



199937
P1-40/M4/SVB/HI11

Overview

Specifications

Resources



Delivery program

Technical data

Design verification as
per IEC/EN 61439

Technical data ETIM8.0

DELIVERY PROGRAM

Product range
Main switch
maintenance switch

Part group reference
P1

Stop Function
Emergency switching off function

With red rotary handle and yellow locking ring

Number of poles
3 pole

Auxiliary contacts

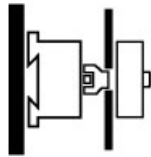
1 NO


1 NC

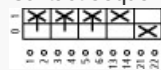
Locking facility
Lockable in the 0 (Off) position

Degree of Protection
Front IP65

Design
rear mounting

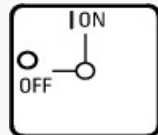


Contact sequence



Switching angle
90 °

Function



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

Mechanical variables

Auxiliary contacts



1 NO

Mechanical variables

Auxiliary contacts



1 NC

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 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_e
3.5 W

Lifespan, mechanical [Operations]
> 0.3 x 10⁶

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_n]
30 A

AC
AC-3
Rated operational current motor load switch
400V 415 V [I_n]
30 A

AC
AC-3
Rated operational current motor load switch
690 V [I_n]
17 A

AC
AC-21A
Rated operational current switch
400 V 415 V [I_n]
40 A

AC
AC-21A
Rated operational current switch
500 V [I_n]
40 A

AC
AC-21A
Rated operational current switch
690 V [I_n]
40 A

AC
AC-22A
Rated operational current switch
400 V 415 V [I_n]
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
H₁

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_{id}]
1.9 W

TECHNICAL DATA ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EO000216)

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
Yes

Version as maintenance-/service switch
Yes

Version as safety switch
No

Version as emergency stop installation
Yes

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
3

Number of auxiliary contacts as normally closed
contact
1

Number of auxiliary contacts as normally open
contact
1

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
Red

Type of control element
Door coupling rotary drive

Interlockable
Yes

Type of electrical connection of main circuit
Screw connection

Degree of protection (IP), front side
IP65

Degree of protection (NEMA)



