M2-Series Annunciators – Advanced Models
M2-12R/M2-16R/M2-20R/ M2-24R

Features

• Super bright, White color SMD LED for fault indications.
• Available in 12, 16 ,20 and 24 windows respectively.
• Test / Mute / Acknowledge / Reset buttons in front and terminals at rear are available.
• Program enabling / disabling facility available at rear.
• RS-485 modbus communication available with field selectable device id .
• User-selectable sequence of operations-Manual reset, Auto reset, Manual reset + ring back
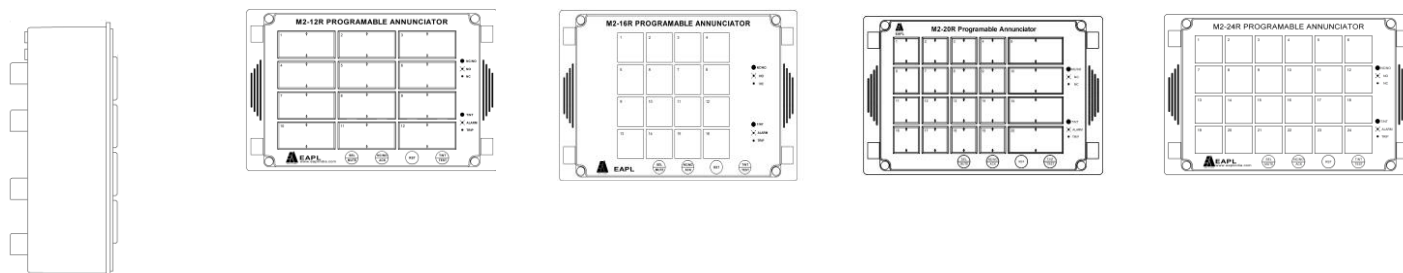 or First in First Out (FIFO).

Ordering Information

Models	No of Windows	Source Voltage	Stand By Voltage	Output
M2-12R	12			
M2-16R	16	85-270V AC/DC or 24-48V DC	12V DC or 85-270V AC/DC	2 relays 1 C/O (NC-C-NO) for trip/Alarm, 2 relays 1C/O (C-NO) for Hooter, AC Fail
M2-20R	20			
M2-24R	24			

Note: All above models are also available without communication and AC Fail /DC Fail indications.
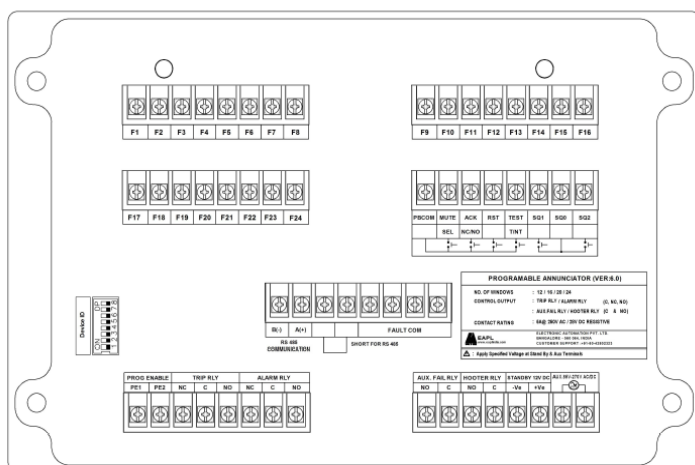
Side & Front View M2-12R   M2-16R   M2-20R   M2-24R

Over-all and cut-out Dimensions

Models	Dimension Details in mm			Cut-out Dimension in mm	
	W	H	D	W	H
M2-12R/16R/20R/24R	291	187	79	285	181

■ Specifications

Parameters Models	M2-12R	M2-16R	M2-20R	M2-24R
Function	Programmable Fault Annunciator			
Supply Voltage	85-270V AC/DC or 24-48V DC± 10%			
Power Consumption	For 85-270V AC/DC : AC: 30VA Approx. DC:20W Approx. For 24-48VDC : DC:20W Approx.			
Rated Frequency	50 / 60Hz ± 5% AC ONLY			
No of Windows	12	16	20	24
Stand By Supply	12V DC ± 10%			
Fault input contacts	Selectable NO/ NC type for every channel(No Volt)			
Window colour	Red			
Window Size	28.0mmX63.0mm	28.0mm x 28.0mm	28.0 mm x 63.0 mm 28.0mm x 28.0mm	28.0mm X 28.0mm
Flash Rate	Fast: 100/Minute Slow:50/Minute			
Control Output	4 Trip Rly (C,NC,NO) Alarm Rly (C,NC,NO) Aux. fail Rly (C & NO) Hooter Rly (C & NO)			
External Push Buttons	Provided			
Contact Rating	1 C/ O Rated for 5A @ 250 VAC / 28V DC resistive load			
Test Facility	Provided (operational test)			
Fault Sensitivity	100msec ±10mSec			
Sequence of Operation	a) Manual reset b) Auto reset c)Manual Reset + Repeat Alarm d)First in First Out			
Insulation resistance	>100M ohms @500V DC			
Service life (under no load)	10^6 operations minimum			
Electrical life(under full load)	10^5 operations minimum			
Recovery Time	2Sec minimum			
Humidity	85% RH @ 40^0C			
Ambient Temperature	Operating : -10^0 C to $+55^0$ C Storage : -25^0 C to $+80^0$ 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	Screw type terminals with self lifting clamps			
Over-all Dimension(WXHXD)	291 x 187 x 79 mm			
Cut-out Dimension(WXH)	285 x 181 mm			

Connection Details

Terminal Details

Aux Supply: 85-270V AC/DC or 24-48V DC ± 10%

TEST, MUTE, ACK, RESET: External Push Buttons for remote operations connected WRT PB COM

Alarm & Trip relay: Alarm and Trip output indication

Hooter RLY C & NO: Rly contacts for Hooter during power fail
Aux. Fail Rly C & NO: Rly contacts for indicating power failure

Individual fault I/P terminals for respective window (Potential free).Connect WRT Fault COM (FC):
F1-----F12: for 12 Windows **F1-----F16:** for 16 Windows
F1-----F20: for 20 Windows **F1-----F24:** for 24 Windows

FC: Common fault (FC) I/P terminals for F1-F12, F1-F16, F1-F20, F1-F24

SQ1, SQ2: Selection of required sequence of   Operations. Connect WRT SQ0.
A (+), B (-): RS485 Communication terminals.
PE1 & PE2: Program Enable **.**