

Dual Source Energy Meter

EMS-17

Features

- On site programmable PT (Primary & Secondary) / CT (Primary & Secondary) ratio
- High brightness alpha numeric LED display for parameters and numeric values.
- Password protection for program settings.
- Protection from dust and water as per IP 51.
- Accuracy Class:1.0(as per IEC 62053-21) / 0.5(as per IEC 62053-22).

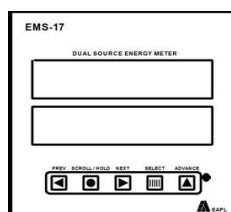


Ordering Information

Models	Function	Source Voltage	Display Parameters
EMS-17	Dual Source Energy Meter	85V to 270V AC/DC	V(R, Y, B), V(RY, YB, BR), A(R,Y, B), Hz, PF(R, Y, B,T), RPM(for generator mode), Phase angle (R, Y, B),W(R, Y, B,T), KWh(M), MWh(M), LH(M), KWh(G), MWh(G), LH(G) All parameters are available in-Mains(M) and generator mode(G), KVA, KVAh (G&M)

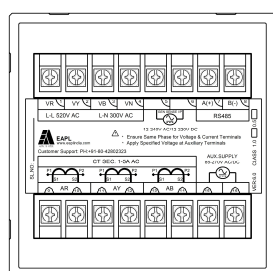
Front View

EMS-17



Rear View

EMS-17



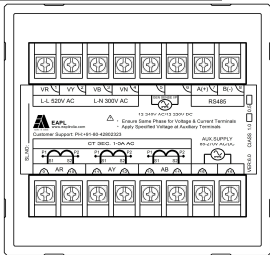
Over-all Dimension

Models	Dimension Details in mm			Cutout Dimension in mm	
	W	H	D	W	H
EMS-17	96	96	95.5	92	92

■ Specifications

Parameters	Models	EMS-17
Function		Dual Source energy meter
Rated supply Voltage		85V to 270 V AC / DC
Rated Frequency		50 / 60Hz \pm 5% for AC only
Power consumption		AC Approx 6VA DC Approx 4W
Burden		< 0.2 VA per Volts/Amps input
Accuracy		Class 1.0/Class 0.5
Input Voltage		3 Phase 4 wire (R,Y,B,N) Range - 415 VAC (-40% to +20%) 110 VAC (-40% to +20%)
Input Current		Current inputs (AR,AY,AB)1A to 5A (to 200%)
Input Frequency		50 Hz, \pm 2%
Communication		RS-485 MODBUS RTU Protocol
Recovery Time		2 sec minimum
Meter Constant		3200 Pulses / KWh
CT Ratio Selectable		Primary 1A to 5000A max. Secondary 1A to 5A
PT Ratio Selectable		Primary 110V to 999KV Secondary 110V to 500V
Device ID		1-247
Baud rate		2400,4800,960019200 bps
Poles		1-28
Protection of configuration settings		User settable Password Range 0001 to 9999
Humidity		Up to 95% RH @ 40°C
Ambient Temperature		Operation: -10°C to +55°C(14°F to 131°F) Storage: -25°C to +80°C(-13°F to 176°F)
Dielectric Strength		2.5KV AC, 50Hz for 1minute (Between current carrying & non-current carrying parts)
Insulation resistance		>100M ohms @500V DC
Electrical connection		Screw type terminals with self lifting clamps.
Dimension (W x H x D)		96 X 96 X 95.5mm
Cut-out Dimension(W x H)		92X 92 mm

Connection and Terminal Details

	EMS-17
Connection Details	
	EMS-17
Terminal Details	<p>1, 2, 3, 4 : R, Y, B, N 5, 6 : Generator sensing input (12VAC/DC to 240V AC/220V DC) 7, 8 : A, B (RS 485Communication port) 9, 10 : S1, S2 (R Phase) 11, 12 : S1, S2 (Y Phase) 13, 14 : S1, S2 (B Phase) 15, 16 : Auxiliary Supply(85-270 V AC/DC)</p>