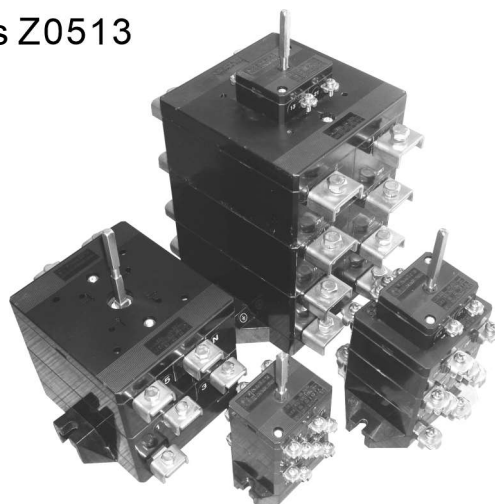




Product manual load isolation switches Z0513



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Purpose of these instructions

- Working in hazardous areas, the safety of personnel and plant depends on complying with all relevant safety regulations.
- Assembly and maintenance staff working on installations therefore have a particular responsibility. They require precise knowledge of the applicable standards and regulations.
- These instructions give a brief summary of the most important safety measures. It supplements the corresponding regulations which the staff must study.



SAFETY INSTRUCTIONS

- Use the load isolation switch only for its intended purpose.
- The load isolation switch are not suitable for zone 0 hazardous areas!
- Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision.
- No changes to the device impairing its explosion protection are permitted.
- Use the circuit breaker only if they are clean and undamaged.
- Any damage can invalidate the Ex-protection.
- Observe the following during installation and operation:
 - National safety regulations;
 - National accident prevention regulations;
 - National installation regulations (e.g. IEC 60079-14);
 - Generally recognized technical regulations;
 - Safety guidelines in these operating instructions;
 - Characteristic values given on the components.

Conformity to standards

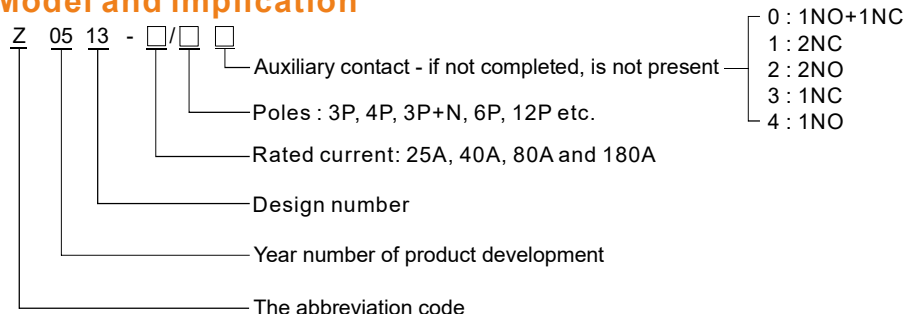
The circuit breaker is designed and manufactured according to standard of ISO 9001.
The circuit breaker is conformity to the directive 94/9/EC, ATEX and the standards EN60079

Applicable scope

To ensure that the explosion-proof circuit breaker can be operated normally and safely, user shall observe the following:

- The products are applicable for use in hazardous areas zone1 and zone 2.
- The products are used for isolation the power.
- The products which are Ex components can't be used separately but with the explosion-proof enclosure suitable for the environment.

Model and implication





Technical data

Explosion proof load isolation switch
 Ex mark: Ex II 2 G Ex db eb IIC Gb
 Test certificate: Presafe 17 ATEX 9488U
 Rated voltage max. 690V 50/60 Hz
 Rated Current 25A, 40A, 80A and 180A
 Ambient temperature $-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
 Service temperature $-40^{\circ}\text{C} \leq T_a \leq +95^{\circ}\text{C}$

Switch module, switch operating handle, outline and installation dimensions see figure 2 and tabel 1.

Rated switch capacity switch 25A:

U/V	230	400	500	690		250	400		24	250
AC3 I/A	25	25	20	16	AC15	10	8	DC13	8	1
Wire cross-section area	4 mm ²		2.5 mm ²		1.5 mm ²		1.5 mm ²			
Ground cross-section area	4 mm ²		2.5 mm ²		1.5 mm ²		1.5 mm ²			

Rated switch capacity switch 40A:

U/V	230	400	500	690
AC3 I/A	40	40	40	32
Wire cross-section area	10 mm ²			
Ground cross-section area	10 mm ²			

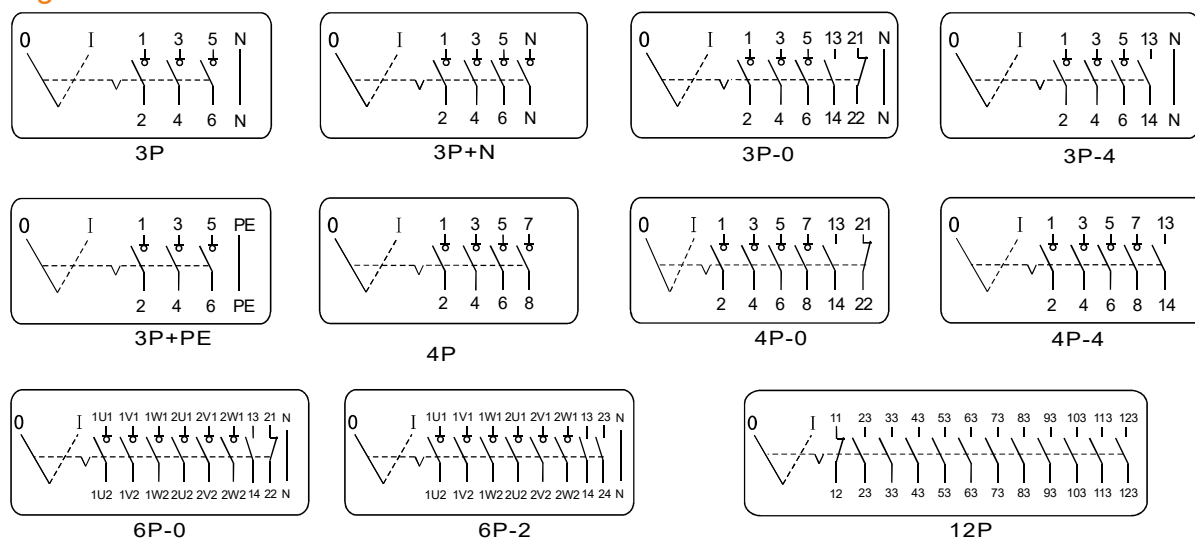
Rated switch capacity switch 80A:

U/V	230	400	500	690
AC3 I/A	80	80	80	63
Wire cross-section area	25 mm ²			
Ground cross-section area	25 mm ²			

Rated switch capacity switch 180A:

U/V	230	400	500	690
AC3 I/A	180	180	150	125
Wire cross-section area	95 mm ²		70 mm ²	
Ground cross-section area	50 mm ²			

Figure 1



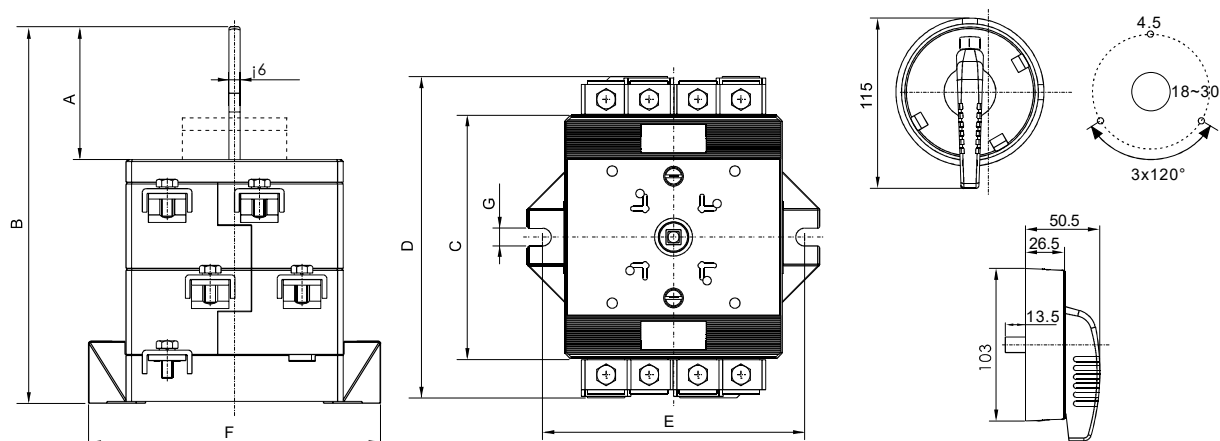


Table 1

spec.	25A											40A									
Poles	3P	4P	3P+N	3P-4	3P-0	4P-4	4P-0	6P-0	6P-2	12P-0	3P	4P	3P+N	3P-4	3P-0	4P-4	4P-0	6P-0	6P-2		
A	41				23				51		34		83			57				59	
B	105							151		171		171							201		
C	50											73									
D	72											118									
E	74											115									
F	80											126									
G	5.5											6.5									

Continued Table 1

specification	80A										180A									
Poles	3P	4P	3P+N	3P-4	3P-0	4P-4	4P-0	6P-0	6P-2	3P	4P	3P+N	3P-4	3P-0	4P-4	4P-0	6P-0	6P-2		
A	71			45				39			84			58				50		
B	201							241			241							291		
C	130										145									
D	172										201									
E	142										172									
F	156										192									
G	9.5										9.5									



Operation/installation

Transport and storage in original packaging only. National safety and installations regulations and the generally accepted rules of engineering practice must be observed when mounting and operating this equipment.

The operating handle with the switch included should be applied

The switch operating handle can be divided in two types:

Z - 8003/1D Standard Type (Black)

Z - 8003/1R Emergency Stop Type (Red/ Yellow)

For the sake of the normal operation and the safety of explosion-proof load isolation switch the user shall observe the following provisions:

Explosion-proof load isolation switch is suitable for use in hazardous areas, zones 1 and 2.

The load isolation switch should be used under the following atmospheric condition:

- The pressure is 80kPa (0.8bar)~110kPa (1.1bar)
- The volume ratio of standard oxygen content is 21% air.
- The ambient air relative humidity is less than: 95%

The series products which are Ex components can't be used separately but with the explosion-proof enclosure suitable for the environment.

This product should be installed in accordance with IEC60947-5-1

Proposed tightening screw torque of terminals:

- 1.5 ~ 2.0 Nm - 25 A.
- 1.5 ~ 2.0 Nm - 40 A.
- 1.5 ~ 2.0 Nm - 80 A.
- 1.5 ~ 2.0 Nm -180 A.
- 1.5 ~ 2.0 Nm - Aux. contact

The switch mounting should be firm and reliable.

The supply terminals are designed for the connection of connecting cables or multi copper conductors.

The wire ends have to be handled in accordance with the applicable national and international rules

The switch or conductor itself shall not be damaged

The wire should be pretreatment before connected to the terminal when wiring.

The standard compression lug should be added to the wire connection. If need to connect multi-cable, use cable connecting tools, such as OT series, for parallel connection before connecting multi-cable. The connection should be reliable and the false connection of conductor is not permitted.

During wiring the creepage distance of bare current carrying part should be 12mm. Electric gap should be 10 mm.

Applicable scope

To ensure that the explosion-proof load isolation switch module can be operated normally and safely, user shall observe the following:

The series products are used for isolating the power and not manually operating load isolation switch so frequently as well in the circuit which the frequency is 50/60 Hz,



Repairs / Maintenance

- Observe the relevant national regulations for your country!
- Only parts from our company that can be used to replace or maintain, and the operation should be carried out by professional electrician!
- The following points must be checked during maintenance:
 - * Compliance with permitted temperatures;
 - * Check if there is any crack in the components.
 - * Check if the component has been fixed reliably.
 - * Check the wiring
 - * Check if the flame-proof joints is damaged.

Spare parts / Accessories

Use only original spare parts as well as original accessories made by INDEX ELEKTRO BV.
INDEX ELEKTRO BV

Recycling / Disposal

- The respective valid national regulations for waste disposal shall be observed when disposing of apparatus!
- We are pleased to answer any questions. In this case you can contact INDEX ELEKTRO BV.