199904
P1-40/EZ/N

Overview
Specifications
Resources

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

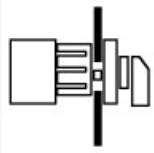
Auxiliary contacts

0 N/O

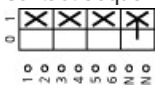
0 N/C

Degree of Protection
Front IP65

Design
centre 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 temperature
Open
-25 - +50 °C

Ambient temperature
Enclosed
-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 variables
Number of poles
3 pole + N

Mechanical variables
Auxiliary contacts

0 N/O

Mechanical variables
Auxiliary contacts

0 N/C

Electrical characteristics
Rated operational voltage [U_e]

690 V AC

Electrical characteristics
Rated uninterrupted current [I_u]
40 A

Electrical characteristics
Note on rated uninterrupted current I_u
Rated uninterrupted current I_u is specified for max. cross-section.

Short-circuit rating
Fuse
50 A gG/gL

Rated short-time withstand current (1 s current) [I_{cw}]
640 A_{rms}

Note on rated short-time withstand current Icw
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_e
3.5 W

Lifespan, mechanical [Operations]
> 0.3 x 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
400V 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
Solid or flexible conductor with ferrule
14 - 8 AWG

Terminal capacity
Terminal screw
M4

Terminal capacity
Tightening torque
14.1 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_{vid}]
1.9 W

TECHNICAL DATA ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (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 Ue AC
690 V

Rated operating voltage
690 - 690 V

Rated permanent current Iu
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 Icw
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 Iq
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
Built-in device fixed built-in technique

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)