

Enistic SM16D & CT installer guide. v1

Before proceeding with installation please read the information provided by Enistic in line with this installation guide on the link below

<http://www.enistic.com/16-channel-sf-distribution-board>

Specific items required & tools

- Boot lace ferule crimp
- Red boot lace ferules – take the 2 cores from CT
- Black boot lace ferules – take up to 3 screen cores from CT
- Cable stripper
- Cable markers
- 3 x 32mm bush & 6 x 32mm lock rings
- 6/10A MCB to suit DB make
- 2.5 6242Y cable (T&E)
- Marker pen
- Labeller
- Dual colour warning label

Equipment & installation

SM16D monitoring module & enclosure

The SM16D requires a 230v 6A-10A supply from local DB. Fit 2/3 x 32mm bushes and lock rings to trunking or DB. Double up the lock rings to allow a gap for the enclosure front casing to fit, cut out front casing to allow for lock rings. It has an angled top & bottom that does not sit flat.

Further information can be found at: <http://www.enistic.com/16-channel-sf-distribution-board>

DO NOT ENERGISE UNTIL ALL CT's ARE CONNECTED



CT's

There are **3 types** of CT's supplied depending on the ampage. 2 come with a 3.5mm jack plug. Please make sure that you use the appropriate size. It needs to be the nearest clamp size ***ABOVE*** the MCB current rating that we are measuring. For example, if the CT is on a 10A MCB/circuit it requires a BBSP-CT15 (i.e. 15A) current clamp. Sizes are 15, 30,40,60,100 & 200A

***DO NOT CUT THE BRAIDED SCREEN CORES OFF ***

BBSP-CT15/30/40/60

These are up to 60A and come with a 3.5mm jack plug fitted, cut off jack plug (unless going into a supplied expander unit for a single CT), strip cable carefully with a cable stripper, **DO NOT** cut out braided screen cable this is the Negative. Red & white go together in a red boot lace ferule and the screen cable will be connected with upto 3 other CT screen cables. Fit a number marker and note the Source & Load direction sticker. These come off very easily , write on the CT L&S in permanent marker and the circuit ref. I.e L1



BBSP-CT100

These are pre stripped, so number marker it, write circuit ref and direction of load & source on the CT and fit boot lace ferule to both cores. Note: **White** is Positive + and **Black** is Negative -



BBSP CT200

These come with a 3.5mm jack plug fitted, cut off jack plug (unless going into a supplied extender unit for a single CT), strip cable carefully with a cable stripper. There are only 2 cores that are very fine. **White** is Positive + and **Grey/Black** is Negative -. Put the White core into a red boot lace ferule, double cores over or it will pull out of the ferule. The Grey/Black will go in a black ferule with upto 3 other CT neutrals. Note the Source & Load direction sticker and write the direction and circuit ref on the CT with permanent marker.



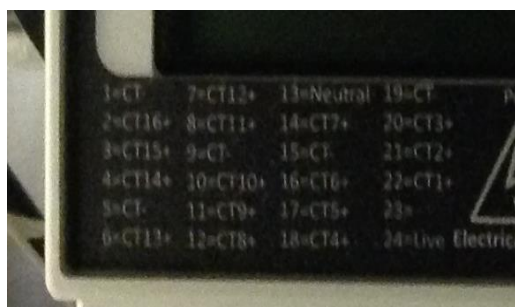
Connecting the CT's to the SM16D unit

The unit is numbered, 13-24 on the top and 1-12 on the bottom. The CT connection order is on the unit below the LCD display. Connect in order in batches of 3. Connect the CT's in order given by Enistic as this will be critical when inputted on the Enistic software dashboard.

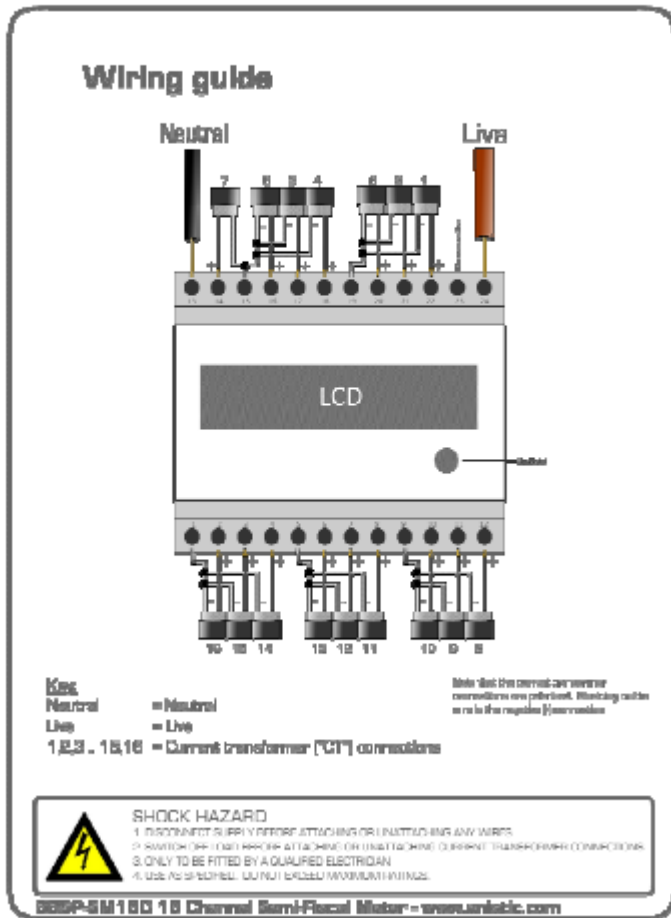
Further information can be found at: <http://www.enistic.com/16-channel-sf-distribution-board>

For example **CT1+** is 22, **CT2+** is 21, **CT3+** is 20, and terminal **19** will have the **3 Negative screen** cables from **CT1, 2&3** together in a **black** ferule. Follow the number order and fit CT's to the unit as specified by Enistic. Note: **CT7** Negative can connect with **CT4, 5 & 6**. See diagram on page 4

Note terminals 1, 5,9,15 and 19 are all Negative terminals for the screen or Negative cable



4. Note that connections 1,5,9,15 and 19 have the screening wire of multiple clamps connected to them.

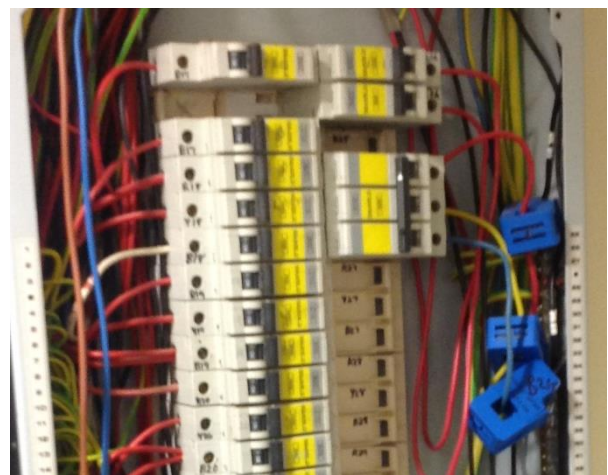
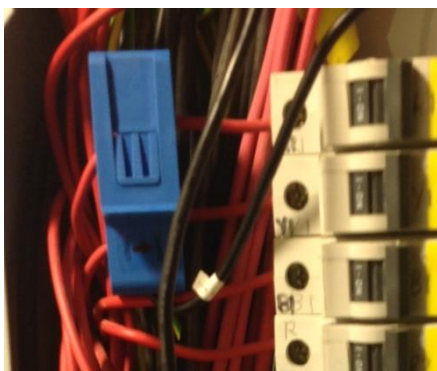


Note terminals 1, 5,9,15 and 19 are all Negative terminals for the screen or Negative cable

Fitting the CT's

Clamp the CT's around the PHASE cores in the DB only when you have connected all cores at the SM16D unit. The CT's unclip and go around the PHASE conductor at the MCB, note the direction label. SOURCE is towards the supply, LOAD is outgoing.

The DB's can be full and short of room so position the CT best to suit the cabling and the refitting of the cover, be carefull not cause a compression fault or dislodge a MCB when doing this!



Energising the SM16D unit

Supply connections on the SM16D unit are **LIVE- 24 NEUTRAL – 13 EARTH** – No terminal so put in connector block or bond locally.

Carry out testing to BS7671 for a 'new circuit' and complete a NIC/ EIC certificate.

Note 'next test due date', request previous test certificate for the DB and take a copy as this will help with completing the certificate. If the previous certificate is not available 'Limitations' may need to be applied to the certificate unless the Supply Parameter & Mains characteristics are labelled at the intake.

If next test date is out of date please recommend J Brand for carrying out a Periodic Inspection at the premises.

Before refitting the DB cover make a note of any circuits that are in the off position (take a photo) to ensure you do not accidentally turn any **MCB's off** refitting the cover. Refit DB cover.

Energise the SM16D unit and make a note of the serial no on the LCD display when it first come on line. Carry out live tests as required.

Label circuit on DB cover, fill in DB schedule if available and fit dual colour warning label on DB if required.

Remove all waste materials from area, dispose of appropriately with permission from site.

Commisioning

Once the unit is online contact Enistic to set up dashboard,. They will require:

- Exact order of CT-circuit fitted
- Ampage of the CT fitted
- Ampage of the MCB
- Name of circuit being monitored
- DB reference
- DB circuit reference , such as L1.

They will proceed with set up of software and if being viewed on customer PC or screen confirm image is on screen and take photos.

If you are requested to install the above on the software then information of how to do this can be found at: <http://www.enistic.com/16-channel-sf-distribution-board>

Click on USER GUIDE to set up dash board.

For technical support contact Paul Willett - 0844 875 1600

Obtain sign off from client and check remotely that Enistic can view data