<b>ELCOS</b> <sup>®</sup> <b>(FIREATION</b> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIREATION)</i> <i>(FIRE</i>	Date:	02/12/2019
	File name:	\\Sbs-2003\ufficio tecnico\DOCUMENTAZIONE\Doc umenti comuni a tutti i prodotti\CAM-333_TO_CAM- 332\CAM-333_TO_CAM- 332 EN.docx
	Author's name:	
	Total pages:	2
	Rev. 1.00 This r revisions.	evision supersedes any previous

## Instructions - Installing CAM-332 in place of CAM-333

These instructions aim to simplify installation and connection of the CAM-332 control unit in systems where the CAM-333 control unit - now out of production - was in use.

- 1. The two control units have identical mechanical dimensions so there is no need to modify the housing hole in the panel door.
- 2. CAM-333 uses FASTON terminals, whereas CAM-332 uses screw-type terminals. During replacement, eliminate the FASTON connectors and screw the wires directly onto the terminals. It is advisable to use ferrule terminals. An exception applies to the terminals of the current transformers in the CAM-332, which have FASTON connectors as well.
- 3. The three-phase voltmetric reading of the mains in CAM-333 is handled by battery charger CBV-015. The terminals for connection to the mains three-phase line are already fitted inside CAM-332. Thus, wires 90, 91, 92 and 93 have to be disconnected from the CBV-015 and connected to the relevant terminals in CAM-332. If you need to use the CBV-015 as a battery charger, leave wires 90 and 92 in CBV-015.
- 4. With CAM-332, the use of the CBV-015 battery charger is no longer required. As a result, you can use either one of the following: CBS-010 (1A), CBS-031 (3.5A) or CBS-061 (6A).
- 5. In CAM-333, charge alternator pre-excitation is enabled with a metal clip that has to be hooked onto a fork connector (12V or 24V). In CAM-332, pre-excitation is enabled through setting of technical parameters. Pre-excitation is included (factory setting).
- 6. The settings in CAM-333 are managed via dip switches. CAM-332 uses the front buttons to manage all the settings; this avoids having to remove the rear cover, which must stay in place at all times.
- 7. CAM-333 offers only two-phase generator reading terminals 96 and 97. CAM-332 accepts three-phase, two-phase and single-phase generator reading. This means that if you want to maintain a two-phase connection, you have to connect wires 96 and 97 to the corresponding terminals 96 and 97 in CAM-332. Along with this connection, two-phase generator reading has to be set on CAM-332. The following is the settings menu path:
  - [TECHNICAL PROGRAMMING]
  - [GENERATOR PROGRAMMING]
  - [CONNECTION TYPE]
  - ➢ [TWO-PHASE L1 L2]

However, it is advisable to complete the reading with the three-phases and neutral.

- 8. In CAM-332, connection of terminal no. 5 to the battery negative is mandatory.
- 9. The emergency button circuit must be executed according to the wiring diagram.
- 10. CAM-333 manages current transformers only in the generator line, whereas CAM-332 manages current transformers in the power user line. As a result, if you want to leave the

current transformers on the generator, you will need to set the parameter in CAM-332 as follows: POSITION = GENERATOR. The following is the settings menu path:

- [TECHNICAL PROGRAMMING]
- [CHOICE OF CURRENT TRANSFORMER]
- ➢ [POSITION]
- ➢ [GENERATOR]

11. CAM-332 does not manage the cooling water level probe in the radiator.