



## Safety precautions

The products in this manual are industrial products and are all open-type housing designs. It is essential to install these products within a control cabinet that is safeguarded against dust, moisture, and accidents such as electric shocks or physical impacts. Additionally, protective measures must be taken to prevent malfunctions or damage caused by improper operation or accidents involving non-maintenance personnel. Failure to do so may lead to serious risks to personnel safety and potential loss of property.

M100

Please refer to the M100 series hardware operation manual for more detailed information.



Batter

M100 CPU CR2430

5.3

The M100 series CPUs are equipped with built-in CR2430 batteries. Replacement batteries must be purchased from HCFA. A professional electrical engineer, wearing insulated gloves and with power turned off, should replace them as described in Section 5.3.

Les CPU de la série M100 sont équipés de batteries CR2430 intégrées. Les batteries de remplacement doivent être achetées auprès de HCFA. Un ingénieur électrique professionnel, portant des gants isolants et avec le courant coupé, devrait les remplacer comme décrit dans la section 5.3.

## Model identification









\_\_\_ **M1** \_\_\_ \_\_\_ \_\_\_ **M** \_\_\_ \_\_\_











⑫  
⑬  
⑭





⑬ ⑭








Indicator description

PWR	(Power)	(Green)		Not lit	Power of
				Lit	Power on
RUN	(Run)	(Green)		Not lit	Stop
				Lit	Run
ERR	(System error)	(Red)		Not lit	No error
				Lit	Error
COM	RS485/RS232 (RS485/RS232 communication)	(Yellow)		Not lit	No communication
				Blinking	Communication in progress

IN N (0-7)	(Input)	(Green)		Not lit	N	The input channel N has not detected input signals
				Lit	N	The input channel N has detected input signals
OUT N (0-5)	(Output)	(Green)		Not lit	N	There is no output signal in this channel
				Lit	N	There are output signals in this channel

IN N (0-7 10-13)	(Input)	(Green)		Not lit	N	The input channel N has not detected input signals
				Lit	N	The input channel N has detected input signals
OUT N (0-7)	(Output)	(Green)		Not lit	N	There is no output signal in this channel
				Lit	N	There are output signals in this channel

IN N (0-7 10-17)	(Input)	(Green)		Not lit	N	The input channel N has not detected input signals
				Lit	N	The input channel N has detected input signals
OUT N (0-7 10-15)	(Output)	(Green)		Not lit	N	There is no output signal in this channel
				Lit	N	There are output signals in this channel

PWR	(Power)	(Green)		Not lit	Power of
				Lit	Power on
RUN	(Run)	(Green)		Not lit	Stop
				Lit	Run
ERR	(System error)	(Red)		Not lit	No error
				Lit	Error
COM1	RS232 (RS232 communication)	(Yellow)			



E	S/S	I1	I3	I5	I7																					
L*1	N	I0	I2	I4	I6																					
OV	Q0	Q1	Q2	Q4																						
24V	COM0*2	COM1	COM2	Q3	Q5																					
E	S/S	I1	I3	I5	I7	I11	I13																			
N	I0	I2	I4	I6	I10	I12	I14																			
OV	Q0	Q1	Q2	Q4																						
24V	COM0	COM1	COM2	Q3	Q5																					
E	S/S	S/S	I1	I3	I5	I7	I11	I13	I15	I17																
N	S/S	I0	I2	I4	I6	I10	I12	I14	I16	I18																
OV	Q0	Q1	Q2	Q4	COM3	Q7	Q11	Q12	Q14	•																
24V	COM0	COM1	COM2	Q3	Q5	Q6	Q10	COM4	Q13	Q15																
E	S/S	S/S	I1	I3	I5	I7	I11	I13	I15	I17																
N	S/S	I0	I2	I4	I6	I10	I12	I14	I16	I18																
OV	Q0	Q1	Q2	Q4	COM3	Q7	Q11	Q12	Q14	•																
24V	COM0	COM1	COM2	Q3	Q5	Q6	Q10	COM4	Q13	Q15																
E	S/S	I1	I3	I5	I7	I11	I13	I15	I17	I21	I23	I25	I27													
N	I0	I2	I4	I6	I10	I12	I14	I16	I20	I22	I24	I26	I30	I32												
OV	Q0	Q1	Q2	Q4	Q6	Q10	Q12	•	Q14	Q16	Q20	Q22	•													
24V	COM0	COM1	COM2	Q3	COM3	Q5	Q7	COM4	Q11	Q13	COM5	Q15	Q17	COM6	Q21	Q23										
E	S/S	I1	I3	I5	I7	I11	I13	I15	I17	I21	I23	I25	I27	I31	I33											
N	I0	I2	I4	I6	I10	I12	I14	I16	I20	I22	I24	I26	I30	I32	I34	I36	I40	I42								
OV	Q0	Q1	Q2	Q4	Q6	Q10	Q12	•	Q14	Q16	Q20	Q22	•	Q24	Q26											
24V	COM0	COM1	COM2	Q3	COM3	Q5	Q7	COM4	Q11	Q13	COM5	Q15	Q17	COM6	Q21	Q23	COM7	Q25	Q27							
E	S/S	I1	I3	I5	I7	I11	I13	I15	I17	I21	I23	I25	I27	I31	I33	I35	I37	I41	I43							
N	I0	I2	I4	I6	I10	I12	I14	I16	I20	I22	I24	I26	I30	I32	I34	I36	I40	I42	I44							
OV	Q0	Q1	Q2	Q4	Q6	Q10	Q12	•	Q14	Q16	Q20	Q22	•	Q24	Q26											
24V	COM0	COM1	COM2	Q3	COM3	Q5	Q7	COM4	Q11	Q13	COM5	Q15	Q17	COM6	Q21	Q23	COM7	Q25	Q27							
S/S	S/S	I1	I3	I5	I7	I11	I13	I15	I17	I21	I23	I25	I27	I31	I33	I35	I37	I41	I43	I45	I47					
S/S	S/S	I0	I2	I4	I6	I10	I12	I14	I16	I20	I22	I24	I26	I30	I32	I34	I36	I40	I42	I44	I46					
OV	Q0	Q1	Q3	Q4	Q6	Q10	Q11	Q13	Q14	Q16	Q20	Q21	Q23	Q24	Q26	Q30	Q31	Q33	Q34	Q36	Q40	Q41	Q43	Q44	Q46	
24V	COM0	COM1	Q2	COM2	Q5	Q7	COM3	Q12	COM4	Q15	Q17	COM5	Q22	COM6	Q25	Q27	COM7	Q32	COM8	Q35	Q37	COM9	Q42	COM10	Q45	Q47
S/S	S/S	I1	I3	I5	I7	I11	I13	I15	I17	I21	I23	I25	I27	I31	I33	I35	I37	I41	I43	I45	I47					
S/S	S/S	I0	I2	I4	I6	I10	I12	I14	I16	I20	I22	I24	I26	I30	I32	I34	I36	I40	I42	I44	I46					
OV	Q0	Q1	Q2	Q4	Q6	Q10	Q11	Q13	Q15	Q17	Q20	Q21	Q22	Q24	Q26	Q30	Q31	Q33	Q35	Q37	Q40	Q41	Q43	Q45	Q47	
24V	24V0	COM0	Q3	Q5	Q7	24V1	COM1	Q12	Q14	Q16	24V2	COM2	Q23	Q25	Q27	24V3	COM3	Q32	Q34	Q36	24V4	COM4	Q42	Q44	Q46	

\* 1 L N E S/S  
2 COM 24V OV COM

\* Note 1: In the input terminal, L connects to the fire wire, N connects to the zero wire, E connects to the ear h wire, and S/S is the common terminal.  
2: In the output terminal, COM is the common terminal, and the DC output is between 24V and OV. The thick line isolation area is a group, with the COMs in the isolation area conducting to each other.



80