MODBUS REGISTER ADDRESSES LIST

Readable Parameters : [Length (Register) : 2 ; Data Structure : Float]

Address	Hex Address	Parameter
30000	0x00	Voltage V1N
30002	0x02	Voltaage V2N
30004	0x04	Voltage V3N
30006	0x06	Average Voltage LN
30008	0x08	Voltage V12
30010	0x0A	Voltage V23
30012	0x0C	Voltage V31
30014	0x0E	Average Voltage LL
30016	0x10	Current I1
30018	0x12	Current I2
30020	0x14	Current I3
30022	0x16	Average Current
30024	0x18	kW1
30026	0x1A	kW2
30028	0x1C	kW3
30030	0x1E	kVA1
30032	0x20	kVA2
30034	0x22	kVA3
30036	0x24	kVAr1
30038	0x26	kVAr2
30040	0x28	kVAr3
30042	0x2A	Total KW
30044	0x2C	Total KVA
30046	0x2E	Total KVAr
30048	0x30	PF1
30050	0x32	PF2
30052	0x34	PF3
30054	0x36	Average PF
30056	0x38	Frequency
30058	0x3A	Total net kWh
30060	0x3C	Total net kVAh
30062	0x3E	Total net kVArh
30064	0x40	kW Active Power Max DMD
30066	0x42	kW Active Power Min DMD
30068	0x44	kVAr Reactive Power Max DMD
30070	0x46	kVAr Reactive Power Min DMD
30072	0x48	kVA Apparent Power Max DMD
30080	0x50	Auxiliary Interrupt
30082	0x52	Run hour
30084	0x54	kWh1 (Imp)
30086	0x56	kWh2 (Imp)
30088	0x58	kWh3 (Imp)
30090	0x5A	kWh1 (Exp)
30092	0x5C	kWh2 (Exp)
30094	0x5E	kWh3 (Exp)
30096	0x60	Total kWh (Imp)
30098	0x62	Total kWh (Exp)
30100	0x64	kVArh1 (Imp)
30102	0x66	kVArh2 (Imp)
30104	0x68	kVArh3 (Imp)
30106	0x6A	kVArh1 (Exp)
30108	0x6C	kVArh2 (Exp)
30110	0x6E	kVArh3 (Exp)
30112	0x70	Total kVArh (Imp)
30114	0x72	Total kVArh (Exp)
30116	0x74	kVAh1
30118	0x76	kVAh2
30120	0x78	kVAh3
30122	0x7A	Neutral Current
30124	0x7C	THD of 1st Phase Voltage
30126	0x7E	THD of 2nd Phase Voltage
30128	0x80	THD of 3rd Phase Voltage
30130	0x82	THD of Voltage V12
30132	0x84	THD of Voltage V23
30134	0x86	THD of Voltage V31
30136	0x88	THD of Current I1
30138	0x8A	THD of Current I2
30140	0x8C	THD of Current I3
30684	0x2AC	Serial no. (Data Structure : Hex)
30692	0x2B4	MAX I1 Demand
30694	0x2B6	MAX I2 Demand
30696	0x2B8	MAX I3 Demand
30698	0x2BA	MAX Avg. I Demand
30700	0x2BC	Phase Sequence Indication (0-Invalid, 1-Anticlockwise, 2-OK clockwise)
30702	0x2BE	Existing KW Active Power MAX DMD
30704	0x2C0	Existing KW Active Power MIN DMD
30706	0x2C2	Existing KVAr Reactive Power MAX DMD
30708	0x2C4	Existing KVAr Reactive Power MIN DMD
30710	0x2C6	Existing KVA Apparent Power MAX DMD
30712	0x2C8	Existing MAX I1 Demand
30714	0x2CA	Existing MAX I2 Demand
30716	0x2CC	Existing MAX I3 Demand
30718	0x2CE	Existing MAX Avg. I Demand

Formula to find address of individual Harmonic

Constant Parameter	Meaning
0	Voltage V1N
1	Voltage V2N
2	Voltage V3N
3	Voltage V12
4	Voltage V23
5	Voltage V31
6	Current I1
7	Current I2
8	Current I3

{143 + [(Harmonic no-2) x 2] + 60 x Constant Parameter}

For Example,

To find the 14th Harmonic address of Voltage V31 following formula can be used :

Formula with the parameter :
{143 + [(Harmonic no-2) x 2] + 60 x C P}
Eg. {143 + [(14-2) x 2] + 60 x 5} = 467

So, Check the 14th Harmonic of Voltage V31 at 467 address.

Readable / writable parameters : [Data Structure : Integer]

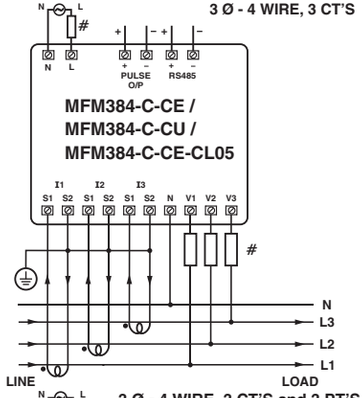
Address	Hex Address	Parameter	Range		Length (Register)
40000	0x00	Password	Min value : 0	Max value : 9998	1
40001	0x01	N/W Selection	Value : 0	Meaning : 3P4W	1
			Value : 1	Meaning : 3P3W	1
			Value : 2	Meaning : 1P2W-P1	1
			Value : 3	Meaning : 1P2W-P2	1
			Value : 4	Meaning : 1P2W-P3	1
40002	0x02	CT Secondary	Min value : 1	Max value : 5	1
40003	0x03	CT primary (CT Secondary=5)	Min value : 5	Max value : 10000	1
		CT primary (CT Secondary=1)	Min value : 1	Max value : 10000	
40004	0x04	PT Secondary	Min value : 100	Max value : 500	1
40005	0x05	PT primary	Min value : 100	Max value : 500kV	2
40007	0x07	Slave id	Min value : 1	Max value : 255	1
40008	0x08	Baud rate	Value : 0x0000	Meaning : 300	1
			Value : 0x0001	Meaning : 600	
			Value : 0x0002	Meaning : 1200	
			Value : 0x0003	Meaning : 2400	
			Value : 0x0004	Meaning : 4800	
			Value : 0x0005	Meaning : 9600	
			Value : 0x0006	Meaning : 19200	
40009	0x09	Parity	Value : 0x0000	Meaning : None	1
			Value : 0x0001	Meaning : Odd	
			Value : 0x0002	Meaning : Even	
40010	0x0A	Stop bit	Value : 0x0000	Meaning : 1	1
			Value : 0x0001	Meaning : 2	1
40011	0x0B	Backlight OFF	Min Value : 0	Max Value : 7200	1
40012	0x0C	Factory Default	1	Meaning : Set to factory setting range	1
40013	0x0D	Reset Active Energy	1	Meaning : Reset Total Active Energy	1
40014	0x0E	Reset Apparent Energy	1	Meaning : Reset Total Apparent Energy	1
40015	0x0F	Reset Reactive Energy	1	Meaning : Reset Total Reactive Energy	1
40016	0x10	Auto Mode Pages	Min Value : 1	Max Value : 21	1
40017	0x11	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40018	0x12	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40019	0x13	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40020	0x14	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40021	0x15	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40022	0x16	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40023	0x17	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40024	0x18	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40025	0x19	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40026	0x1A	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40027	0x1B	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40028	0x1C	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40029	0x1D	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40030	0x1E	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40031	0x1F	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40032	0x20	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40033	0x21	Page Address Sequence	1-21	Meaning : 1-First Page ; 21-Last Page	1
40034	0x22	Demand Interval Method	Value : 0x0000	Meaning : Sliding	1
			Value : 0x0001	Meaning : Fixed	
40035	0x23	Demand Interval Duration	Min Value : 1	Max Value : 30	1
40036	0x24	Demand Interval Length	Min Value : 1	Max Value : 30	1

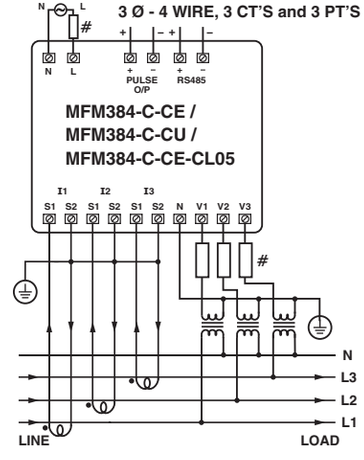
MODBUS REGISTER ADDRESSES LIST

Readable / writable parameters : [Data Structure : Integer] **MODBUS register addresses list continued…**

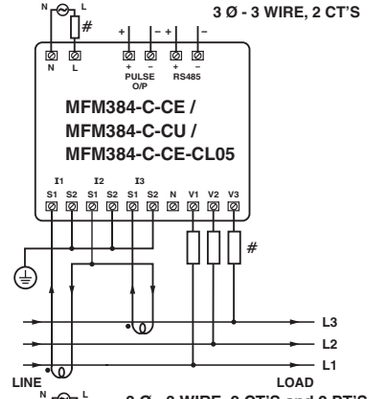
Address	Hex Address	Parameter		Range	Length (Register)
40037	0x25	Reset Active Power Max DMD	Value : 1	Meaning : Reset Max Active power	1
40038	0x26	Reset Active Power Min DMD	Value : 1	Meaning : Reset Min Active power	1
40039	0x27	Reset Reactive Power Max DMD	Value : 1	Meaning : Reset Max Reactive power	1
40041	0x29	Reset Apparent Power Max DMD	Value : 1	Meaning : Reset Max Apparent Power	1
40042	0x2A	Reset Run Hour	Value : 1	Meaning : Reset Run Hour	1
40043	0x2B	Reset Auxiliary Interrupt	Value : 1	Meaning : Reset Auxiliary Interrupt	1
40044	0x2C	Reset Reactive Power Min DMD	Value : 1	Meaning : Reset Min Reactive power	1
40054	0x36	Page Address Sequence	1-21	1-First Page ; 21-Last Page	1
40055	0x37	Page Address Sequence	1-21	1-First Page ; 21-Last Page	1
40057	0x39	Pulse Duration	Min Value : 0.1(sec)	Max Value : 2.0(sec)	1
40058	0x3A	Pulse Weight	Min Value : 0.01	Max Value : 99.99	1
40059	0x3B	Page Address Sequence	1-21	1-First Page ; 21-Last Page	1
40060	0x3C	Page Address Sequence	1-21	1-First Page ; 21-Last Page	1
40064	0x40	Reset Max Current	Value : 1	Meaning : Reset Max Current	1
40070	0x46	Change Endianness	Value :0 or 1	Meaning : 0: Mid Little Endian (CDAB) 1: Big Endian (ABCD) Default setting :Big Endian	1

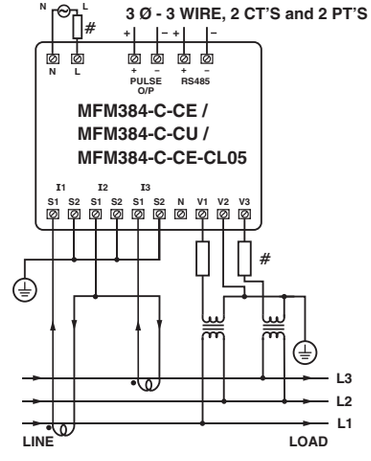
3 PHASE 4-WIRE (COMMONLY USED)





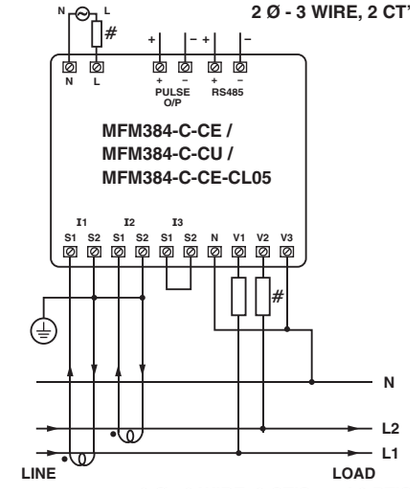
3 PHASE 3-WIRE

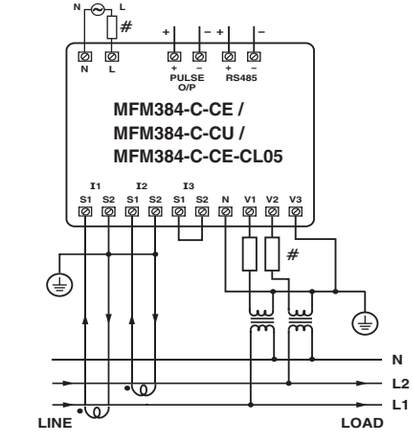




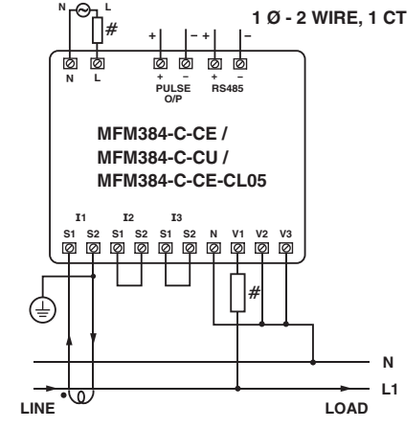
TYPICAL WIRING DIAGRAM

2 PHASE - 3 WIRE

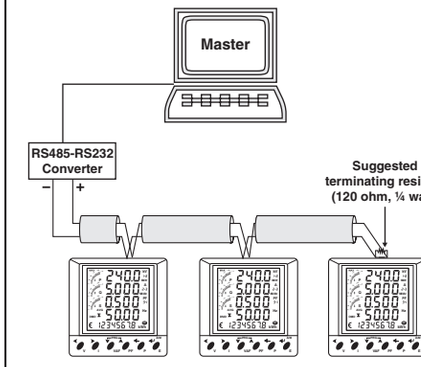




1 PHASE - 2 WIRE



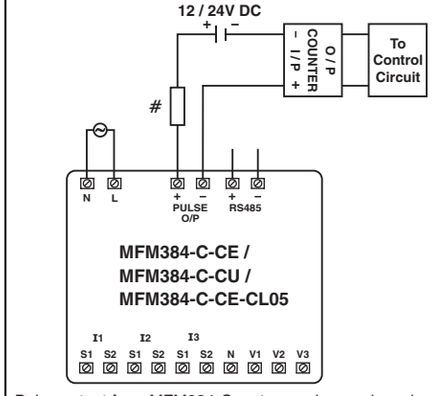
CONNECTION DIAGRAM FOR COMMUNICATION



Contact sales for PC based monitoring software to communicate with the meters.

All fuse types : 0.5A class CC UL type
0.5A fast acting 600V

● ENERGY CONTROLLER



Pulse output from MFM384-C meter can be used as alarm generator or total energy controller by interfacing it with Pre-settable counter and control circuits (Contactors, Relay, Trip Circuit).

The counter is loaded with the maximum energy consumption. When count reaches setpoint it provides output to control circuit to take appropriate action.

All fuse types : 0.5A class CC UL type
0.5A fast acting 600V

(Specifications are subject to change, since development is a continuous process.)

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