

# ICM450A PLUS+ MODBUS DATA MAPPING

## Discrete Inputs (Read Only)

Address	Field	Comments
20000	Relay State	0 = off, 1 = on
20001	Ctrl State	0 = off, 1 = on

## Fault Codes

Fault	Code
No Fault	0
Line Phase Loss	1
Line Phase Reversal	2
Line Phase Imbalance	3
Line Over Voltage	4
Line Under Voltage	5
Load Phase Loss	6
Load Phase Reversal	7
Load Phase Imbalance	8
Load Over Voltage	9
Load Under Voltage	10
Brownout	11
Brownout Recovery	12
Control Voltage Loss	13
Hard Reset	14

## Input Registers (Read Only)

Address	Field	Comments
40000	HW Rev	
40001	SW Rev	
40002	Line 1 Voltage	0 V - 999 V
40003	Line 2 Voltage	0 V - 999 V
40004	Line 3 Voltage	0 V - 999 V
40005	Load 1 Voltage	0 V - 999 V
40006	Load 2 Voltage	0 V - 999 V
40007	Load 3 Voltage	0 V - 999 V
40008	Line_Voltage	190V - 630V
40009	Delay_On_Break	15 sec - 600 sec
40010	Delay_On_Fault	0 sec - 15 sec
40011	Pct_Over_Voltage	2% - 25%
40012	Pct_Under_Voltage	2% - 25%
40013	Pct_Phase_Unbalance	2% - 20%
40014	Reset_Mode_Retries	0 - 10
40015	Cntrl_Mode	0 = off, 1 = on
40016	Ac_Cal_Factor	-10 V - +10 V
40017	Language	0 = English, 1 = Spanish
40018	Current date	5 bits day   4 bits month   7 bits years since 2020
40019	Current time	Minutes since midnight
40020	RS485 Termination Resistor	0 = no, 1 = yes
40021	Fault 0	Most recent always at 0
40022	Fault 1	
40023	Fault 2	
40024	Fault 3	
40025	Fault 4	
40026	Fault 5	
40027	Fault 6	
40028	Fault 7	
40029	Fault 8	
40030	Fault 9	
40031	Fault 10	
40032	Fault 11	
40033	Fault 12	
40034	Fault 13	
40035	Fault 14	
40036	Fault 15	
40037	Fault 16	
40038	Fault 17	
40039	Fault 18	
40040	Fault 19	
40041	Fault 20	
40042	Fault 21	
40043	Fault 22	
40044	Fault 23	
40045	Fault 24	

## Holding Registers (Write Only)

Address	Field	Comments
60000	Line_Voltage	190V - 630V
60001	Delay_On_Break	15 sec - 600 sec (in 15 sec periods)
60002	Delay_On_Fault	0 sec - 15 sec
60003	Pct_Over_Voltage	2% - 25%
60004	Pct_Under_Voltage	2% - 25%
60005	Pct_Phase_Unbalance	2% - 20%
60006	Reset_Mode_Retries	0 - 10
60007	Cntrl_Mode	0 = off, 1 = on
60008	Ac_Cal_Factor	-10 V - +10 V
60009	Language	0 = English, 1 = Spanish
60010	New date	5 bits day   4 bits month   7 bits years since 2020
60011	New time	Minutes since midnight
60012	RS485 Termination Resistor	0 = no, 1 = yes