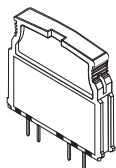
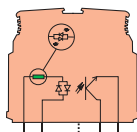


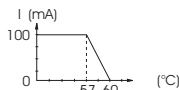
Output optocoupler plugs CE



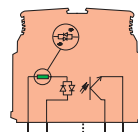
100 mA - 5 V DC



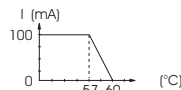
Derating curve



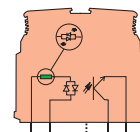
100 mA - 24 V DC



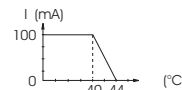
Derating curve



100 mA - 48 V DC



Derating curve



Note 1 :

$$F_{max} = (1 - 0,007 \times V_s) / (L \times I_s^2)$$

or

$$F_{max} = (1 - 0,007 \times V_s) / (P \times \frac{L}{R})$$

Note 2 :

$$F_{max} = (1 - 0,012 \times V_s) / (L \times I_s^2)$$

or

$$F_{max} = (1 - 0,012 \times V_s) / (P \times \frac{L}{R})$$

Part number

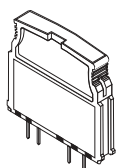
| Type | P/N | Type | P/N | Type | P/N |
|------------|-------------|-------------|-------------|-------------|-------------|
| BNMS P5V-3 | 0031 809.26 | BNMS P24V-3 | 0031 810.12 | BNMS P48V-3 | 0031 811.07 |

Characteristics

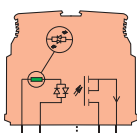
| INPUT | | Type | | P/N | |
|--|---------------------|---------------------|---------------------|-----|--|
| Voltage | 4,5 V to 5,5 V DC | 20,4 V to 28,8 V DC | 40,8 V to 57,6 V DC | | |
| Max. current | 8,5 mA | 4,8 mA | 3,9 mA | | |
| Typical triggering threshold | 2,9 V DC | 16 V DC | 26 V DC | | |
| Switching time | 20 μ s / 1,3 ms | 20 μ s / 1,3 ms | 20 μ s / 1,3 ms | | |
| Leakage current | 1 mA | 1 mA | 1 mA | | |
| OUTPUT | | | | | |
| Max. voltage. / Max. current | 58 V / 100 mA | 58 V / 100 mA | 58 V / 100 mA | | |
| Residual voltage max. I and rated V standard | 1 V DC | 1 V DC | 1 V DC | | |
| max. | 1,3 V DC | 1,3 V DC | 1,3 V DC | | |
| Frequency with inductive load | See Note 1 | See Note 1 | See Note 1 | | |
| Input / Output isolation | 2,5 kV | 2,5 kV | 2,5 kV | | |
| TEMPERATURE | | | | | |
| Storage | -30°C to +80°C | -30°C to +80°C | -30°C to +80°C | | |
| Operating | -20°C to +60°C | -20°C to +60°C | -20°C to +44°C | | |
| Body color | Red | Red | Red | | |

V_s = Output voltage supply
 I_s = Output current
 L = Inductive load
 P = Load power
 R = Load resistance

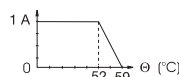
Output optocoupler plugs CE



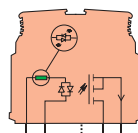
1 A - 5 V DC



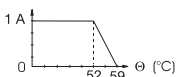
Derating curve



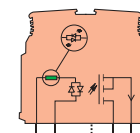
1 A - 24 V DC



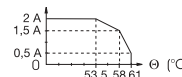
Derating curve



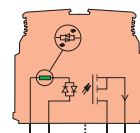
2 A - 5 V DC



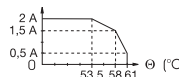
Derating curve



2 A - 24 V DC



Derating curve



Part number

| Type | P/N | Type | P/N | Type | P/N | Type | P/N |
|------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|
| BNMS P5V-2 | 0031 818.16 | BNMS P24V-2 | 0031 819.17 | BNMS P5V-1 | 0031 814.02 | BNMS P24V-1 | 0031 815.03 |

Characteristics

| INPUT | | Type | | P/N | |
|---|--------------------------|-------------------------|--------------------------|--------------------------|--|
| Voltage | 4,5 V to 5,5 V DC | 20,4 V to 28,8 V AC | 4,5 V to 5,5 V DC | 20,4 V to 28,8 V DC | |
| Max. current | 12,5 mA | 7 mA | 12,5 mA | 7 mA | |
| Typical triggering threshold at $I_s = 100\%$ | 3,5 V DC | 10 V DC | 3,5 V DC | 10 V DC | |
| Switching time | 20 μ s / 250 μ s | 50 μ s / 35 μ s | 20 μ s / 250 μ s | 50 μ s / 350 μ s | |
| Leakage current | 1 mA | 1 mA | 1 mA | 1 mA | |
| OUTPUT | | | | | |
| Max. voltage / Max. current | 58 V / 1 A | 58 V / 1 A | 30 V DC / 2 A | 30 V / 2 A | |
| Residual voltage max. I | 1,3 V | 1,3 V | 1,3 V | 1,3 V | |
| Frequency with inductive load | See Note 1 | See Note 1 | See Note 2 | See Note 2 | |
| Input / Output isolation | 2,5 kV | 2,5 kV | 2,5 V | 2,5 kV | |
| TEMPERATURE | | | | | |
| Storage | -30°C to +80°C | -30°C to +80°C | -30°C to +80°C | -30°C to +80°C | |
| Operating | -20°C to +59°C | -20°C to +59°C | -20°C to +61°C | -20°C to +61°C | |
| Body color | Red | Red | Red | Red | |