

ES-M1

Amplifier Unit, Main Unit, NPN



Specifications

Model	ES-M1 ¹	
Type	One-line expansion system	
Shape	Main unit	
Operation mode	N.O./N.C. switch-selectable	
Timer function	10-ms delay / timer OFF switchable ²	
Output	NPN	
Output	Control output	NPN open collector 100 mA max. 40 V, residual voltage 1 V max.
Disconnection alarm output	NPN open collector 100 mA max. 40 V, residual voltage 1 V or less ³	
Response time	1 ms max.	
Temperature characteristics	Within $\pm 8\%$ of detecting distance at +23°C 73.4°F when within 0 to 50°C 32 to 122°F temperature range	
Sensitivity adjustment	25-turn trimmer	
Protection circuit	Reverse power connection protection, output overcurrent protection, output surge protection	
Rating	Power voltage	12 to 24 VDC, Ripple (P-P) 10 % or less
	Current/power consumption	25 mA max.
Environmental resistance	Ambient temperature	0 to +50 °C 32 to 122 °F ⁴
	Relative humidity	35 to 85 % RH (No condensation)
Weight	Approx. 65 g (including nuts and 2-m 9.8' cable)	

¹ The ES-M1(P)/M2(P) cannot be connected to the EH-422, 430, 440 or 290.

² During N.O. operating configuration, the off delay timer is 10 ms. During N.C., the on delay timer is 10 ms.

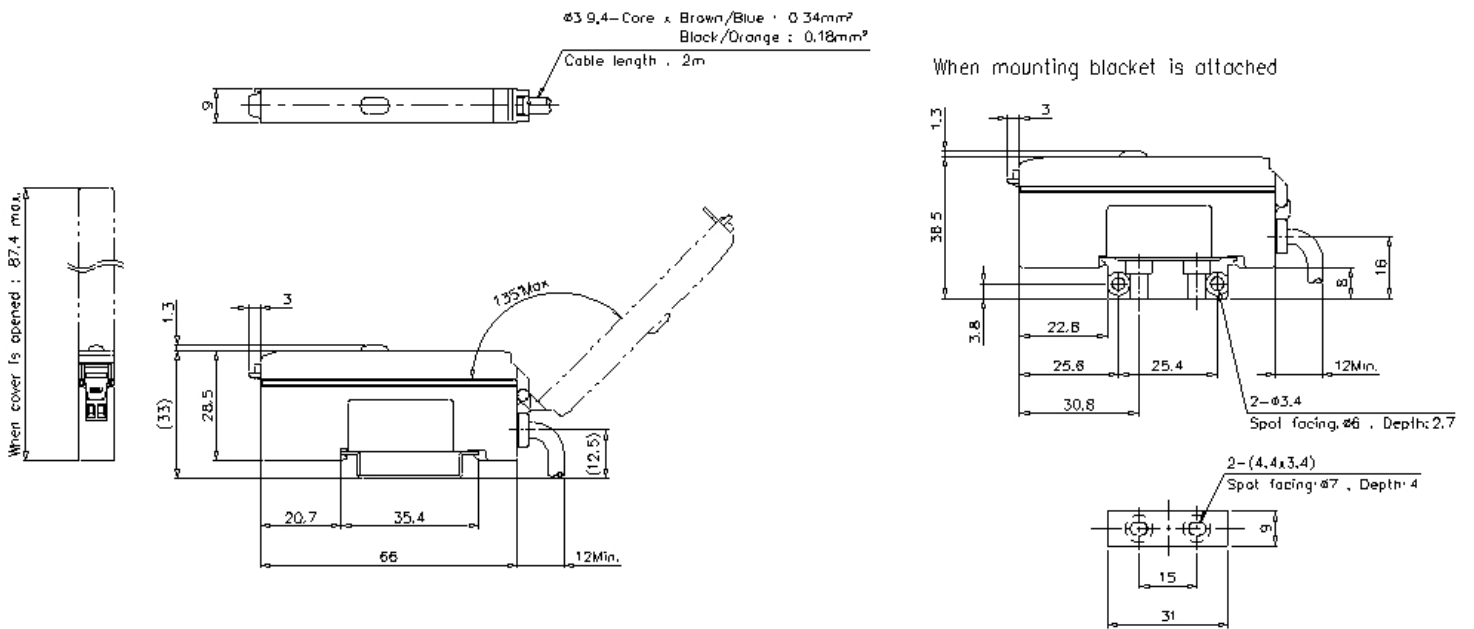
³ Broken connection warning output is not available on the ES-M2 (P).

⁴ The ambient temperature changes according to the following conditions when expansion units are added. When adding units, always attach them to a DIN rail (metal plate) and set the output current to 20 mA or less.
 1 to 10 expansion units: 0 to 50°C 32 to 122°F
 11 to 16 expansion units: 0 to 45°C 32 to 113°F

Dimensions

* Download CAD file or product manual for larger image/text and more detail.

ES-M1



I/O Circuit Connection diagram

* Download CAD file or product manual for larger image/text and more detail.

Input/Output Circuits
NPN

