

Operation on an IT or Corner Grounded System

Definition

IT system: Isolated or impedance grounded neutral. Use a permanent insulation monitoring device compatible with nonlinear loads, such as an XM200 type or equivalent.

Corner grounded system: System with one phase grounded.

Operation

  DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Read and understand the instructions in **Safety Information** chapter before performing any procedure in this chapter.

Failure to follow these instructions will result in death or serious injury.

The drives have a built-in EMC filter (*). As a result they exhibit leakage current to ground. If the leakage current creates compatibility problems with your installation (residual current device or other), then you can reduce the leakage current by changing the IT jumper position or by removing the screws as shown below. In this configuration the product does not meet the EMC requirements according to the standard IEC 61800-3.

(*): Except ATV320...M3C drives (for 3-phase 200...240 V supply mains).

Setting

This table shows the setting according to the drives



Drive type	Ratings	Setting
ATV320...B	All	IT jumper
ATV320...C	1-phase 200 V up to 2.2 kW	IT jumper
	3-phase 400 V up to 4 kW	Screw
	3-phase 200 V (1)	–

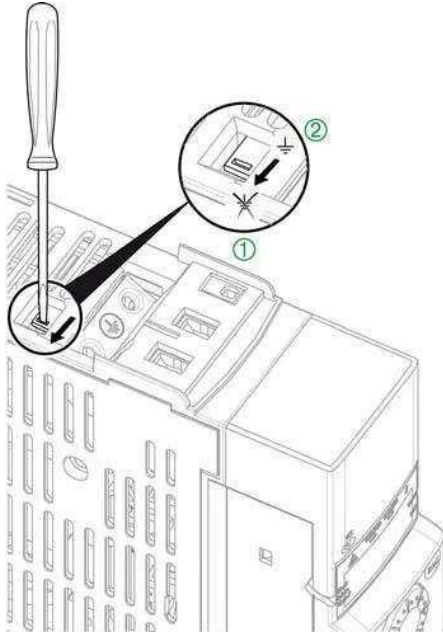
(1) These drives do not include an EMC filter.

Setting on ATV320U02M2B...U22M2B, ATV320U04N4B...U40N4B drives

On frame sizes 1B and 2B the IT jumper is located on top of the product, behind the GV2 circuit-breaker adapter mounting screws.

Apply the following instructions to set the drive to operate or not on an IT or Corner grounded system



Step	Action
1	Remove the front cover (see page 53)
2	For operation on an IT or Corner grounded system  position the screws as shown on detail ①
3	For operation on a non- IT or Corner grounded system  position the screws as shown on detail ②
4	Refit the front cover

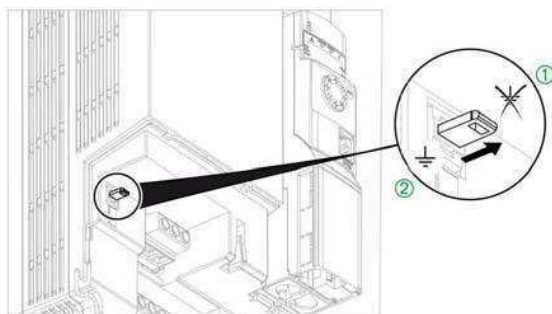


Setting on ATV320U55N4B...D15N4B drives

On frame sizes 4B4, 5B5 the IT jumper is located on front side, behind the power terminals protective cover, on the left-hand side of the power input terminals.



Apply the following instructions to set the drive to operate or not on an IT or Corner grounded system

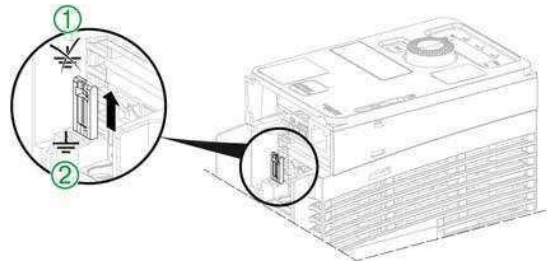
Step	Action
1	Remove the front cover (see page 54)
2	For operation on an IT or Corner grounded system  position the screws as shown on detail ①
3	For operation on a non- IT or Corner grounded system  position the screws as shown on detail ②
4	Refit the front cover



Setting on ATV320U02M2C...U07M2C drives



Apply the following instructions to set the drive to operate or not on an IT or Corner grounded system

Step	Action
1	Remove the power terminal cover (see page 56)
2	For operation on an IT or Corner grounded system  position the screws as shown on detail ①
3	For operation on a non- IT or Corner grounded system  position the screws as shown on detail ②
4	Refit the front cover



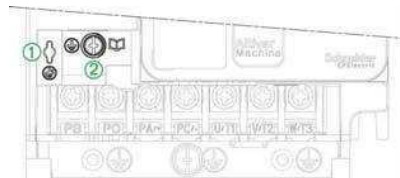
Setting on ATV320U11M2C...U22M2C, ATV320U04N4C...U15N4C drives

Apply the following instructions to set the drive to operate or not on an IT or Corner grounded system

Step	Action
1	Remove the power terminal cover (see page 58)
2	For operation on an IT or Corner grounded system  position the screws as shown on detail ①
3	For operation on a non- IT or Corner grounded system  position the screws as shown on detail ②
4	Refit the front cover



NOTE:

- Use only the screws supplied.
- Do not operate the drive with setting screws removed.



Setting on ATV32U22N4C...U40N4C drives

Apply the following instructions to set the drive to operate or not on an IT or Corner grounded system

Step	Action
1	Remove the power terminal cover (see page 60)
2	For operation on an IT or Corner grounded system  position the screws as shown on detail ①
3	For operation on a non- IT or Corner grounded system  position the screws as shown on detail ②
4	Refit the front cover

NOTE:

- Use only the screws supplied.
- Do not operate the drive with setting screws removed.

