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Powering Business Worldwide

P1-40/I2/N - On-Off switch, P1, 40 A, surface mounting, 3 pole + N, with black thumb grip and front plate



199908 P1-40/I2/N

[Overview](#) [Specifications](#) [Resources](#)



199908 P1-40/I2/N

On-Off switch, P1, 40 A, surface mounting, 3 pole + N, with black thumb grip and front plate
On-Off switch, Product range: On-Off switch, Part group reference: P1, with black thumb grip and front plate, Information about equipment supplied: auxiliary contact fitted by user., 3 pole + N, Degree of Protection: IP65, Design: surface mounting, Motor rating AC-23A, 50 - 60 Hz 400 V : P = 22 kW, Rated uninterrupted current: $I_u = 40$ A, Standards: IEC/EN 60947, IEC/EN 60204, Switch-disconnector according to IEC/EN 60947-3

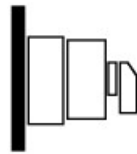


- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 8.0

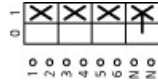
Delivery program

Product range
On-Off switch
Part group reference
P1
with black thumb grip and front plate
Information about equipment supplied
auxiliary contact fitted by user.
Number of poles
3 pole + N
Auxiliary contacts
0 NO

I_t
 0 NC
 Degree of Protection
 IP65
 Design
 surface mounting



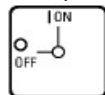
Contact sequence



Switching angle

90 °

Front plate no.



FS 908

Motor rating AC-23A, 50 - 60 Hz [P]

400 V [P]

22 kW

Rated uninterrupted current [I_u]

40 A

Note on rated uninterrupted current I_u

Rated uninterrupted current I_u is specified for max. cross-section.

Technical data

General

Standards

IEC/EN 60947, IEC/EN 60204

Switch-disconnector according to IEC/EN 60947-3

Climatic proofing

Damp heat, constant, to IEC 60068-2-78

Damp heat, cyclic, to IEC 60068-2-30

Ambient temperatureEnclosed

-25 - +40 °C

Overvoltage category/pollution degree

III/3

Rated impulse withstand voltage [U_imp]

6000 V AC

Mechanical shock resistance

15 g

Mounting position

As required

Contacts

Mechanical variablesNumber of poles

3 pole + N

Mechanical variablesAuxiliary contacts I_t

0 NO

Mechanical variablesAuxiliary contacts I_t

0 NC

Electrical characteristicsRated operational voltage [U_e]

690 V AC

Electrical characteristicsRated uninterrupted current [I_u]

40 A

Electrical characteristicsNote on rated uninterrupted current I_u

Rated uninterrupted current I_u is specified for max. cross-section.

Short-circuit ratingFuse

50 A gG/gL

Rated short-time withstand current (1 s current) [I_cw]

640 A_{rms}

Note on rated short-time withstand current I_cw

Current for a time of 1 second

Switching capacity
 Safe isolation to EN 61140 between the contacts
 440 V AC
 Safe isolation to EN 61140 Current heat loss per contact at I_b
 3.5 W
 Lifespan, mechanical [Operations]
 $> 0.3 \times 10^6$
 Maximum operating frequency [Operations/h]
 1200
 AC AC-3 Rating, motor load switch [P] 220 V 230 V [P]
 7.5 kW
 AC AC-3 Rating, motor load switch [P] 400 V 415 V [P]
 15 kW
 AC AC-3 Rating, motor load switch [P] 690 V [P]
 15 kW
 AC AC-3 Rated operational current motor load switch 230 V [I_e]
 30 A
 AC AC-3 Rated operational current motor load switch 400 V 415 V [I_e]
 30 A
 AC AC-3 Rated operational current motor load switch 690 V [I_e]
 17 A
 AC AC-21A Rated operational current switch 400 V 415 V [I_e]
 40 A
 AC AC-21A Rated operational current switch 500 V [I_e]
 40 A
 AC AC-21A Rated operational current switch 690 V [I_e]
 40 A
 AC AC-22A Rated operational current switch 400 V 415 V [I_e]
 40 A
 AC AC-22A Rated operational current switch 500 V [I_e]
 40 A
 AC AC-22A Rated operational current switch 690 V [I_e]
 40 A
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 230 V [P]
 11 kW
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 400 V 415 V [P]
 22 kW
 AC AC-23A Motor rating AC-23A, 50 - 60 Hz [P] 690 V [P]
 17 kW
 AC AC-23A Rated operational current motor load switch 230 V [I_e]
 40 A
 AC AC-23A Rated operational current motor load switch 400 V 415 V [I_e]
 40 A
 AC AC-23A Rated operational current motor load switch 690 V [I_e]
 20 A
 Control circuit reliability at 24 V DC, 10 mA [Fault probability]
 $< 10^{-5}$, < 1 failure in 100,000 switching operations H_F
 Terminal capacities
 Solid or stranded
 1 x (1,5 - 10)
 2 x (1,5 - 10) mm²
 Flexible with ferrules to DIN 46228
 1 x (1 - 4)
 2 x (1 - 4) mm²
 Terminal screw
 M4
 Tightening torque for terminal screw
 1.6 Nm
 Rating data for approved types
 Terminal capacity Flexible
 14.13 AWG
 Terminal capacity Terminal screw
 M4
 Terminal capacity Tightening torque
 14.13 lb-in

Design verification as per IEC/EN 61439

Rated operational current for specified heat dissipation [I_n]

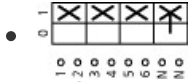
40 A
Heat dissipation per pole, current-dependent [P_{td}]
3.5 W

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss10.0.1-27-37-14-03 [AKF060013])
Version as main switch
No
Version as maintenance-/service switch
No
Version as safety switch
No
Version as emergency stop installation
No
Version as reversing switch
No
Number of switches
1
Max. rated operation voltage U_e AC
690 V
Rated operating voltage
690 - 690 V
Rated permanent current I_u
40 A
Rated permanent current at AC-23, 400 V
40 A
Rated permanent current at AC-21, 400 V
40 A
Rated operation power at AC-3, 400 V
15 kW
Rated short-time withstand current I_{cw}
0.64 kA
Rated operation power at AC-23, 400 V
22 kW
Switching power at 400 V
22 kW
Conditioned rated short-circuit current I_q
80 kA
Number of poles
4
Number of auxiliary contacts as normally closed contact
0
Number of auxiliary contacts as normally open contact
0
Number of auxiliary contacts as change-over contact
0
Motor drive optional
No
Motor drive integrated
No
Voltage release optional
No
Device construction
Complete device in housing
Suitable for floor mounting
No
Suitable for front mounting 4-hole
No
Suitable for front mounting centre
No
Suitable for distribution board installation
No
Suitable for intermediate mounting
No
Colour control element
Black

Type of control element
Short thumb-grip
Interlockable
No
Type of electrical connection of main circuit
Screw connection
Degree of protection (IP), front side
IP65
Degree of protection (NEMA)

Wiring diagram

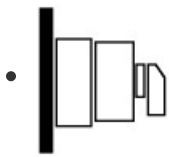


115S010-2

Line drawing

On-Off switches without auxiliary contacts

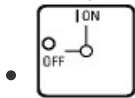
Symbol



000Z078

Graphic

Rotary switches, surface mounting



FS 908

115K001

Graphic

FS908 standard front plate

Brochure

- [P1-40 Switch-disconnectors brochure \(SA042012-EN\)](#)

File

P1-40 Switch-disconnectors brochure

<https://www.eaton.com/content/dam/eaton/products/industrialcontrols-drives-automation-sensors/switch-disconnectors-and-cam-switches/t-rotary-cam-switches-and-p-switch-disconnectors/p1-40-switch-disconnectors/eaton-p1-40-switch-disconnectors-flyer-sa042012EN-en-us.pdf>

(PDF)

Catalog

- [P1-40 Switch-disconnectors \(CA042002-EN\)](#)

File

P1-40 Switch-disconnectors

<https://www.eaton.com/content/dam/eaton/products/industrialcontrols-drives-automation-sensors/switch-disconnectors-and-cam-switches/t-rotary-cam-switches-and-p-switch-disconnectors/p1-40-switch-disconnectors/eaton-p1-40-switch-disconnectors-catalogue-ca042002en-en-us.pdf>

(PDF)

Product photo



199908_C

Photo

P1-40 main switch

(Web)



[199908_R](#)

Photo

P1-40 main switch

(Web)



[Y7-199908_L](#)

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