-N P
		CTL-12-S56-10L-N S
Communication Protocol	⑥	ANSI/RKC standard protocol 1
		MODBUS protocol 2
		PLC special protocol (MAPMAN) (Mitsubishi MELSEC A/Q series) • Only Z-TIO-C/D 3
		PLC special protocol (MAPMAN) (Mitsubishi MELSEC FX series) • Only Z-TIO-C/D 5

Event Type Code Table

Event Type	Code
No event	N
Deviation High	A
Deviation Low	B
Deviation High/Low	C
Band	D
Deviation High with Alarm Hold	E
Deviation Low with Alarm Hold	F
Deviation High/Low with Alarm Hold	G
Process High	H
Process Low	J
Process High with Alarm Hold	K
Process Low with Alarm Hold	L

Event Type	Code
Deviation High with Alarm Re-Hold	Q
Deviation Low with Alarm Re-Hold	R
Deviation High/Low with Alarm Re-Hold	T
Set value High	V
Set value Low	W
MV value High	1
MV value Low	2
Cool side MV value High	3
Cool side MV value Low	4
LBA (Loop break alarm) [1]	5
Temperature rise completion [2]	6

[1] LBA is available with event 4 only.
[2] Temperature rise completion is available with event 3 only.

● Digital Input/Output Module (Z-DIO-A)

Specifications		Model and Suffix Code	Hardware coding / Quick start code
		Z-DIO-A	①–②③/④–⑤⑥⑦–⑧
Wiring method	①	Terminal type T Connector type C	
Number of digital input (DI)	②	Not supplied N DI 8 points A	
Digital output (DO) signal	③	Not supplied N Relay contact output, 8 points M Open Collector output, 8 points D	
Quick start code	④	No quick start code (Default setting) N Specify quick start code 1	
Quick start code: Digital input (DI) allocation	⑤	No quick start code No symbol No digital input N See DI allocation table □	
Quick start code: Digital output (DO) allocation (DO1 to DO4)	⑥	No quick start code No symbol No digital output N See DO1 to 4 allocation table □	
Quick start code: Digital output (DO) allocation (DO5 to DO8)	⑦	No quick start code No symbol No digital output N See DO5 to 8 allocation table □	
Quick start code: Communication protocol	⑧	No quick start code No symbol ANSI/RKC standard protocol 1 MODBUS protocol 2	

DO1 to 4 Allocation Table

Code	Digital output			
	DO 1	DO 2	DO 3	DO 4
01	DO1 manual output	DO2 manual output	DO3 manual output	DO4 manual output
02	Event 1 (All CH)	Event 2 (All CH)	Event 3 (All CH)	Event 4 (All CH)
03	Event 1 (CH1)	Event 2 (CH1)	Event 3 (CH1)	Event 4 (CH1)
04	Event 1 (CH2)	Event 2 (CH2)	Event 3 (CH2)	Event 4 (CH2)
05	Event 1 (CH3)	Event 2 (CH3)	Event 3 (CH3)	Event 4 (CH3)
06	Event 1 (CH4)	Event 2 (CH4)	Event 3 (CH4)	Event 4 (CH4)
07	Event 1 (CH1)	Event 1 (CH2)	Event 1 (CH3)	Event 1 (CH4)
08	Event 2 (CH1)	Event 2 (CH2)	Event 2 (CH3)	Event 2 (CH4)
09	Event 3 (CH1)	Event 3 (CH2)	Event 3 (CH3)	Event 3 (CH4)
10	Event 4 (CH1)	Event 4 (CH2)	Event 4 (CH3)	Event 4 (CH4)
11	TIO HBA (CH1)	TIO HBA (CH2)	TIO HBA (CH3)	TIO HBA (CH4)
12	Burnout (CH1)	Burnout (CH2)	Burnout (CH3)	Burnout (CH4)
13	Temperature rise	HBA (Comprehensive output)	Burnout (All CH)	DO4 manual output

DO5 to 8 Allocation Table

Code	Digital output			
	DO 5	DO 6	DO 7	DO 8
01	DO5 manual output	DO6 manual output	DO7 manual output	DO8 manual output
02	Event 1 (All CH)	Event 2 (All CH)	Event 3 (All CH)	Event 4 (All CH)
03	Event 1 (CH1)	Event 2 (CH1)	Event 3 (CH1)	Event 4 (CH1)
04	Event 1 (CH2)	Event 2 (CH2)	Event 3 (CH2)	Event 4 (CH2)
05	Event 1 (CH3)	Event 2 (CH3)	Event 3 (CH3)	Event 4 (CH3)
06	Event 1 (CH4)	Event 2 (CH4)	Event 3 (CH4)	Event 4 (CH4)
07	Event 1 (CH1)	Event 1 (CH2)	Event 1 (CH3)	Event 1 (CH4)
08	Event 2 (CH1)	Event 2 (CH2)	Event 2 (CH3)	Event 2 (CH4)
09	Event 3 (CH1)	Event 3 (CH2)	Event 3 (CH3)	Event 3 (CH4)
10	Event 4 (CH1)	Event 4 (CH2)	Event 4 (CH3)	Event 4 (CH4)
11	TIO HBA (CH1)	TIO HBA (CH2)	TIO HBA (CH3)	TIO HBA (CH4)
12	Burnout (CH1)	Burnout (CH2)	Burnout (CH3)	Burnout (CH4)
13	Temperature rise	HBA (Comprehensive output)	Burnout (All CH)	DO8 manual output

DI Allocation Table

Code	Digital input							
	DI 1	DI 2	DI 3	DI 4	DI 5	DI 6	DI 7	DI 8
01	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Alarm interlock reset	AUTO/MANUAL
02	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Alarm interlock reset	LOCAL/REMOTE
03	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Alarm interlock reset	Feed-forward start
04	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Alarm interlock reset	Soak stop
05	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Alarm interlock reset	STOP/RUN
06	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	AUTO/MANUAL	LOCAL/REMOTE
07	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	AUTO/MANUAL	Feed-forward start
08	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	AUTO/MANUAL	Soak stop
09	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	AUTO/MANUAL	STOP/RUN
10	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	LOCAL/REMOTE	Feed-forward start
11	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	LOCAL/REMOTE	Soak stop
12	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	LOCAL/REMOTE	STOP/RUN
13	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	EDS start	Soak stop
14	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	EDS start	STOP/RUN
15	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	Soak stop	STOP/RUN
16	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	LOCAL/REMOTE	Feed-forward start
17	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	LOCAL/REMOTE	Soak stop
18	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	LOCAL/REMOTE	STOP/RUN
19	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	EDS start	Soak stop
20	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	EDS start	STOP/RUN
21	Memory area selection (1 to 8)			Area set	Alarm interlock reset	AUTO/MANUAL	Soak stop	STOP/RUN
22	Memory area selection (1 to 8)			Area set	AUTO/MANUAL	LOCAL/REMOTE	EDS start	Soak stop
23	Memory area selection (1 to 8)			Area set	AUTO/MANUAL	LOCAL/REMOTE	EDS start	STOP/RUN
24	Memory area selection (1 to 8)			Area set	AUTO/MANUAL	LOCAL/REMOTE	Soak stop	STOP/RUN
25	Memory area selection (1 to 8)			Area set	LOCAL/REMOTE	Feed-forward start	Soak stop	STOP/RUN
26	Memory area selection (2 points)	Area set	Alarm interlock reset	STOP/RUN	AUTO/MANUAL	LOCAL/REMOTE	Operation mode 1	Operation mode 2
27	Memory area selection (1 to 8)			Area set	Operation mode 1	Operation mode 2	EDS start 1	EDS start 2
28	Memory area selection (2 points)	Area set	Alarm interlock reset	Area set	AUTO/MANUAL	LOCAL/REMOTE	EDS start 1	EDS start 2
29	EDS start 1	EDS start 2	Alarm interlock reset	Area set	AUTO/MANUAL	LOCAL/REMOTE	Operation mode 1	Operation mode 2

• Area setting is set to disabled at the factory.
• EDS function : External disturbance suppression function

Operation mode 1 : Only monitoring. (Control stop, Event function OFF)
Operation mode 2 : Monitoring and Event function (Control stop)

Model and Suffix Code

● CT (Current transformer) Input Module (Z-CT)

Specifications		Model and Suffix Code	Hardware coding only	Quick start code
Model		Z-CT	1 / 2	3 4
Wiring method	①	Terminal type Connector type	T C	
Quick start code	②	No quick start code (Default setting) Specify quick start code		N 1
Quick start code: CT type	③	No quick start code CTL-6-P-N (0 to 30A) CTL-12-S56-10L-N (0 to 100A) CTL-6-P-Z (0 to 10A)		No code P S Z
Quick start code: Communication protocol	④	No quick start code ANSI/RKC standard protocol MODBUS protocol		No code 1 2

● Communication Module (Z-COM-A)

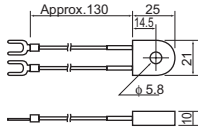
Specifications		Model and Suffix Code	Hardware coding only	Quick start code
Model		Z-COM-A	1 2 / 3	4 5 6
COM PORT 1,2 communication	①	RS-422A RS-485	4 5	
COM PORT 3,4 communication	②	RS-422A RS-485		4 5
Quick start code	③	No quick start code (Default setting) Specify quick start code		N 1
Quick start code: COM PORT 1,2 communication protocol	④	No quick start code ANSI/RKC standard protocol MODBUS protocol		No code 1 2
Quick start code: COM PORT 3,4 communication protocol	⑤	No quick start code ANSI/RKC standard protocol MODBUS protocol PLC special protocol (Mitsubishi MELSEC A/Q series) PLC special protocol (OMRON SYSMAC series) PLC special protocol (Mitsubishi MELSEC FX series)		No code 1 2 3 4 5
Quick start code: Maximum channel data (For PLC special communication)	⑥	No quick start code 16-channels specification 32-channels specification 48-channels specification 64-channels specification		No code A B C D

● Accessories

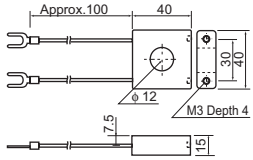
Current transformer for heater break alarm (HBA) * Separately

(Unit : mm)

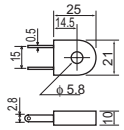
Model : CTL–6–P–N (0 to 30A)



Model : CTL-12-S56-10L-N (0 to 100A)



Model : CTL–6–P–Z (0 to 10A)
[Available for Z-CT module only]

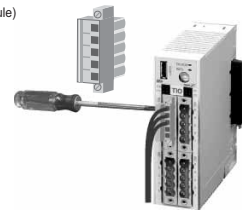


1 (U.R.D.Co.,LTD product)

Plug-in connector * Separately

(For connector type module)

Model : SRZP-02
(2 piece)
(Side screw type)
Equivalent part :
MSTB 2,5/5-STF-5,08
PHOENIX CONTACT



Model : SRZP-01
(2 piece)
(Front screw type)
Equivalent part :
FRONT-MSTB 2,5/5-STF-5,08
PHENIX CONTACT

Front terminal cover * Separately

Model :
KSRZ-510A

Termination resistor connector * Separately

Model : W-BW-01
(For RS-485)
Model : W-BW-02
(For RS-422A)

End plates * Separately

Model : DEP-01
(2 piece)

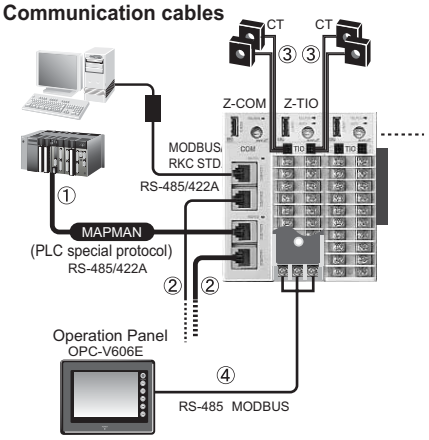
To firmly fix the modules, use end plates on both sides of the mounted modules on the DIN rail.

Standard accessory

Power supply terminal cover
Model : KSRZ-518A

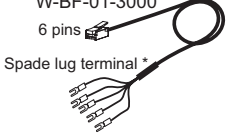
Connector cover
Model : KSRZ-517A

Communication cables



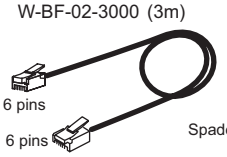
* Separately

① Model : W-BF-01-3000 (3m)

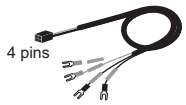


* Other types of cables such as cable with 9-pin D-SUB connector are also available. Please contact RKC.

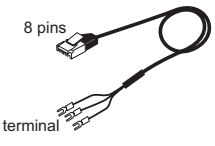
② Model :
W-BF-02-500 (0.5m)
W-BF-02-1000 (1m)
W-BF-02-3000 (3m)



③ Model :
W-BW-03-1000 (1m)
W-BW-03-2000 (2m)
W-BW-03-3000 (3m)

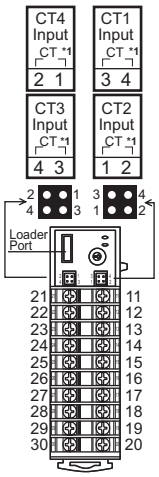


④ Model : V6-MLT (3m)



Terminal/ Connector Configuration

● Temperature Control Module (Z-TIO) Terminal type

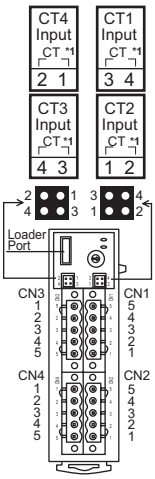


No.	Description		No.	Description	
21	Measured Input 3 (CH3)	(1) Thermocouple (2) RTD (3) Voltage/Current	11	Control Output 1 (CH1)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
22			12		
23			13	Measured Input 1 (CH1)	(1) Thermocouple (2) RTD (3) Voltage/Current
24	Control Output 3 (CH3)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac	14		
25			15		
26	Measured Input 4 (CH4)	(1) Thermocouple (2) RTD (3) Voltage/Current (4) Feedback resistance	16	Control Output 2 (CH2)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
27			17		
28			18	Measured Input 2 (CH2)	(1) Thermocouple (2) RTD (3) Voltage/Current (4) Feedback resistance
29	Control Output 4 (CH4)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac	19		
30			20		

CT : Current transformer for heater break alarm
Feedback resistance input is used only for monitoring.
<Caution> Voltage / current outputs are not isolated from the power supply voltage.

*1 : Optional

● Temperature Control Module (Z-TIO) Connector type



CN (Connector) 3

No.	Description	
1	Measured Input 3 (CH3)	(1) Thermocouple (2) RTD (3) Voltage/Current
2		
3		
4	Control Output 3 (CH3)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
5		

CN (Connector) 1

No.	Description	
5	Control Output 1 (CH1)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
4		
3	Measured Input 1 (CH1)	(1) Thermocouple (2) RTD (3) Voltage/Current
2		
1		

CN (Connector) 4

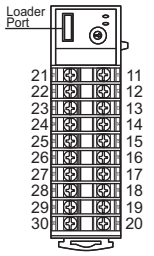
No.	Description	
1	Measured Input 4 (CH4)	(1) Thermocouple (2) RTD (3) Voltage/Current (4) Feedback resistance
2		
3		
4	Control Output 4 (CH4)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
5		

CN (Connector) 2

No.	Description	
5	Control Output 2 (CH2)	(1) Relay contact (2) Voltage pulse/Voltage/ Current/Open collector (3) Triac
4		
3	Measured Input 2 (CH2)	(1) Thermocouple (2) RTD (3) Voltage/Current (4) Feedback resistance
2		
1		

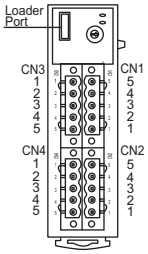
• For 2CH specifications, connectors CN3 and CN4 are not mounted. *1 : Optional
CT : Current transformer for heater break alarm
Feedback resistance input is used only for monitoring.
<Caution> Voltage / current outputs are not isolated from the power supply voltage.

● Digital Input/Output Module (Z-DIO) Terminal type



No.	Description		No.	Description	
21	DI4	Digital Input 1 to 4 Voltage sink type input	11	COM 24VDC COM	Digital Output 1 to 4 (1) Relay contact (2) Open collector
22	DI3		12	DO1 DO1	
23	DI2		13	DO2 DO2	
24	DI1		14	DO3 DO3	
25	COM 24VDC		15	DO4 DO4	
26	DI8	Digital Input 5 to 8 Voltage sink type input	16	COM 24VDC COM	Digital Output 5 to 8 (1) Relay contact (2) Open collector
27	DI7		17	DO5 DO5	
28	DI6		18	DO6 DO6	
29	DI5		19	DO7 DO7	
30	COM 24VDC		20	DO8 DO8	

● Digital Input/Output Module (Z-DIO) Connector type



CN (Connector) 3

No.	Description	
1	DI4	Digital Input 1 to 4 Voltage sink type input
2	DI3	
3	DI2	
4	DI1	
5	COM 24VDC	

CN (Connector) 1

No.	Description	
5	COM 24VDC COM	Digital Output 1 to 4 (1) Relay contact (2) Open collector
4	DO1 DO1	
3	DO2 DO2	
2	DO3 DO3	
1	DO4 DO4	

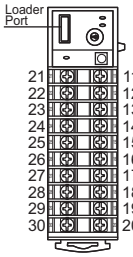
CN (Connector) 4

No.	Description	
1	DI8	Digital Input 5 to 8 Voltage sink type input
2	DI7	
3	DI6	
4	DI5	
5	COM 24VDC	

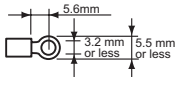
CN (Connector) 2

No.	Description	
5	COM 24VDC COM	Digital Output 5 to 8 (1) Relay contact (2) Open collector
4	DO5 DO5	
3	DO6 DO6	
2	DO7 DO7	
1	DO8 DO8	

● CT (Current transformer) Input Module (Z-CT) Terminal type

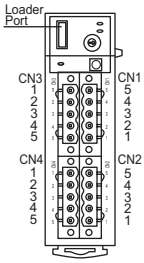


Screw Size : M3 X 7
Solderless terminal is recommended



No.	Description		No.	Description	
21	CT9	CT Input 7 to 9	11	CT1	CT Input 1 to 3
22	COM		12	COM	
23	CT8		13	CT2	
24	COM		14	COM	
25	CT7		15	CT3	
26	CT12	CT Input 10 to 12	16	CT4	CT Input 4 to 6
27	COM		17	COM	
28	CT11		18	CT5	
29	COM		19	COM	
30	CT10		20	CT6	

● CT (Current transformer) Input Module (Z-CT) Connector type



CN (Connector) 3

No.	Description	
1	CT9	CT Input 7 to 9
2	COM	
3	CT8	
4	COM	
5	CT7	

CN (Connector) 1

No.	Description	
5	CT1	CT Input 1 to 3
4	COM	
3	CT2	
2	COM	
1	CT3	

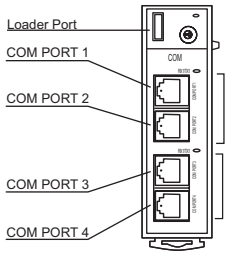
CN (Connector) 4

No.	Description	
1	CT12	CT Input 10 to 12
2	COM	
3	CT11	
4	COM	
5	CT10	

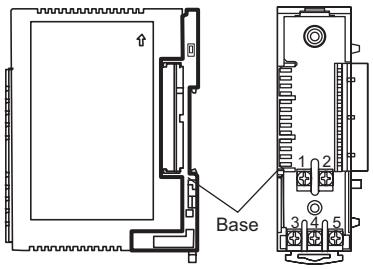
CN (Connector) 2

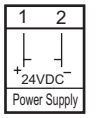
No.	Description	
5	CT4	CT Input 4 to 6
4	COM	
3	CT5	
2	COM	
1	CT6	

● Communication Extension Module (Z-COM)

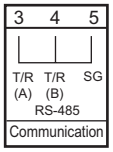


● Z-TIO/DIO/CT/COM

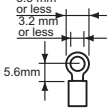




Power Supply
• Supply the power to only one of the joined modules. When power is supplied to any one of the joined modules, all of the joined modules will receive power.



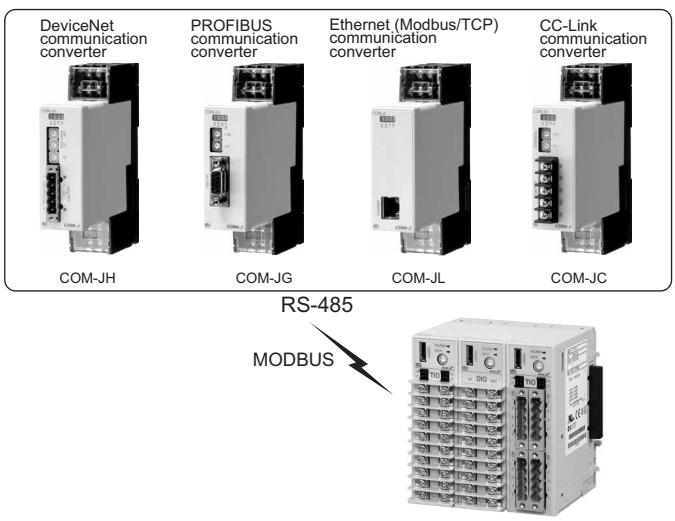
Screw Size : M3 X 7
Solderless terminal is recommended

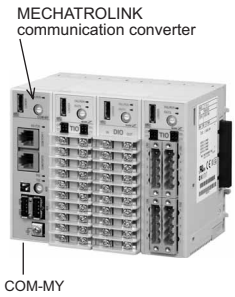


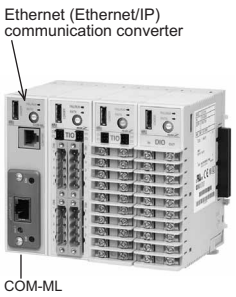
• Z-COM: No.3,4,5 terminals are not mounted.

Communication Converter Model Code

The SRZ can be connected to various Open Networks via a gateway.







Model and Suffix Code

● DeviceNet communication converter (COM-JH)

Specifications	Model Code				
	COM - J	H - □	∗	02	
Type	DeviceNet communication converter	H			
Connector for DeviveNet	Open connector (Unshielded type)		N		
	Micro connector (Shield type)		1		
Available controller	SRZ			02	

● PROFIBUS communication converter (COM-JG)

Specifications	Model Code			
	COM - J	G	∗	02
Type	DeviceNet communication converter	G		
Available controller	SRZ			02

● Ethernet (Modbus/TCP) communication converter (COM-JL)

Specifications	Model Code				
	COM - J	L - □	∗	02	
Type	Ethernet communication converter	L			
Communication type	Modbus/TCP		N		
Available controller	SRZ			02	

● CC-Link communication converter (COM-JC)

Specifications	Model Code				
	COM - J	C	∗	02	- □
Type	CC-Link communication converter	C			
Available controller	SRZ			02	
RUN/STOP logic selection	0 : RUN, 1 : STOP				1
	0 : STOP, 1 : RUN				2

● Ethernet (Ethernet/IP) communication converter (COM-ML)

Specifications	Model Code				
	COM - M	L - 2		□ ∗	02
Type	Ethernet communication converter	L			
Ethernet communication type	Ethernet/IP		2		
Host communication type	RS-422A			4	
	RS-485			5	
Available controller	SRZ				02

● MECHATROLINK communication converter (COM-MY)

Specifications	Model Code			
	COM - M	Y - □	∗	02
Type	MECHATROLINK communication converter	Y		
Host communication type	RS-422A		4	
	RS-485		5	
Available controller	SRZ			02