

# Maximum Demand Indicators /Maximum Demand Controller

## EMS-15 / EMS-15c

### Features

- High brightness red LED display.
- Measurement of basic, power, energy and demand parameters.
- High brightness alpha numeric LED display for parameters and numeric values.
- Automatic CT reverse correction for energy and demand.
- Programmable demand techniques block / sliding window
- Programmable demand parameters Apparent / Active power.
- Programmable demand range Kilo / Mega.
- Programmable Alarm / hysteresis settings.
- Programmable RTC setting to match EB meter's clock.



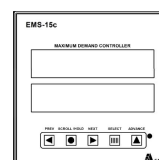
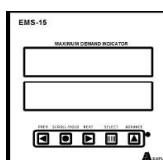
### Ordering Information

Models	Function	Source Voltage	Display Parameters	
EMS-15	Maximum Demand Indicator	170V to 270V AC/DC	Basic	V(R, Y, B), V(RY, YB, BR), A(R, Y, B), Hz, RTC Time
			Power	PF(R, Y, B, T), W(R, Y, B, T), VAr(R, Y, B, T), VA(R, Y, B, T)
			Integral	KWh, KVAh-C, KVAh-I, KVAh, LH
EMS-15c	Maximum Demand Controller		Demand	Md (Fixed/Sliding), Md Time (Fixed/Sliding), Wd (Fixed/Sliding), Rd (Fixed), Elapsed Time (Fixed/Sliding)

### Front View

#### EMS-15

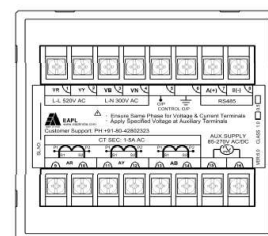
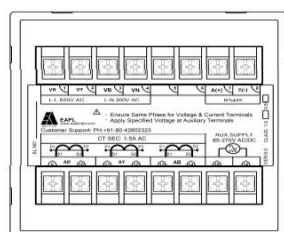
#### EMS-15c



### Rear View

#### EMS-15

#### EMS-15c



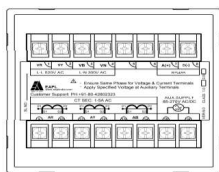
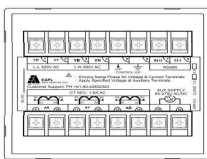
### Over-all Dimension

Models	Dimension Details in mm			Cutout Dimension in mm	
	W	H	D	W	H
EMS-15/EMS-15c	96	96	95.5	92	92

## ■ Specifications

Parameters	Models	EMS-15	EMS-15c
Function		Maximum Demand Indicator	Maximum Demand Controller
Rated supply Voltage		85V – 270V AC/DC	
Rated Frequency		50 / 60Hz $\pm$ 5% for AC only	
Power consumption		AC Approx. 6 VA DC Approx. 4W	
Burden		< 0.2 VA per Volts/Amps input	
Input Voltage		3 Phase 4 wire (R,Y,B,N) 415 VAC (-40% to +20%) 110 VAC (-40% to +20%)	
Input Frequency		50 Hz, $\square$ 2%	
Input Current		Current inputs (AR, AY, AB) 1A to 5A (to 200%)	
Recovery Time		2 sec minimum	
Accuracy		Class 1.0 For Active Energy Class 2.0 For Reactive Energy	
RTC Accuracy		Up to 20Sec per month	
Communication		RS-485 MODBUS RTU Protocol	
Meter Constant		3200 Pulses/KWh 3200 Pulses/KVArh	
Battery life		Approx 2yrs	
CT Ratio Selectable		Primary 1 to 5KA max Secondary 1 to 5A	
PT Ratio Selectable		Primary 110 to 11KV Secondary 110 to 500V	
Device Id		1-247	
Baud Rate		2400,4800,9600,19200bps	
Pulse Output		Active Energy/ Reactive	
Synchronization technique		Sliding Window/ Fixed(bloc) Window	
Demand Parameter		Active/ Apparent	
Demand Range		Kilo/ Mega	
Demand Period		05 / 10 / 15 / 30 Mins	
Ambient Temperature		Operation: -10°C to +55°C(14°F to 131°F) Storage : -25°C to +80°C(-13°F to 176°F)	
Humidity		Up to 95% RH @ 40°C	
Dielectric Strength		a)2.5 KV AC,50Hz for 1minute(Between current carrying & non-current carrying parts)	
Insulation resistance		>100M Ohms @500V DC	
Dimension (W x H x D)		96 X 96 X 95.5 mm	
Cut-out Dimension(W x H)		92 x 92mm	

## Connection and Terminal Details

	EMS-15	EMS-15c
Connection Details		

	EMS-15	EMS-15c
Terminal Details	<b>1, 2, 3, 4 :</b> R, Y, B, N <b>7,8 :</b> A,B (RS 485Communication port) <b>9, 10 :</b> S1, S2 (R Phase) <b>11,12 :</b> S1, S2 (Y Phase) <b>13,14 :</b> S1, S2 (B Phase) <b>15,16 :</b> Auxiliary Supply(85-270 V AC/DC)	<b>1, 2, 3, 4 :</b> R, Y, B, N <b>5,6 :</b> Digital Output to Relay Module <b>7,8 :</b> A,B (RS 485Communication port) <b>9, 10 :</b> S1, S2 (R Phase) <b>11,12 :</b> S1, S2 (Y Phase) <b>13,14 :</b> S1, S2 (B Phase) <b>15,16 :</b> Auxiliary Supply(240 V AC/DC, -20 to +10%)