# **RKC Rex B Series**

## **HMI Factory Setting:**

Baud rate: 9600, 7, Even, 2 (RS-422)

Controller Station Number: 1

Control Area / Status Area: None/None

#### Connection

#### a. RS-422 (DOP-A/AE Series)

DOP Series		Controller		PLC1.
9 pin D-sub m	ale			
PLC1." PLC1."				
RXD- (1)			TA (12)	
PLC1.if PLC1.if				
RXD+ (2)			TB (13)	
Provide Provide				
TXD+ (3)	1		RB (15)	
Provin Provin				
TXD- (4)	*		RA (14)	
-, c/.ii -, c/.ii				

### b. RS-422 (DOP-AS35/AS38/AS57 Series)

DOP Series		Controller		Č/ .
9 pin D-sub m	iale			
R- —			TA (12)	
PLC1.II PLC1.II				
R+ —			TB (13)	
PLC1.ir PLC1.ir				
T+ -			RB (15)	
PLC1:11 PLC1:11				
T- <del>-</del>			RA (14)	
PCV.ii PCCV.ii	oLC1.ir	oLC1.11	aLC <sup>A,M</sup> aL	ر ۱۰ <u>۰</u>

## c. RS-422 (DOP-B Series)

DOP Series 9 pin D-sub male	Controller	
RXD- (9)	TA (12)	
RXD+ (4)	TB (13)	
TXD+ (1)	RB (15)	
TXD- (6)	RA (14)	P/C//

# Definition of PLC Read/Write Address

# a. Registers

Туре	Format Channel No.(n)	Read/Write Range	Data Length	Note
Temperature	M1:n	M1:1 - M1:8	Word	Read
measured-value (PV)				only, <u>1</u>
Control output status	<b>O1</b> :n	<b>01</b> :1 - <b>01</b> :8	Word	Read
(Heating-side)				only, <u>1</u>
Control output status	O2:n	<b>O2</b> :1 - <b>O2</b> :8	Word	Read
(Cooling-side)				only, <u>1</u>
Heater break alarm status	AC:n	AC:1 - AC:8	Byte	Read only
Current transformer input	M2:n	M2:1 - M2:8	Word	Read
value	I PLC1:II PI	C1:11 PLC1:11 PLC1:	PLC1.II	only, <u>1</u>
Error code	ER:n	ER:1	Word	Read only
Communication Error code	EC:n	EC:1	Word	Read only
PID/AT identification	G1:n	<b>G1</b> :1 - <b>G1</b> :8	Byte	
Temperature set-value (SV)	<b>S1</b> :n	<b>S1</b> :1 - <b>S1</b> :8	Word	<u>1</u> , C^
Proportional band	<b>P1</b> :n	P1:1 - P1:8	Word	1
(Heating-side)	I PLC1:II PI	C1:11 PLC1:11 PLC1:	PLC1.II	PLC1.ir
Proportional band	<b>P2</b> :n	<b>P2</b> :1 - <b>P2</b> :8	Word	1
(Cooling-side)	I PLC1:II PI	C1:11 PLC1:11 PLC1:	PLC1.II	PLC1.ir
Integral time	I1:n	l1:1 - l1:8	Word	
Derivative time	D1:n	D1:1 - D1:8	Word	PLC1.ii

Туре	Format Channel No.(n)	Read/Write Range	Data Length	Note
Anti-reset windup	<b>W1</b> :n	<b>W1</b> :1 - <b>W1</b> :8	Word	
Deadband	V1:n	<b>V1</b> :1 - <b>V1</b> :8	Word	<u>1</u>
Alarm 1 setting	A1:n	<b>A1</b> :1 - <b>A1</b> :8	Word	1
Alarm 2 setting	<b>A2:</b> n	<b>A2</b> :1 - <b>A2</b> :8	Word	1
Channel used/unused	El:n	EI:1 - EI:8	Byte	- 643/
Proportional cycle	T0:n	T0:1 - T0:8	Word	VV-
(Heating–side)	S		. CA.W	
Proportional cycle	T1:n	T1:1 - T1:8	Word	PLO
(Cooling-side)	N 1 N	CA 31 CA 31 CA	N ~ 15	77.70
PV bias	PB:n	<b>PB</b> :1 - <b>PB</b> :8	Word	1
Heater break alarm setting	<b>A3</b> :n	<b>A3</b> :1 - <b>A3</b> :8	Word	<u>1</u>
Memory area execution NO.	<b>ZA</b> :n	<b>ZA</b> :1	Byte	PLO
setting	S -4 M	-A.W	N ~ N	77.70
Control response parameter	CA:n	CA:1 - CA:8	Byte	PLO
Output Monitoring time	TU:n	TU:1	Word	~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Event function selection	XK:n	<b>XK</b> :1	Byte	PV

#### b. Contacts

Type	Format	Read/Write Range	Note
Турс	Channel No.(b)	Read/ Write Range	14010
Alarm 1 status	<b>AA</b> :b	<b>AA</b> :1 - <b>AA</b> :8	Read only
Alarm 2 status	AB:b	<b>AB</b> :1 - <b>AB</b> :8	Read only
Burnout status	<b>B1</b> :b	<b>B1</b> :1 - <b>B1</b> :8	Read only
Control run/stop	X1:b	X1:1	brcs
Alarm interlock release	AR:b	AR:1	Read only
Event input status	L1:b	L1:1	Read only

# NOTE

1) The input value and display value of RKC Rex B Series must in one decimal place. Please refer to RKC user manual to ensure if the temperature controller supports one decimal place.