

## E:T•N

Powering Business Worldwide

## We make what matters work.*



At Eaton, we believe that power is a fundamental part of just about everything people do. That's why we're dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because this is what really matters. And we're here to make sure it works.

## Est•N

Powering Business Worldwide

## Eaton's Pl-40 Switch-disconnectors

Eaton's P1-40 Switch-disconnectors bridges the gap between the P1's previous maximum rating of 32 A and the P3's lowest rating of 63 A . It allows for a greater current rating in the compact P1 size.

Eaton's world expertise in the design, manufacture and specifications of switch-disconnectors ensure your application will be protected by the best switching solutions available.

Contact buletechnical@eaton.com for further information.


## Description

Eaton's P1-40 Switch-disconnectors bridges the gap between the P1's previous maximum rating of 32 A and the P3's lowest rating of 63 A . It allows for a greater current rating in the compact P 1 size. It is the ideal solution for machine control, automation, production lines, emergency switching and power switching applications.

## Mounting options

- Center mounting
- Distribution board mounting
- Flush mounting
- Rear mounting
- Rear mounting with metal extension handle
- Surface mounting in Ci-K Polycarbonate enclosure
- Surface mounting in Ci-K Polycarbonate enclosure with preassembled EMC screen
- Surface mounting in steel enclosures


## Standards/Approvals

- IEC/EN 60947-3
- IEC/EN 60204


## Technical data

- Rated voltage:690 V a.c.
- Rated current: 40 A
- Utilisation category: AC-21, AC-22, AC-23 and AC-3


## Features and benefits

- Compact solution with a 40 Amp current rating allows for higher power applications, future proofing your installation
- Variety of mounting and configuration options available to suit the majority of applications
- Compatible with all existing P1 accessories
- Set of four fork terminals included in box as standard for Main switches and enclosed switches for connection to the additional earth and neutral terminals to accomodate the larger wire sizes at 40 A , ensuring ease of installation


P1-40/EA/SVB/H111 Main switch with auxiliary contacts


P1-40/I2H/N
Surface mounting, switch fitted in polycarbonate Ci-K Enclosure with metric knockouts


P1-40/IVS-RT
Distribution board On-Off switch

## P1-40 Switch-disconnectors - Range overview

|  |  | Main switch |  | On-Off switch |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With emergency switching off/ emergency stop function function | Without emergency switching off/ emergency stop function | On-Off switch | With emergency switching off/ emergency stop function |
| Center mounting /EZ |  |  |  |  |  |
|  | Without auxiliary contacts |  |  | $\checkmark$ |  |
|  | With auxiliary contacts |  |  |  |  |
| Distribution board mounting /IVS |  |  |  |  |  |
|  | Without auxiliary contacts |  |  | $\checkmark$ | $\checkmark$ |
|  | With auxiliary contacts |  |  | $\checkmark$ |  |
| Flush mounting /EA (Main switch) /E (On-off switch) |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Rear mounting /V (Main switch / Z (On-Off switch) |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Rear mounting with metal extension handle /M4 |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ |  |  |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ |  |  |
| Surface mounting in Ci-K Polycarbonate enclosure /l2 |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
| Surface mounting in Ci-K Polycarbonate enclosure with pre-assembled EMC screen I/MBS |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ |  |  |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ |  |  |
| Surface mounting in steel enclosures /SE1 |  |  |  |  |  |
|  | Without auxiliary contacts | $\checkmark$ | $\checkmark$ | $\checkmark$ |  |
|  | With auxiliary contacts | $\checkmark$ | $\checkmark$ |  |  |

P1-40 Switch-disconnectors - Catalogue number system
Flush mounting ' $E$ ' and ' $E A$ '

|  | P | - | Rated <br> current <br> (Amps) | $\boldsymbol{I}$ Mounting form, switch type, handle type | Options |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{P 1}$ | $\mathbf{4 0}$ | EA/SVB: Flush mounting, main switch with red/yellow handle <br> EA/SVB-SW: Flush mounting, main switch with black handle <br> E: Flush mounting with black thumb grip and front plate <br> E-RT: Flush mounting with red thumb grip | I | Accesories |  |

Centre mounting 'EZ'

| $\mathbf{P}$ | - | Rated <br> current <br> $(\mathbf{A m p s})$ | I | Switch type, mounting form, handle type | $\boldsymbol{I}$ | Nb of poles |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P1 | $\mathbf{4 0}$ |  | EZ: Centre mounting, ON-OFF switch with black thumb-grip and front plate | N: 3-pole + <br> Neutral |  |  |

Surface mounting 'I2', switch-disconnector fitted in Ci-K Polycarbonate enclosure

| P | Rated current (Amps) |  | 1 | Mounting form | Ci-K Enclosure size (H x W mm) | H | I | Options |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Switch type, handle type |  |  |  |  | 1 | Nb of poles | Accesories |
| P1 |  | 40 |  |  | I : Surface mounting in $\mathrm{Cl}-\mathrm{K}$ enclosure | $\mathbf{2}(181 \times 100 \mathrm{~mm})$ | H: Hard knockouts |  | SVB: Main switch with red/yellow handle SVB-SW: Main switch with black handle <br> MBS/SVB: Main switch with red/yellow handle and pre-assembled EMC screen <br> MBS/SVB-SW: Main switch with black handle and pre-assembled EMC screen <br> (Blank) Switch with ON-OFF function |  | $\mathbf{N}$ : 3-pole + Neutral | HI11: With auxiliary contacts with 1 NO/1 NC <br> RT: Red Thumb grip |

Surface mounting 'SE1', switch-disconnector fitted in steel enclosure

| P | $-$Rated <br> current <br> (Amps) |  | 1 | Steel enclosure type | 1 | Options |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Switch type, handle type |  |  | 1 | Nb of poles | I | Accesories |
| P1 |  | 40 |  |  | SE1 |  | SVB: Main switch with red/yellow handle SVB-SW: Main switch with black handle <br> (Blank) Switch with ON-OFF function |  | N: 3-pole + Neutral |  | HI11:With auxiliary contacts with 1 NO/1 NC |

## Service distribution board mounting 'IVS' switch-disconnectors

| P | - | Rated <br> current <br> (Amps) | $\boldsymbol{I}$ | Mounting form, switch type, handle type5 | $\boldsymbol{I}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| P1 | $\mathbf{4 0}$ | Nb of poles <br> IVS: ON-OFF Disribution board mounting switch with black thumb grip and front plate <br> IVS: ON-OFF Disribution board mounting switch with red thumb grip | $\mathbf{N}: 3-$-pole + <br> Neutral |  |  |

## P1-40 Switch-disconnectors - Catalogue number system

Rear mounting 'V/SVB', 'M4' and 'Z' switch-disconnectors

|  |  |  |  |  |  | Options |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P | - | Rated current (Amps) | 1 | Mounting form, switch type, handle type | 1 | Nb of poles | / | Accesories |
| P1 |  | 40 |  | V/SVB: Rear mounting, main switch with red/yellow handle <br> V/SVB-SW: Rear mounting, main switch with black handle <br> M4/SVB:Rear mounting, main switch with 400 mm extension shaft with red/yellow handle <br> M4/SVB-SW: Rear mounting, main switch with 400 mm extension shaft with blank handle <br> $\mathbf{Z}$ : ON-OFF switch with black thumb grip and front plate |  | N: 3-pole + Neutral |  | HI11: With auxiliary contacts with 1 NO/1 NC <br> HI10: With auxiliary contacts with 1 NO/O NC |

## Accessories - FORKTERM-P1

## Description

Eaton's P1-40 Switch-disconnectors Flush mounting Main switch, Rear mounting Main switch and Surface mounting in Ci-K Polycarbonate enclosures come with 4 Fork terminals as standard. They are the ideal solution for connection to the additonal earth and neutral terminals to accomodate the larger wire sizes at 40 A .

Eight additional fork terminal FORKTERM-P1 (Y7-400136) can be ordered separately for use with the body terminals and additional terminals such as auxiliary and neutral units.



Set of 4 fork terminal to fit on the additional earthing and neutral terminal


FORKTERM-P1

## P1-40 Main switches

Pl-40 Main switch with emergency switching off/emergency stop function - Flush and Surface mounting

- With red rotary handle and yellow locking collar
- Lockable in the 0 (Off position)
- Front IP65

* Comes with 4 Fork Terminals as standard

P1-40/EA/SVB

P1-40/I2H/SVB

P1-40/I2H/MBS/SVB

P1-40/SE1/SVB/H111

P1-40 Main switches
Pl-40 Main switch with emergency switching off/emergency stop function - Rear mounting

- With red rotary handle and yellow locking collar
- Lockable in the 0 (Off position)
- Front IP65

| Front plate | Contact sequence | Auxiliary contacts |  |  |  |  |  |  | Suitable for export to North America (US) and Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N/O | N/C | Number of poles | Rated current | Part number | Article number | Pack qty |  |
| Rear mounting, front IP65 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40/V/SVB* | 199952 | 1 | N/A |
| FS 908 |  |  |  | $3+N$ | 40 A | P1-40/V/SVB/N* | 199955 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | P1-40/V/SVB/HI11* | 199953 | 1 | N/A |
|  |  | 1 | 1 | $3+N$ | 40 A | P1-40/V/SVB/N/HI11* | 199956 | 1 | N/A |
| Rear mounting with 400 mm metal extension handle, front IP65 |  |  |  |  |  |  |  |  |  |
|  | $-><\|x\| c \mid$ <br> $->$ |  |  | 3 | 40 A | P1-40/M4/SVB | 199936 | 1 | N/A |
| FS 908 |  |  |  | $3+N$ | 40 A | P1-40/M4/SVB/N | 199938 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | Pl-40/M4/SVB/HI11 | 199937 | 1 | N/A |
|  |  | 1 | 1 | $3+N$ | 40 A | Pl-40/M4/SVB/N/HI11 | 199939 | 1 | N/A |

* Comes with 4 Fork Terminals as standard


P1-40/V/SVB/H111


PI-40/M4/SVB/H11

Pl-40 Main switch without emergency switching off/emergency stop function - Flush and Surface mounting

- With black rotary handle and black locking collar
- Lockable in the 0 (Off position)

|  |  | Auxiliary contacts |  |  |  |  |  |  | Suitable for export to North America (US) and Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Front plate | Contact sequence | N/O | N/C | Number of poles | Rated current | Part number | Article number | Pack qty |  |
| Flush mounting, front IP65 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40/EA/SVB-SW* | 199898 | 1 | N/A |
| FS 908 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $3+N$ | 40 A | P1-40/EA/SVB-SW/N* | 199900 | 1 | N/A |
|  |  | 1 | 1 | $3$ | 40 A | P1-40/EA/SVB-SW/HI11* | 199899 | 1 | N/A |
|  |  | 1 | 1 | $3+N$ | 40 A | P1-40/EA/SVB-SW/N/HI11* | 199901 | 1 | N/A |


| Surface mounting, switch fitted in Ci-K Polycarbonate enclosure, front IP65, totally insulated |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $-x \mid x$ |  |  | 3 | 40 A | P1-40/I2/SVB-SW* | 199912 | 1 | N/A |
|  |  |  |  |  | 40 A | P1-40/I2H/SVB-SW* | 199925 | 1 | N/A |
| FS 908 | $-x\|x\| x \mid x$ |  |  | $3+N$ | 40 A | P1-40/I2/SVB-SW/N* | 199914 | 1 | N/A |
|  | 은ㅇㅇㅇㅇㅇㅇㅇㅇㅅㅇ |  |  |  | 40 A | P1-40/I2H/SVB-SW/N* | 199927 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | P1-40/I2/SVB-SW/HI11* | 199913 | 1 | N/A |
|  |  |  |  |  | 40 A | P1-40/I2H/SVB-SW/HI11* | 199926 | 1 | N/A |
| Surface mounting, switch fitted in Ci-K Polycarbonate enclosure with pre-assembled EMC screen, front IP65 totally insulated |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40/I2H/MBS/SVB-SW* | 199919 | 1 | N/A |
| FS 908 |  |  | 1 | 3 | 40 A | P1-40/I2H/MBS/SVB-SWHI11* | 199920 | 1 | N/A |
| Surface mounting, switch fitted in steel enclosures, front IP65 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40/SE1/SVB-SW | 199949 | 1 | N/A |
| FS 908 | - |  |  | $3+N$ | 40 A | P1-40/SE1/SVB-SW/N | 199951 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | P1-40/SE1/SVB-SW/HI11 | 199950 | 1 | N/A |

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P1-40/EA/SVB-SW/N


P1-40/I2/SVB-SW/N


P1-40/I2H/MBS/SVB-SW


P1-40/SE1/SVB-SW/HI11

P1-40 Main switches
Pl-40 Main switch without emergency switching off/emergency stop function - Rear mounting

- With black rotary handle and black locking collar
- Lockable in the 0 (Off position)

| Front plate | Contact sequence | Auxiliary contacts |  |  |  |  |  |  | Suitable for export to North America (US) and Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N/O | N/C | Number of poles | Rated current | Part number | Article number | Pack qty |  |
| Rear mounting, front IP65 |  |  |  |  |  |  |  |  |  |
| $\stackrel{\text { ON }}{\text { ONF }}$ |  |  |  | 3 | 40 A | P1-40/V/SVB-SW* | 199958 | 1 | N/A |
| FS 908 | $x>$ $x$   <br>     <br> 웅ㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇㅇ |  |  | $3+N$ | 40 A | P1-40/V/SVB-SW/N* | 199961 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | P1-40/V/SVB-SW/HI11* | 199959 | 1 | N/A |
|  |  | 1 | 1 | $3+N$ | 40 A | P1-40/V/SVB-SW/N/H11* | 199962 | 1 | N/A |
| Rear mounting with 400 mm metal extension handle, front IP65 |  |  |  |  |  |  |  |  |  |
| $\mathrm{C}_{\mathrm{OFF}}^{\mathrm{O}}$ | $\begin{aligned} & -x<x<x \\ & \circ \text { 응운ㅇㅇㅇ } \end{aligned}$ |  |  | 3 | 40 A | P1-40/M4/SVB-SW | 199940 | 1 | N/A |
| FS 908 |  |  |  | $3+N$ | 40 A | P1-40/M4/SVB-SW/N | 199942 | 1 | N/A |
|  |  | 1 | 1 | 3 | 40 A | Pl-40/M4/SVB-SW/HI11 | 199941 | 1 | N/A |
|  | $\begin{array}{\|l\|l\|l\|l\|} \hline x\|x\| x\|x\| x & \\ \hline & & & \\ \hline \end{array}$ <br>  | 1 | 1 | $3+N$ | 40 A | Pl-40/M4/SVB-SW/N/H111 | 199943 | 1 | N/A |

* Comes with 4 Fork Terminals as standard


P1-40/V/SVB-SW/N


PI-40/M4/SVB-SW/N/HI11

P1-40 On-Off switches
Pl-40 On-off switch - Flush , Center and Surface mounting

- With black thumb grip and front plate

|  | Contact sequence | Auxi cont |  |  |  |  |  |  | Suitable for export |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Front plate |  | N/O | N/C | Number of poles | Rated current | Part number | Article number | Pack qty | to North <br> America (US) <br> and Canada |
| Flush mounting, front IP65 |  |  |  |  |  |  |  |  |  |
| ${ }^{0}{ }^{\text {OFF }}-1$ |  |  |  | 3 | 40 A | P1-40/E | 199889 | 1 | N/A |
| FS 908 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $3+N$ | 40 A | P1-40/E/N | 199891 | 1 | N/A |
|  |  |  |  |  |  |  |  |  |  |
| Center mounting, front IP65 |  |  |  |  |  |  |  |  |  |
| ${ }^{0}{ }^{\text {OFF }}$ | $\begin{aligned} & -x>x \mid x \\ & \hline \therefore \text { 웅ㅇㅇㅇㅇㅇㅇ } \end{aligned}$ |  |  | 3 | 40 A | P1-40/EZ | 199903 | 1 | N/A |
| FS 908 | $\begin{aligned} & -x \times x \times x \\ & \text { 웅ㅇㅇㅇㅇㅇㅇㅇㅁㅇ․ } \end{aligned}$ |  |  | $3+N$ | 40 A | P1-40/EZ/N | 199904 | 1 | N/A |
|  |  |  |  |  |  |  |  |  |  |
| Surface mounting, switch fitted in Ci-K Polycarbonate enclosure,front IP65 totally insulated |  |  |  |  |  |  |  |  |  |
| $\overbrace{\text { OFF }}^{\text {OF }}$ |  |  |  | 3 | 40 A | P1-40/L2* | 199906 | 1 | N/A |
|  |  |  |  | 3 | 40 A | P1-40/I2H* | 199915 | 1 | N/A |
| FS 908 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40-12H/HI11* | 199916 | 1 | N/A |
|  |  |  |  |  |  |  |  |  |  |
|  | $-\quad-x\|x\| x$ <br>  |  |  | $3+N$ | 40 A | P1-40/I2/N* | 199908 | 1 | N/A |
|  |  |  |  | $3+N$ | 40 A | P1-40/I2H/N* | 199921 | 1 | N/A |
| Surface mounting, switch fitted in steel enclosures, front IP65 |  |  |  |  |  |  |  |  |  |
| $\overbrace{\text { OFF }}^{O_{0}-D_{0}^{\text {ON }}}$ | $\begin{aligned} & -x>x \\ & \hline \circ \times \stackrel{\circ}{\circ} \circ \circ \circ \\ & \therefore \circ_{\sim}^{\circ} \circ \circ \end{aligned}$ |  |  | 3 | 40 A | P1-40/SE1 | 199944 | 1 | N/A |
| FS 908 | $-$$x>x \mid x$ <br>  |  |  | $3+N$ | 40 A | P1-40/SE1/N | 199945 | 1 | N/A |
|  |  |  |  |  |  |  |  |  |  |



P1-40/E/N


P1-40/EZ/N


P1-40/I2/N


P1-40-I2H/H111


P1-40/SE1/N

* Comes with 4 Fork Terminals as standard


## P1-40 On-Off switches

Pl-40 On-off switch - Distribution board and Rear mounting

- With black thumb grip and front plate
Front
plate
Service distribution board mounting, front $1 P 30$

Pl-40 On-off switch with an emergency switching off/emergency stop function

- With red thumb grip and yellow front plate

| Front plate | Contact sequence | Auxiliary contacts |  |  |  |  |  |  | Suitable for export to North America (US) and Canada |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N/O | N/C | Number of poles | Rated current | Part number | Article number | Pack qty |  |
| Flush mounting, front IP65 |  |  |  |  |  |  |  |  |  |
| ${ }^{\substack{\text { OFF } \\ \mathrm{O}_{2} \\ \hline \\ \hline \\ \hline}}$ |  |  |  | 3 | 40 A | P1-40/E-RT | 199902 | 1 | N/A |
| FS 908 |  |  |  |  |  |  |  |  |  |
| Surface mounting, switch fitted in Ci-K Polycarbonate enclosure, front IP65, totally insulated |  |  |  |  |  |  |  |  |  |
| $\mathrm{O}_{\mathrm{OFF}}^{\mathrm{O}-\mathrm{O}}$ | $\begin{array}{l\|l\|l\|} \hline x & x & x \\ \hline & & \\ \hline ㅇ ㅜ ㅇ ㅇ ㅇ ㅇ ㅇ ㅇ ㅇ ~ \end{array}$ |  |  | 3 | 40 A | P1-40/I2-RT | 199930 | 1 | N/A |
| FS 908 |  |  |  |  |  |  |  |  |  |
| Service distribution board mounting, front IP30 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 3 | 40 A | P1-40/IVS-RT | 199935 | 1 | N/A |



P1-40/E-RT


P1-40/I2-RT


P1-40/IVS-RT

## Dimensions - Outline drawings

P1 Flush mounting main switch /EA/SVB


P1 Rear mounting /Z


| Part no. | a2 | a3 | a4 | a21 | a22 | a23 | a31 | a32 | a33 | b2 | b3 | b21 | b22 | b23 | b24 | b31 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P1 | 48 | 49 | 53.5 | 65 | 48 | 87 | 15 | 15 | 83 | 48 | 70 | 65 | 17 | 180 | 32 | 49 |


| Part no. | c2 | $c 3$ | c20 <br> $\geqq 1 \leqq$ | c20 with <br> ミ4 <br> ZAV/ZVV | c21 | c22 | c23 | c24 | c25 | c27 | c28 | c31 | c32 | c33 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P1 | 59 | 86 | $96-112$ | 212 | 35 | 32 | 65 | 68 | 58 | 35 | 77 | 25 | 25 | 27 |

P1 Rear mounting main switch /V/SVB

(1) Interlock extension with ZVV-...+ZAV... possible $\leqq 4 \times 25=100 \mathrm{~mm}$
(2) Not included as standard

## Dimensions - Outline drawings

P1 Centre mounting /EZ


P1 Service distribution board mounting /IVS
P1.../VS


## P1 Surface mounting /l2

Surface mounting
P1.../I2

Surface mouting main switches/safety switches
P1.../I2/SVB / P1.../I2/SI
Drilling dimensions


| Part no. | a2 | a3 | a4 | a21 | a22 | a23 | a31 | a32 | a33 | b2 | b3 | b21 | b22 | b23 | b24 | b31 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P1.../I2 | 48 | 49 | 53.5 | 65 | 48 | 100 | 15 | 15 | 83 | 48 | 70 | 65 | 17 | 180 | 35.5 | 49 |


| Part no. | c2 | c3 | c20 <br> $\geqq I \leqq$ | c20 with <br> $\leqq 4$ <br> ZAV/ZVV | c21 | c22 | c23 | c24 | c25 | c27 | c28 | c31 | c32 | c33 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P1... | 59 | 86 | $96-112$ | 212 | 35 | 32 | 65 | 68 | 58 | 35 | 80 | 25 | 25 | 27 |

P1 Surface mounting main switch /I2H/MBS/SVB with pre-assembled EMC screen

$a=101 \mathrm{~mm}\left(3.98^{\prime \prime}\right)$


|  | $\infty$ <br> in | mm | $\varnothing$ | mm | in |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | 0.28 | $2 \times 4.2 \times 8.2$ | d1 | 3.5 | 0.14 |
| 8 | 0.32 | $2 \times 4.2 \times 8.2$ | d1 | 3.5 | 0.14 |
| 10 | 0.39 | $2 \times 4.2 \times 8.2$ | d1 | 3.5 | 0.14 |
| 12 | 0.47 | $2 \times 4.8 \times 10.5$ | d2 | 4.1 | 0.16 |

## Technical data

|  |  |  |  | P1-40 |
| :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |
| Standards |  |  |  | IEC/EN 60947, IEC/EN 60204, switchdisconnector to IEC/EN 60947-3 |
| Lifespan mechanical |  | Operations | $\times 10^{6}$ | 0.3 |
| Maximum operating frequency |  | Operations/h |  | 50 |
| Climatic proofing |  |  |  | Damp heat, constant to IEC 60068-2-78 <br> Damp heat, cyclical to IEC 60068-2-30 |
| Ambient temperature |  | Open | ${ }^{\circ} \mathrm{C}$ | -25-50 |
|  |  | Enclosed | ${ }^{\circ} \mathrm{C}$ | -25-40 |
| Mounting position |  |  |  | Any |
| Mechanical shock resistance (IEC/EN 600068-2-27) |  | Half-sinusoidal shock 20 ms | g | 15 |
| Contacts |  |  |  |  |
| Rated operational voltage |  | $U_{\text {e }}$ | VAC | 690 |
| Rated impulse withstand voltage |  | $\mathrm{U}_{\mathrm{imp}}$ | VAC | 6000 |
| Overvoltage category/pollution degree |  |  |  | III/3 |
| Rated uninterrupted current |  | ${ }_{u}$ | A | 40 |
| Short-circuit rating |  | Fuse | A gG/gL | 50 |
| Rated short-time withstand current (1s current) |  | $\mathrm{l}_{\text {cw }}$ | $\mathrm{A}_{\text {rms }}$ | 640 |
| Isolating characteristics to IEC/EN 60947 |  |  | V AC | $\leq 690$ |
| Safe isolation according to EN 61140 betweeb the auxiliary contacts and main circuits |  |  | VAC | 440 |
| Switching angle |  |  | - | 90 |
| Contacts |  |  | Number | Max. 3 (+N) |
| Current heat loss per contact at $\mathrm{I}_{\mathrm{e}}$ |  |  | W | 1.9 |
| Terminal |  |  |  |  |
| Solid or stranded |  |  | $\mathrm{mm}^{2}$ | $\begin{aligned} & 1 \times(1.5-10) \\ & 2 \times(1.5-10) \end{aligned}$ |
| Flexible with ferrule to DIN 46228 |  |  | $\mathrm{mm}^{2}$ | $\begin{aligned} & 1 \times(1-4) \\ & 2 \times(1-4) \end{aligned}$ |
| Fork terminal |  |  | $\mathrm{mm}^{2}$ | $\begin{aligned} & 1 \times(1.5-10) \\ & 2 \times(1.5-10) \end{aligned}$ |
| Terminal screw |  |  |  | M4 |
| Tightening torque |  |  | Nm | 1.6 |
| Switching capacity |  |  |  |  |
| AC Voltage |  |  |  |  |
| Rated making capacity $\cos \varphi=0.45$ |  |  | A | 360 |
| Rated breaking capacity, motor load switch $\cos \varphi=0.45$ | 400/415 V |  | A | 290 |
|  | 690 V |  | A | 130 |
| Rated operational current 440V, load-break switch AC-21A |  | $\mathrm{I}_{\text {e }}$ | A | 40 |
| AC-3 motor load switch motor load | 230 V | P | kW | 7.5 |
|  | 400/415 V | P | kW | 15 |
|  | 690 V | P | kW | 15 |
| AC-23A motor load switch motor load | 230 V | P | kW | 11 |
|  | $400 / 415 \mathrm{~V}$ | P | kW | 22 |
|  | 690 V | P | kW | 18.5 |

Note: Main switch characteristics to IEC/EN 60204; positive opening of contacts, operator element positively located on shaft. Rated uninterrupted current lu is specified for max cross-section. For terminal capacity solid, stranded and flexible and fork terminal: Max. 2 cross-section sizes difference admissible when using 2 conductors.


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Publication No. CA04200EN
February 2022

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[^0]:    * Comes with 4 Fork Terminals as standard

