## Features

## Plug-in mount/Faston 187 16 A Power relay

- Plug-in (92 series sockets) or Faston 187 $(4.8 \times 0.5 \mathrm{~mm})$ with optional mounting adaptors
- 2 \& 3 Pole changeover contacts or NO ( $\geq 3 \mathrm{~mm}$ contact gap)
- AC coils \& DC coils
- UL Listing (certain relay/socket combinations)
- LED, mechanical indicator \& test button options
- Reinforced insulation between coil and contacts according to EN 60335-1, with 6 mm clearance \& 8 mm creepage distance
- SELV coil-contact separator option
- Cadmium Free contact material options
- Sockets and accessories

62.32-0300 62.33-0300
* Distance between contacts $\geq 3 \mathrm{~mm}$ (EN 60730-1).
** With the $\mathrm{AgSnO}_{2}$ material the maximum peak current is $120 \mathrm{~A}-5 \mathrm{~ms}$ (NO contact).
for Ul Horsepower and Pilot duty ratings
SEE "General technical information" page V


## Contact specification

Contact configuration
Rated current/Maximum peak current
Rated voltage/Maximum switching voltage V AC
Rated load AC 1
Rated load AC 15 (230 V AC)
Motor rating (230/400 V AC)
Breaking capacity DC1: 30/110/220 V
Minimum switching load $\quad \mathrm{mW}(\mathrm{V} / \mathrm{mA})$
Standard contact material
Coil specification
Nominal voltage $\left(U_{N}\right) \quad$ VAC $(50 / 60 \mathrm{~Hz})$
Rated power AC/DC VA $(50 \mathrm{~Hz}) / \mathrm{W}$
Operating range AC
DC
Holding voltage AC/DC
Must drop-out voltage AC/DC
Technical data

| Mechanical life AC/DC | cycles |
| :--- | :--- |
| Electrical life at rated load AC1 | cycles |

Operate/release time ms
Insulation between coil and contacts (1.2/50 $\mu \mathrm{s}$ ) kV
Dielectric strength between open contacts $V$ AC
Ambient temperature range
Environmental protection
Approvals (according to type)
$\square$
A
62.32 / 62.33


- 2 \& 3 pole changeover contact
- Plug-in / Faston 187
62.32-0300 / 62.33-0300

- 2 \& 3 pole normally open contact ( $\geq 3 \mathrm{~mm}$ contact gap)
- Plug-in / Faston 187

62.32-0300

62.33-0300


62.33
62.32


| 2 CO (DPDT) | 3 CO (3PDT) |
| :---: | :---: |
| $16 / 30 * *$ |  |

$250 / 400$
4,000

2 NO (DPST-NO) $, \geq 3 \mathrm{~mm} * 3 \mathrm{NO}(3 P S T-N O), \geq 3 \mathrm{~mm} *$
$16 / 30 * *$
$250 / 400$

- 25

750

| 750 |  |  |
| :---: | :---: | :---: |
| $16 / 0.6 / 0.4$ |  |  |
| $0.8 / 1.5$ |  |  |


| $16 / 0.6 / 0.4$ |
| :---: |
| $1,000(10 / 10)$ |

AgCdO
AgCdO

6-12-24-48-60-110-120-230-240-400
6-12-24-48-60-110-125-220
$\square$

| $2.2 / 1.3$ | $3 / 3$ |
| :---: | :---: |

3/3
10.
10.85
$\frac{(0.85 \ldots 1.1) U_{N}}{(0.85 \ldots 1.1) U_{N}}$
$0.8 \mathrm{U}_{\mathrm{N}} / 0.6 \mathrm{U}_{\mathrm{N}}$
$0.2 \mathrm{U}_{\mathrm{N}} / 0.1 \mathrm{U}_{\mathrm{N}}$
$0.2 U_{N} / 0.1 U_{N}$
$10 \cdot 10^{6} / 30 \cdot 10^{6}$
$10 \cdot 10^{6} / 30 \cdot 10^{6}$
$100 \cdot 10$
20/4
6
2,500
$-40 \ldots+50$
RT I

## (1) finder

## Features

Flange mount/Faston 250 16 A Power relay

- Faston $250(6.3 \times 0.8 \mathrm{~mm})$ termination Flange or optional mounting adaptors
- 2 \& 3 Pole changeover contacts or NO ( $\geq 3 \mathrm{~mm}$ contact gap)
- AC coils \& DC coils
- LED, mechanical indicator \& test button options
- Reinforced insulation between coil and contacts according to EN 60335-1, with 6 mm clearance \& 8 mm creepage distance
- SELV coil-contact separator option
- Cadmium Free contact material options

62.82

62.83

62.8 x

$62.8 x-0300$
62.82-0300 62.83-0300
* Distance between contacts $\geq 3 \mathrm{~mm}$ (EN 60730-1).
** With the $\mathrm{AgSnO}_{2}$ material the maximum peak current is $120 \mathrm{~A}-5 \mathrm{~ms}$ ( NO contact).
For Ul Horsepower and Pilot Duty ratings
SEE "General technical information" page V


## Contact specification

Contact configuration

| Rated current/Maximum peak current A |
| :--- |
| Rated voltage/Maximum switching voltage V AC |

Rated load AC1
Rated load AC15 (230 V AC)

| Motor rating (230/400 V AC) | kW |
| :--- | ---: |
| Breaking capacity DC 1 : 30/110/220 V | A |

Minimum switching load $\mathrm{mW}(\mathrm{V} / \mathrm{mA})$
Standard contact material

## Coil specification

Nominal voltage ( $U_{N}$ ) V AC $(50 / 60 \mathrm{~Hz})$

|  | V DC |
| :--- | ---: |
| Rated power AC/DC | $\mathrm{VA}(50 \mathrm{~Hz}) / \mathrm{W}$ |
| Operating range | AC |
|  | DC |
| Holding voltage | $\mathrm{AC} / \mathrm{DC}$ |
| Must drop-out voltage | $\mathrm{AC} / \mathrm{DC}$ |
| Technical data |  |
| Mechanical life AC/DC | cycles |
| Electrical life at rated load ACl | cycles |
| Operate/release time | ms |
| Insulation between coil and contacts $(1.2 / 50$ | $\mu \mathrm{s})$ |
| kV |  |
| Dielectric strength between open contacts | V AC |
| Ambient temperature range | ${ }^{\circ} \mathrm{C}$ |

62.82 / 62.83


- 2 \& 3 pole changeover contact - Flange mount / Faston 250
62.82-0300 / 62.83-0300

- 2 \& 3 pole normally open contact ( $\geq 3 \mathrm{~mm}$ contact gap) - Flange mount / Faston 250



## Ordering information

Example: 62 series power relay + Faston $250(6.3 \times 0.8 \mathrm{~mm})$, rear flange mount, 2 NO (DPST-NO), 12 V DC coil.



Lockable test button and mechanical flag indicator (0040, 0050, 0054, 0070, 0074)
The dual-purpose Finder test button can be used in two ways:
Case 1) The plastic pip (located directly above the test button) remains intact. In this case, when the test button is pushed, the contacts operate. When the test button is released the contacts return to their former state.
Case 2) The plastic pip is broken-off (using an appropriate cutting tool). In this case, (in addition to the above function), when the test button is pushed and rotated, the contacts are latched in the operating state, and remain so until the test button is rotated back to its former position. In both cases ensure that the test button actuation is swift and decisive.

## Technical data

| Insulation according to EN 61810-1 |  |  |
| :---: | :---: | :---: |
|  | 2-O-3 CO | 2 NO-3 NO |
| Nominal voltage of supply system V AC | 230/400 | 230/400 |
| Rated insulation voltage V AC | 400 | 400 |
| Pollution degree | 3 | 3 |
| Insulation between coil and contact set |  |  |
| Type of insulation | Reinforced | Reinforced |
| Overvoltage category | III | III |
| Rated impulse voltage $\quad$ kV (1.2/50 ss ) | 6 | 6 |
| Dielectric strength V AC | 4,000 | 4,000 |
| Insulation between adjacent contacts |  |  |
| Type of insulation | Basic | Basic |
| Overvoltage category | III | III |
| Rated impulse voltage kV (1.2/50 $\mu \mathrm{s}$ ) | 4 | 4 |
| Dielectric strength V AC | 2,500 | 2,500 |
| Insulation between open contacts |  |  |
| Type of disconnection | Micro-disconnection | Full-disconnection |
| Overvoltage category | - | III |
| Rated impulse voltage $\mathrm{kV}(1.2 / 50 \mu \mathrm{~s})$ | - | 4 |
| Dielectric strength V AC/kV (1.2/50 ss) | 1,500/2 | 2,500/4 |
| Conducted disturbance immunity |  |  |
| Burst ( $5 \ldots 50$ )ns, 5 kHz , on $\mathrm{A} 1-\mathrm{A} 2$ | EN 61000-4-4 | level 4 (4 kV) |
| Surge (1.2/50 $\mu$ s) on A1-A2 (differential mode) | EN 61000-4-5 | level 4 ( 4 kV ) |
| Other data |  |  |
| Bounce time: NO/NC ms | 3/6 (changeover) | 3/- (normally open) |
| Vibration resistance (10...150)Hz: NO/NC g | 20/8 |  |
| Shock resistance g | 15 |  |
| Power lost to the environment | 2 pole (CO) 3 pole (CO) | 2 pole (NO) 3 pole (NO) |
| without contact current W | 1.3 1.3 | 3 l |
| with rated current W | 3.3 4.3 | 5 析 |
| Recommended distance between relays mounted on PCB mm | $\geq 5$ |  |

## Contact specification

## F 62 - Electrical life (AC) v contact current



## H 62 - Maximum DC1 breaking capacity

Changeover contacts


## H 62 - Maximum DC1 breaking capacity

Normally open contacts


- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 100 \cdot 10^{3}$ can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load. Note: the release time of the load will be increased.


## Coil specifications

DC version data

| Nominal voltage $U_{N}$ | Coil code | Operating range |  | Resistance <br> R | Rated coil consumption I at $U_{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{U}_{\text {min }}$ | $U_{\text {max }}$ |  |  |
| V |  | V | V | $\Omega$ | mA |
| 6 | 9.006 | 4.8 | 6.6 | 28 | 214 |
| 12 | 9.012 | 9.6 | 13.2 | 110 | 109 |
| 24 | 9.024 | 19.2 | 26.4 | 445 | 54 |
| 48 | 9.048 | 38.4 | 52.8 | 1,770 | 27 |
| 60 | 9.060 | 48 | 66 | 2,760 | 21.7 |
| 110 | 9.110 | 88 | 121 | 9,420 | 11.7 |
| 125 | 9.125 | 100 | 138 | 12,000 | 10.4 |
| 220 | 9.220 | 176 | 242 | 37,300 | 5.8 |

DC (NO/nPST-NO) version data $-\geq 3 \mathrm{~mm}$

| Nominal <br> voltage <br> $U_{N}$ | Coil <br> code | Operating range |  | Resistance | Rated coil <br> consumption |
| :---: | :---: | :---: | :---: | :---: | :---: |
| V |  | $\mathrm{U}_{\text {min }}$ | $\mathrm{U}_{\text {max }}$ | R | I at $\mathrm{U}_{\mathrm{N}}$ |
| 6 | 9.006 | 5.1 | 6.6 | 12 | 500 |
| 12 | 9.012 | 10.2 | 13.2 | 48 | 250 |
| 24 | 9.024 | 20.4 | 26.4 | 192 | 125 |
| 48 | 9.048 | 40.8 | 52.8 | 770 | 63 |
| 60 | 9.060 | 51 | 66 | 1,200 | 50 |
| 110 | 9.110 | 93.5 | 121 | 4,200 | 26 |
| 125 | 9.125 | 106 | 138 | 5,200 | 24 |
| 220 | 9.220 | 187 | 242 | 17,600 | 12.5 |

R 62 - DC coil operating range v ambient temperature Changeover contacts


## R 62 - DC coil operating range v ambient temperature

Normally open contacts


1-Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

## AC version data

| Nominal voltage $U_{N}$ V | Coil code | Operating range |  | Resistance <br> R | Rated coil consumption$\text { I at } U_{N}(50 \mathrm{~Hz})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathrm{U}_{\text {min }}$ | $U_{\text {max }}$ |  |  |
|  |  | V | V | $\Omega$ | mA |
| 6 | 8.006 | 4.8 | 6.6 | 4.6 | 367 |
| 12 | 8.012 | 9.6 | 13.2 | 19 | 183 |
| 24 | 8.024 | 19.2 | 26.4 | 74 | 90 |
| 48 | 8.048 | 38.4 | 52.8 | 290 | 47 |
| 60 | 8.060 | 48 | 66 | 450 | 37 |
| 110 | 8.110 | 88 | 121 | 1,600 | 20 |
| 120 | 8.120 | 96 | 132 | 1,940 | 18.6 |
| 230 | 8.230 | 184 | 253 | 7,250 | 10.5 |
| 240 | 8.240 | 192 | 264 | 8,500 | 9.2 |
| 400 | 8.400 | 320 | 440 | 19,800 | 6 |

AC (NO/nPST-NO) version data $-\geq 3 \mathrm{~mm}$

| $\begin{array}{c}\text { Nominal } \\ \text { voltage } \\ U_{N}\end{array}$ | $\begin{array}{c}\text { Coil } \\ \text { code }\end{array}$ |  | $\begin{array}{c}\text { Operating range }\end{array}$ |  | Resistance |
| :---: | :---: | :---: | :---: | ---: | :---: | \(\left.\begin{array}{c}Rated coil <br>

consumption\end{array}\right)\)

R 62 - AC coil operating range $v$ ambient temperature Changeover contacts


R 62 - AC coil operating range $v$ ambient temperature Normally open contacts


1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.

