## **ORDERING INFORMATION**

## **Model: M50XWTU**

PLEASE FILL IN THIS SECTION	FACTORY USE ONLY			
<b>↓ ↓ ↓</b>		<b>↓ ↓</b>		
Model	Job No.	Approved by (Sales office)		
Company	Ser No.	Issued by (Sales office)		
Name	Sales Rep.	Approved by (Factory)		
P/O No.		Issued by (Factory)		
	_	Ser No.		

Specify the items you want to change. Default setting will be used if not specified.

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	FACTORY INTERNAL CHECK
Input wiring	☐ Single-phase/2-wire	Three-phase/		
	4-circuit (circuit A, B, C, D)	3-wire		
	☐ Single-phase/3-wire	2-circuit		
	2-circuit (circuit A, C)	(circuit A, C)		
	☐ Three-phase/3-wire			
	2-circuit (circuit A, C)			
	☐ Three-phase/4-wire			
	1-circuit (circuit A)			
	☐ Single-phase/two-wire			
	branched from single-phase			
	three-wire 4-circuit			
	(circuit A, B, C, D)			
	☐ Single-phase3-wire			
	1-circuit (circuit A) + Single-			
	phase/two-wire branched			
	from single-phase three-			
	wire 2-circuit (circuit C, D)			
VT rating, primary		110	50 to 400 000 : Voltage (V)	
			If VT is not used, enter	
			the same value for pri-	
			mary and secondary.	

	ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	FACTORY INTERNAL CHECK
VT rating	r, secondary		110	50 to 500: Voltage (V) The secondary can be set up to 500V. However, this does not mean the unit accepts 500V for input. Do not use with the condition exceeding input rating written in the specification sheet of the unit.	
Circuit A CT sensor	Sensor type	☐ CLSE-R5 ☐ CLSE-05 ☐ CLSE-10 ☐ CLSE-20 ☐ CLSE-40 ☐ CLSE-60	CLSE-R5	Select same sensor type for circuit A and B, and circuit C and D.	
	Primary current		5	Specify from 1 to 20000 A when CLSE-R5 is selected.	
	Measured point	□ 1 - N □ 3 - N □ 1 - 3		Specify 2 wires to measure only when measuring single-phase/2-wire branched from single-phase/3-wire.	
Circuit B CT sensor	Sensor type	☐ CLSE-R5 ☐ CLSE-05 ☐ CLSE-10 ☐ CLSE-20 ☐ CLSE-40 ☐ CLSE-60	CLSE-R5	Select same sensor type for circuit A and B, and circuit C and D.	
	Primary current		5	Specify from 1 to 20000 A when CLSE-R5 is selected.	
	Measured point	□ 1 - N □ 3 - N □ 1 - 3		Specify 2 wires to measure only when measuring single-phase/2-wire branched from single-phase/3-wire.	

	ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	FACTORY INTERNAL CHECK
Circuit C CT sensor	Sensor type	☐ CLSE-R5 ☐ CLSE-05 ☐ CLSE-10 ☐ CLSE-20 ☐ CLSE-40 ☐ CLSE-60	CLSE-R5	Select same sensor type for circuit A and B, and circuit C and D.	
	Primary current		5	Specify from 1 to 20000 A when CLSE-R5 is selected.	
	Measured point	□ 1 - N □ 3 - N □ 1 - 3		Specify 2 wires to measure only when measuring single-phase/2-wire branched from single-phase/3-wire.	
Circuit D CT sensor	Sensor type	☐ CLSE-R5 ☐ CLSE-05 ☐ CLSE-10 ☐ CLSE-20 ☐ CLSE-40 ☐ CLSE-60	CLSE-R5	Select same sensor type for circuit A and B, and circuit C and D.	
	Primary current		5	Specify from 1 to 20000 A when CLSE-R5 is selected.	
	Measured point	□ 1 - N □ 3 - N □ 1 - 3		Specify 2 wires to measure only when measuring single-phase/2-wire branched from single-phase/3-wire.	
Do1 pulse setting	Operation mode	☐ Normal open ☐ Normal close	Normal open		
	Measured energy		EP	Specify the items by symbol from Table 1.	
	Energy per pulse		0.1 kW	Specify from 0.01 to 1000.00kW	
	Pulse width		100 msec.	Specify from 100 to 2000 msec. (in 100 msec. increments)	
	Measured circuits	$\Box A + \Box B + \Box C + \Box D$		Put checks to measured circuits. By selecting multiple circuits, total energies are measured.	

	ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	FACTORY INTERNAL CHECK
Do2 pulse setting	Operation mode	<ul><li>☐ Normal open</li><li>☐ Normal close</li></ul>	Normal open		
	Measured energy		EP	Specify the items by	
				symbol from Table 1.	
	Energy per pulse		0.1 kW	Specify from 0.01 to 1000.00 kW.	
	Pulse width		100 msec.	Specify from 100 to 2000	
				msec. (in 100 msec. in-	
				crements)	
	Measured circuits	$\square A + \square B + \square C + \square D$		Put checks to measured	
				circuits.	
				By selecting multiple cir-	
				cuits, total energies are	
				measured.	
Frequency		☐ Voltage signal	Voltage		
input		☐ 50 Hz fixed	signal		
		☐ 60 Hz fixed			
Low-end	Circuit A		1.0%	0.0 to 99.9% of rated cur-	
cutout,	Circuit B		1.0%	rent value x % of speci-	
current	Circuit C		1.0%	fied value	
	Circuit D		1.0%		
Calcula-	Power factor sign		IEC	IEC: Identical to the	
tion		□ IEEE		active energy	
				IEEE: Positive in LAG,	
				Negative in LEAD	
	Reactive power		IEC	IEC: Positive from	
	sign	☐ Inverts sign at outgoing		PF = 1.0 to 180° in	
				LAG direction; Negative	
				for the other direction	
				Inverts sign at outgoing:	
				Positive in LAG,	
	D 1 1		D .:	Negative in LEAD	
	Each phase reac-	Reactive power meter method	Reactive		
	tive power calcu- lation	□ Vector S - P	power meter		
		Vector D. O	method		
	Apparent power calculation	☐ Vector P+Q ☐ S1+S2+S3	Vector P+Q		
	Measuring mode	☐ Standard measuring	Standard	Voltage and power factor	
	measuring mode	☐ Standard measuring ☐ Simple measuring	measuring	are fixed at simple mea-	
			measumg	suring	
	Power factor at		1.0000	Specify from 0 to 1.0000.	

	ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	FACTORY INTERNAL CHECK
Modbus	Node address		1	Specify from 1 to 247.	
	Baud rate	☐ 1200 bps	38400 bps		
		$\square$ 2400 bps			
		☐ 4800 bps			
		☐ 9600 bps			
		☐ 19200 bps			
		☐ 38400 bps			
	Parity	□ None	Odd		
		□ Odd			
		☐ Even			
	Stop bit	□1	1		
		$\Box 2$			

## Table 1 Selectable Energy Count Pulse

SYMBOL	DESCRIPTION
EP	Active energy, incoming
EQ	Reactive energy, LAG
ES	Apparent energy
EP-	Active energy, outgoing
EQ-	Reactive energy, LEAD
EQ+LAG	Reactive energy, incoming, LAG
EQ+LEAD	Reactive energy, incoming, LEAD
EQ-LAG	Reactive energy, outgoing, LAG
EQ-LEAD	Reactive energy, outgoing, LEAD
EQ+P	Reactive energy, incoming
EQ-P	Reactive energy, outgoing
EQA	Reactive energy, (incoming + outgoing) kvarh