

Basic Meters

EMS-12/EMS-12a / EMS-12y / EMS-12s

Features

- High brightness red LED display.
- Programmed values of parameters are protected against unintentional / unauthorised changes.
- Entering program mode is possible by means of short links or buttons.
- Measurement of voltage parameters (L-N), (L-L).
- PT primary & secondary programmable.

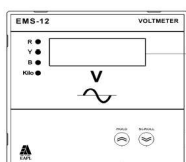


Ordering Information

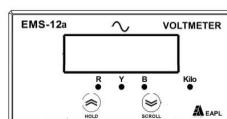
Models	Function	Source Voltage	Display Parameters
EMS-12	Voltmeter	240V AC	V(R,Y,B), V(RY,YB,BR)
EMS-12a			V(R,Y,B), V(RY,YB,BR)
EMS-12y		85-270V AC/ DC	V(R,Y,B), V(RY,YB,BR)
EMS-12s		240V AC	V(R)

Note: EMS-12 available in 110V AC also.

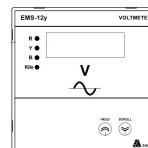
Front View EMS-12



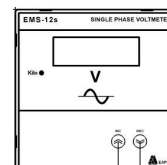
EMS-12a



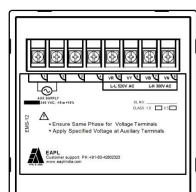
EMS-12y



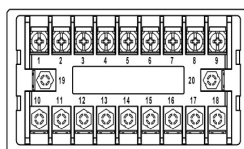
EMS-12s



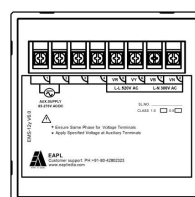
Rear View EMS-12



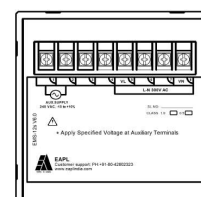
EMS-12a



EMS-12y



EMS-12s



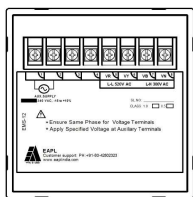
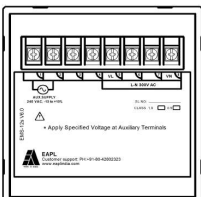
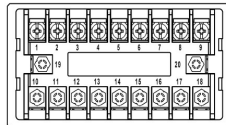
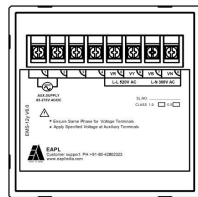
Over-all Dimension

Models	Dimension Details in mm			Cutout Dimension in mm	
	W	H	D	W	H
EMS-12/EMS-12s/EMS-12y	96	96	95.5	92	92
EMS-12a	98	50	79	92	46

■ Specifications

Parameters	Models	EMS-12	EMS-12s	EMS-12a	EMS-12y
Function	Voltmeter				
Rated supply Voltage	240V AC (-15% to +10%)				85-270V AC/ DC
Rated Frequency	50 Hz \pm 5%				
Power consumption	AC Approx. 5 VA				AC Approx. 5 VA DC Approx- 2W
Burden	< 0.2 VA per Volts/Amps input				
Input Voltage	3 Phase 4 wire (R,Y,B,N) Range 50V-300V	1 Phase 2 wire (L-N) Range 50V-300V	3 Phase 4 wire (R,Y,B,N) Range 50V-300V		
Input frequency	50 Hz, \pm 2%				
Voltage	Class 1 for Standard				
Recovery Time	500msec minimum				1sec minimum.
Sensing	True RMS				
PT Ratio Selectable	Primary 110V to 999KV max Secondary 110V				
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	2.5 KV AC, 50Hz for 1 minute (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 95.5 mm			98 x 50 x 79 mm	96 X 96 X 95.5 mm
Cut-out Dimension(W x H)	92 x 92mm			92 x 46mm	92 x 92mm

Connection and Terminal Details

	EMS-12	EMS-12s	EMS-12a	EMS-12y
Connection Details				

	EMS-12	EMS-12s	EMS-12a	EMS-12y
Terminal Details	For three phase 1,2 : Auxiliary Supply (85-270V AC/ DC) 5 : R Phase 6 : Y Phase 7 : B Phase 8 : Neutral For single phase 1, 2 : Auxiliary Supply (85-270V AC/ DC) 5 : R Phase 8 : Neutral	1, 2 : Auxiliary supply (240V AC,-15% to 10%) 5, 8 : Line and neutral	For Three phase 1,2 Auxiliary Supply (240 VAC,-15% to +10%) 6 : R Phase 7 : Y Phase 8 : B Phase 9 : Neutral For single phase 1, 2 : Auxiliary Supply (240 VAC,-15% to +10%) 6 : R Phase 9 : Neutral	For three phase 1,2 : Auxiliary Supply (85-270V AC/ DC) 5 : R Phase 6 : Y Phase 7 : B Phase 8 : Neutral For single phase 1, 2 : Auxiliary Supply (85-270V AC/ DC) 5 : R Phase 8 : Neutral