

# ENERGY SCOUT + WATTHOUR METER MODEL ESP3-354EDM-N

## DESCRIPTION

The model ESP3 Watthour meter is used to measure energy at the input to electrical load centers or branch circuits. The unit displays Volts, Amps, Watts and power factor, in addition to import and export energy.

The unit is DIN-rail mounted and has optional indoor and outdoor enclosures. Solid-core or split-core current transformers are available.

## FEATURES

- Single model for all 1 $\Phi$  and 3 $\Phi$  applications over range of 120-240Vac
- Indoor or outdoor package options
- Optional split-core current transformers



## APPLICATIONS

- Input to electrical load centers
- Branch circuits

### ORDERING INFORMATION

Example: 3 $\Phi$ 3W Watthour Meter with 208Vac and 200Aac Input, with Split-core CTs in Outdoor Surface-mount Enclosure  
**ESP3-354EDM-N with SCCT-013-200 (Qty 2) and ENC-OSM**

**18 MONTH WARRANTY**



## SPECIFICATIONS

### INPUT

Current Range  
 With appropriate CTs ( $I_n$ ).....0-200, 0-400Aac  
 Over-range without damage..... 125% F.S.  
 Voltage..... Nominal..... 120, 208, 240VL-L  
 Operating Range..... Nominal  $\pm$ 30%  
 Power Factor..... any  
 Frequency Range ..... 47-63Hz  
 Power Consumption..... <1VA

### OUTPUT

Pulse Value .....1.0kWh/Pulse, polarity sensitive  
 (NOTE: Unit is factory-programmed for CT ratio.)  
 Contact Closure (Low-impedance).....low<3 $\Omega$ , high>1M $\Omega$   
 Duration... 50% duty cycle or 80ms, whichever is greater  
 Serial..... RS-485, 9600 baud (E,7,1)

### DIELECTRIC TEST

Input/Output/Case..... 2250Vac

### ACCURACY

IEC 62052-11 .....0.05( $I_n$ )..... Class 0.5

### DISPLAYED VALUES

	<u>Resolution</u>
Energy (Import and Export).....(kWh).....	XXXXXX.X
Volts (Per-Phase).....(Vac).....	XXX.X
Amps (Per-Phase).....(Aac).....	XXX.X
Power (Per-Phase and Total).....(W).....	XXXXXXX
Power Factor (Per-Phase w/Direction) ... (C or L).....	X.XX

### TIME OF USE (Parameters Available via RS-485 Port)

Real-Time Clock Calendar with Battery Back-up  
 4 Tariff Periods ( $T_1, T_2, T_3, T_4$ ) Per Day. (Active Taiff Period is shown on display below decimal point in kWh reading.)  
 Max. Demand for 15-, 30-, or 60-Minute Intervals.  
 Resettable Demand via RS-485 Port

### PHYSICAL & ENVIRONMENTAL

Operating Range..... 0 $^{\circ}$  to 40 $^{\circ}$ C  
 Storage Range.....-30 $^{\circ}$  to 55 $^{\circ}$ C  
 Operating Humidity ..... 0-85% non-condensing  
 Weight..... 10.0 oz  
 Termination (Screw Compression).....20-16 AWG  
 Enclosure Material ..... ABS

## DISPLAY REGISTERS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Total kWh	Reverse kWh	Volts L1	Volts L2	Volts L3	Amps L1	Amps L2	Amps L3	Watts L1	Watts L2	Watts L3	Total Watts	Cos L1	Cos L2	Cos L3

Display scrolls through each register with Total kWh displayed for 2 minutes, followed by the remaining registers for 3 seconds each.



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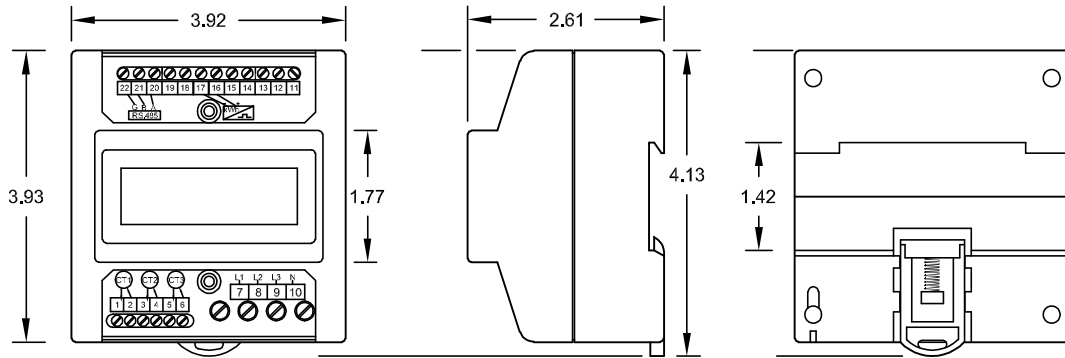
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 Hilliard, Ohio 43026-1264

**TELEPHONE: 614-777-1005**

**TOLL FREE: 1-800-537-6732**

**FAX: 614-777-4511**

## CASE DIMENSIONS



FRONT VIEW SHOWN WITH  
TERMINAL COVERS REMOVED

TERMINAL BLOCK ACCESS  
HOLE DIAMETER - .105"

Dwg# 0902-00949-B Rev A

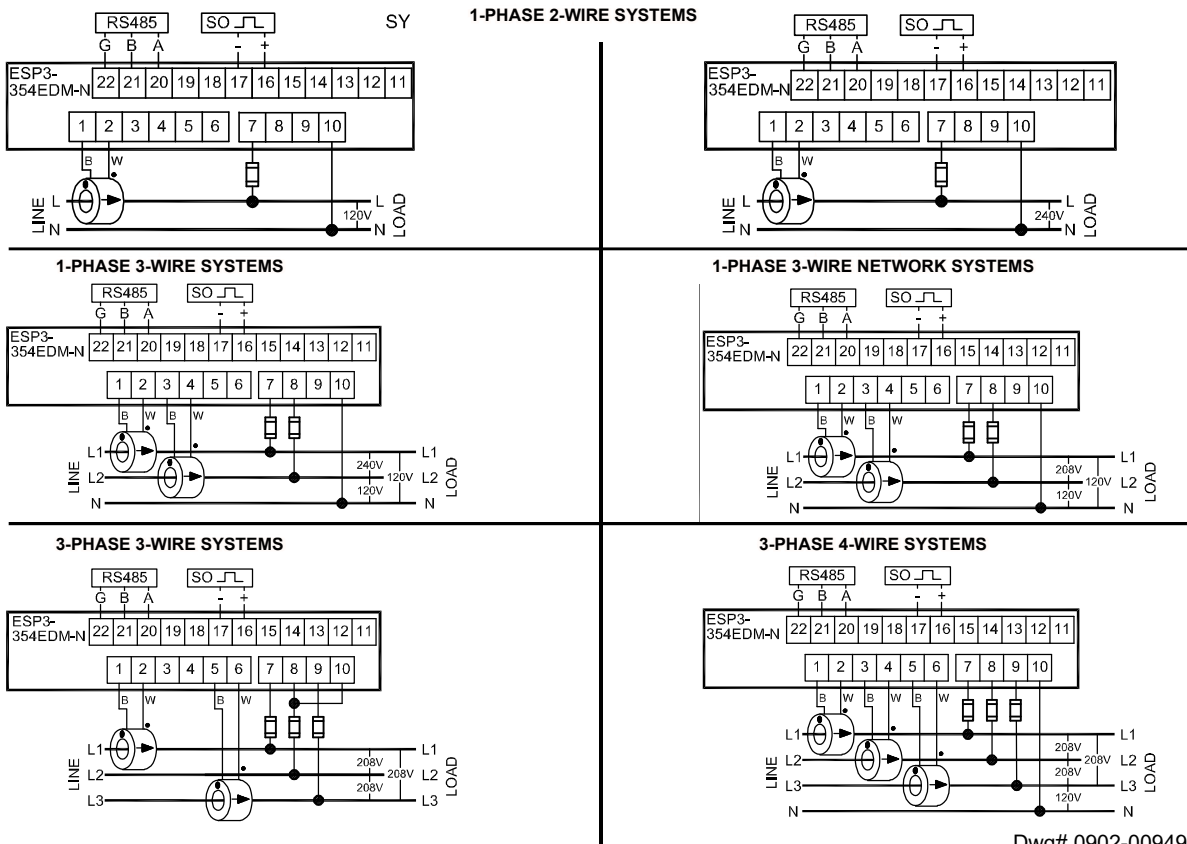
## SYSTEM SELECTION

SYSTEM CONFIGURATION	VOLTAGE INPUT (Vac)	# OF CTS
1-Phase 2-Wire*	120	1
1-Phase 2-Wire*	240	1
1-Phase 3-Wire*	120/240	2
1-Phase 3-Wire Network*	120/208	2
3-Phase 3-Wire*	208	2
3-Phase 4-Wire*	120/208	3

### FUSE SIZE



Solid and Split-Core 26.6mA Output CTs are available separately. See BCT and SCCT spec sheets.



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