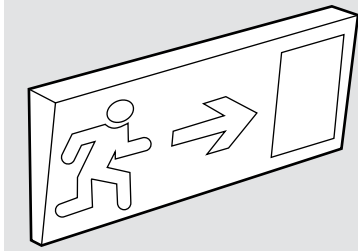


EMERG1W
EMERG2W
EMERG3W
EMERG4W

User Instructions

Emergency Lighting Discharge Test solutions have been developed to meet the needs of the electrical industry. In accordance to AS2293.1 and AS/NZS2293.2 'Emergency Evacuation Lighting for Buildings', a discharge test circuit MUST be installed in both existing and new installations.



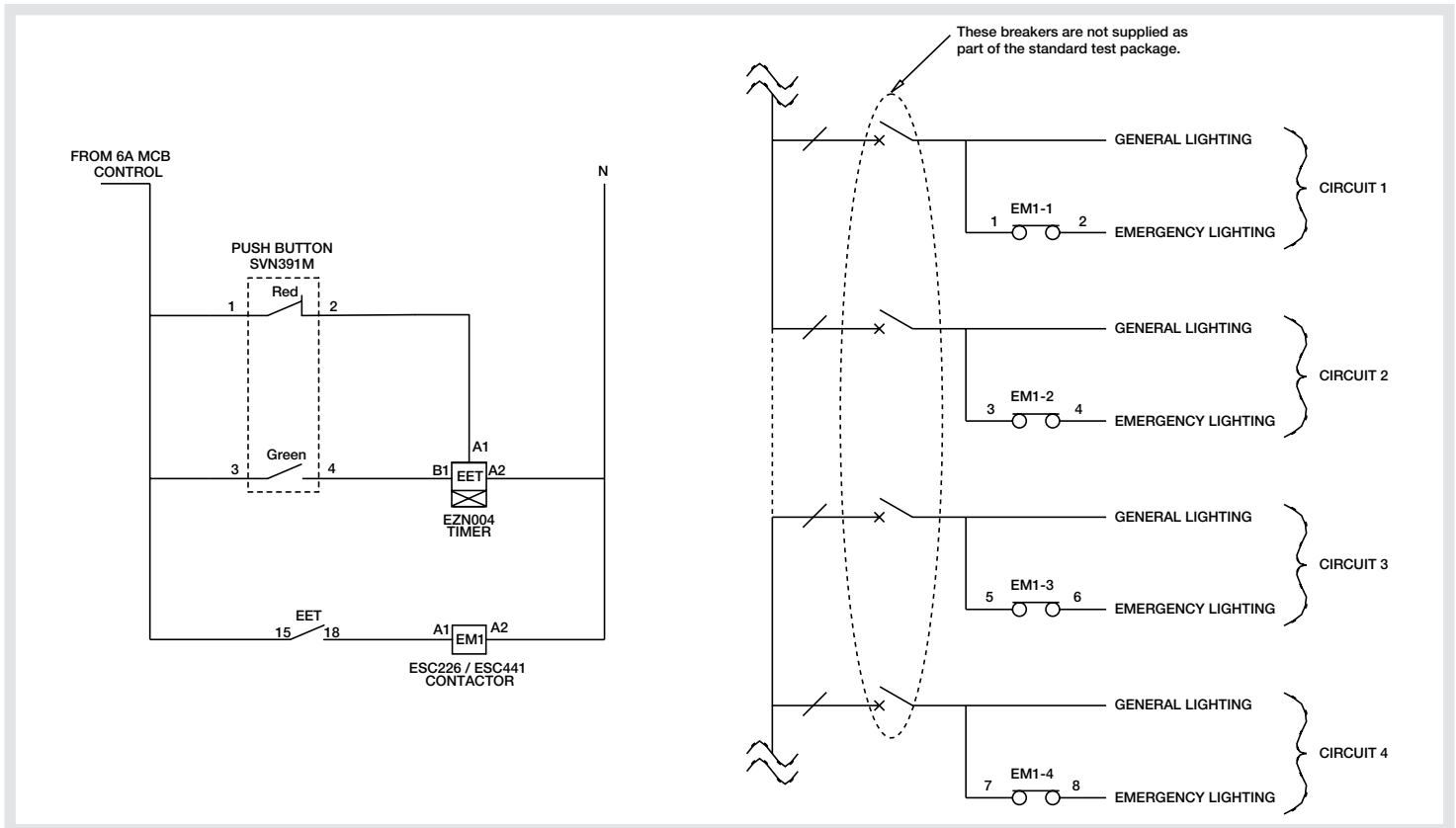
Emergency lighting discharge test kits

Operation

Upon engaging the Green push button for 1 second, the timer starts its operation and energizes the contactor coil. The four normally closed contacts open, initiating operation of the emergency lights.

The timer, to be set at 2 hours (2hrs for initial commissioning, 90mins thereafter, completes its operation, de-energising the contactor coil returning the contacts to the normally closed position.

In accordance with AS2293.1 the test facility is capable of being manually reset. If the red push button is pressed the timer resets & is ready for the green push button to start the timing cycle again.



Kit contents in relation to product purchased

1 - Standalone solutions prewired in plastic enclosures

EMERG1W - Suitable for up to 4 separate test circuits

| QTY | Cat.Ref | Description | Module width |
|-----|---------|---------------------------------------|--------------|
| 1 | ESC441 | Contactors - 4NC contacts, 40A | 3 |
| 1 | SVN391M | Push button - 1NO (green) + 1NO (red) | 1 |
| 1 | EZN004 | Delay timer - 0.1sec to 10hrs | 1 |
| 1 | GD106T | Enclosure - Plastic, 6 module | 6 |
| 1 | GP106T | Door - suits GD106T, transparent | - |
| 1 | VZ313 | Lock - suits GD106T | - |

EMERG2W - Suitable for up to 2 separate test circuits

| QTY | Cat.Ref | Description | Module width |
|-----|---------|---------------------------------------|--------------|
| 1 | ESC226 | Contactors - 2NC contacts, 25A | 1 |
| 1 | SVN391M | Push button - 1NO (green) + 1NO (red) | 1 |
| 1 | EZN004 | Delay timer - 0.1sec to 10hrs | 1 |
| 1 | GD104T | Enclosure - Plastic, 4 module | 4 |
| 1 | GP104T | Door - suits GD104T, transparent | - |
| 1 | VZ313 | Lock - suits GD104T | - |

2 - Wired kit without enclosure for PERFORMA panelboards (Classic, Apex, Apex PLUS, Elite)

EMERG3W - Suitable for up to 4 separate test circuits

| QTY | Cat.Ref | Description | Module width |
|-----|---------|---------------------------------------|--------------|
| 1 | ESC441 | Contactors - 4NC contacts, 40A | 3 |
| 1 | SVN391M | Push button - 1NO (green) + 1NO (red) | 1 |
| 1 | EZN004 | Delay timer - 0.1sec to 10hrs | 1 |



EMERG4W - Suitable for up to 2 separate test circuits

| QTY | Cat.Ref | Description | Module width |
|-----|---------|---------------------------------------|--------------|
| 1 | ESC226 | Contactors - 2NC contacts, 25A | 1 |
| 1 | SVN391M | Push button - 1NO (green) + 1NO (red) | 1 |
| 1 | EZN004 | Delay timer - 0.1sec to 10hrs | 1 |

Lighting applications

Modern lighting systems generate high inrush currents. Therefore we recommend to use the table below to calculate the maximum number of lamps (or dual fittings) which can be connected to each pole of a Hager contactor on 230V 50Hz circuits.

- From June 2014, Hager has improved the performance of 1 and 2 module contactors. The products identified on the front face with the pictogram  can accept a higher number of lamps.
- For the 1 and 2 module contactors without the pictogram , divide the results given by 2.

| Type | Lamp wattage (W) | 25A '+' | Rated output (per pole) 40A | 63A |
|---|---|--|--|--|
| Compact Fluorescent Lamps (CFL's) | | | | |
| CFL with external electronic ballast | 5 - 7 9 - 11 15 - 26 | 27 26 22 | 49 40 36 | 76 63 57 |
| CFL with integrated electronic ballast | 5 - 15 18 - 26 | 54 40 | 86 63 | 135 100 |
| Incandescent lamps | | | | |
| Tungsten Halogen Lamps 230V | 40 60 75 100 150 200 300 500 1000 | 57 45 38 28 18 14 10 6 2 | 76 67 63 41 29 22 15 9 4 | 120 105 100 65 45 35 23 14 7 |
| Halogen ELV (12 or 24V) with electronic transformer | 20 35 50 75 100 150 | 40 26 18 12 6 4 | 139 82 60 52 35 20 | 218 129 94 82 55 31 |
| Fluorescent tubes (T5) | | | | |
| Single - with starter (Low power factor <0.9) | 15 - 20 36 40 58-65 80 115 140 | 30 28 26 24 17 15 10 | 70 60 60 55 35 20 16 | 100 90 90 83 56 48 32 |
| Single - with starter (High power factor >0.9) | 15 - 20 40 - 42 58 - 80 115 | 20 20 15 | 34 29 27 | 53 45 42 |
| Double - with starter (Low power factor <0.9) | 2 x 18 2 x 20 2 x 36 2 x 40 2 x 42 2 x 58 2 x 65 2 x 80 2 x 115 | 40 38 30 26 24 18 16 14 10 | 50 50 44 40 40 27 27 22 16 | 78 78 69 63 63 42 42 35 25 |
| Double - with starter (High power factor >0.9) | 2 x 18 2 x 20 2 x 36 - 42 2 x 58 2 x 65 2 x 80 2 x 115 | 40 38 30 26 24 18 16 14 | 50 50 44 40 40 27 27 | 78 78 69 63 63 42 42 |
| Single with electronic ballast |  | 10 22 | 20 36 | 31 57 |
| Double with electronic ballast |  | 20 44 | 40 72 | 62 114 |

The information given should be considered as indicative and is provided on an "as is" basis. Considerable variations may occur depending on the electrical installation and equipment used. Only experienced professionals with the expertise to determine the characteristics of the electrical installation (value and duration of inrush currents, general characteristics of the installation, types of loads, etc.) may approve and implement a configuration, in accordance with the currently applicable installation standards. Hager accepts no liability for the use made of this information.

| Type | Lamp wattage (W) | 25A '+' | Rated output (per pole) 40A | 63A |
|---|--|-------------------------------|-------------------------------------|--------------------------------------|
| Discharge lamps | | | | |
| High pressure mercury vapour lamps (Low power factor <0.9) | 50 80 125 250 400 700 | 28 18 10 6 2 | 32 24 18 10 6 4 | 50 37 28 15 5 |
| High pressure mercury vapour lamps (High power factor >0.9) | 50 80 125 250 400 700 | 22 16 10 6 2 | 26 22 15 9 6 4 | 40 34 23 14 5 3 |
| Low pressure sodium vapour lamps (Low power factor <0.9) | 90 135 - 180 | 9 6 | 14 6 | 20 8 |
| Low pressure sodium vapour lamps (High power factor >0.9) | 18 35 55 90 135 180 | 7 5 4 2 2 | 10 10 8 5 5 3 | 24 23 19 16 7 6 |
| High Pressure sodium lamps (Low power factor <0.9) | 50 70 110 150 250 400 1000 | 15 12 10 8 5 2 | 22 18 14 10 6 4 2 | 34 28 22 16 10 6 3 |
| High Pressure sodium lamps (High power factor >0.9) | 35 50 70 110 150 250 400 1000 | 18 12 12 6 4 2 | 31 22 16 8 6 5 2 | 50 35 25 13 8 7 3 |
| Metal - Halide Lamp (Low power factor <0.9) | 35 70 150 400 1000 | 30 17 8 4 1 | 42 26 9 6 3 | 55 36 20 9 5 |
| Metal - Halide Lamp (High power factor >0.9) | 35 70 150 400 1000 | 17 13 7 4 1 | 22 18 12 8 4 | 39 33 22 16 9 |
| LED's | | | | |
| LED 230V integrated Driver, Non dimmable, E27 / GU10 | 4 - 12 17 - 22 30 - 40 | 54 40 28 | 86 63 44 | 135 101 70 |
| LED 230V integrated driver Dimmable, GU 10 | 4 - 12 17 - 22 30 - 40 | 120 88 62 | 159 118 82 | 250 185 130 |
| LED high bay lighting 230V integrated driver | 50 100 150 200 | 48 3 2 | 65 6 4 | 102 9 6 |
| LED 12V external driver Dimmable | 1 - 5 7 - 10 15 | 120 120 88 | 180 160 160 | 220 200 200 |