



199938  
P1-40/M4/SVB/N

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

Information about equipment supplied  
auxiliary contact fitted by user.

Number of poles  
3 pole + N

Auxiliary contacts

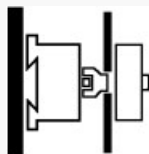
0 NO

0 NC

Locking facility  
Lockable in the 0 (Off) position

Degree of Protection  
Front IP65

Design  
rear mounting

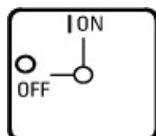


Contact sequence

1	2	3	4	5	6	7	8
X	X	X	X	X	X	X	X
0	2	3	4	5	6	7	8

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 + N

#### Mechanical variables

Auxiliary contacts

1

0 NO

Mechanical variables

Auxiliary contacts



0 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<sub>rms</sub>

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]

$> 0.3 \times 10^6$

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<sub>e</sub>]  
30 A

AC  
AC-3  
Rated operational current motor load switch  
400V 415 V [I<sub>e</sub>]  
30 A

AC  
AC-3  
Rated operational current motor load switch  
690 V [I<sub>e</sub>]  
17 A

AC  
AC-21A  
Rated operational current switch  
400 V 415 V [I<sub>e</sub>]  
40 A

AC  
AC-21A  
Rated operational current switch  
500 V [I<sub>e</sub>]  
40 A

AC  
AC-21A  
Rated operational current switch  
690 V [I<sub>e</sub>]  
40 A

AC  
AC-22A  
Rated operational current switch  
400 V 415 V [I<sub>e</sub>]  
40 A

AC  
AC-22A  
Rated operational current switch  
500 V [I<sub>e</sub>]  
40 A

AC  
AC-22A  
Rated operational current switch  
690 V [I<sub>e</sub>]  
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<sub>e</sub>]  
40 A

AC  
AC-23A  
Rated operational current motor load switch  
400 V 415 V [I<sub>e</sub>]  
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<sub>1</sub>

### Terminal capacities

Solid or stranded  
1 x (1,5 - 10)  
2 x (1,5 - 10) mm<sup>2</sup>

Flexible with ferrules to DIN 46228  
1 x (1 - 4)  
2 x (1 - 4) mm<sup>2</sup>

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 [ $P_{\text{vd}}$ ]  
1.9 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  
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  
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  
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)



