# 90 Series - Socket overview for 60 series relays

90.03

See page 8

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| 99.02 | 90.02 | 60.12 | **Screw terminal (Box clamp) socket** | Panel or 35 mm rail (EN 60715) mount | - Coil indication and EMC suppression modules<br>- Jumper link<br>- Timer modules<br>- Metal retaining clip |
|  | 90.03 | 60.13 | Double A1 terminal | | |

90.21

See page 9

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| 99.01 | 90.20 | 60.12 | **Screw terminal (Box clamp) socket** | Panel or 35 mm rail (EN 60715) mount | - Coil indication and EMC suppression modules<br>- Metal retaining clip |
|  | 90.21 | 60.13 | | | |

90.83.3

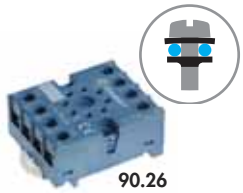
See page 10

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| — | 90.82.3 | 60.12 | **Screw terminal (Box clamp) socket** | Panel or 35 mm rail (EN 60715) mount | - Metal retaining clip |
| — | 90.83.3 | 60.13 | | | |

90.23

See page 10

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| — | 90.22 | 60.12 | **Screw terminal (Box clamp) socket** | Panel or 35 mm rail (EN 60715) mount | - Metal retaining clip |
| — | 90.23 | 60.13 | | | |



90.26

See page 11

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| — | 90.26 | 60.12 | **Screw terminal (Plate clamp) socket** | Panel or 35 mm rail (EN 60715) mount | - Metal retaining clip |
| — | 90.27 | 60.13 | | | |

90.12

See page 11

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| — | 90.12 | 60.12 | **Flange mount solder socket** | M3 screw fixing | — |
| — | 90.13 | 60.13 | | | |

90.15

See page 12

| Module | Socket | Relay | Description | Mounting | Accessories |
|---|---|---|---|---|---|
| — | 90.14 | 60.12 | **PCB socket** | PCB | — |
| — | 90.14.1 | 60.12 | | | |
| — | 90.15 | 60.13 | | | |
| — | 90.15.1 | 60.13 | | | |

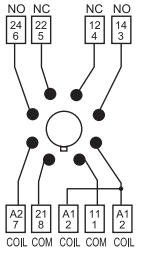
# 90 Series - Sockets and accessories for 60 series relays

90.03

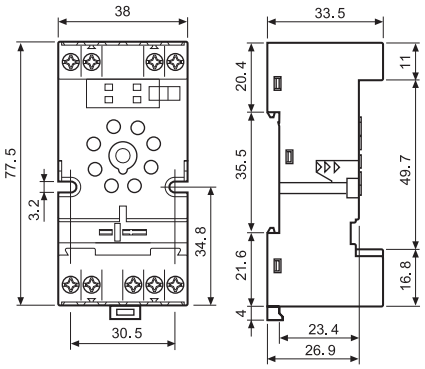
Approvals (according to type):

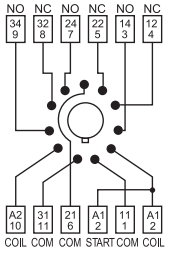
Certain relay/socket combinations

| Screw terminal (Box clamp) socket<br>panel or 35 mm rail (EN 60715) mount | | 90.02<br>Blue | 90.02.0<br>Black | 90.03<br>Blue | 90.03.0<br>Black |
|---|---|---|---|---|---|
| For relay type | | 60.12 | | 60.13 | |
| **Accessories** | | | | | |
| Metal retaining clip | | 090.33 | | | |
| 6-way jumper link | | 090.06 | | | |
| Identification tag | | 090.00.2 | | | |
| Modules (see table below) | | 99.02 | | | |
| Timer modules (see table below) | | 86.00, 86.30 | | | |
| **Technical data** | | | | | |
| Rated values | | 10 A - 250 V | | | |
| Dielectric strength | | 2 kV AC | | | |
| Protection category | | IP 20 | | | |
| Ambient temperature | °C | –40...+70 | | | |
| Screw torque | Nm | 0.6 | | | |
| Wire strip length | mm | 10 | | | |
| Max. wire size for 90.02 and 90.03 sockets | | solid wire | | stranded wire | |
| | mm² | 1x6 / 2x2.5 | | 1x4 / 2x2.5 | |
| | AWG | 1x10 / 2x14 | | 1x12 / 2x14 | |

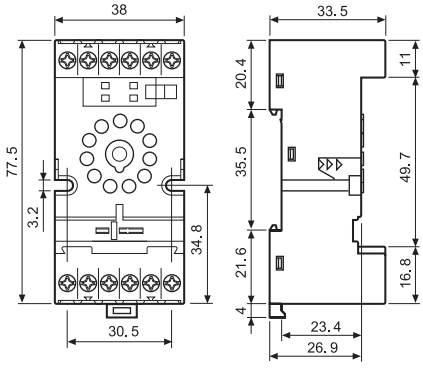



90.02



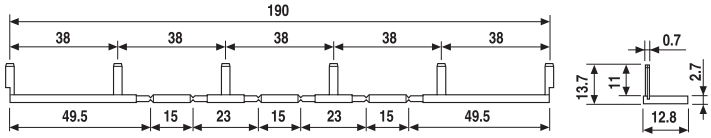

90.03




090.06

| **6-way jumper link** for 90.02 and 90.03 sockets | 090.06 (blue) |
|---|---|
| Rated values | 10 A - 250 V |

Approvals (according to type):




86.00

86.30

| **86 series timer modules** | |
|---|---|
| Multi-voltage: (12...240)V AC/DC;<br>Multi-functions: AI, DI, SW, BE, CE, DE, EE, FE; (0.05 s...100 h) | 86.00.0.240.0000 |
| (12...24)V AC/DC; Bi-function: AI, DI; (0.05 s...100 h) | 86.30.0.024.0000 |
| (110...125)V AC; Bi-function: AI, DI; (0.05s...100h) | 86.30.8.120.0000 |
| (230...240)V AC; Bi-function: AI, DI; (0.05 s...100 h) | 86.30.8.240.0000 |

Approvals (according to type):

99.02

Approvals (according to type):

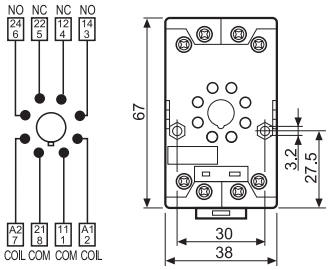
| **99.02 coil indication and EMC suppression modules** for 90.02 and 90.03 sockets | | |
|---|---|---|
| Diode (+A1, standard polarity) | (6...220)V DC | 99.02.3.000.00 |
| LED | (6...24)V DC/AC | 99.02.0.024.59 |
| LED | (28...60)V DC/AC | 99.02.0.060.59 |
| LED | (110...240)V DC/AC | 99.02.0.230.59 |
| LED + Diode (+A1, standard polarity) | (6...24)V DC | 99.02.9.024.99 |
| LED + Diode (+A1, standard polarity) | (28...60)V DC | 99.02.9.060.99 |
| LED + Diode (+A1, standard polarity) | (110...220)V DC | 99.02.9.220.99 |
| LED + Varistor | (6...24)V DC/AC | 99.02.0.024.98 |
| LED + Varistor | (28...60)V DC/AC | 99.02.0.060.98 |
| LED + Varistor | (110...240)V DC/AC | 99.02.0.230.98 |
| RC circuit | (6...24)V DC/AC | 99.02.0.024.09 |
| RC circuit | (28...60)V DC/AC | 99.02.0.060.09 |
| RC circuit | (110...240)V DC/AC | 99.02.0.230.09 |
| Residual current by-pass | (110...240)V AC | 99.02.8.230.07 |

DC Modules with non-standard polarity (+A2) on request.

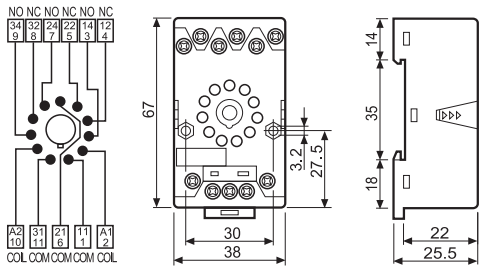
90.21

Approvals (according to type):

| Screw terminal (Box clamp) socket<br>panel or 35 mm rail (EN 60715) mount | | 90.20<br>Blue | 90.20.0<br>Black | 90.21<br>Blue | 90.21.0<br>Black |
|---|---|---|---|---|---|
| For relay type | | 60.12 | | 60.13 | |
| **Accessories** | | | | | |
| Metal retaining clip (supplied with socket - packaging code SMA) | | 090.33 | | | |
| Modules (see table below) | | 99.01 | | | |
| **Technical data** | | | | | |
| Rated values | | 10 A - 250 V | | | |
| Dielectric strength | | 2 kV AC | | | |
| Protection category | | IP 20 | | | |
| Ambient temperature | °C | –40...+70 | | | |
| Screw torque | Nm | 0.5 | | | |
| Wire strip length | mm | 10 | | | |
| Max. wire size for 90.20 and 90.21 sockets | | solid wire | | stranded wire | |
| | $mm^2$ | 1x6 / 2x2.5 | | 1x6 / 2x2.5 | |
| | AWG | 1x10 / 2x14 | | 1x10 / 2x14 | |




90.20




90.21

99.01

Approvals (according to type):

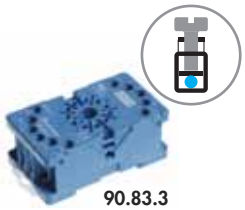
* Modules in Black housing are available on request.

Green LED is standard. Red LED available on request.

**99.01 coil indication and EMC suppression modules** for 90.20 and 90.21 sockets

| | | Blue* |
|---|---|---|
| Diode (+A1, standard polarity) | (6...220)V DC | 99.01.3.000.00 |
| Diode (+A2, non-standard polarity) | (6...220)V DC | 99.01.2.000.00 |
| LED | (6...24)V DC/AC | 99.01.0.024.59 |
| LED | (28...60)V DC/AC | 99.01.0.060.59 |
| LED | (110...240)V DC/AC | 99.01.0.230.59 |
| LED + Diode (+A1, standard polarity) | (6...24)V DC | 99.01.9.024.99 |
| LED + Diode (+A1, standard polarity) | (28...60)V DC | 99.01.9.060.99 |
| LED + Diode (+A1, standard polarity) | (110...220)V DC | 99.01.9.220.99 |
| LED + Diode (+A2, non-standard polarity) | (6...24)V DC | 99.01.9.024.79 |
| LED + Diode (+A2, non-standard polarity) | (28...60)V DC | 99.01.9.060.79 |
| LED + Diode (+A2, non-standard polarity) | (110...220)V DC | 99.01.9.220.79 |
| LED + Varistor | (6...24)V DC/AC | 99.01.0.024.98 |
| LED + Varistor | (28...60)V DC/AC | 99.01.0.060.98 |
| LED + Varistor | (110...240)V DC/AC | 99.01.0.230.98 |
| RC circuit | (6...24)V DC/AC | 99.01.0.024.09 |
| RC circuit | (28...60)V DC/AC | 99.01.0.060.09 |
| RC circuit | (110...240)V DC/AC | 99.01.0.230.09 |
| Residual current by-pass | (110...240)V AC | 99.01.8.230.07 |

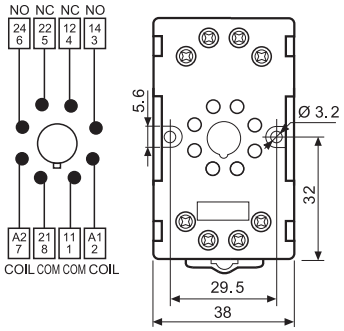
# 90 Series - Sockets and accessories for 60 series relays



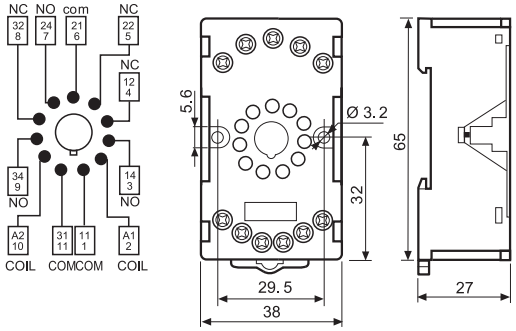
90.83.3

Approvals (according to type):

| Screw terminal (Box clamp) socket<br>panel or 35 mm rail (EN 60715) mount | | 90.82.3<br>Blue | 90.82.30<br>Black | 90.83.3<br>Blue | 90.83.30<br>Black |
|---|---|---|---|---|---|
| For relay type | | 60.12 | | 60.13 | |
| **Accessories** | | | | | |
| Metal retaining clip | | 090.33 | | | |
| **Technical data** | | | | | |
| Rated values | | 10 A - 250 V | | | |
| Dielectric strength | | 2 kV AC | | | |
| Protection category | | IP 20 | | | |
| Ambient temperature | °C | –40...+70 | | | |
| Screw torque | Nm | 0.8 | | | |
| Max. wire size for 90.82.3 and 90.83.3 sockets | | solid wire | | stranded wire | |
| | mm² | 1x6 / 2x4 | | 1x6 / 2x4 | |
| | AWG | 1x10 / 2x14 | | 1x10 / 2x14 | |




90.82.3

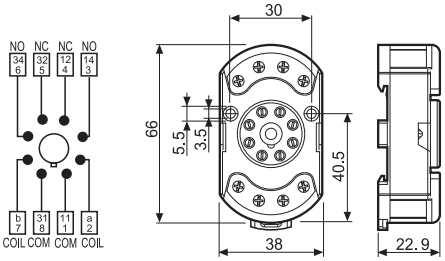



90.83.3

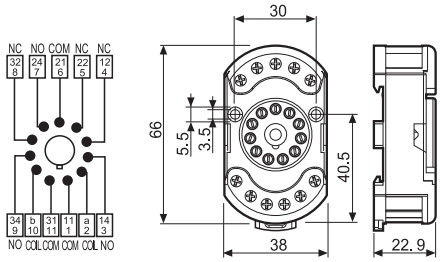
90.23

Approvals (according to type):

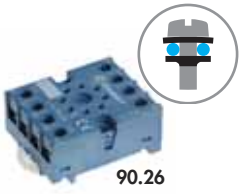
| Screw (Box clamp) terminal socket<br>panel or 35 mm rail (EN 60715) mount | | 90.22<br>Blue | 90.23<br>Blue |
|---|---|---|---|
| For relay type | | 60.12 | 60.13 |
| **Accessories** | | | |
| Metal retaining clip (supplied with socket - packaging code SMA) | | 090.33 | |
| **Technical data** | | | |
| Rated values | | 10 A - 250 V | |
| Dielectric strength | | 2 kV AC | |
| Protection category | | IP 20 | |
| Ambient temperature | °C | –40...+70 | |
| Screw torque | Nm | 0.5 | |
| Wire strip length | mm | 7 | |
| Max wire size for 90.22 and 90.23 sockets | | solid wire | stranded wire |
| | mm² | 1x6 / 2x2.5 | 1x6 / 2x2.5 |
| | AWG | 1x10 / 2x14 | 1x10 / 2x14 |




90.22



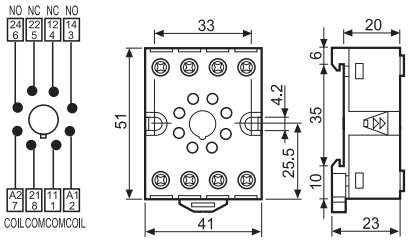

90.23



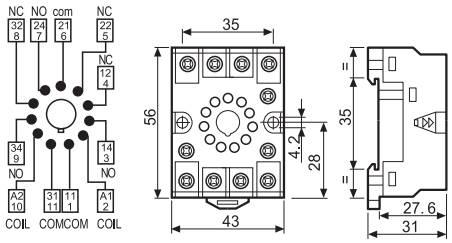
90.26

Approvals (according to type):

| Screw terminal (Plate clamp) socket<br>panel or 35 mm rail (EN 60715) mount | | 90.26<br>Blue | 90.26.0<br>Black | 90.27<br>Blue | 90.27.0<br>Black |
|---|---|---|---|---|---|
| For relay type | | 60.12 | | 60.13 | |
| **Accessories** | | | | | |
| Metal retaining clip (supplied with socket - packaging code SMA) | | 090.33 | | | |
| **Technical data** | | | | | |
| Rated values | | 10 A - 250 V | | | |
| Dielectric strength | | 2 kV AC | | | |
| Protection category | | IP 20 | | | |
| Ambient temperature | °C | –40…+70 | | | |
| Screw torque | Nm | 0.8 | | | |
| Wire strip length | mm | 10 | | | |
| Max. wire size for 90.26 and 90.27 sockets | | solid wire | | stranded wire | |
| | mm² | 1x4 / 2x2.5 | | 1x4 / 2x2.5 | |
| | AWG | 1x12 / 2x14 | | 1x12 / 2x14 | |




90.26

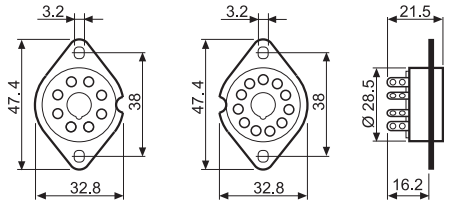



90.27

90.12

Approvals (according to type):

| Flange mount solder socket mount with M3 screw | | 90.12 (black) | 90.13 (black) |
|---|---|---|---|
| For relay type | | 60.12 | 60.13 |
| **Technical data** | | | |
| Rated values | | 10 A - 250 V | |
| Dielectric strength | | 2 kV AC | |
| Ambient temperature | °C | –40…+70 | |

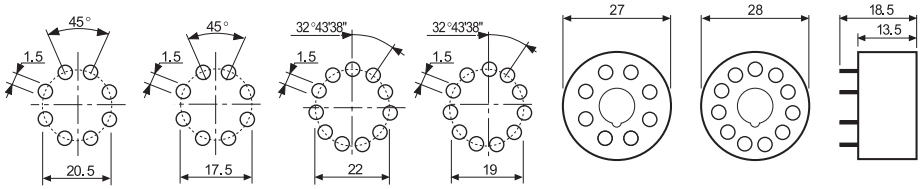



90.12 90.13

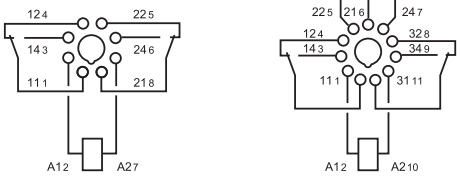
90.15

Approvals (according to type):

| PCB socket | Blue<br>Blue | 90.14 (Ø 20.5 mm)<br>90.14.1 (Ø 17.5 mm) | 90.15 (Ø 22 mm)<br>90.15.1 (Ø 19 mm) |
|---|---|---|---|
| For relay type | | 60.12 | 60.13 |
| **Technical data** | | | |
| Rated values | | 10 A - 250 V | |
| Dielectric strength | | 2 kV AC | |
| Ambient temperature | °C | –40...+70 | |




90.14 90.14.1 90.15 90.15. 1 90.14 90.15




90.14 90.15

## Packaging code

**How to code and identify retaining clip and packaging options for sockets.**

Example:

| 9 0 . | 2 | 1 | S M | A |
|---|---|---|---|---|

**A** Standard packaging

**SM** Metal retaining clip

| 9 0 . | 2 | 1 | | |
|---|---|---|---|---|

Without retaining clip