

Lamp starting solution

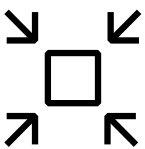
Assimilation lighting in greenhouses



Control cabinets in greenhouses are rarely ventilated, suffer from limited space and the electrical components are exposed to aggressive substances. ABB's lamp starting solution for assimilation lighting makes sure that the plants in your greenhouse thrive underneath artificial light without disturbances.

The typical lamp starter combination is designed with a MS132-...L protected lamp starter and a lamp contactor AF16-...L or AF26-...L and usually mounted on a Wöhner adapter snapped on a bus bar system.

The new components guarantee a lower heat generation. The lamp starter generates 10% less heat and the lamp contactor even 20% less than previously. The MS132-...L lamp starter is able to automatically compensate temperatures up to 60°C without influencing the characteristics. Furthermore, e.g. the MS132-20L is short-circuit proof up to 100kA at 400V - a feature that is useful in greenhouses where high short-circuit protection is needed due to the positioning of transformers close to the control panels.



Space saving

The new lamp starting combination has a reduced size in comparison with its predecessor. The width of the lamp starter is reduced by 17% with the advantage of an optimized thermal distribution.



Speed up your projects

Improve the mounting process by reducing the installation time and cost. Replace complete starters in just one click, by using the optional Wöhner adapter to fix the lamp starter combination directly on the bus bar system.



Harsh environments

Proven in use. Field-validated technology in high temperature and humid greenhouse environments. Concept and devices proven in numerous applications.

Lamp starter solution description

The lamp starter combination controls the lamp loads and provides protection for the lamps and installation against short-circuit and overload. The main functions are:

- Overload protection
- Short-circuit protection
- Phase loss sensitivity
- Disconnect function
- Switching lamp loads
- Adjustable current setting for overload protection
- Temperature compensation: -25 to +60 °C

Control panel composition

Typically, 16, 18 or 20 lamp starter combinations are placed in one panel and each is connected with nine lamps of 1000W/400V. The control panel usually consists of:

- Enclosure, min. IP44
- Bus bar system
- MCCB (T4D 320) with RCD (optional if required)
- Bus bar adapters for protected lamp starter combinations, e.g. Wöhner
- Protected lamp starter combination, for example MS132-...L and AF...-L
- OT disconnect switch
- Control interface to management system
- Lockable handle

Technical data

- Coil voltage range of lamp contactors: 100-250 V AC/DC or 250-500V AC/DC
- Setting range lamp starters: 10-16A, 16-20A or 20-25A
- Adapter (optional): Wöhner 54 mm
- Heat dissipation combination: 3-6W pole

Ordering details

| | | | Lamp starter |
|-----------|---------------|-----------------|---------------|
| Type | Current range | Order number | EAN-code |
| MS132-16L | 10-16A | 1SAM350100R1011 | 4013614516511 |
| MS132-20L | 16-20A | 1SAM350100R1013 | 4013614516559 |
| MS132-25L | 20-25A | 1SAM350100R1014 | 4013614516726 |

| | | | Lamp contactor |
|----------------|-------------------------------|-----------------|----------------|
| Type | Rated control circuit voltage | Order number | EAN-code |
| AF16-40-00L-13 | 100-250V50/60HZ-DC | 1SBL177281R1300 | 3471523135734 |
| AF16-40-00L-14 | 250-500V50/60HZ-DC | 1SBL177281R1400 | 3471523135741 |
| AF26-30-00L-13 | 100-250V50/60HZ-DC | 1SBL237081R1300 | 3471523135833 |
| AF26-30-00L-14 | 250-500V50/60HZ-DC | 1SBL237081R1400 | 3471523135840 |