

# M3-Series Annunciators – Basic Models

## M3-12R/20R/24R

### Features

- Super bright SMD LEDs.
- Master and slave units are available in 4,6 & 8 windows.
- Incorporates a built-in buzzer in addition to fault alarm relay output.
- User-selectable sequence of operations-Manual/Auto reset/ Manual reset with ring back / FIFO.
- RS485 MODBUS communication output with field selectable device Ids.
- Repeat Relay card Option available.

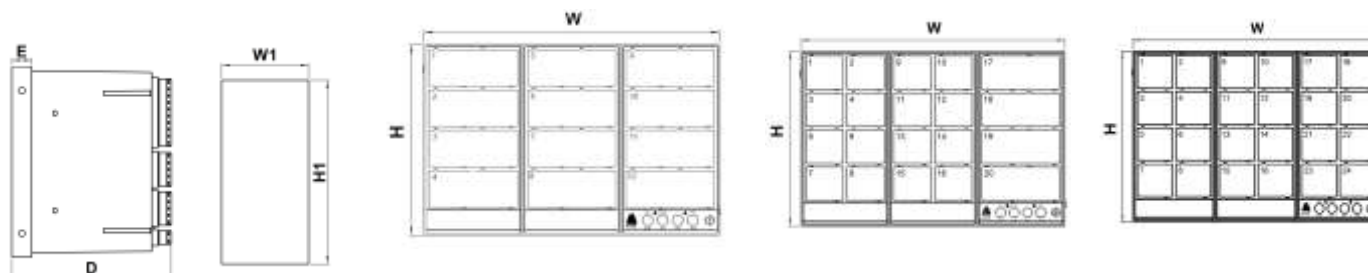


### Ordering Information

Models	No of Windows	Product Size	Source and Stand By Voltage	Output
M3-12R	12	3D	85-270V AC/DC & 12V DC or	Trip Relay - (C-NC-NO), Alarm Relay - (C-NC-NO), AC Fail - (C, NO), DC Fail - (C, NO).
M3-20R	20		85-270V AC/DC & 85-270V AC/DC or	
M3-24R	24		24-48V AC/DC & 12V DC or 24-48V AC/DC & 85-270V AC/DC	

Note: All above models are also available without communication and AC Fail /DC Fail indications.

### Side & Front View M3-12R M3-20R M3-24R



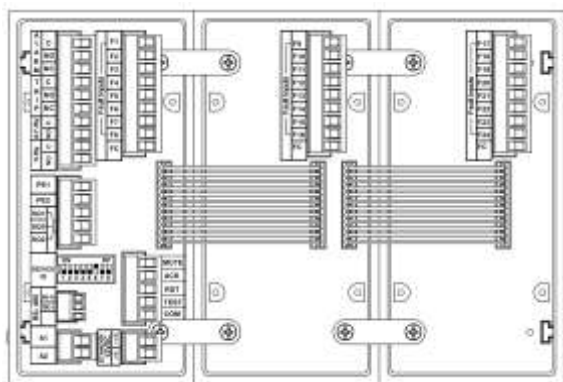
### Over-all and cut-out Dimensions

Models	Dimension Details in mm				Cut-out Dimension in mm	
	W	H	D	E	W1	H1
M3-12R/20R/24R	216	144	121	15	212	139

## ■ Specifications

Parameters	Models	M3-12R	M3-20R	M3-24R
Function	Programmable Fault Annunciator with RS-485 Communication			
Supply Voltage	85-270V AC/DC or 24-48V AC/DC			
Power Consumption	AC: 35VA Approx. DC:20W Approx.			
Rated Frequency	50 / 60Hz $\pm$ 5% AC ONLY			
No of Windows	12	20	24	
Fault input contacts	Potential Free (NO/NC field selectable)			
Communication	RS485 Modbus RTU protocol.			
Stand By Supply	12VDC $\pm$ 10%			
Window colour	Red			
Device Id Selection	Field Programmable			
Window Size	68.0mm X31.0mm(LXW)	68.0mm X 31.0mm(LXW) 34.0mm X 31.0mm(LXW)	34.0mm X 31.0mm(LXW)	
Flash rate	Fast:100/Minute $\pm$ 10 Slow :60/Minute $\pm$ 10			
Control Output	4 TRIP Relay(C,NC,NO),Alarm Relay ( C,NC,NO) Aux. fail Rly (C & NO),Hooter Rly (C & NO)			
Push Button Control	Integral Push button for Test, Mute, Acknowledge & Reset Function, Provision of output connections for remote access of push Buttons			
Illumination	Low power Super Bright LED'S			
Fault input Signal	Potential Free (NO/NC field selectable)			
Contact Rating	1 C/ O Rated for 5A @ 250 VAC / 30VDC(NO) 3A @ 250VAC / 30VDC (NC)			
Test Facility	Yes			
Audible Output	Internal Buzzer			
Fault Sensitivity	100msec $\pm$ 10mSec			
Sequence of Operation	a) Manual reset b) Auto reset c) Manual Reset + Repeat Alarm d) FIFO Sequence			
Insulation resistance	>100M ohms @500V DC			
Service life (under no load)	10 <sup>6</sup> operations minimum			
Electrical life(under full load)	10 <sup>5</sup> operations minimum			
Recovery Time	2Sec minimum			
Humidity	85% RH @ 40°C			
Ambient Temperature	Operating : -10 <sup>0</sup> C to +55 <sup>0</sup> C Storage : -25 <sup>0</sup> C to +80 <sup>0</sup> C			
Dielectric Strength	a)2.5KV AC, 50Hz for 1 minute. (Between current carrying & non-current carrying parts) b) 1.5KV AC, 50Hz for 1 minute. (Between contacts & control circuit) c) 750V AC, 50Hz for 1 minute. (Between non-continuous relay contacts)			
Electrical Connection	Right angle female pluggable connector			
Over-all Dimension(WXHXD)	216 x 144 x 121 mm			
Cut-out Dimension(WXH)	212 x 139 mm			

## Connection Details



## Terminal Details

**Aux Supply** : 85-270V AC/DC or 24-48V AC/DC  
**Stand by Supply -Ve & + Ve** : 12V DC (1Amp)  $\pm$  10%  
**Hooter RLY C & NO** : Rly contacts for Hooter during power fail  
**Aux. Fail Rly C & NO** : Rly contacts for indicating power failure  
**Alarm & Trip relay** : C,NO&NC for alarm and trip output indication.  
**PE1 & PE2**: Short - Program Enable (PGM) & Open- Program Disable (RUN)  
**FC**: Common fault(FC) I/P terminals for F1-F8,F1-F12, F1- F16  
 Individual fault I/P terminals for respective window (Potential free).Connect WRT  
 Fault COM (FC):  
**F1-----F12** for 8 windows  
**F1-----F20**for 12 windows  
**F1-----F24** for 16 windows  
**MUTE ACK, RST, and TEST**: External push buttons for, remote operations  
 Connect WRT COM.  
**SQ1, SQ2**: Selection of required sequence of operation connect w.r.t SQ0  
**A (+), B (-)**: RS485 Communication terminals