RKC RB/CB Series

Supported Series: RKC RB/CB Series
Website: https://www.rkcinst.co.jp/

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	RKC RB/CB Series		
PLC I/F	RS485 2W		
Baud rate	19200	2400 ~ 19200	
Data bits	8	7,8	
Parity	None	None, Odd, Even	
Stop bits	1	1,2	
PLC sta. no.	0	0 ~ 99	

Device Address:

Bit/Word	Device type	Format	Range	Memo
B	AA	D	0	
B	AB	D	0	
B	B1	D	0	
B	SR	D	0	0: Run / 1: Stop
B	Q1	D	0	
B	Q2	D	0	
B	AC	D	0	
B	AD	D	0	
B	DA	D	0	F01 block selection
B	DK	D	0	F02 block selection
B	DL	D	0	F03 block selection
B	DM	D	0	F04 block selection
B	DN	D	0	F05 block selection
B	DO	D	0	F06 block selection
B	DQ	D	0	F07 block selection
B	DR	D	0	F08 block selection
B	DS	D	0	F09 block selection
B	DT	D	0	F10 block selection
B	LF	D	0	Event 1 interlock

Bit/Word	Device type	Format	Range	Memo
B	LG	D	0	Event 2 interlock
B	LH	D	0	Event 3 interlock
B	LI	D	0	Event 4 interlock
B	OT	D	0	Bumpless mode setting
B	AJ_Bit	Ddd	0 ~ 15	Event state
B	L1_Bit	Ddd	0 ~ 15	DI state
B	Q3_Bit	Ddd	0 ~ 15	Output state
B	L0_Bit	Ddd	0 ~ 15	Operation mode
B	LP_Bit	Ddd	0 ~ 15	
B	LM_Bit	Ddd	0 ~ 15	
W	M1	D	0	Measured value monitor
W	M2	D	0	Current transfomer input value monitor
W	M3	D	0	Current transfomer input value monitor
W	ER	D	0	Error code: 0~255
W	S1	D	0	Set value 1
W	A1	D	0	Event 1 set value [high]
W	A2	D	0	Event 2 set value [high]
W	A3	D	0	Heater break alarm 1 set value
W	A4	D	0	Heater break alarm 2 set value
W	A5	D	0	Control loop break alarm time
W	A6	D	0	LBA deadband (LBD)
W	G1	D	0	Autotunin (AT)
W	P1	D	0	Proportional band [heat-side]
W	I1	D	0	Integral time [heat-side]
W	D1	D	0	Derivative time [heat-side]
W	W1	D	0	Anti-reset windup (ARW)
W	T0	D	0	Proportional cycle time [heat-side]
W	P2	D	0	Proportional band [cool-side]
W	V1	D	0	Overlap/Deadband
W	T1	D	0	Proportional cycle time
W	PB	D	0	PV bias
W	LK	D	0	Set lock level
W	EB	D	0	EEPROM mode
W	EM	D	0	EEPROM state
W	IR	D	0	Interlock release
W	TD	D	0	Event 1 delay timer
W	TG	D	0	Event 2 delay timer

Bit/Word	Device type	Format	Range	Memo
W	O1	D	0	Manipulated output value monitor
W	O2	D	0	Manipulated output value monitor
W	ID	D	0	Model ID
W	VR	D	0	ROM version
W	AJ	D	0	
W	L1	D	0	
W	Q3	D	0	
W	MS	D	0	Set value monitor
W	TR	D	0	Remaining-time monitor
W	L0	D	0	
W	LZ	D	0	Actural SV selection number
W	J1	D	0	Auto/manual transfer
W	LP	D	0	Monitor selection
W	LM	D	0	Mode selection
W	S2	D	0	Set value 2
W	S3	D	0	Set value 3
W	S4	D	0	Set value 4
W	ZB	D	0	SV selection
W	TH	D	0	Time 1
W	TI	D	0	Time 2
W	TJ	D	0	Time 3
W	TK	D	0	Time 4
W	ZC	D	0	Timer function
W	RR	D	0	Repeat execution times
W	HH	D	0	Setting change rate limiter (up)
W	HL	D	0	Setting change rate limiter (down)
W	BT	D	0	Event 1 set value [low]
W	BU	D	0	Event 2 set value [low]
W	A7	D	0	Event 3 set value [high]
W	BV	D	0	
W	A8	D	0	Event 4 set value [high]
W	BW	D	0	
W	ST	D	0	Startup tuning (ST)
W	CB	D	0	Fine tuning setting
W	VI	D	0	Minimum ON/OFF time of proportioning cylcle [heat-side]
W	OH	D	0	Output limiter (high)

Bit/Word	Device type	Format	Range	Memo
W	OL	D	0	Output limiter (low)
W	VJ	D	0	Minimum ON/OFF time of proportioning cycle [cool-side]
W	F1	D	0	PV digital filter
W	ON	D	0	Manual manipulated output value
W	HP	D	0	Holding peak value ambient temperature monitor
W	UT	D	0	Integrated operating time monitor
W	XI	D	0	Input type
W	XU	D	0	Decimal point position
W	BS	D	0	Burnout direction
W	XV	D	0	Input scale high
W	XW	D	0	Input scale low
W	SH	D	0	Setting limiter (high)
W	SL	D	0	Setting limiter (low)
W	DU	D	0	PV flashing display at input error
W	H2	D	0	DI assignment
W	SS	D	0	Output status at STOP mode
W	LB	D	0	Transmission output type
W	CV	D	0	Transmission output scale high
W	CW	D	0	Transmission output scale low
W	JK	D	0	AO full scale adjustment value
W	JL	D	0	AO zero adjustment value
W	XA	D	0	Event 1 type
W	WA	D	0	Event 1 hold action
W	HA	D	0	Event 1 differential gap
W	OA	D	0	Event 1 output state at input burnout
W	Z1	D	0	Energized/De-energized of Event 1 output
W	XB	D	0	Event 2 type
W	WB	D	0	Event 2 hold action
W	HB	D	0	Event 2 differential gap
W	OB	D	0	Event 2 output state at input burnout
W	NB	D	0	Energized/De-energized of Event 2 output
W	VC	D	0	Event 3 type
W	WC	D	0	Event 3 hold action
W	HC	D	0	Event 3 differential gap
W	OC	D	0	Event 3 output state at input burnout

Bit/Word	Device type	Format	Range	Memo
W	NC	D	0	Energized/De-energized of Event 3 output
W	TE	D	0	Event 3 delay timer
W	XD	D	0	Event 4 type
W	WD	D	0	Event 4 hold action
W	HD	D	0	Event 4 different gap
W	OD	D	0	Event 4 output state at input burnout
W	ND	D	0	Energized/De-energized of Event 4 output
W	TF	D	0	Event 4 delay timer
W	XR	D	0	CT ratio (Number of turns)
W	EH	D	0	Number of HBA delay times
W	CA	D	0	Direct/Reverse action
W	XQ	D	0	Cool action
W	IV	D	0	ON/OFF action differential gap (upper)
W	IW	D	0	ON/OFF action differential gap (lower)
W	WH	D	0	Control output at burnout
W	KA	D	0	Derivative action
W	G3	D	0	AT cycles
W	GH	D	0	AT differential gap time
W	SU	D	0	ST start condition
W	HU	D	0	Setting change rate limiter unit time
W	RU	D	0	Timer time unit
W	DX	D	0	STOP display selection
W	TA	D	0	Time setting of proportional cycle time [heat-side]
W	TB	D	0	Time setting of proportional cycle time [cool-side]

Wiring Diagram:

Diagram 1

RS-485 2W

The serial port pin assignments may vary between HMI models, please click the following link for more information.

HMI		PLC
Link		RB Series RS485 2W Terminal
Data-	⟷	14 T/R(A)
Data+	⟷	15 T/R(A)
GND	⟷	13 SG