ABF3I-25/630A Type Two-Position Oil Immersed Load Switch

Installation & Operation Manual

Summarize Two-Position Oil Immersed Load Switch

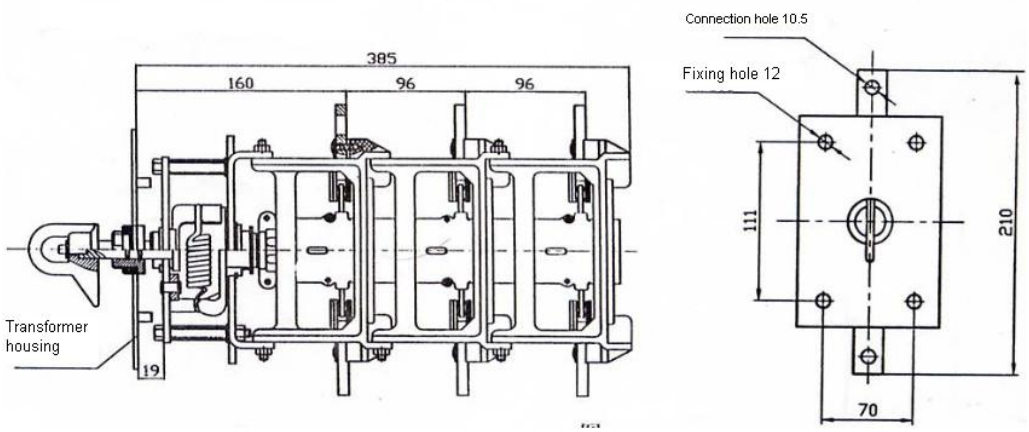
With the transformer oil as insulation and arc extinction medium and energy storing spring operating mechanism, this ABF3I-25/630A two-position oil immersed load switch applies to the combined transformer with 50Hz frequency and 24KV rated voltage, it is capable to turn on and off the load current. Equipped with ON and OFF two positions, the clockwise turn is ON, while anticlockwise is OFF, the rotation angle should be controlled within 90°. In addition, it can be suitable for end power distribution system or ring-network power distribution system if equipped extra configurations.

Main technical parameters

Table 1

Name		24/630A	Name	24/630A
Rated voltage (KV)		24	Rated current (A)	630
1min power frequency withstand voltage	Earth/Interphase	55	Rated thermostable current(KA/4S)	25
	Isolation clearance	60	Rated dynamic current (peak KA)	50
lightning surge withstand voltage	Earth/Interphase	125	Rated short making current(KA)	50
	Isolation clearance	145	Mechanical life	3000

Overall dimension



Reservation installation size for transformer housing

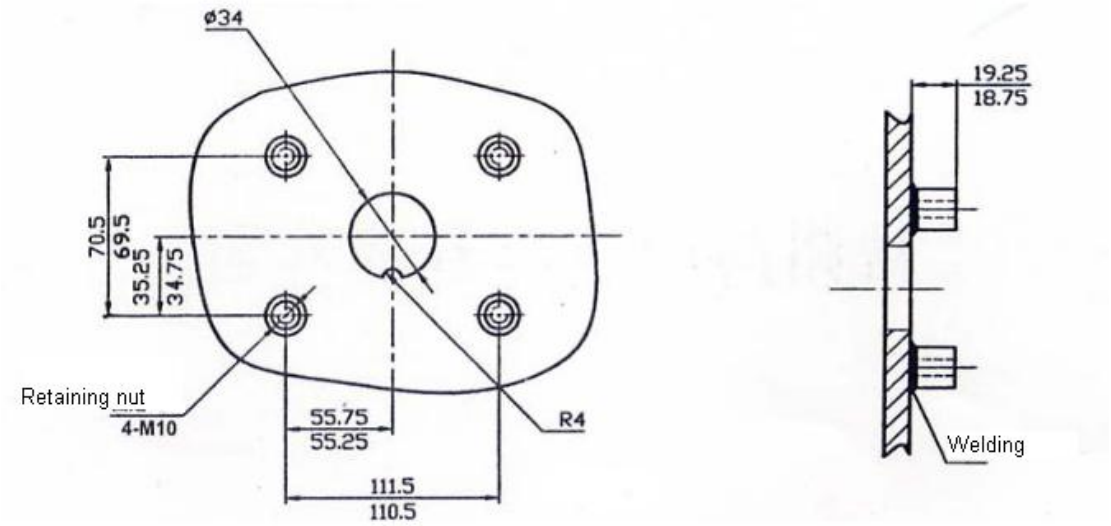


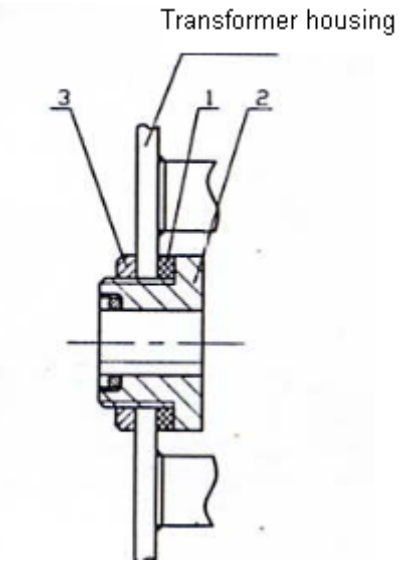
Fig 2

Load switch installation

Before installation, check if the switching motion is flexible and accurate carefully, only after confirmed to be under good condition, the installation can be implemented, in addition, the load switch must be dried under 65±5℃condition by 24h.

Installation procedure

1) Put the fixed-sleeve(2) through the prepared holeΦ34 on transformer housing, and screw down the M33X2 screw nut (3) as well as seal ring so that internal leakage of transformer can be avoided, you may see Fig 3 for details, and refer to Table 2 for the tightening torque.



2) Then put the load switch through the fixed-sleeve, use 4~M10X20 bolts with spring washer to fasten the load switchonto the transformer housing, you may refer to Fig 4 for details.

NOTICE: if found that the relative position of bolt hole deviates heavily when screw down the M10 bolts, you must amend the hole and then screw down it again. Otherwise, this will cause distortion to mounting plate, and may bring about malfunction to load switch.

3) After install the rotate handle (4)of switch, check if the open and close positions are consistent with the pointing direction on handle, then regulate the pressure of M23X1.5 compression washer (5) to seal ring (6), the force moment can be found in table 2.

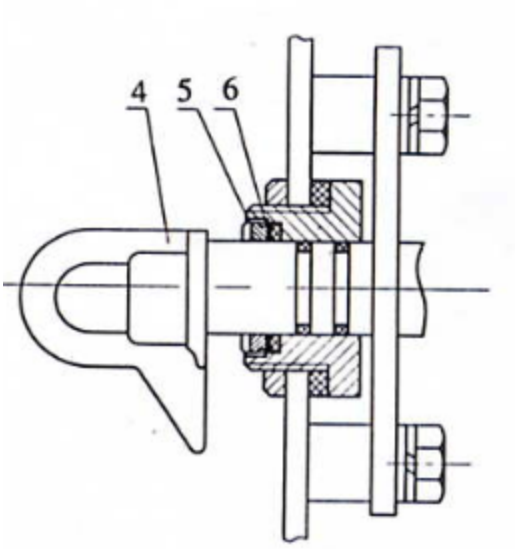


FIG4

4) When connect the load switch, the fastening bolts of busbar must be screw down completely so that a good contact can be kept; in addition, the length of busbar should be selected properly in case over short busbar will pull the connecting block of fixed-contact to one side, even cause functional failure to load switch!

Force Moment

Table 2

4-M10 fixed bolt	40-60N.m
M33X2 screw cap	30-50N.m
M23X1.5 washer	14-20N.m

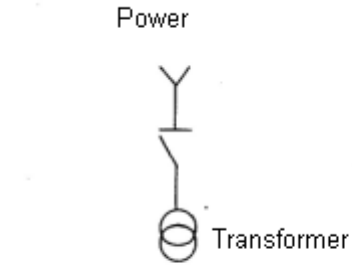
5) After installation and connection, it is suggested to carry out “open” and “close” operation to check if the switch can be moved flexibly and if the position indication is correct, if any abnormal, please check the installation of switch and the connection of busbar according to article 2 and 4.

Points for attention

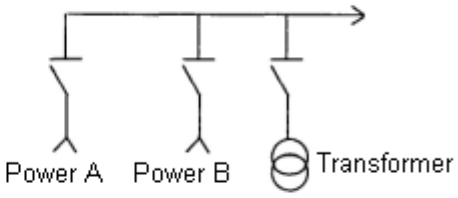
1) This load switch can be used to open or close rated current only, while the application for closing and opening the failure current. If over rated current, forbidden to operate switch.

2) Only the special insulated operating arm can be used to operate this load switch to ensure personal safety.

Connection Diagram



For terminal type （single)



For ring-network (three)